



Planning Commission Meeting Agenda

ASHLAND PLANNING COMMISSION

REGULAR MEETING AGENDA

Tuesday, July 9, 2024

Note: Anyone wishing to speak at any Planning Commission meeting is encouraged to do so. If you wish to speak, please rise and, after you have been recognized by the Chair, give your name and complete address for the record. You will then be allowed to speak. Please note the public testimony may be limited by the Chair.

I. CALL TO ORDER

7:00 p.m., Civic Center Council Chambers, 1175 E. Main Street

II. ANNOUNCEMENTS

1. Staff Announcements
2. Advisory Committee Liaison Reports

III. CONSENT AGENDA

1. Approval of Minutes
 - a. May 14, 2024 Regular Meeting
 - b. May 28, 2024 Study Session

IV. PUBLIC FORUM

Note: To speak to an agenda item in person you must fill out a speaker request form at the meeting and will then be recognized by the Chair to provide your public testimony. Written testimony can be submitted in advance or in person at the meeting. If you wish to discuss an agenda item electronically, please contact PC-publictestimony@ashland.or.us by July 9, 2024 to register to participate via Zoom. If you are interested in watching the meeting via Zoom, please utilize the following link: <https://zoom.us/j/91339035306>

V. TYPE I PUBLIC HEARINGS

PLANNING ACTION: PA-APPEAL-2024-00019, an appeal of PA-T1-2024-00233
SUBJECT PROPERTY: 1250 Ashland Street (SOU Science Building)
OWNER: Southern Oregon University
APPLICANT/APPELLANT: Verizon Wireless
DESCRIPTION: The Planning Commission will consider an appeal of the Staff Advisor's denial of a request for a Site Design Review Permit to install wireless communication facilities (antennas and associated equipment) on the roof of the Science Building at 1250 Ashland Street on the Southern Oregon University Campus. The application also includes a request for a Conditional Use Permit because with the installation of panels proposed to screen the wireless communication facility installation, the building height will exceed 40 feet. (The proposal is the same as one previously approved by the city in PA-2017-01486 but which subsequently expired, and the applicant proposes to comply with the conditions of the prior approval.) **COMPREHENSIVE PLAN DESIGNATION:** Southern Oregon University District; **ZONING:** SO; **ASSESSOR'S MAP:** 39 1E 15BB; **TAX LOT #:** 100

VI. UNFINISHED BUSINESS

1. Approval of Draft Findings for PA-APPEAL-2024-00019, 1250 Ashland Street

VII. TYPE III PUBLIC HEARINGS

PLANNING ACTION: PA-T3-2024-00009
SUBJECT PROPERTY: 2228 East Main Street





Planning Commission Meeting Agenda

APPLICANT/OWNER: Ashland Parks & Recreation/City of Ashland

DESCRIPTION: A request to annex the 6.51-acre property at 2228 East Main Street and the adjacent 0.97 acres of East Main Street right-of-way into the City of Ashland with Suburban Residential (R-1-3.5) zoning. The application also includes a request for Site Design Review approval to develop the annexed property as a new public park to include restrooms, a bike park with pump track & skills course, fenced dog park, play area, and a community garden. **COMPREHENSIVE PLAN**

DESIGNATION: Suburban Residential; **ZONING:** Existing – RR-5 (County); Proposed – R-1-3.5 (City); **ASSESSOR'S MAP:** 39 1E 11CB; **TAX LOT #'s:** 200

VIII. OPEN DISCUSSION

IX. ADJOURNMENT

Next Meeting Date: July 23, 2024

Next Meeting Date:

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please email planning@ashlandoregon.gov. Notification 72 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to the meeting (28 CFR 35.102-35.104 ADA Title 1).





Planning Commission Minutes

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May 14, 2024
REGULAR MEETING
***DRAFT* Minutes**

I. CALL TO ORDER:

Chair Verner called the meeting to order at 7:00 p.m. at the Civic Center Council Chambers, 1175 E. Main Street. She noted that Commissioners Knauer and MacCracken were attending the meeting via Zoom, though the latter was not yet in attendance when the meeting was called to order.

Commissioners Present:

Lisa Verner
Doug Knauer
Kerry KenCairn
Eric Herron
Russell Phillips
Gregory Perkinson
Susan MacCracken Jain

Staff Present:

Brandon Goldman, Community Development Director
Derek Severson, Planning Manager
Aaron Anderson, Senior Planner
Michael Sullivan, Executive Assistant

Absent Members:

Council Liaison:

Paula Hyatt

II. ANNOUNCEMENTS

Community Development Director Brandon Goldman made the following announcements:

- Several Community Development Department staff members participated in the Habitat for Humanity wall-raising for the Beach Creek Subdivision on May 11, 2024. This volunteer event was organized by Serena Locke and Regan Trapp on behalf of the Oregon Permit Technicians Association, where they serve as President and President-Elect, respectively. Ms. Trapp is also a Permit Technician II in the City's Community Development Department.
- The Historic Preservation Awards ceremony will take place on May 18, 2024 at Railroad Park to mark the installation of the HUB Medallion. The Historic Preservation Awards are granted to developments that occurred over the last year in Historic Districts.
- Building Code amendments will be reviewed by the City Council at their May 24, 2024 meeting, and include state building code modifications to be approved for local adoption.
- Senior Planner Aaron Anderson and Associate Planner Veronica Allen developed code updates relating to developments in the floodplain.

III. CONSENT AGENDA





Planning Commission Minutes

1. **Approval of Minutes**

- a. April 9, 2024 Regular Meeting
- b. April 23, 2024 Study Session

Commissioners Perkinson/Phillips m/s to approve the consent agenda as presented. Voice Vote: All AYES. Motion passed 6-0.

IV. **PUBLIC FORUM** – None

V. **OTHER BUSINESS**

A. **2024 Update to the Buildable Lands Inventory (BLI)**

Chair Verner opened the Public Hearing and Public Record at 7:07 p.m.

Mr. Goldman stated that the BLI is a supporting document to the Comprehensive Plan, and received minor updates in 2004 and 2005, with more significant updates occurring in 2011 and 2019. He added that the BLI is a tool that will change over time.

Mr. Anderson outlined the purpose of conducting an update of the BLI, which is to quantify the amount of vacant and partially-vacant land available within the city limits and Urban Growth Boundary (UGB) of the City. Combined with the City's 2021 Housing Capacity Analysis (HCA), 2023 Housing Production Strategy (HPS), a BLI allows a community to determine whether there exists an adequate supply of buildable land to accommodate future housing and business development (see attachment #1).

Mr. Anderson detailed how the BLI update found that the City has 288 net buildable acres within the city limits, while the UGB contains 630 net buildable acres, for a combined potential of 2,710 additional dwelling units. The City has produced 90 dwelling units over the last six fiscal years, with the HCA determining the need for 43 dwellings produced per year to meet expected demand. Mr. Anderson briefly outlined the data used to compile the BLI update, which included population and household demographics, geospatial data, and vacant and partially-vacant land within the UPG and city limits.

Mr. Anderson concluded that the HCA found a demand for 858 new dwelling units in the City over the next 20 years, with the BLI update demonstrating that there is sufficient buildable land to accommodate this need. He reiterated that the BLI is a living document, citing numerous changes to state law, such as the elimination of parking requirements and new Climate Friendly Area regulations, which impacted the potential number of new dwelling units in the City.





Planning Commission Minutes

Questions of Staff

Commissioner KenCairn asked if potential dwelling units are determined by average size or by lot. Mr. Anderson responded that it is lot-specific and begins algorithmically to determine lots with a minimum size to support additional dwelling units. These lots were then analyzed for any logistical or planning obstacles, such as steep slopes or floodplains. Commissioner KenCairn asked how recent state law changes impacted the identification of potentially developable lots. Mr. Anderson responded that the methodology remained consistent with those used in the 2019 update, and that a single-family home lot which had the potential to be subdivided was counted as two lots. Commissioner KenCairn asked how cottage development factored into this analysis. Mr. Anderson responded that analyzing the potential for cottage developments is difficult due to the wide range of factors when identifying a site for a cottage development.

Commissioner MacCracken Jain expressed appreciation that more units were being developed than anticipated, but remarked that the analysis did not account appear to account for how housing demand could change based on price elasticity. Mr. Goldman responded that the BLI analyzes how much potential housing exists, but does not analyze price controls or how much demand for housing there is. He noted that the current 20-year supply of available buildable land is a variable based on potential future price fluctuations.

Commissioner Perkinson commented that page 6 of the BLI update notes that the recent state law changes could have unknown impacts to the BLI and are therefore not included in the model. When presenting the BLI to the Council, Commissioner Perkinson suggested that staff emphasize this uncertainty and how these changes could impact future planning.

Commissioner Phillips asked why the City only requires the creation of a minimum of 43 units annually despite producing 90 dwelling units on average over the last several years. Mr. Anderson responded that the HCA analyzed components of economic change in greater detail than the BLI, and found that a minimum of 43 new dwelling units are required annually in order to meet expected population growth over the next 20 years. He stated that the HCA found that the City is producing enough housing to meet housing demand, and that the number of dwelling units produced is actually underestimated due to when the building permits were issued.

Chair Verner asked why the City is experiencing a housing shortage if there is seemingly enough housing being produced annually. Mr. Goldman responded that the HCA identifies the City's housing needs over the next 20 years based on predicted population growth, but does not speak to the types of housing that is needed to make up any deficiencies from the past. He noted that it also excludes cost of living and the number of people who are unable to afford living in the City. He stated that this relates more to the HPS and emphasized that the BLI, HCA, and HPS inform the City on how much land is available for housing, how much housing is needed, and how to develop that needed



Planning Commission Minutes

housing. Commissioner MacCracken Jain suggested that staff elaborate on the differences between housing demand and housing supply when presenting the BLI update to the Council. The Commission discussed the interconnected nature of the BLI, HCA, and HPS, and suggested that this relationship be emphasized when the update is presented to the Council.

Chair Verner closed the Public Hearing at 7:55 p.m.

Decision

Commissioners Perkinson/KenCairn m/s to support the resolution as presented. Voice Vote: All AYES. Motion passed 7-0.

B. Election of Planning Commission Officers (Chair and Vice-Chair)

Commissioners Perkinson/KenCairn m/s to reelect Commissioner Verner as Chair. Voice Vote: All AYES. Motion passed 7-0.

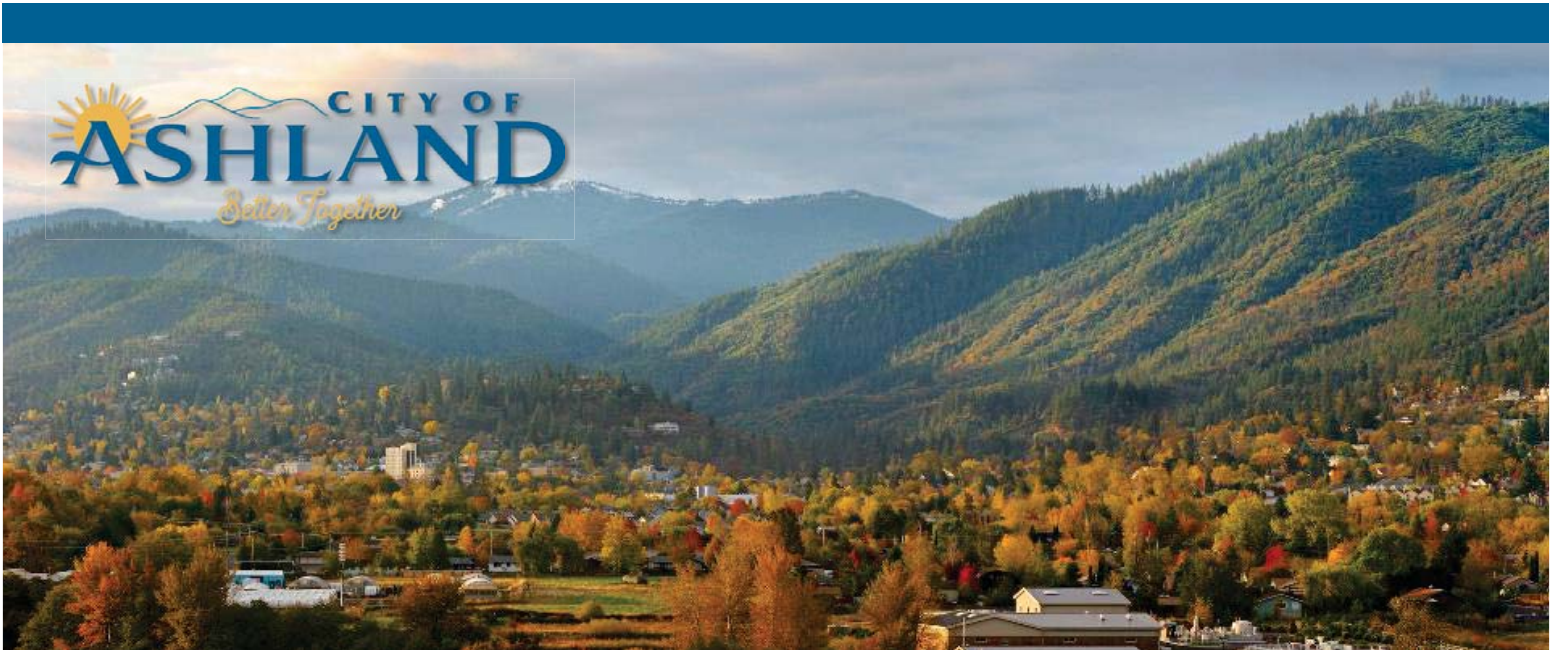
Commissioners Perkinson/Phillips m/s to reelect Commissioner Knauer as Vice-Chair. Voice Vote: All AYES. Motion passed 7-0.

V. OPEN DISCUSSION - None

VI. ADJOURNMENT

Meeting adjourned at 7:58 p.m.

*Submitted by,
Michael Sullivan, Executive Assistant*



2024 Buildable Lands Inventory

PLANNING
COMMISSION

MAY 14, 2024

Introduction

The purpose of conducting an update of the “Buildable Lands Inventory” (BLI) is to quantify the amount vacant and partially-vacant land available within the City of Ashland (City Limits and Urban Growth Boundary). In combination with the Housing Capacity Analysis (2021), Housing Production Strategy (2023), a BLI allows a community to determine whether or not there exists an adequate supply of buildable land to accommodate future housing and business development.

The BLI was last updated in 2019.

4

Key Findings

- ❖ Within the City limits there are 288 net buildable acres across all zones. There are 630 net buildable acres of land within the UGB out of a gross area of 985 acres.
 - ❖ Over the last 13 years the city has consumed 10.2 acres per year.
- ❖ Within the City it is estimated that 1,407 dwellings can be accommodated. The area in the UGB is projected to be able to support an additional 1,303 possible dwellings for a total of 2,710 dwellings in the combined City Limits and UGB.
 - ❖ Over the last six fiscal years the city has produced 90 dwellings units per year.

5

Housing Capacity Analysis

- ❖ The 2021 Housing Capacity Analysis determined that the needs 43 dwellings produced per year to meet expected demand.
- ❖ 858 over the twenty-year planning period

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Demographics

Population

Birth, Death, Fertility, Migration

Household Unit

Population, Household Size, vacancy rate, etc.

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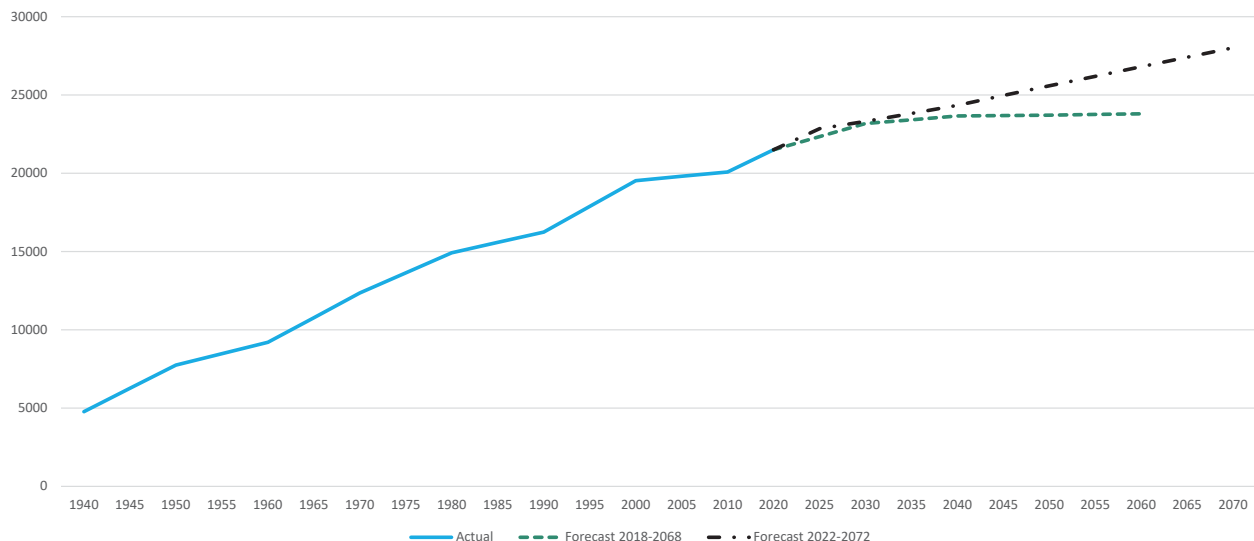
Population

Chen, C., Sharygin, E., Whyte, M., Loftus, D., Rynerson, C., Alkitkat, H. (2022). Coordinated Population Forecast for Jackson County, its Urban Growth Boundaries (UGB), and Area Outside UGBs 2022-2072. Population Research Center, Portland State University

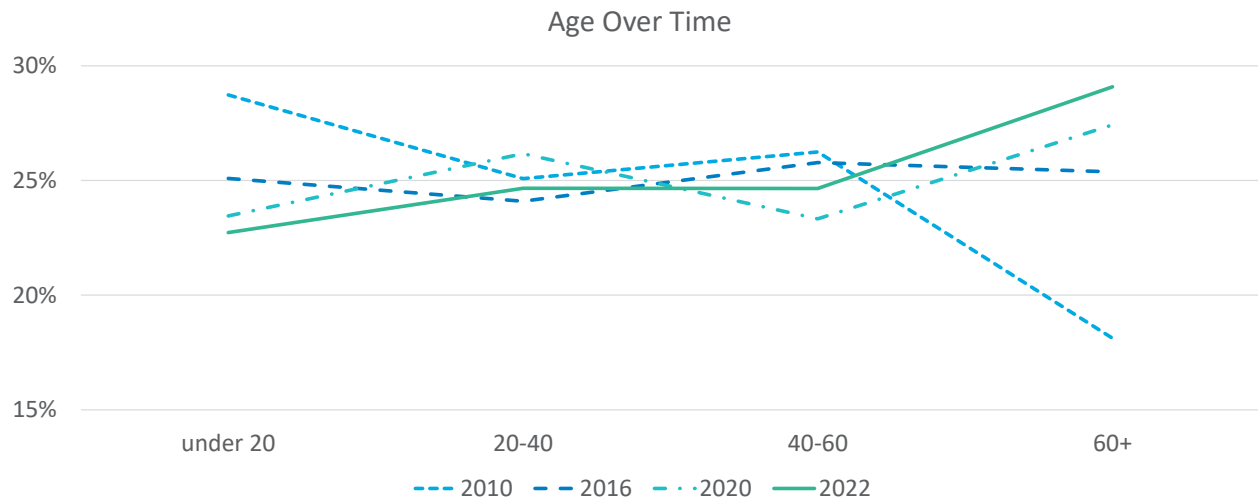
Table 2. Historical and forecasted population and AAGR in Jackson County and its sub-areas.

	Historical			Forecast				
	2010	2020	AAGR (2010-2020)	2022	2047	2072	AAGR (2022-2047)	AAGR (2047-2072)
Jackson County	203,206	223,259	0.9%	228,380	276,013	318,713	0.8%	0.6%
Larger Sub-Areas								
Ashland	20,626	21,897	0.6%	22,553	25,208	28,257	0.4%	0.5%

Population



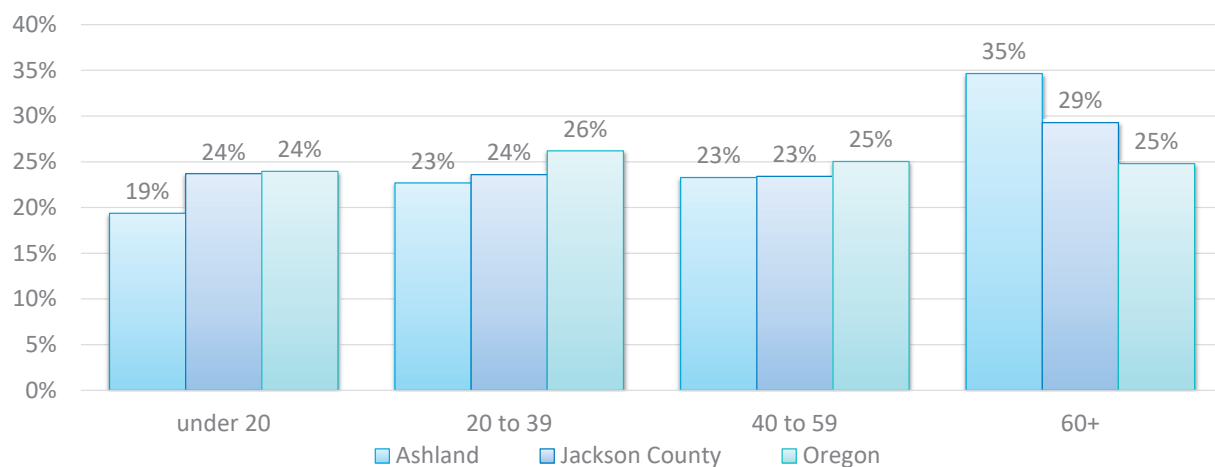
Age Structure



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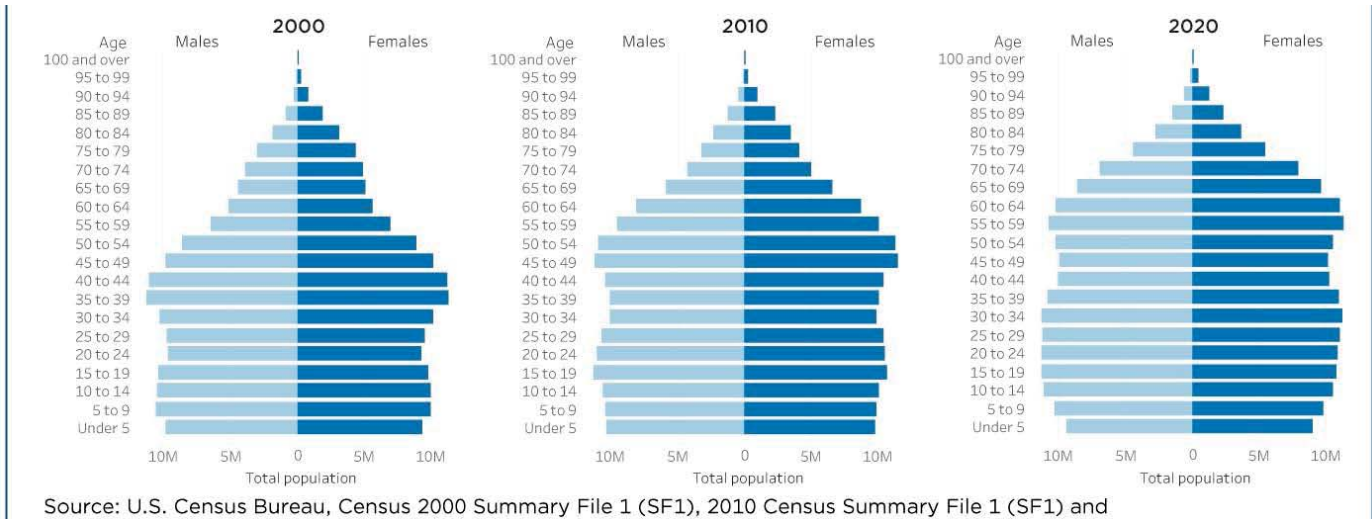
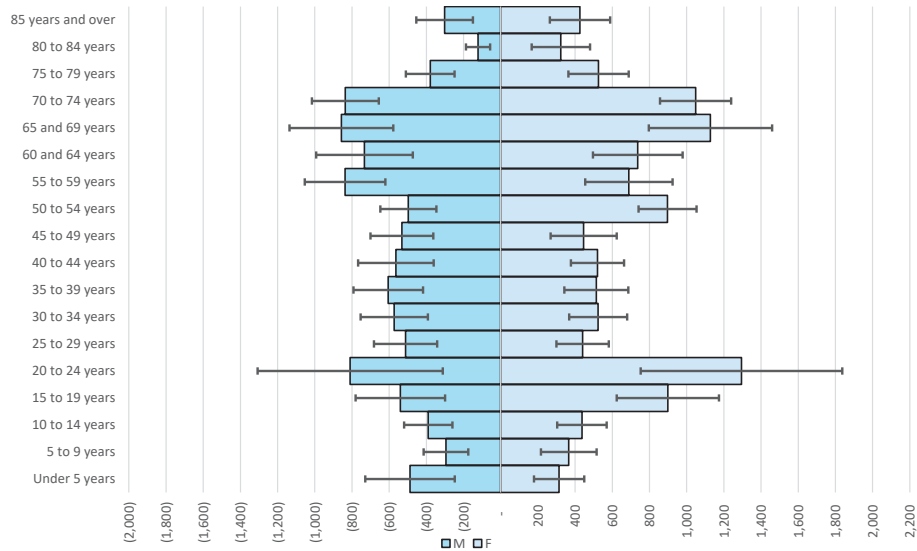
Age Structure

Population Distribution by Age, Ashland, Jackson County, and Oregon 2018-2022



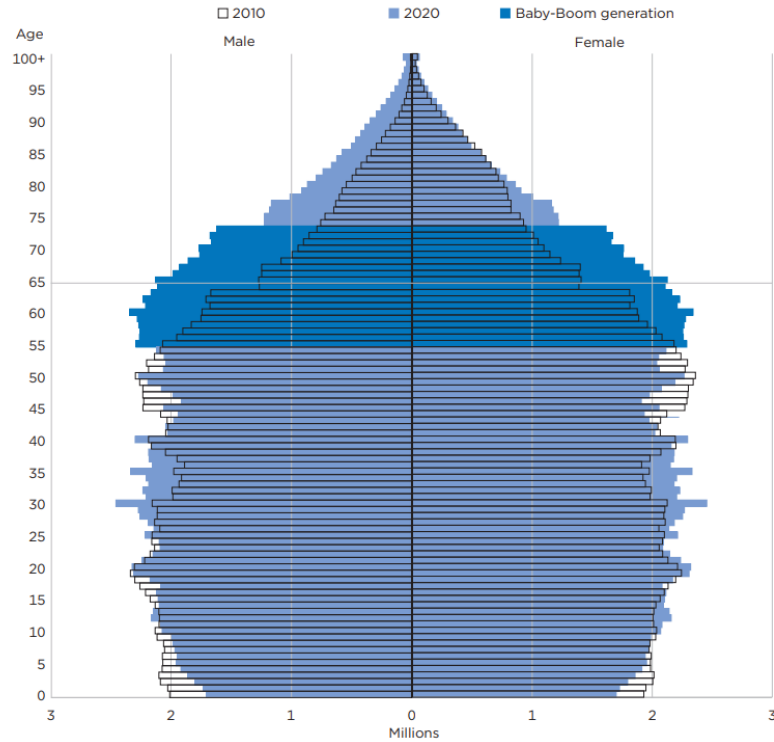
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Population Pyramid

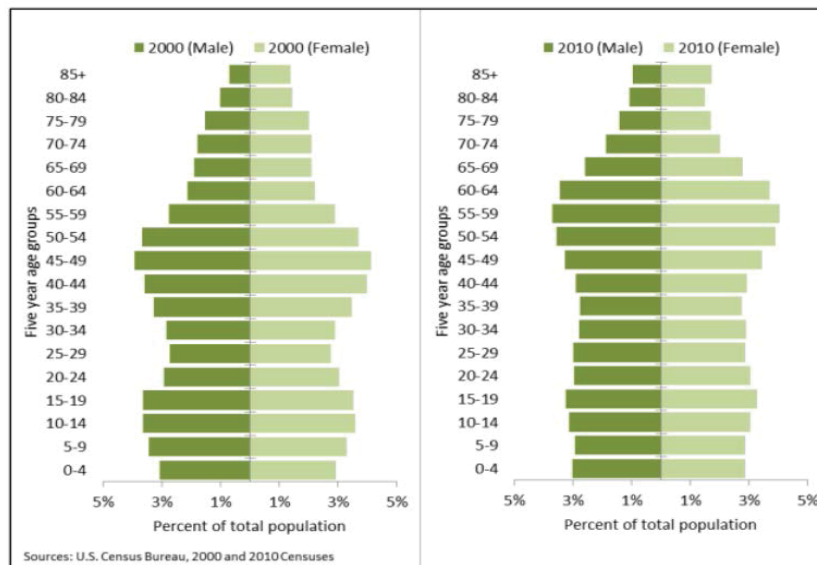


US Population Pyramid

Figure 3.
Population by Sex and Age: 2010 and 2020



14



Jackson Count Population Pyramid

15

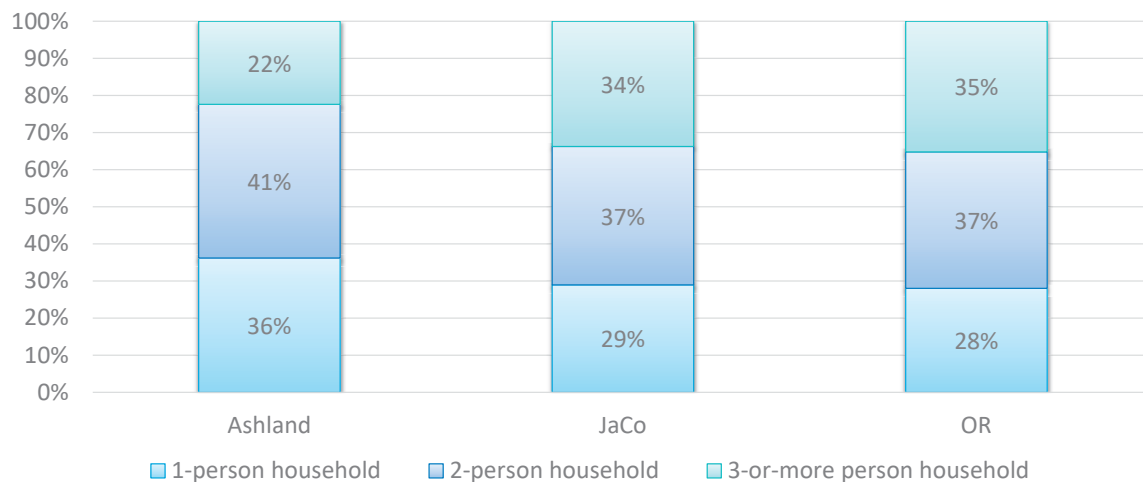
Household Size

	Ashland city, Oregon		
Label	2018-2022 Estimates	2013-2017 Estimates	Statistical Significance
HOUSING TENURE			
Occupied housing units	10,120	9,719	
Owner-occupied	52.8%	54.1%	
Renter-occupied	47.2%	45.9%	
Average household size of owner-occupied unit	2.19	2.02	*
Average household size of renter-occupied unit	1.84	2.11	*

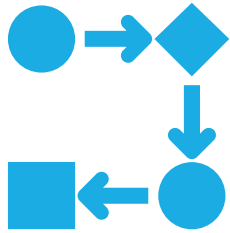
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Household Size

Household Size, Ashland, Jackson County, ORegon 2018-2022



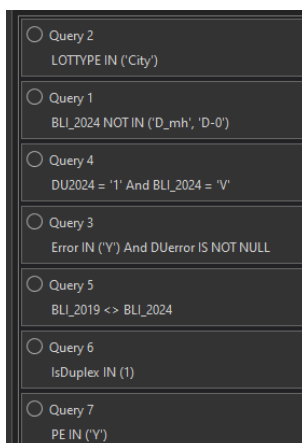
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Process

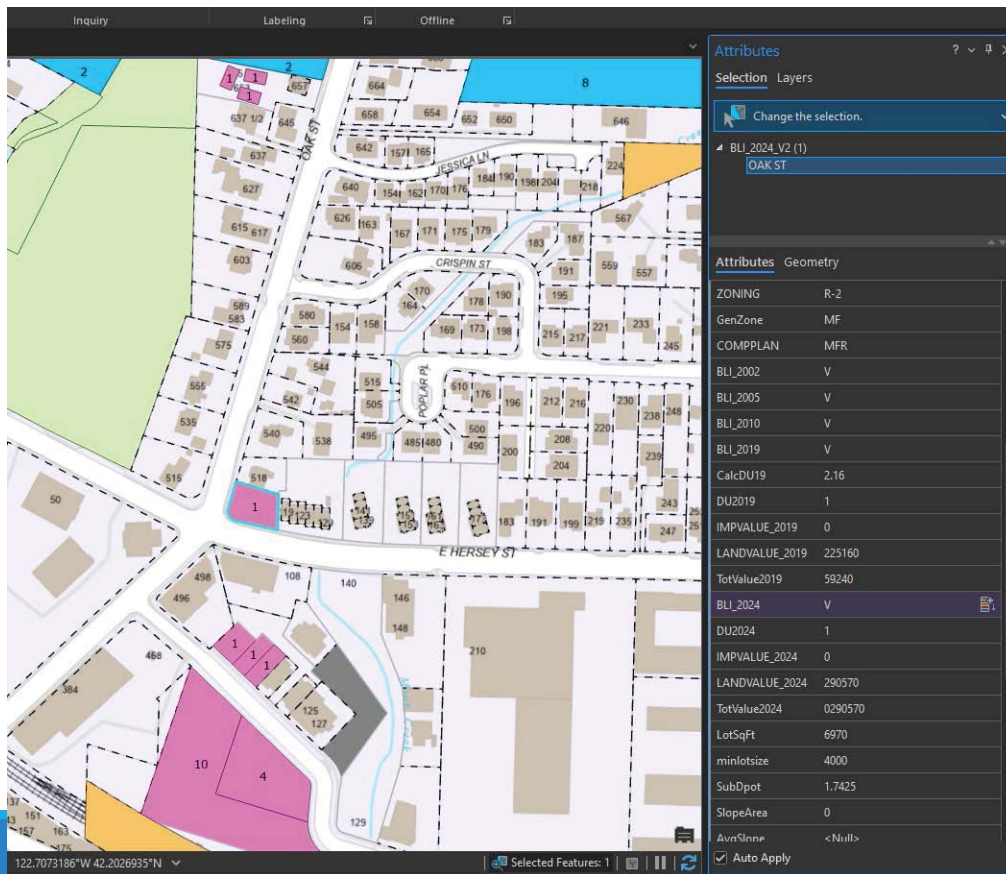
18

Geospatial Data & Sources



- ❖ GIS special data of current parcels
 - ❖ Join Building Permits, Join previous 2019 BLI
- ❖ Definition Queries used extensively to then classify changes to development status
- ❖ Same as previous years

19



Tabular output (spread sheet)

ID	Address	City	State	Zip	County	BLI_2019	BLI_2024
1	101 N. 1st St.	San Jose	CA	95131	San Jose	100	100
2	102 N. 1st St.	San Jose	CA	95131	San Jose	100	100
3	103 N. 1st St.	San Jose	CA	95131	San Jose	100	100
4	104 N. 1st St.	San Jose	CA	95131	San Jose	100	100
5	105 N. 1st St.	San Jose	CA	95131	San Jose	100	100
6	106 N. 1st St.	San Jose	CA	95131	San Jose	100	100
7	107 N. 1st St.	San Jose	CA	95131	San Jose	100	100
8	108 N. 1st St.	San Jose	CA	95131	San Jose	100	100
9	109 N. 1st St.	San Jose	CA	95131	San Jose	100	100
10	110 N. 1st St.	San Jose	CA	95131	San Jose	100	100

9126 records with over 30 fields of data

- Zoning & Comp Plan, City/UGB, Acreage, previous BLI status, area constrained, net buildable area, land value, improvement value, previous land and improvement values, calculated dwellings, adjusted dwellings, etc.

Pivot tables were used for summarizing the datasets. Pivot tables are one of Excel's most powerful features. A pivot table allows you to extract the significance from a large, detailed data set.

Land Supply

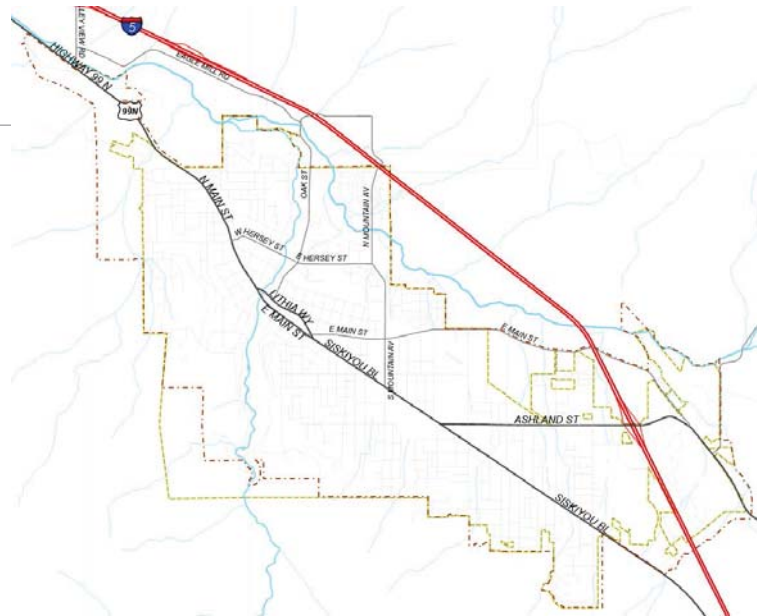
22

City Area

The City of Ashland contains a grand total of 4,258 acres within the City Limits.

The Urban Growth Boundary (UGB) contains a total of 4,732 acres.

An area of 226 acres in the southwest corner of the city is inside the city limits but outside the UGB. For this reason, the combined total area of Ashland political boundaries is 4,958 acres.



23

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24

Vacant and Partially Vacant Lands

From Tables 2,3 and 4 of the report

BLI_STATUS	Gross Acreage	Net Buildable Acres
City limits		
Vacant	224.8	139.2
Partially Vacant	243.8	149.7
UGB		
Vacant	168.2	110.7
Partially Vacant	348.6	230.7
TOTAL		
<u>Vacant</u>	<u>393.0</u>	<u>249.9</u>
<u>Partially Vacant</u>	<u>592.4</u>	<u>380.4</u>

25

Table 3

Table 3 - Total Net Buildable Acreage (V&PV) UGB alone

BLI_STATUS	# of Parcels	Gross Acreage	Net Buildable Acres
Vacant	59	168.2	110.7
Partially Vacant	112	348.6	230.7
Vacant/Airport	1	21	per plan
Vacant/UnDevelopable	8	8	0
Vacant /Open Space or Park	2	8.3	0
Vacant /Parking	3	1.8	0

26

Dwelling Unit Potential

From Tables 9 & 10

	Estimated Dwellings
City limits	1407
UGB	1303
<u>TOTAL</u>	<u>2710</u>

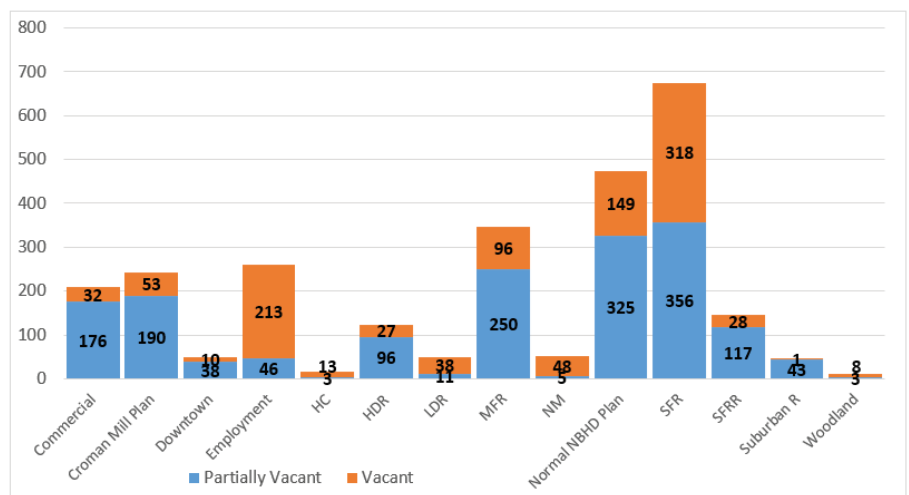
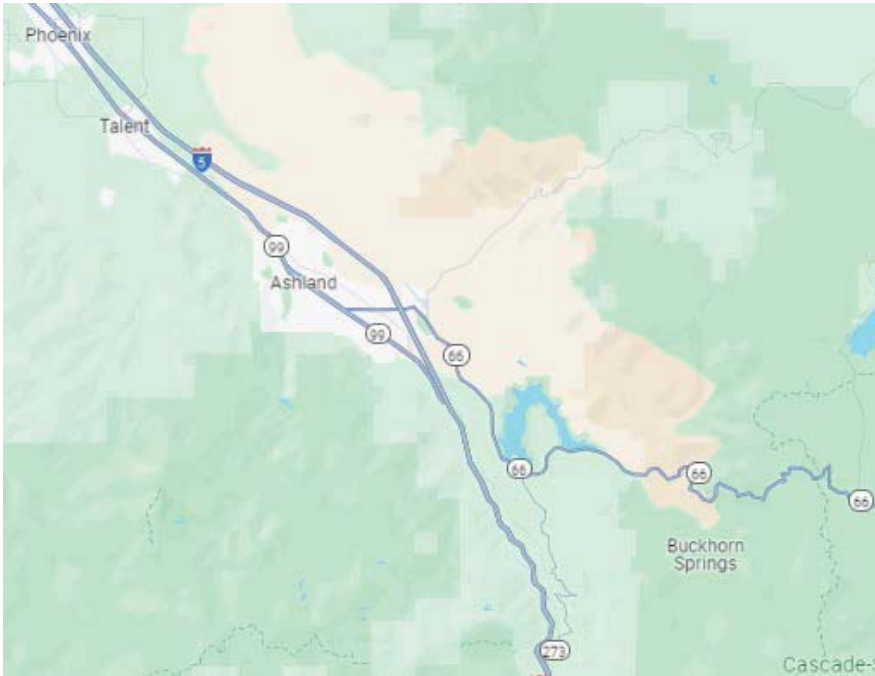
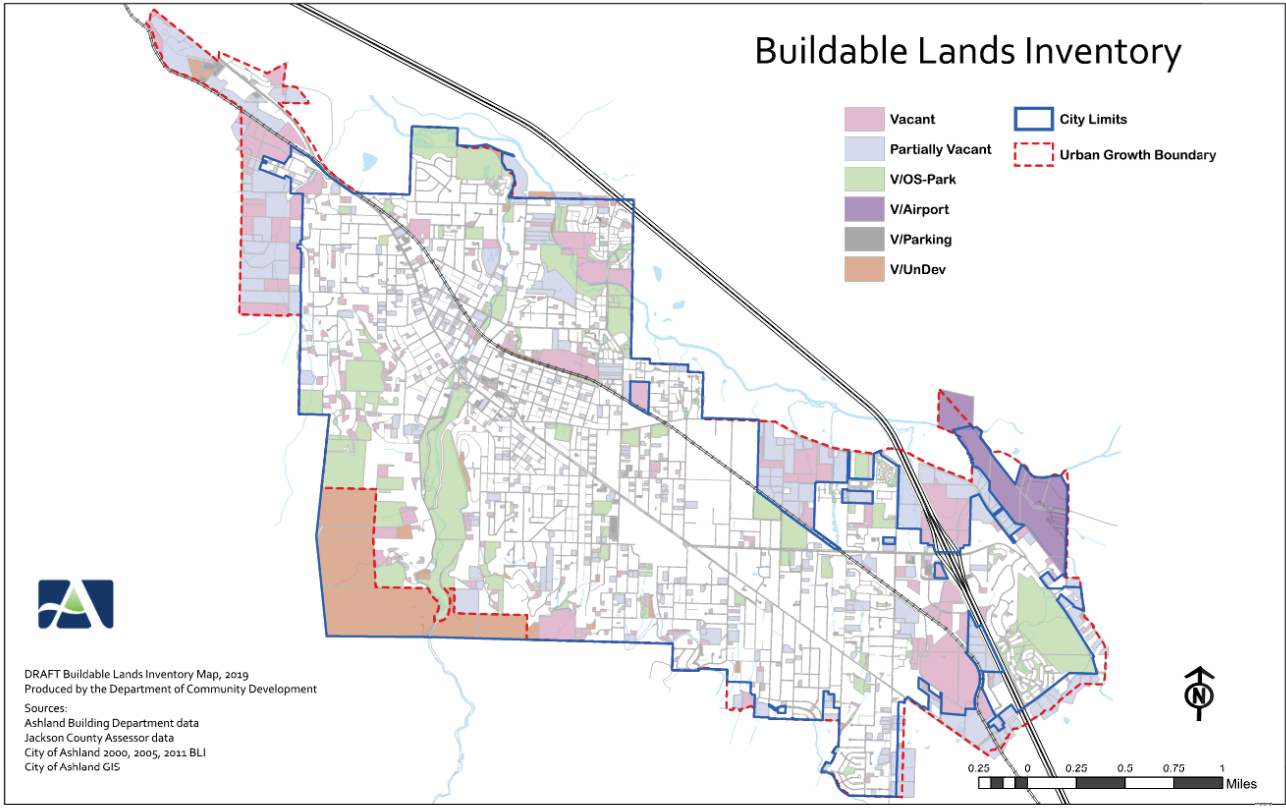
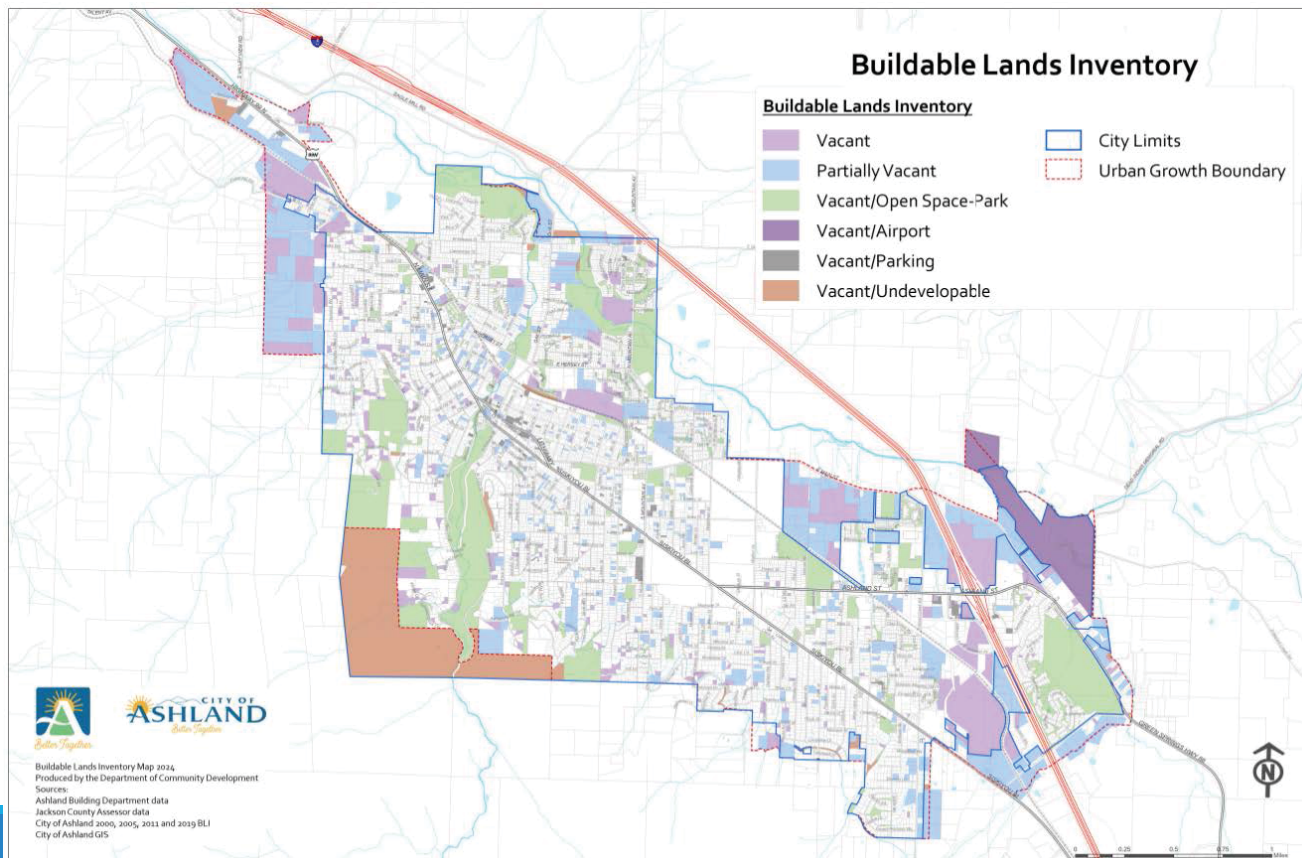


Figure 1 – Potential Dwelling Units by Comprehensive Plan Designation

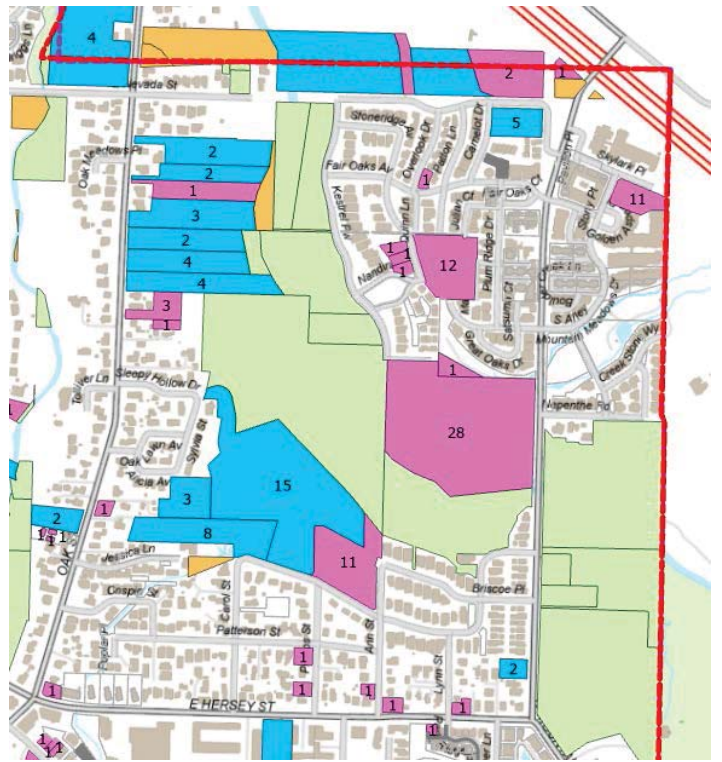
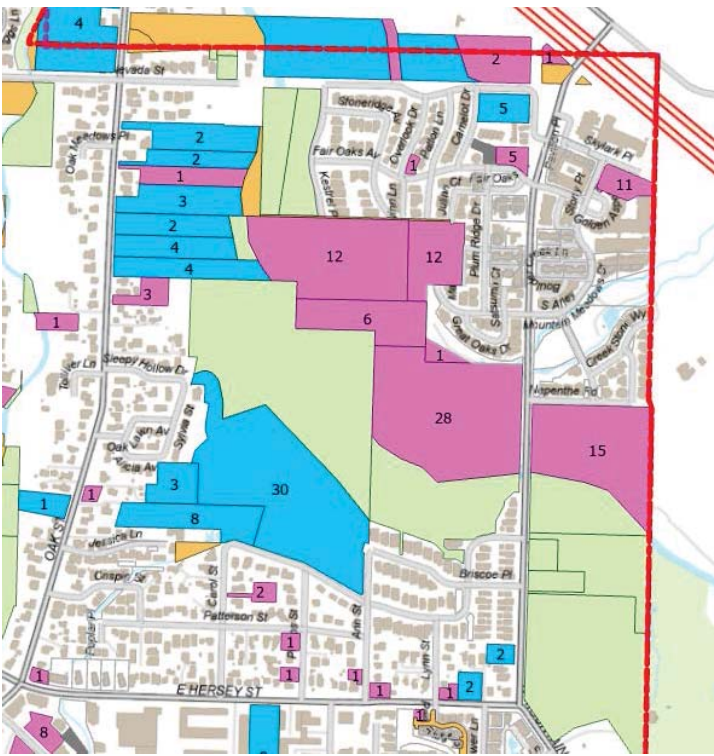


BLI Map





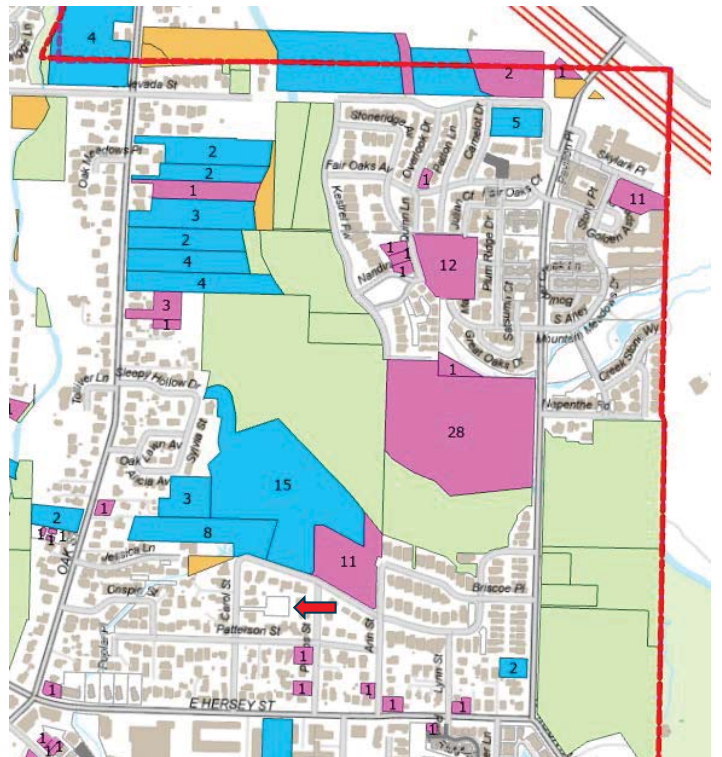
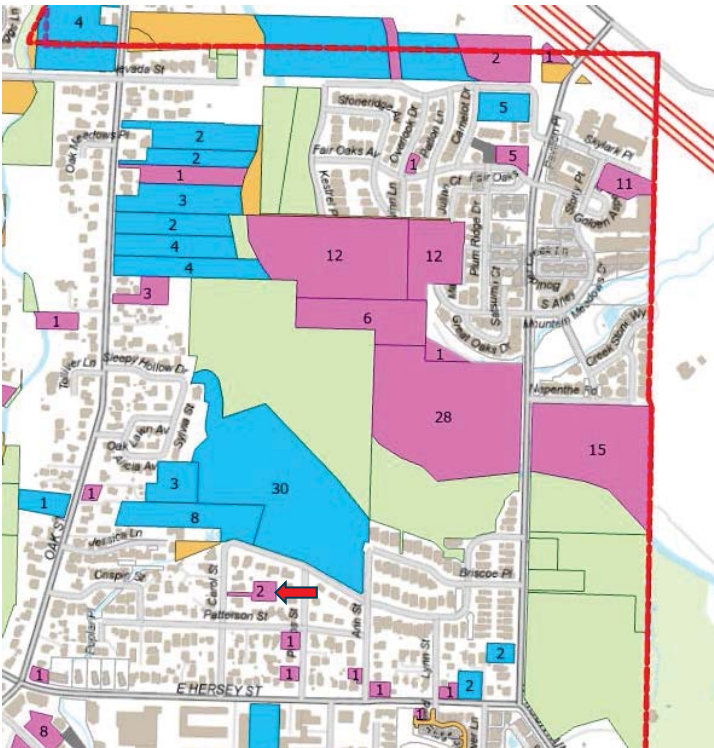
North Mountain



2019

2024

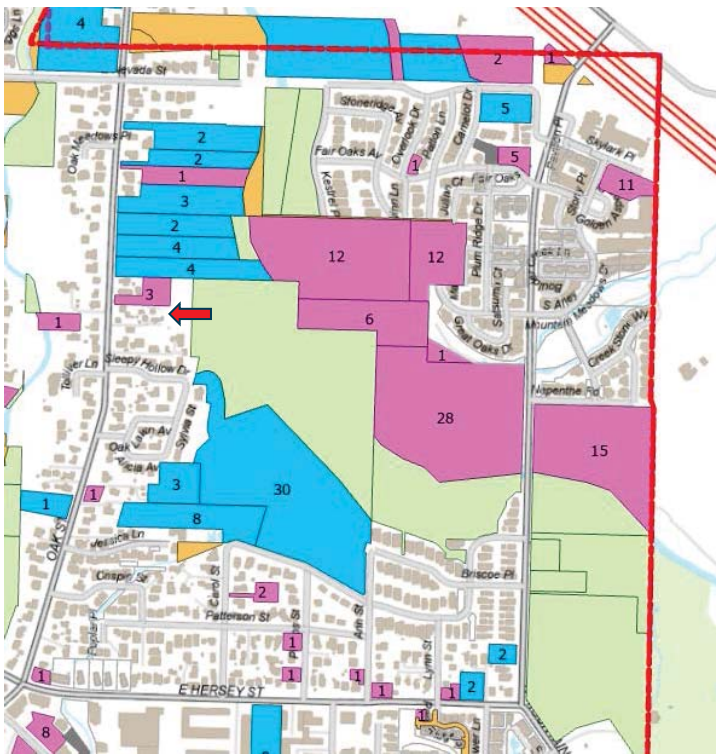
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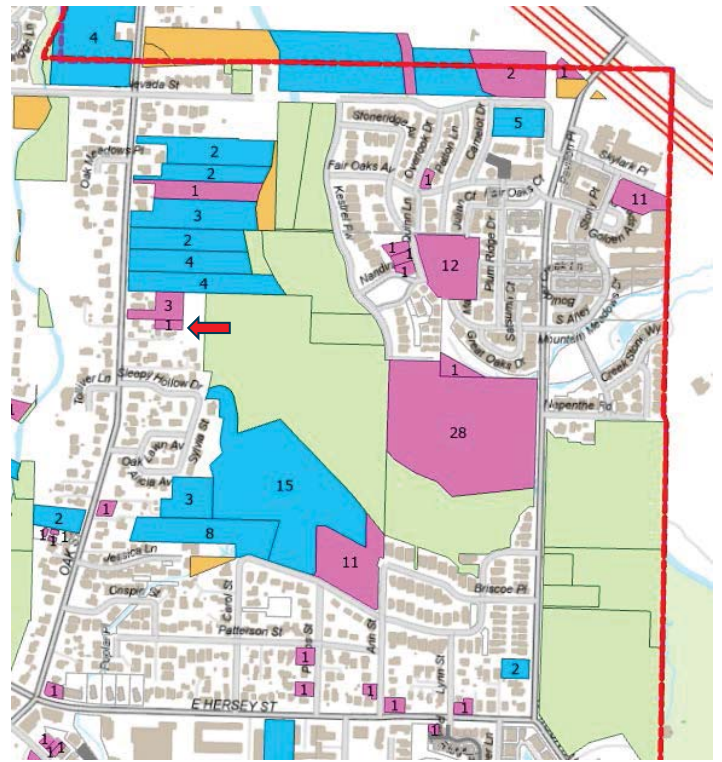
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2024

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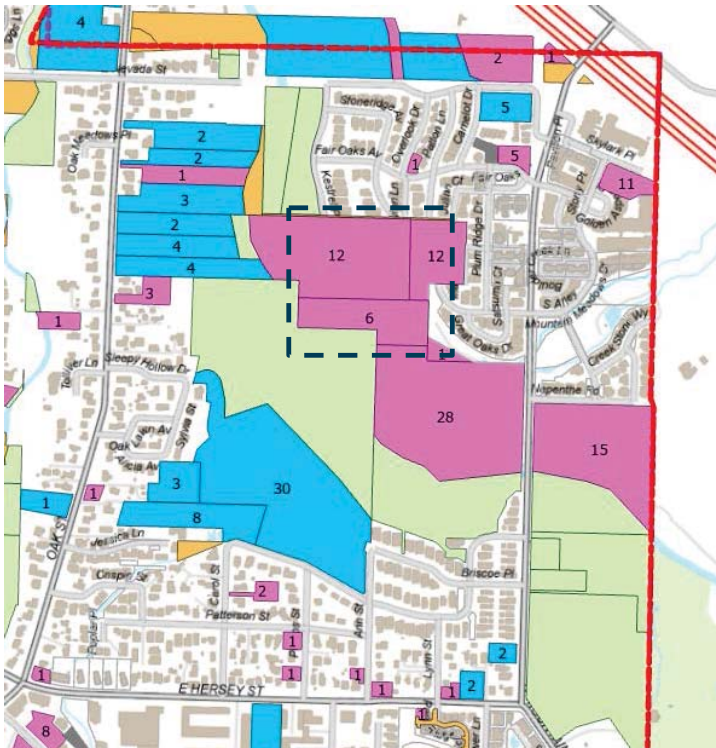


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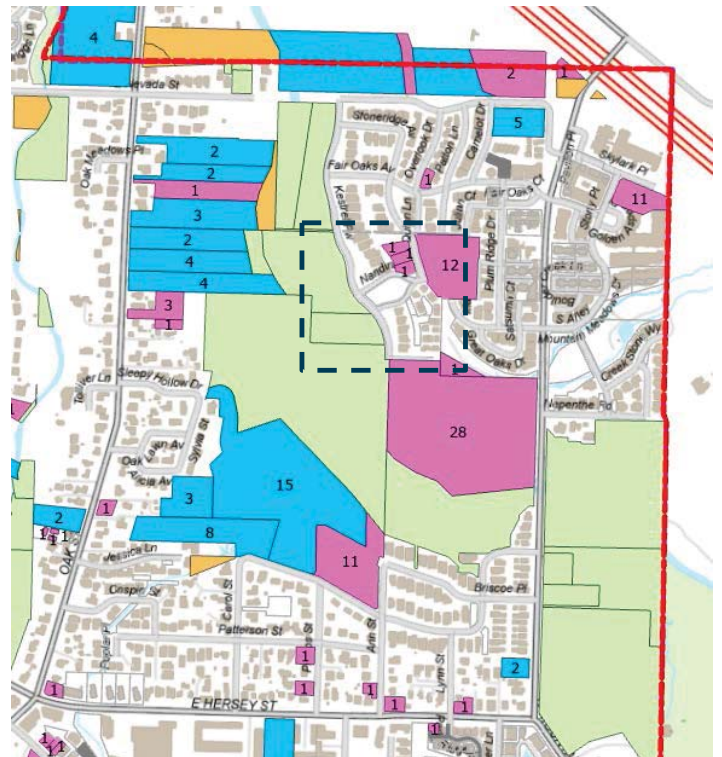


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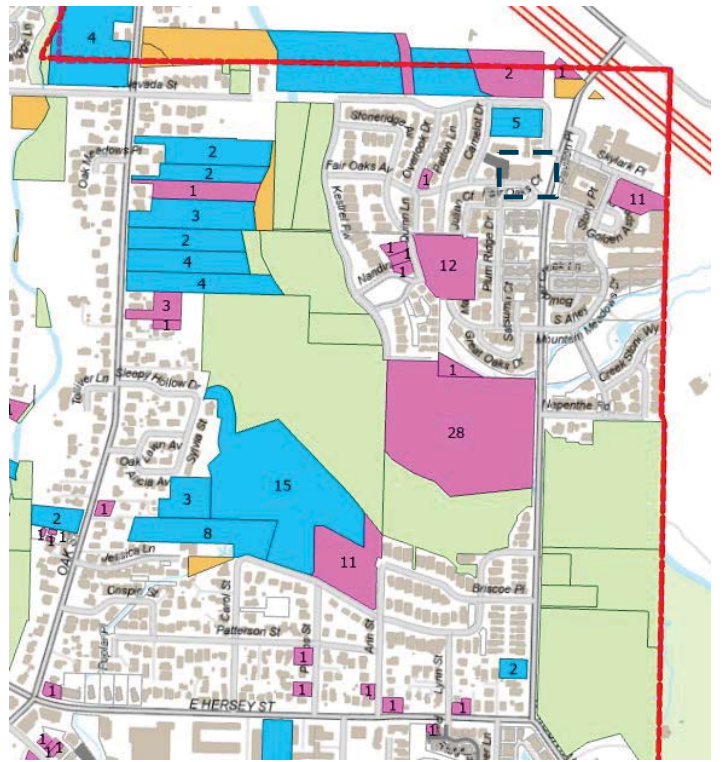
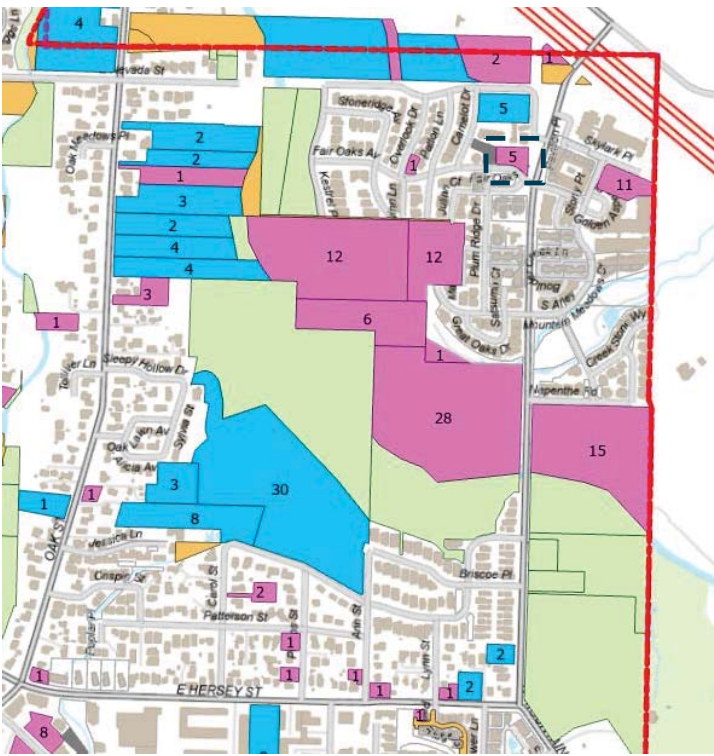


2019



2024

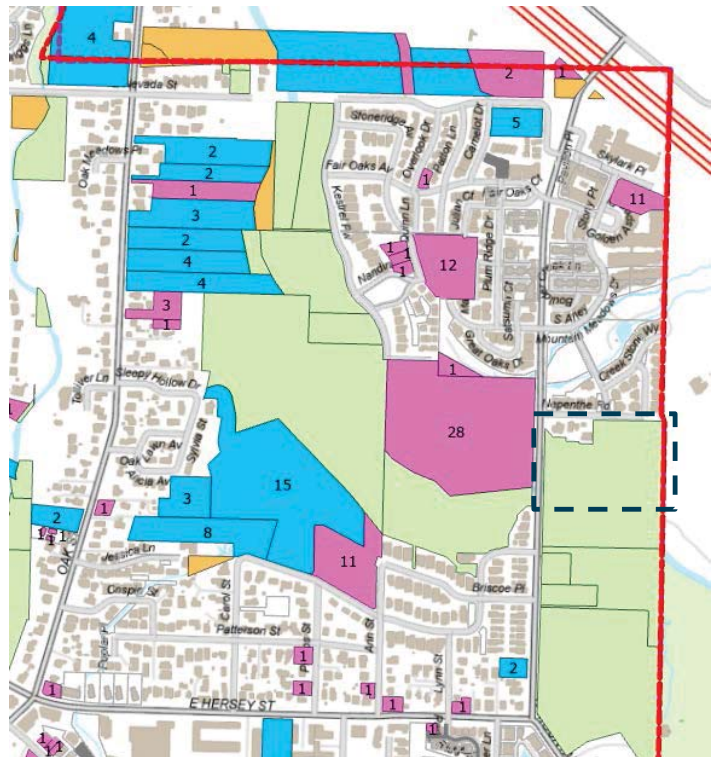
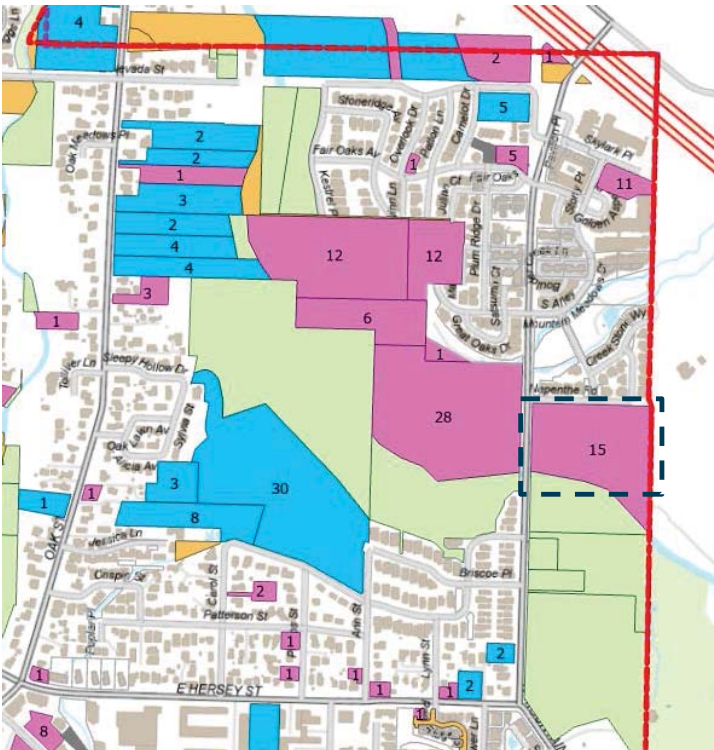
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2019

2024

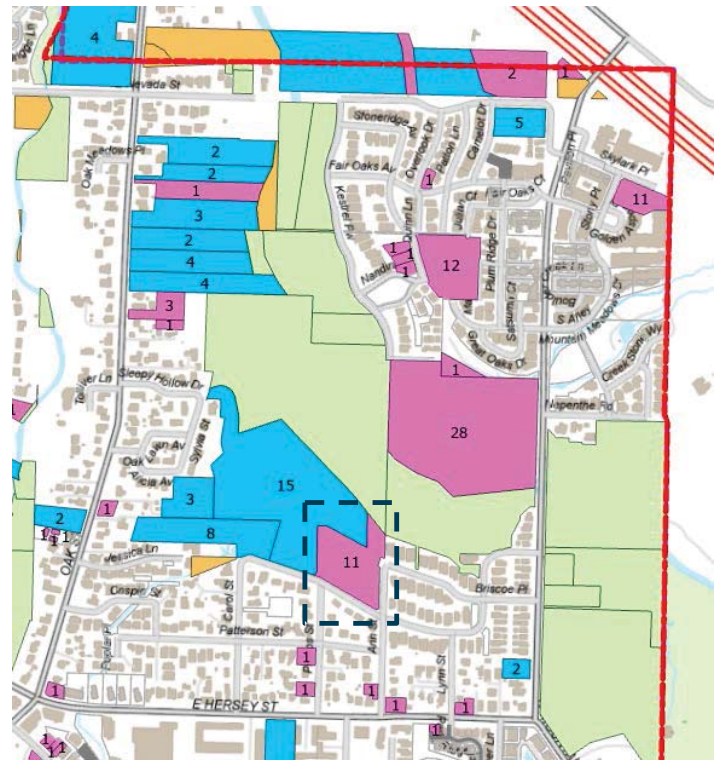
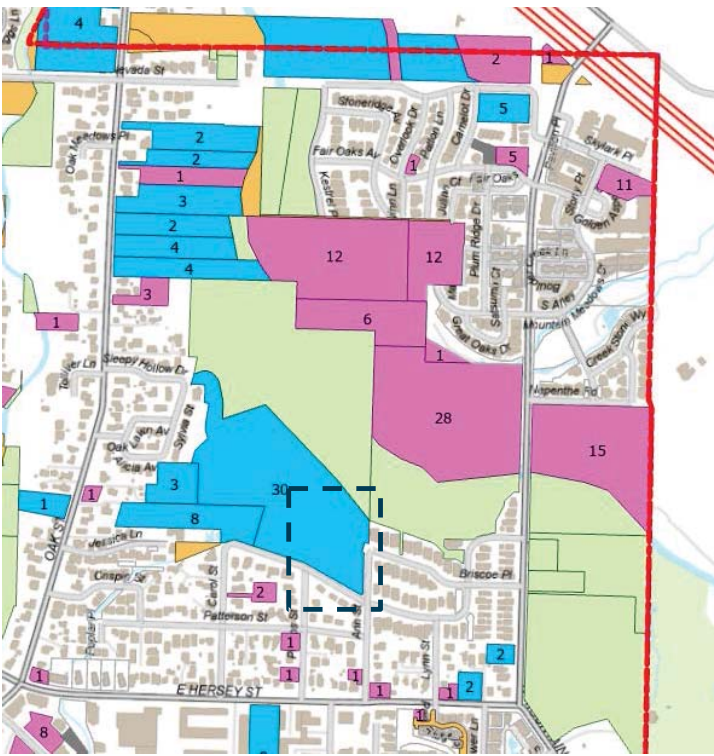
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2019

2024

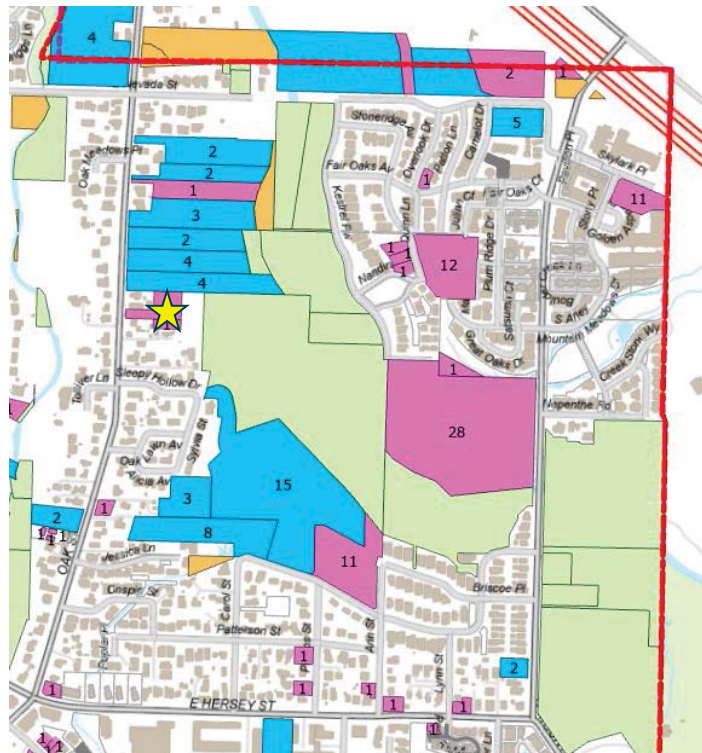
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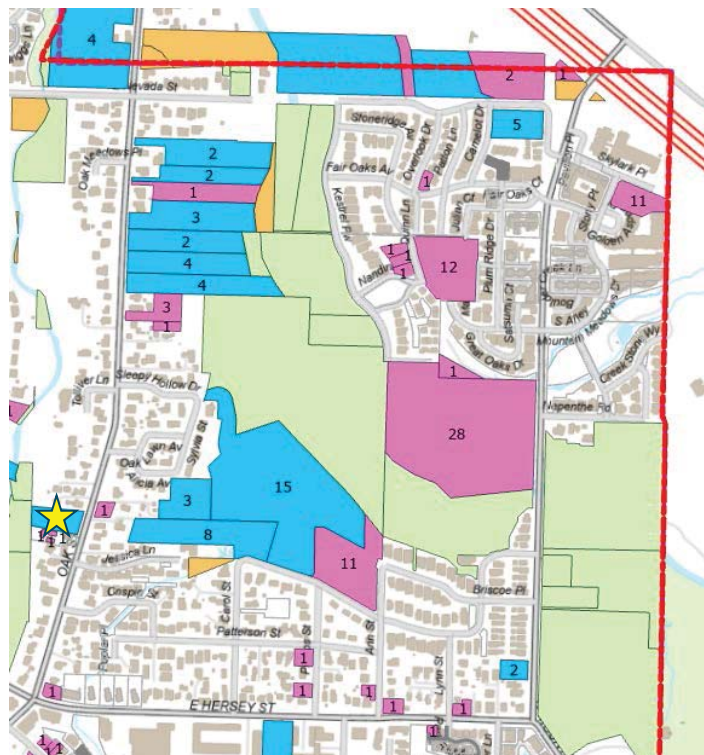
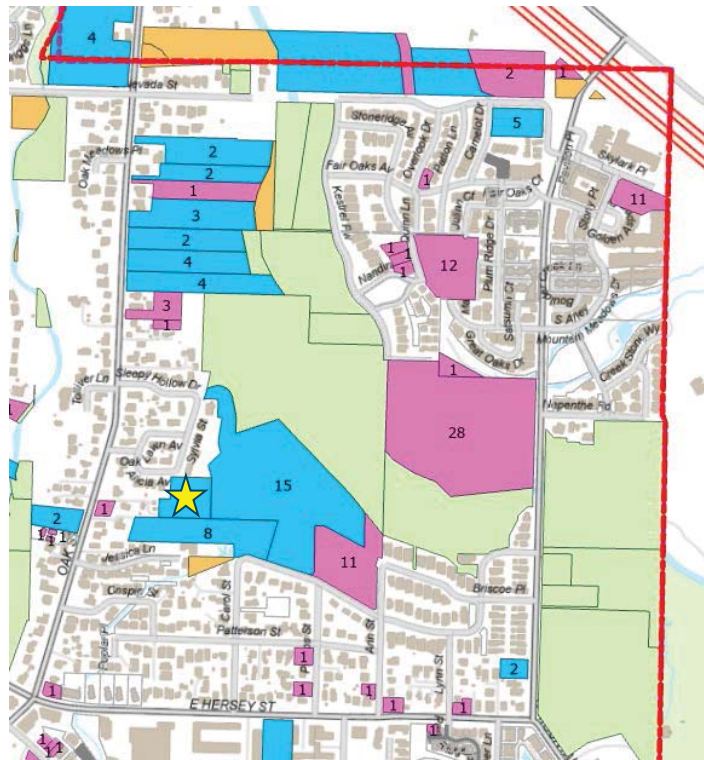
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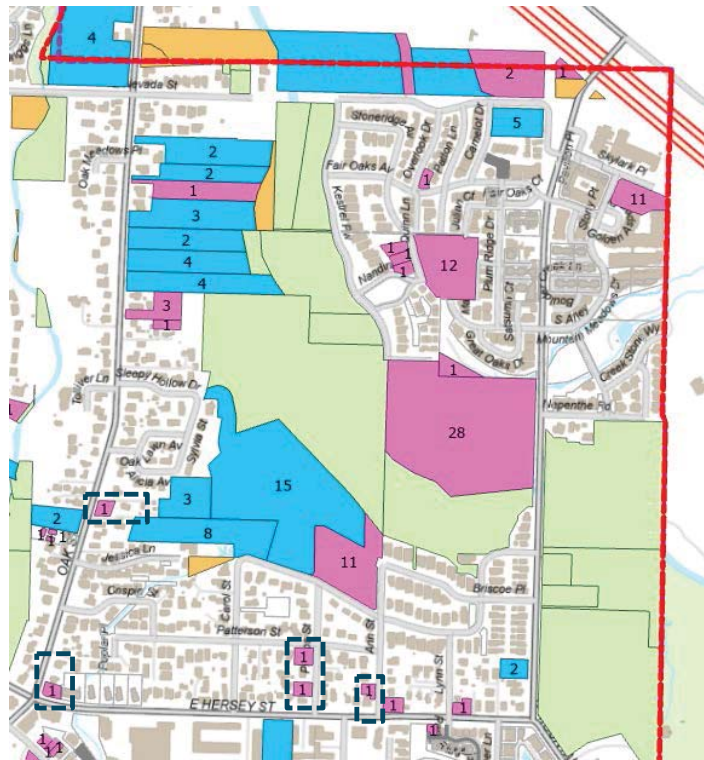
2024

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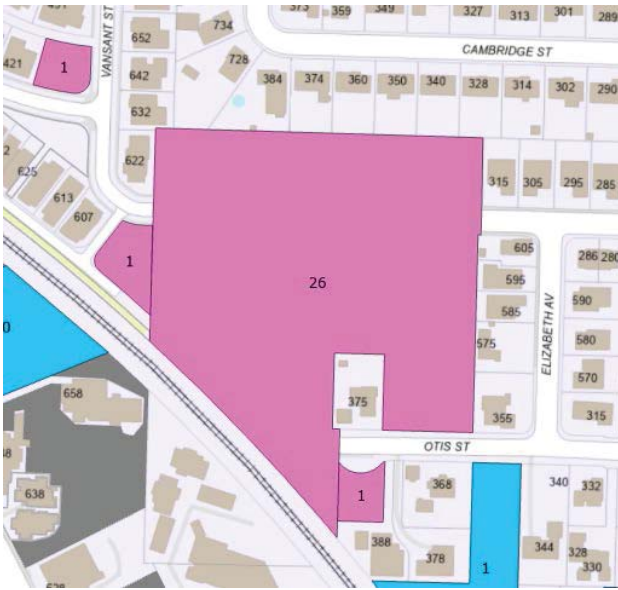


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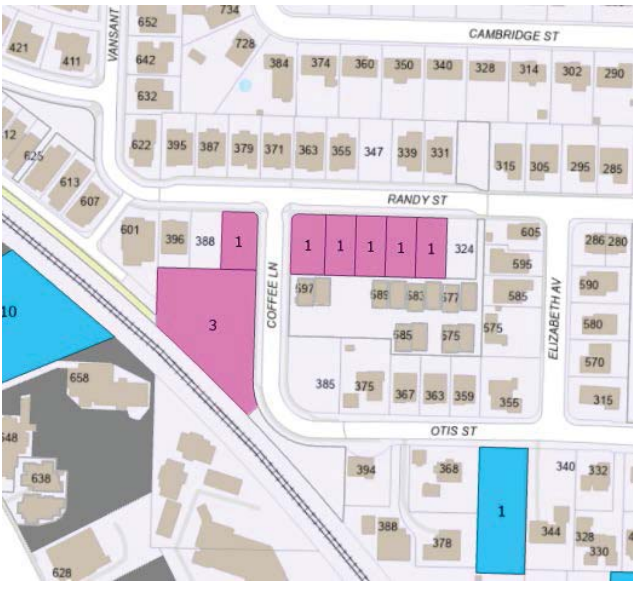




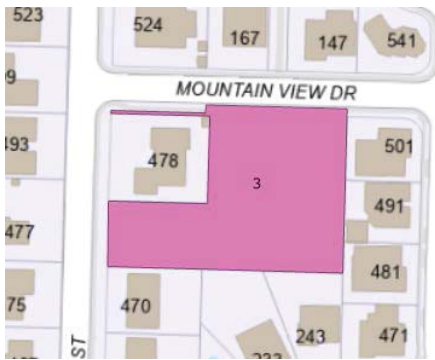
West Village & Surrounding



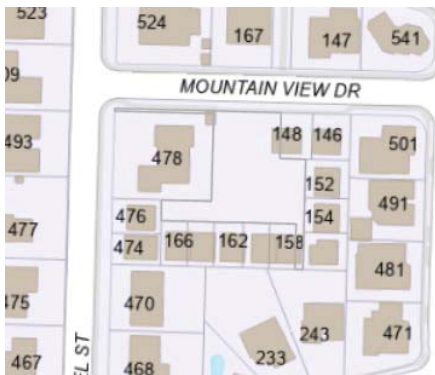
2019



2024



2019



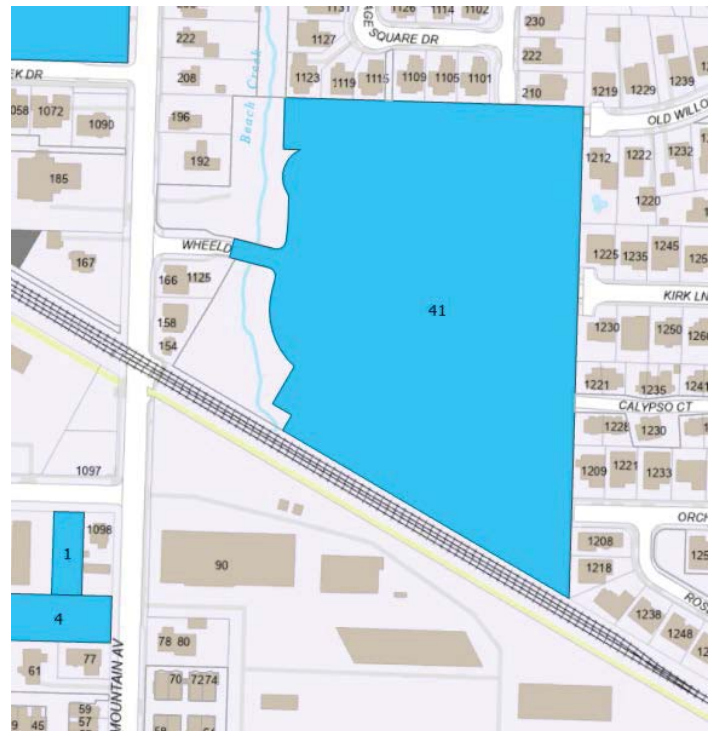
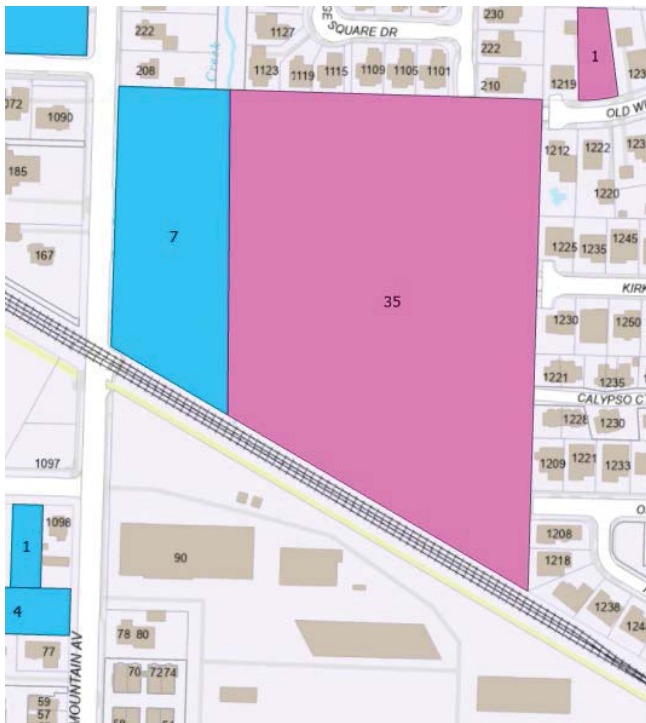
Cottage Housing

2024

Beach Creek

ANNEXATION

46



2019

2024

47



Conclusions

Based on the findings of the Housing Capacity Analysis the City will have a demand for 858 dwellings over the next twenty-year period.

This updated BLI shows that the City has potential development capacity of 1,407 dwellings within the city limits, and an additional 1,303 dwellings possible within the UGB.

This exceeds the forecast demand for new dwellings and demonstrates that there is sufficient buildable land for the projected demand over the twenty-year period.

Exhibit 66. Forecast of demand for new dwelling units, Ashland UGB, 2021 to 2041
Source: Calculations by ECONorthwest.

Variable	New Dwelling Units (2021-2041)
Change in persons	1,691
minus Change in persons in group quarters	58
equals Persons in households	1,633
Average household size	2.06
New occupied DU	793
times Vacancy rate	8.2%
equals Vacant dwelling units	65
Total new dwelling units (2021-2041)	858
Annual average of new dwelling units	43

Housing Production

Table 14 - Residential Production

Residential Units built per fiscal year								total
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	average	
SFR	36	39	32	44	32	17	33.3	200
ARU	13	19	12	12	15	12	13.8	83
Multi-family	29	34	3	96	4	20	31.0	186
Mixed-Use	2	2	36	30	1	0	11.8	71
	80	94	83	182	52	49	90.0	540

BLI as a living document

As was pointed out in the BLI there have been numerous changes in state law including

- duplexes and Accessory Dwelling Units (ADUs) without restriction
- Middle Housing Land Divisions
- eliminating parking requirements
- allowing residential development on commercial lands
- requiring the allowance of 'adjustments' to local regulations
- Climate Friendly Area's and related regulation

As new guidance is issued with regard to methodology to take these changes into account future updates of the BLI will take these changes into account

Next Steps



PC motion to recommend approval of the BLI to City Council



City Council study session on June 3rd



Council meeting on June 4th where a resolution will be adopted.

Additionally, this updated BLI will be used to support ongoing efforts with regards to CFA planning and an updated Economic Opportunity Analysis.





Planning Commission Minutes

Note: Anyone wishing to speak at any Planning Commission meeting is encouraged to do so. If you wish to speak, please rise and, after you have been recognized by the Chair, give your name and complete address for the record. You will then be allowed to speak. Please note the public testimony may be limited by the Chair.

May 28, 2024

STUDY SESSION

DRAFT Minutes

I. **CALL TO ORDER:**

Chair Verner called the meeting to order at 7:00 p.m. at the Civic Center Council Chambers, 1175 E. Main Street. Councilor Hyatt attended the meeting via Zoom.

Commissioners Present:

Lisa Verner
Doug Knauer
Susan MacCracken Jain
Gregory Perkinson
Russell Phillips

Staff Present:

Brandon Goldman, Community Development Director
Derek Severson, Planning Manager
Michael Sullivan, Executive Assistant

Absent Members:

Eric Herron
Kerry KenCairn

Council Liaison:

Paula Hyatt

II. **ANNOUNCEMENTS**

Community Development Director Brandon Goldman made the following announcement:

- The City Council is scheduled to review the Buildable Lands Inventory Update at its June 3, 2024 meeting. It will then go back to the Council on July 18th for consideration.

III. **PUBLIC FORUM** – None

IV. **DISCUSSION ITEM**

A. Transportation Element of the Comprehensive Plan (Scott Fleury and the Transportation Advisory Committee)

Presentation

Public Works Director Scott Fleury began by introducing the Chair of the Transportation Advisory Committee (TAC), Linda Peterson Adams, and provided a brief presentation of the following items:

- General Project Development
- General Project Costing
- Transportation Advisory Committee – Workplan





Planning Commission Minutes

Mr. Fleury described how workplans are developed for capitol and ancillary projects, and how they are funded, such as the Ashland Street rehabilitation project being funded by the Food and Beverage Tax. He commented that some projects are funded by cash on hand, but that the City is continually applying for grants to fund projects (see attachment #1).

Ms. Peterson Adams described the Transportation System Plan (TSP) as an existing transportation system and the projects, programs, and policies that allow a community to meet its transportation needs over the next 20 years. She stated that the TSP aligns with the goal of a sustainable and livable City, and that it can also increase economic prosperity, provide greater access to a skilled workforce, and boost property values. Ms. Peterson Adams described critical elements of the TSP as the following:

- Climate Friendly and Equitable Community (CFEC) and Transportation Planning Rule (TPR) Compliance
- Update Street Design standards (Bike Boulevards)
- High Level of Public Engagement
- New Policies, Goals, and Levels of Services
- New Fiscally Constrained Capital Plan

Discussion

The Commission discussed the benefits of receiving feedback from Public Works and the TAC prior to conducting Type II public hearings, particularly regarding projects with the potential to impact nearby traffic patterns. Mr. Fleury requested that the Commission be cognizant of evacuation routes when reviewing new developments and that the City's and nearby community's burden on the traffic system should be taken into account during an evacuation. He also requested that the Commission provide a level of education to the TAC to better align their goals.

The Commission discussed long-term planning of neighborhoods and the importance of network connectivity. Mr. Fleury remarked on the differences between roads and streets, as well as the differences in transportation goals of a City and those of the Oregon Department of Transportation (ODOT). He noted that widely-requested methods to slow down traffic in neighborhoods, such as speed-bumps, could have adverse effects on emergency vehicles and slow response times. Chair Verner asked if the City had considered installing roundabouts to slow traffic. Mr. Fleury responded that the City has considered mini-roundabouts, and that they're installed flashing lights in heavy-accident areas. He emphasized that the TAC is partially about educating the populace, and that more enforcement is needed to reduce speeding.

B. Energy, Air & Water Conservation Element of the Comprehensive Plan & the Climate and Energy Action Plan (Chad Woodward and the Climate and Environment Policy Advisory Committee)





Planning Commission Minutes

Presentation

Climate and Energy Specialist Chad Woodward provided a background on the Climate and Energy Action Plan (CEAP) which was adopted by the Council in 2017 and followed by a climate recovery ordinance. The two primary goals of the CEAP are 1) to reduce Ashland's contribution to global carbon pollution by reducing greenhouse gas emissions associated with City, residential, commercial, and industrial activities; and 2) to prepare the City's communities, systems, and resources to be more resilient to climate change impacts (see attachment #2). The CEAP has the following six focus areas to achieve these goals:

- Building & Energy
- Urban Form, Land Use & Transportation
- Consumption & Waste
- Natural Systems
- Public Health, Safety & Well-being
- Cross-Cutting Strategies

Mr. Woodward described the various strategies and actions associated with achieving each of the above goals. Bryan Sohl, Chair of the Climate and Environment Policy Advisory Committee (CEPAC) emphasized the need for coordination between the TAC, CEPAC, and Commission in order to achieve these goals. Mr. Woodward listed a number of programs, including Energy Retrofit Ashland, Carshares, and Home Energy Score as ways to reduce carbon emissions. He noted that the City focuses on offering incentives to encourage participation in energy efficient programs, such as switching to electronic appliances.

Chair Sohl informed the Commission that at its last meeting the Council had directed staff to develop an ordinance for the electrification of new residential construction as a way to reduce carbon emissions. He noted that similar ordinances are being developed in Los Altos Hills, but that similar guidelines had run into legal issues in Berkeley.

Chair Sohl stated that the CEPAC had adopted work sessions and would now meet twice a month in order to meet its heavy workload.

Questions

Commissioner Knauer asked if a credit would be granted if a resident traded in for a natural gas stove. Mr. Woodward responded that the CEAP is primarily based off emissions and that the City does not have the staff necessary to calculate that type of credit. Chair Sohl added that the CEPAC would like to grant those types of credits, but that the biggest items the City can impact in terms of greenhouse emissions are transportation and building practices. He noted that the City's use of electricity has gone down, even with the increased use of electric vehicles, though this could also be



Planning Commission Minutes

due to increased efficiency. He added that Avista Utilities has not provided recent numbers on the use of natural gas, as this action is voluntary and such numbers had previously been used to paint the company in a negative fashion.

V. OPEN DISCUSSION

Commissioner MacCracken Jain suggested that the Public Arts Advisory Committee provide a briefing to the Commission in the near future. Chair Verner responded that such a presentation could be arranged.

VI. ADJOURNMENT

Meeting adjourned at 8:42 p.m.

*Submitted by,
Michael Sullivan, Executive Assistant*



Transportation Elements

May 28, 2024 Planning Commission Study Session

Presentation Overview

Topics

- Agenda
 - General Project Development
 - General Project Costing
 - Transportation Advisory Committee – Workplan
 - Questions





Enterprise System Project Development – How

- Cradle to Grave Process

- Project Development
 - System Master Plan
 - Citizen Appointed Committee
 - Public Meetings
 - Council Engagement – Feedback
 - Adoption
 - Capital Improvement Plan
 - 2/6-year development
 - Adoption by Council
 - Budget Process
 - Appropriations and Approval

- Project Initiation

- Request for Proposal
- Preliminary Engineering
- Final Engineering
- Construction Administration
- Construction Contract



Opinion of Cost– Development

- How are project costs developed?
 - Master Plan, 30%, 60%, 90%, 100%
 - Accuracy Increases Iteratively

	AAEC Class	ANSI Classification	Typical Use	Project Definition	Expected Range of Accuracy		Other Terms
					Low Expected Actual Cost	High Expected Actual Cost	
Master Plan →	Class 5	Order-of-Magnitude	Strategic Planning; Concept Screening	0% to 2%	-50% to -20%	+30% to +100%	ROM; Ballpark; Blue Sky; Ratio
	Class 4		Feasibility Study	1% to 15%	-30% to -15%	+20% to +50%	Feasibility; Top-down; Screening; Pre-design
	Class 3	Budgetary	Budgeting	10% to 40%	-20% to -10%	+10% to +30%	Budget; Basic Engineering Phase; Semi-detailed
Final Engineering →	Class 2	Definitive	Bidding; Project Controls; Change Management	30% to 75%	-15% to -5%	+5% to +20%	Engineering; Bid; Detailed Control; Forced Detail
	Class 1		Bidding; Project Controls; Change Management	65% to 100%	-10% to -3%	+3% to +15%	Bottoms Up; Full Detail; Firm Price



Transportation – Workplan

- Transportation System Plan

WHAT IS A TRANSPORTATION SYSTEM PLAN?

A TSP describes the existing transportation system and the **projects, programs, and policies** that will allow a community to meet its transportation needs and aspirations now and 20 years into the future.

Questions the *TSP* Process will Help You Answer



What do we have now?



What do we want?



What will we need in the future?



How will we fund our projects?



What should we do first?



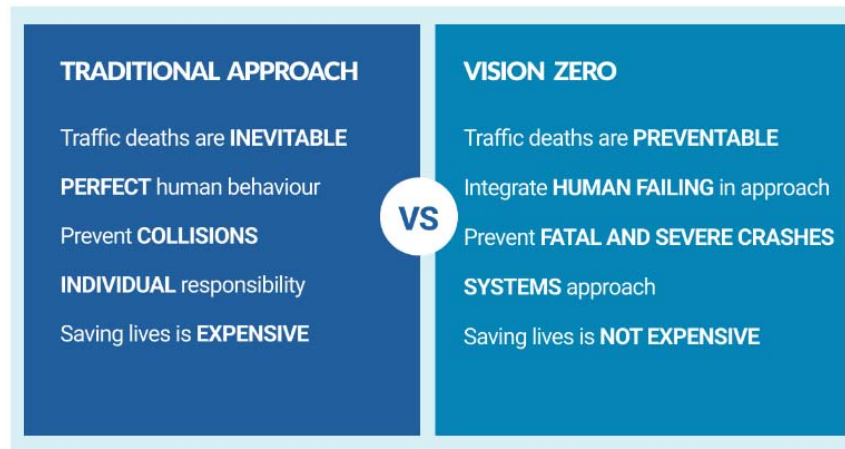
Transportation – Workplan

- Transportation System Plan
 - Grant Funded
 - 18-24 Month Process
- Critical Elements
 - CEPEC and TPR Compliance
 - Update Street Design Standards (Bike Boulevards)
 - High Level of Public Engagement
 - New Policies, Goals and Levels of Service
 - New Fiscally Constrained Capital Plan



Transportation – Workplan

- Vision Zero and Safe Streets For Everyone – Action Plan
 - SS4A Grant Application (August Award)
- Action Plan Opens up Future Grant Opportunities



Transportation – Workplan

- Capital Projects
 - Roadway Rehabilitation
 - Ashland Street
 - North Mountain Avenue
 - Oak Street
 - Clay Street
- Focus on Bike, Ped and Safety Enhancements
 - Protected Bike Lanes
 - Bike Boxes
 - Rectangular Rapid Flashing Beacons
 - Traffic Calming

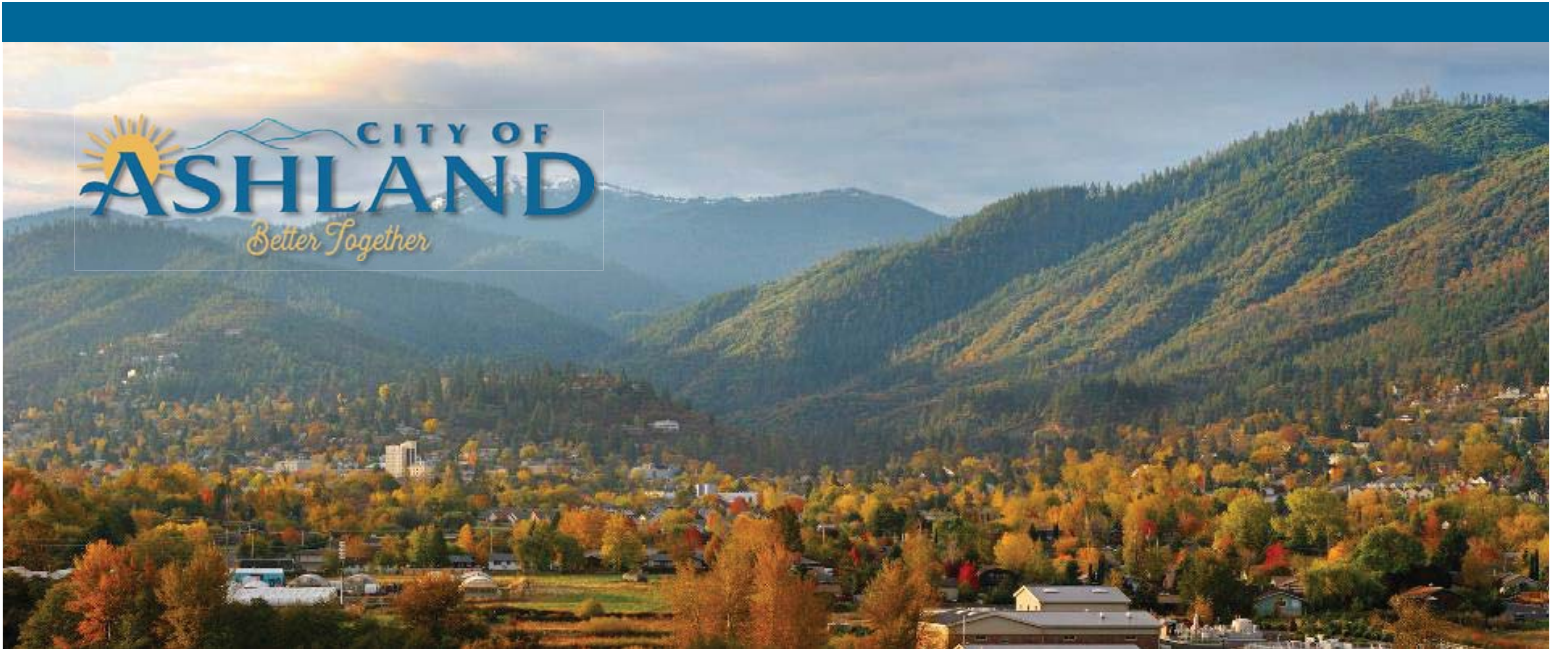
Transportation – Workplan

- Miscellaneous
 - Public Education and Outreach
 - Traffic Calming
 - ODOT Coordination
 - RVTD Support
 - Bike Parking Inventory and Improvement
 - Encroachment Guidelines and Ordinance Update



QUESTIONS?





Comprehensive Plan – Energy & Air

May 21, 2024

Bryan Sohl
Chair – Climate and Environment
Policy Advisory Committee

Chad Woodward
Climate & Energy Analyst



CEAP – History & Background

2011

- [Regional Renewable Energy Assessment](#)

2015

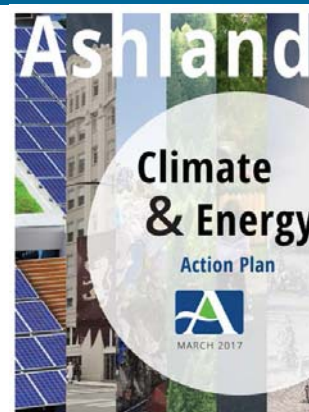
- [Formation of Climate and Energy Action Plan Ad Hoc Committee](#)

2016

- [Greenhouse Gas Inventory, years 2011-2015](#)
- [Public Engagement - Open House #1](#)
- [Public Engagement - Open House # 2](#)
- [Public Engagement - Open House # 3](#)

2017 = Ashland Climate and Energy Action Plan

- The plan was adopted by city council and a [climate recovery ordinance](#) was passed.



CEAP – Goals

1

Reduce Ashland's contribution to global carbon pollution by reducing greenhouse gas emissions associated with City, residential, commercial, and industrial activities.

For the Ashland community:

Reduce overall Ashland community greenhouse gas emissions by 8% on average every year to 2050.

For City of Ashland operations:

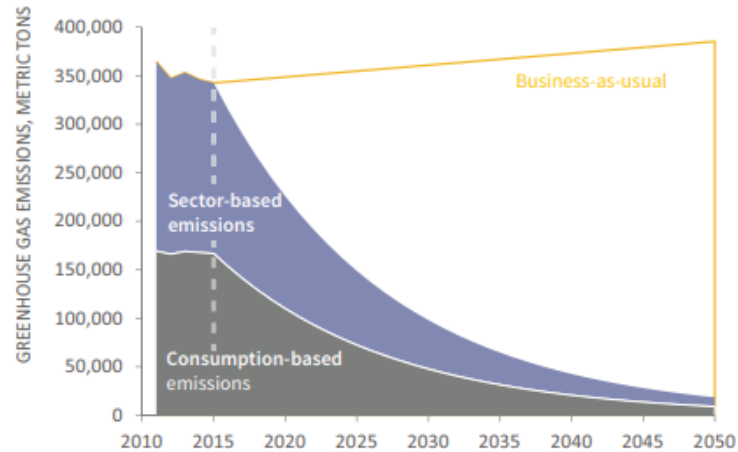
Attain carbon neutrality in City operations by 2030, and reduce fossil fuel consumption by 50% by 2030 and 100% by 2050.



CEAP – Goals

2

Prepare the city's communities, systems, and resources to be more resilient to climate change impacts.



CEAP – Focus Areas



**Buildings &
Energy**



**Urban Form,
Land Use &
Transportation**



**Consumption
& Waste**



**Natural
Systems**



**Public Health,
Safety &
Well-being**



**Cross-Cutting
Strategies**



CEAP – Strategies

URBAN FORM, LAND USE + TRANSPORTATION

- Strategy ULT-1.** Support better public transit and ridesharing.
- Strategy ULT-2.** Make Ashland more bike and pedestrian-friendly.
- Strategy ULT-3.** Support more efficient vehicles.
- Strategy ULT-4.** Support more climate-ready development and land use.
- Strategy ULT-5.** Increase the efficiency of City fleet vehicles and employee commuting.

PUBLIC HEALTH, SAFETY + WELL-BEING

- Strategy PHSW-1.** Manage ecosystems and landscapes to minimize climate-related health impacts.
- Strategy PHSW-2.** Promote a sustainable local economy that minimizes emissions and vulnerability.
- Strategy PHSW-3.** Minimize public health impacts.
- Strategy PHSW-4.** Minimize public safety impacts.

CONSUMPTION + MATERIALS MANAGEMENT

- Strategy CM-1.** Reduce consumption of carbon-intensive goods and services.
- Strategy CM-2.** Support sustainable and accessible local production and consumption.
- Strategy CM-3.** Expand community recycling and composting.
- Strategy CM-4.** Reduce food waste.
- Strategy CM-5.** Improve the sustainability of City operations and purchases.

NATURAL SYSTEMS

- Strategy NS-1.** Promote ecosystem resilience.
- Strategy NS-2.** Manage and conserve community water resources.
- Strategy NS-3.** Conserve water use within City operations.

BUILDINGS + ENERGY

- Strategy BE-1.** Support cleaner energy sources.
- Strategy BE-2.** Encourage increased building energy efficiency and conservation.
- Strategy BE-3.** Maximize efficiency of City facilities, equipment & operations.
- Strategy BE-4.** Improve demand management.
- Strategy BE-5.** Prepare and adapt buildings for a changing climate.

CROSS-CUTTING STRATEGIES

- Strategy CC-1.** Educate and empower the public.
- Strategy CC-2.** Educate and empower City staff.
- Strategy CC-3.** Mainstream and integrate climate considerations.
- Strategy CC-4.** Engage with other governments and organizations around climate policy and action.



CEAP – Actions

BUILDINGS + ENERGY

SCOPE / TYPE

Strategy BE-1. Support cleaner energy sources

- BE-1-1.** Develop a comprehensive plan for the Municipal Electric Utility. C Mi
- BE-1-2.** Promote switching to low and non-carbon fuels. C Mi
- BE-1-3.** Facilitate and encourage solar energy production. C Mi/Ad
- BE-1-4.** Enhance production of on-site solar energy from City facilities. M Mi/Ad

Strategy BE-2. Encourage increased building energy efficiency and conservation.

- BE-2-1.** Expand participation in energy efficiency programs & promote climate-friendly building/construction. C Mi/Ad
- BE-2-2.** Require building energy scores to identify and incentivize cost-effective energy efficiency improvements. C Mi/Ad
- BE-2-3.** Identify and adopt strategies to reduce energy efficiency barriers in rent/lease properties. C Mi/Ad
- BE-2-4.** Establish minimum energy efficiency standards for the affordable housing program. C Mi/Ad

Strategy BE-3. Maximize efficiency of City facilities, equipment & operations.

- BE-3-1.** Use results from City Facilities Energy Audit to prioritize Capital Improvement Plans (CIPs) & maintenance improvements. M Mi

Strategy BE-4. Improve demand management.

- BE-4-1.** Expand the current net meter resolution to include and incorporate virtual net metering. C Mi
- BE-4-2.** Implement utility-level smart grid technologies to facilitate efficiency and distributed energy solutions. C Mi

Strategy BE-5. Prepare and adapt buildings for a changing climate.

- BE-5-1.** Encourage heat-tolerant building approaches such as cool roofs and passive cooling. C Mi/Ad



KEY	SCOPE OF IMPACT		TYPE OF IMPACT	
	C	affects community-wide operations + climate goals.	M	addresses mitigation goals (lowers GHG emissions).
	M	affects municipal operations + climate goals.	Ad	addresses adaptation goals (builds resilience to climate impacts).
			MI/Ad	addresses both mitigation + adaptation goals.

CEAP – Actions

URBAN FORM, LAND USE + TRANSPORTATION

Strategy ULT-1. Support better public transit and ridesharing.

ULT-1-1. Coordinate with neighboring local governments to promote use of transit, carpooling, and car-sharing.	C	Mi
ULT-1-2. Work with RVTB to implement climate-friendly transit.	C	Mi
ULT-1-3. Establish policies to support development near transit hubs without displacing disadvantaged populations.	C	Mi
ULT-1-4. Evaluate feasibility of expanded local transit options.	C	Mi

Strategy ULT-2. Make Ashland more bike- and pedestrian-friendly.

ULT-2-1. Implement bicycle- and pedestrian-friendly actions in the Transportation System Plan and Downtown Parking Management Plan.	C	Mi
ULT-2-2. Explore opportunities to convert to shared streets where appropriate to provide multimodal connectivity.	C	Mi

Strategy ULT-3. Support more-efficient vehicles.

ULT-3-1. Implement a local fuel-related tax.	C	Mi
ULT-3-2. Revise land use codes to require EV charging infrastructure at multifamily and commercial developments.	C	Mi
ULT-3-3. Develop and provide information about electric and hybrid vehicles on the City website.	C	Mi

Strategy ULT-4. Support more climate-ready development and land use.

ULT-4-1. Regulate new development in the Wildfire Lands Overlay part of the urban growth boundary.	C	Ad
ULT-4-2. Revise community development plans to favor walkable neighborhoods and infill density.	C	Mi
ULT-4-3. Modify the WUI code to include construction techniques appropriate for wildfire-prone areas.	C	Ad

Strategy ULT-5. Increase the efficiency of City fleet vehicles and employee commuting.

ULT-5-1. Provide carpool and vanpool parking, charging stations, and parking for EVs for City employees.	M	Mi
ULT-5-2. Conduct a city fleet audit and use it to set policy and targets.	M	Mi
ULT-5-3. Purchase verified carbon offsets to offset City staff travel.	M	Mi



KEY	SCOPE OF IMPACT		TYPE OF IMPACT	
	C	affects community-wide operations + climate goals.	Mi	addresses mitigation goals (lowers GHG emissions).
	M	affects municipal operations + climate goals.	Ad	addresses adaptation goals (builds resilience to climate impacts).
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CEAP – Actions

CONSUMPTION + MATERIALS MANAGEMENT

Strategy CM-1. Reduce consumption of carbon-intensive goods and services.

CM-1-1. Implement an education campaign for waste and consumption reduction strategies.	C	Mi
CM-1-2. Support "collaborative consumption" community projects.	C	Mi
CM-1-3. Determine and implement effective ways to reduce and track consumption based emissions.	C	Mi

Strategy CM-2. Support sustainable and accessible local production and consumption.

CM-2-1. Partner with nonprofit organizations to promote the purchase of climate-friendly food and products.	C	Mi
CM-2-2. Expand community gardening and urban agriculture.	C	Mi/Ad

Strategy CM-3. Expand community recycling and composting.

CM-3-1. Improve recycling programs, implement new education and outreach, and expand public space recycling.	C	Mi
CM-3-2. Update the multi-family recycling ordinance to encourage more diversion.	C	Mi
CM-3-3. Strengthen the Demolition Debris and Diversion ordinance to enhance enforcement, diversion, and reuse.	C	Mi

Strategy CM-4. Reduce food waste.

CM-4-1. Support edible food donation.	C	Mi/Ad
CM-4-2. Provide a best practices guide to help households and businesses reduce food waste and consumption.	C	Mi/Ad
CM-4-3. Evaluate opportunities for recycling of commercial food waste.	C	Mi/Ad

Strategy CM-5. Improve the sustainability of City operations and purchases.

CM-5-1. Introduce environmentally preferable purchasing (EPP) guidelines for City procurement.	M	Mi
CM-5-2. Assess the feasibility of co-digesting food waste and biosolids at the wastewater treatment facility.	M	Mi



KEY	SCOPE OF IMPACT		TYPE OF IMPACT	
	C	affects community-wide operations + climate goals.	Mi	addresses mitigation goals (lowers GHG emissions).
	M	affects municipal operations + climate goals.	Ad	addresses adaptation goals (builds resilience to climate impacts).
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CEAP – Actions

NATURAL SYSTEMS

Strategy NS-1. Promote ecosystem resilience.

NS-1-1. Manage forests to retain biodiversity, resilience, and ecosystem function and services in the face of climate change. Use best available science to inform fire management and planning.

C Ad

NS-1-2. Use green infrastructure such as bioswales, permeable pavement, other pervious surfaces to reduce flood risk and minimize sediment entry into creeks from trails and roads.

C Ad

NS-1-3. Undertake restoration efforts to retain and restore native fish and riparian species.

C Ad

NS-1-4. Map and protect areas that provide ecosystem services.

C Ad

Strategy NS-2. Manage and conserve community water resources.

NS-2-1. Evaluate incentives for practices that reduce use of potable water for nonpotable purposes and recharge ground water.

C Mi/Ad

NS-2-2. Explore water-efficient technologies on irrigation systems and consider requiring them during permitting.

C Mi/Ad

NS-2-3. Expand water conservation outreach and incentive programs for residents and businesses.

C Mi/Ad

Strategy NS-3. Conserve water use within City operations.

NS-3-1. Evaluate the potential for installation of rainwater collection systems at City facilities for graywater uses, and investigate opportunities for graywater reuse at existing and new City facilities and properties.

M Mi/Ad

NS-3-2. Implement efficiency recommendations from the City facilities water audit.

M Mi/Ad



KEY	SCOPE OF IMPACT		TYPE OF IMPACT	
	C	affects community-wide operations + climate goals.	M	addresses mitigation goals (lowers GHG emissions).
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CEAP – Actions

PUBLIC HEALTH, SAFETY + WELL-BEING

Strategy PHSW-1. Manage ecosystems and landscapes to minimize climate-related health impacts.

PHSW-1-1. Promote the expansion of tree canopy in urban heat islands or areas that need air conditioning.

C Ad

Strategy PHSW-2. Promote a sustainable local economy that minimizes emissions and vulnerability.

PHSW-2-1. Engage leading employers in a dialogue on climate action.

C Mi/Ad

PHSW-2-2. Support organizations, such as SOU, in evaluating risks to local food sources under climate change.

C Ad

Strategy PHSW-3. Minimize public health impacts.

PHSW-3-1. Work with vulnerable populations to create specific adaptation strategies that address public health.

C Ad

PHSW-3-2. Identify and minimize potential urban heat impacts.

C Ad

PHSW-3-3. Develop or enhance heat-warning systems for employees and the public.

C Ad

Strategy PHSW-4. Minimize public safety impacts.

PHSW-4-1. Update the City's emergency response plan and ensure that preparation and updates recognize and address likely climate change impacts.

C Ad

PHSW-4-2. Identify and address populations and essential City services within the 100-year flood zone.

M Ad



KEY	SCOPE OF IMPACT		TYPE OF IMPACT	
	C	affects community-wide operations + climate goals.	M	addresses mitigation goals (lowers GHG emissions).
	M	affects municipal operations + climate goals.	Ad	addresses adaptation goals (builds resilience to climate impacts).
			Mi/Ad	addresses both mitigation + adaptation goals.

CEAP – Actions

CROSS-CUTTING STRATEGIES

Strategy CC-1. Educate and empower the public.

CC-1-1. Create a formal public outreach and education plan to inform the community about climate actions.

C Mi/Ad

CC-1-2. Support capacity of community groups to implement climate mitigation and adaptation initiatives.

C Mi/Ad

CC-1-3. Assess the feasibility of a City-sponsored carbon offset program.

C M

Strategy CC-2. Educate and empower City staff.

CC-2-1. Ensure all City departments educate their staff members about the Climate and Energy Action Plan.

M Mi/Ad

Strategy CC-3. Mainstream and integrate climate considerations.

CC-3-1. Consider climate change in all City Council policy, budgetary, or legislative decisions and as part of the Council Communication document template.

M Mi/Ad

CC-3-2. Incorporate CEAP goals and actions in future updates of city plans.

M Mi/Ad

CC-3-3. Include consideration of climate action goals within the scope of every appropriate City Advisory Commission.

M Mi/Ad

Strategy CC-4. Engage with other governments and organizations around regional, statewide, national, and international climate policy and action.

CC-4-1. Engage with other governments and organizations around climate policy and action.

M Mi/Ad

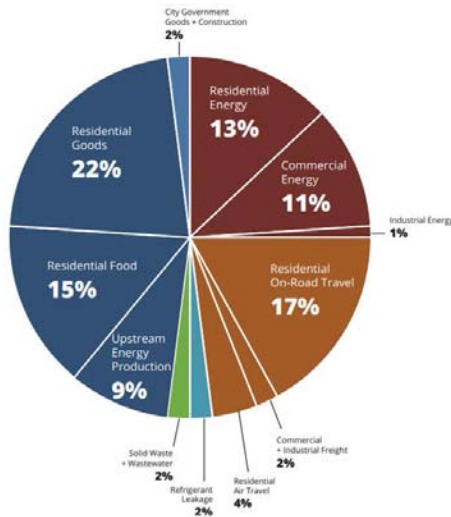


KEY	SCOPE OF IMPACT		TYPE OF IMPACT	
	C	M	Mi	Ad
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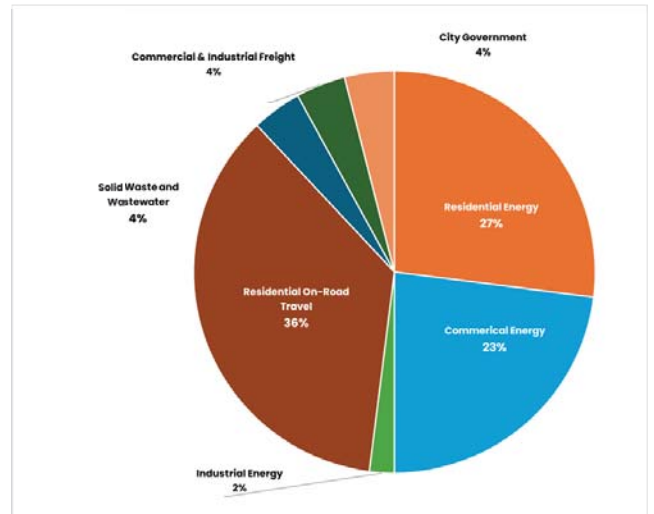
What Is The Responsibility of All Staff, Council, Committees and Commissions?

- CC -2-1. Ensure all City Departments educated their staff members about the CEAP
- CC -3-1. Consider Climate change in all City Council policy, budgetary, or legislative decisions and as part of the Council Communication document template
- CC -3-2. Incorporate CEAP goals and actions in future updates of city plans
- CC -3-3. Include consideration of perpetuation of climate action goals within the scope of every appropriate City Advisory Commission

Focus Areas



Climate Impacts



BPA – Energy Efficiency Programs

- Focuses on increasing efficiency of electric appliances.

BONNEVILLE POWER ADMINISTRATION



Energy Efficiency
Implementation Manual
2024-2025



City Funded

- Focuses on fuel switching to low carbon resources and increasing local renewable energy.



Residential Incentives



Transportation Incentives



Solar



Commercial Incentives



New/Hopeful Programs

- Energy Retrofit
Ashland
 - \$10 Million 0% interest loan to city to reloan.
- Carshare
- Home Energy Score



CEPAC Work Plan

2024 CEPAC Work Plan HIGH PRIORITY

Emission Source	Work Item
Buildings	Complete Ordinance re: Electrification of New Residential Buildings
Buildings	Plan/Ordinance to electrify existing buildings and new commercial and industrial
Buildings, Transportation,	Identify, Evaluate, Secure funding sources that would help electrify Ashland, Incentivize renewable energy, and make Ashland more bike and pedestrian friendly.
All Sectors	Study and Develop Recommendations specifically for City Of Ashland Municipal Operations
Buildings	Work with City Staff and Consultant to modify and update 2023 City Of Ashland Electric Plan Update
Transportation	Review and help shape City of Ashland Transportation Plan 2024 Update.
Buildings	Re-Innovate the Home Energy Score at time of sale of a house.



CEPAC Work Sessions

Climate and Environment Policy Advisory Committee (CEPAC)

3:00 – 5:00 PM

51 Winburn Way - Ashland, Oregon 97520

March 20, 2023 Home Energy Score #1 - (Gould)

April 17, 2024 - Lawn Blowers, Small Engines #2 – (Shaff)

April 24, 2024 – Transportation #1 (Shaff, Dohrman)

May 15, 2024 – Home Energy Scores #2 – (Gould)/Lawn Blowers, Small Engines #3

May 29, 2004 – City of Ashland Municipal Operations #1

Jun 12, 2024 - Electrification of Existing Buildings and Commercial #1

Jun 26, 2024 – Transportation #2, Funding #3



TYPE I APPEAL

PA-APPEAL-2024-00019
1250 Ashland Street

NOTICE OF PUBLIC HEARING

PLANNING ACTION: PA-APPEAL-2024-00019, an appeal of PA-T1-2024-00233

SUBJECT PROPERTY: 1250 Ashland Street (SOU Science Building)

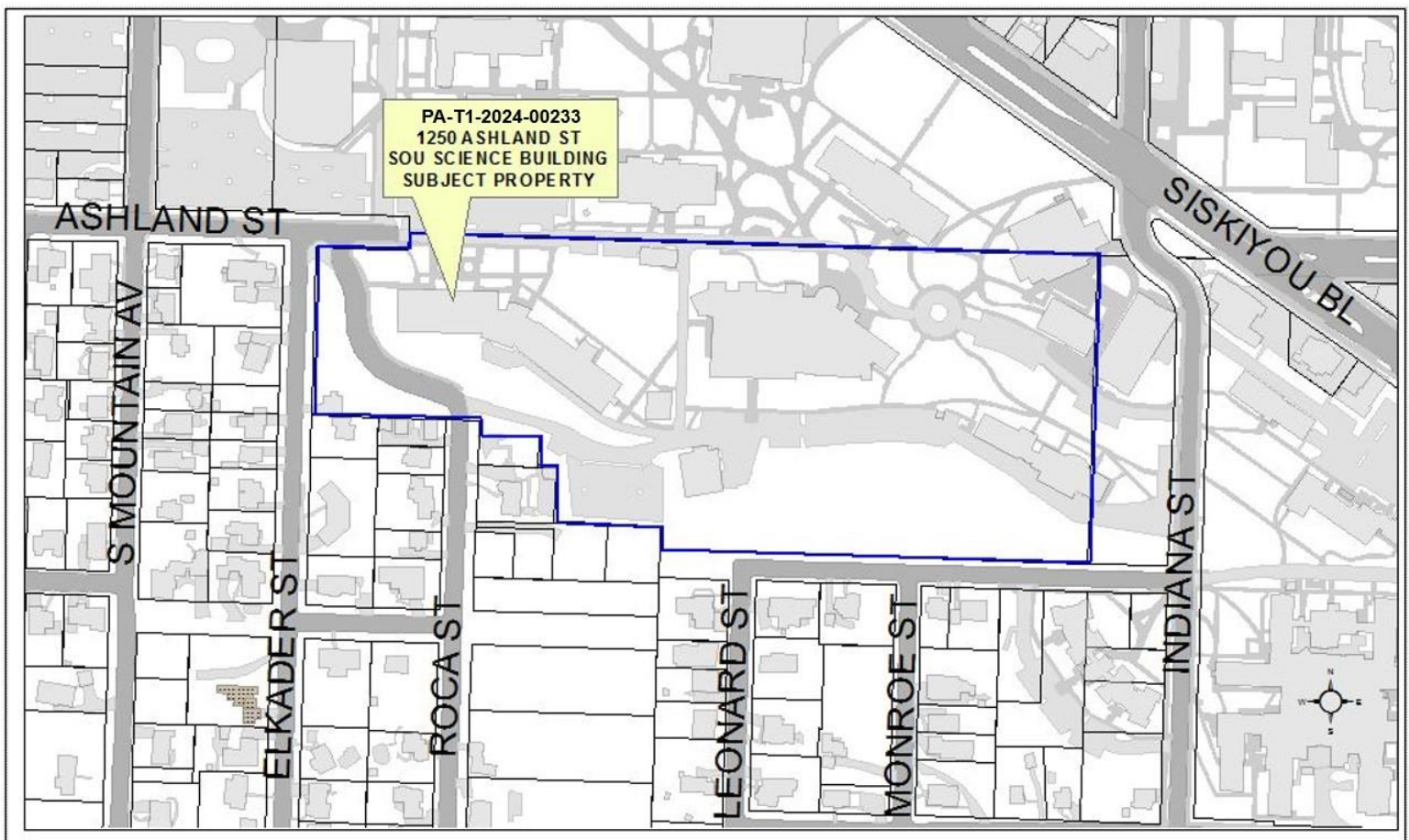
OWNER: Southern Oregon University

APPLICANT/APELLANT: Verizon Wireless

DESCRIPTION: The Planning Commission will consider an appeal of the Staff Advisor's denial of a request for a Site Design Review Permit to install wireless communication facilities (*antennas and associated equipment*) on the roof of the Science Building at 1250 Ashland Street on the Southern Oregon University Campus. The application also includes a request for a Conditional Use Permit because with the installation of panels proposed to screen the wireless communication facility installation, the building height will exceed 40 feet. *(The proposal is the same as one previously approved by the city in PA-2017-01486 but which subsequently expired, and the applicant proposes to comply with the conditions of the prior approval.)*

COMPREHENSIVE PLAN DESIGNATION: Southern Oregon University District; **ZONING:** SO; **ASSESSOR'S MAP:** 39 1E 15BB; **TAX LOT #:** 100

PLANNING COMMISSION HEARING: Tuesday, July 9, 2024 at 7:00 p.m.
Ashland Civic Center at 1175 East Main Street



COMMUNITY DEVELOPMENT DEPARTMENT

51 Winburn Way
Ashland, Oregon 97520
ashland.or.us

Tel: 541.488.5305
Fax: 541.552.2050
TTY: 800.735.2900

PLANNING COMMISSION HEARING

Notice is hereby given that a PUBLIC HEARING on the following request with respect to the ASHLAND LAND USE ORDINANCE will be held before the ASHLAND PLANNING COMMISSION on meeting date shown above. The meeting will be at the ASHLAND CIVIC CENTER, 1175 East Main Street, Ashland, Oregon. You can watch the meeting on local channel 9, on Charter Communications channels 180 & 181, or you can stream the meeting via the internet by going to <https://rvtv.sou.edu> and selecting 'RVTV Civic.' Join the Zoom meeting at: <https://zoom.us/j/91339035306>.

All application materials are available on-line and written comments will be accepted via e-mail to PC-public-testimony@ashlandoregon.gov or can be provided in person or via Zoom during the public hearing. A copy of the application, including all documents, evidence and applicable criteria will be available on-line at "What's Happening in my City" at <https://gis.ashland.or.us/developmentproposals/> no less than 20 days prior to the meeting date shown above. A copy of the staff report will be available on-line in the Commission packet at: https://ashlandor.portal.civicclerk.com/?category_id=30 seven days prior to the meeting date shown above. Copies of application materials will be provided at reasonable cost, if requested. Application materials may be requested to be reviewed in-person during business hours at the Ashland Community Development & Engineering Services Building, 51 Winburn Way, via a pre-arranged appointment by calling (541) 488-5305 or emailing planning@ashlandoregon.gov

The ordinance criteria applicable to this application are attached to this notice. Oregon law states that failure to raise an objection concerning this application, either in person or by letter, or failure to provide sufficient specificity to afford the decision maker an opportunity to respond to the issue, precludes your right of appeal to the Land Use Board of Appeals (LUBA) on that issue. Failure to specify which ordinance criterion the objection is based on also precludes your right of appeal to LUBA on that criterion. Failure of the applicant to raise constitutional or other issues relating to proposed conditions of approval with sufficient specificity to allow this Commission to respond to the issue precludes an action for damages in circuit court.

Anyone wishing to submit comments can do so by sending an e-mail to PC-public-testimony@ashlandoregon.gov with the subject line "**July 9 PC Appeal Hearing Testimony**" by 10:00 a.m. on Monday, July 8, 2024. If the applicant wishes to provide a rebuttal to the testimony, they can submit the rebuttal via e-mail to PC-public-testimony@ashlandoregon.gov with the subject line "**July 9 PC Appeal Hearing Testimony**" by 10:00 a.m. on Tuesday, July 9, 2024. Written testimony received by these deadlines will be available for Planning Commissioners to review before the hearing and will be included in the meeting minutes.

Oral testimony will be taken both in person and via Zoom during the public hearing. If you wish to provide oral testimony via Zoom, please send an email to PC-public-testimony@ashlandoregon.gov by 10:00 a.m. on Monday, July 8, 2024. In order to provide testimony at the public hearing, please provide the following information: 1) make the subject line of the email "**July 9 PC Appeal Speaker Request**", 2) include your name, 3) the agenda item on which you wish to speak on, 4) specify if you will be participating by computer or telephone, and 5) the name you will use if participating by computer or the telephone number you will use if participating by telephone. Join the Zoom meeting at: <https://zoom.us/j/91339035306>

During the Public Hearing, the Chair shall allow testimony from the applicant and those in attendance concerning this request. The Chair shall have the right to limit the length of testimony and require that comments be restricted to the applicable criteria. Unless there is a continuance, if a participant so requests before the conclusion of the hearing, the record shall remain open for at least seven days after the hearing.

If you have questions or comments concerning this request, please feel free to contact Senior Planner Aaron Anderson, the staff planner assigned to this project, at 541-552-2052 or via e-mail to: aaron.anderson@ashlandoregon.gov.

In compliance with the American with Disabilities Act, if you need special assistance to participate in this meeting, please contact the City Administrator's office at 541-488-6002 (TTY phone number 1-800-735-2900). Notification 72 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to the meeting. (28 CFR 35.102.-35.104 ADA Title I).

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SITE DESIGN AND USE STANDARDS (18.5.2.050)

The following criteria shall be used to approve or deny an application:

- A. **Underlying Zone:** The proposal complies with all of the applicable provisions of the underlying zone (part 18.2), including but not limited to: building and yard setbacks, lot area and dimensions, density and floor area, lot coverage, building height, building orientation, architecture, and other applicable standards.
- B. **Overlay Zones:** The proposal complies with applicable overlay zone requirements (part 18.3).
- C. **Site Development and Design Standards:** The proposal complies with the applicable Site Development and Design Standards of part 18.4, except as provided by subsection E, below.
- D. **City Facilities:** The proposal complies with the applicable standards in section 18.4.6 Public Facilities and that adequate capacity of City facilities for water, sewer, electricity, urban storm drainage, paved access to and throughout the property and adequate transportation can and will be provided to the subject property.
- E. **Exception to the Site Development and Design Standards:** The approval authority may approve exceptions to the Site Development and Design Standards of part 18.4 if the circumstances in either subsection 1 or 2, below, are found to exist.
 - 1. There is a demonstrable difficulty meeting the specific requirements of the Site Development and Design Standards due to a unique or unusual aspect of an existing structure or the proposed use of a site; and approval of the exception will not substantially negatively impact adjacent properties; and approval of the exception is consistent with the stated purpose of the Site Development and Design; and the exception requested is the minimum which would alleviate the difficulty.; or
 - 2. There is no demonstrable difficulty in meeting the specific requirements, but granting the exception will result in a design that equally or better achieves the stated purpose of the Site Development and Design Standards.

CONDITIONAL USE PERMITS (18.5.4.050)

A Conditional Use Permit shall be granted if the approval authority finds that the application meets all of the following criteria, or can be made to conform through the imposition of conditions.

- 1. That the use would be in conformance with all standards within the zoning district in which the use is proposed to be located, and in conformance with relevant Comprehensive plan policies that are not implemented by any City, State, or Federal law or program.
- 2. That adequate capacity of City facilities for water, sewer, electricity, urban storm drainage, paved access to and throughout the development, and adequate transportation can and will be provided to the subject property.
- 3. That the conditional use will have no greater adverse material effect on the livability of the impact area when compared to the development of the subject lot with the target use of the zone, pursuant with subsection 18.5.4.050.A.5, below. When evaluating the effect of the proposed use on the impact area, the following factors of livability of the impact area shall be considered in relation to the target use of the zone.
 - a. Similarity in scale, bulk, and coverage.
 - b. Generation of traffic and effects on surrounding streets. Increases in pedestrian, bicycle, and mass transit use are considered beneficial regardless of capacity of facilities.
 - c. Architectural compatibility with the impact area.
 - d. Air quality, including the generation of dust, odors, or other environmental pollutants.
 - e. Generation of noise, light, and glare.
 - f. The development of adjacent properties as envisioned in the Comprehensive Plan.
 - g. Other factors found to be relevant by the approval authority for review of the proposed use.

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4. A conditional use permit shall not allow a use that is prohibited or one that is not permitted pursuant to this ordinance.
5. For the purposes of reviewing conditional use permit applications for conformity with the approval criteria of this subsection, the target uses of each zone are as follows.
 - I. **HC, NM, and SOU.** The permitted uses listed in chapters 18.3.3 Health Care Services, 18.3.5 North Mountain Neighborhood, and 18.3.6 Southern Oregon University District, respectively, complying with all ordinance requirements.

WIRELESS COMMUNICATION FACILITY DESIGN STANDARDS (18.4.10.040)

All wireless communication facilities shall be located, designed, constructed, treated, and maintained in accordance with the following standards.

A. General Provisions

1. All facilities shall be installed and maintained in compliance with the requirements of the Building Code. At the time of building permit application, written statements from the Federal Aviation Administration (FAA), the Aeronautics Section of the Oregon Department of Transportation, and the Federal Communication Commission (FCC) confirming that the proposed wireless communication facility complies with regulations administered by that agency or that the facility is exempt from regulation.
2. All associated transmittal equipment must be housed in a building, above or below ground level, which must be designed and landscaped to achieve minimal visual impact with the surrounding environment.
3. Wireless communication facilities shall be exempted from height limitations imposed in each zone.
4. Wireless communication facilities shall be installed at the minimum height and mass necessary for its intended use. A submittal verifying the proposed height and mass shall be prepared by a licensed engineer.
5. Lattice towers are prohibited as freestanding wireless communication support structures.
6. Signage for wireless communication facilities shall consist of a maximum of two non-illuminated signs, with a maximum of two square feet each, stating the name of the facility operator and a contact phone number.
7. The applicant is required to remove all equipment and structures from the site and return the site to its original condition, or condition as approved by the Staff Advisor, if the facility is abandoned for a period greater than six months. Removal and restoration must occur within 90 days of the end of the six-month period.
8. All new wireless communication support structures shall be constructed so as to allow other users to collocate on the facility.

- B. Preferred Designs.** The following preferred designs are a stepped hierarchy, and the standards shall be applied in succession from subsection a to e, with the previous standard exhausted before moving to the following design alternative. For the purpose of chapter 18.4.10, feasible is defined as capable of being done, executed or effected; possible of realization. A demonstration of feasibility requires a substantial showing that a preferred design can or cannot be accomplished.

1. **Collocation.** Where possible, the use of existing wireless communication facilities sites for new installations shall be encouraged. Collocation of new facilities on existing facilities shall be the preferred option. Where technically feasible, collocate new facilities on pre-existing structures with wireless communication facilities in place or on pre-existing towers.

2. **Attached to Existing Structure.** If (a) above is not feasible, wireless communication facilities shall be attached to pre-existing structures, when feasible.
3. **Alternative Structure.** If (a) or (b) above are not feasible, alternative structures shall be used with design features that conceal, camouflage, or mitigate the visual impacts created by the proposed wireless communication facilities.
4. **Freestanding Support Structure.** If (1), (2), or (3) listed above are not feasible, a monopole design shall be used with the attached antennas positioned in a vertical manner to lessens the visual impact compared to the antennas in a platform design. Platform designs shall be used only if it is shown that the use of an alternate attached antenna design is not feasible.
5. **Lattice towers** are prohibited as freestanding wireless communication support structures.

C. Collocation Standards

1. The collocation feasibility study shall meet all of the following requirements.
 - a. Document that alternative sites have been considered and are technologically unfeasible or unavailable.
 - b. Demonstrate that a reasonable effort was made to locate collocation sites that meet the applicant's service coverage area needs.
 - c. Document the reasons collocation can or cannot occur.
2. Relief from collocation under this section may be granted at the discretion of the approval authority if the application and independent third party analysis demonstrate collocation is not feasible because one or more of the following conditions exist at prospective collocation sites.
 - a. A significant service gap in coverage area.
 - b. Sufficient height cannot be achieved by modifying existing structure or towers.
 - c. Structural support requirements cannot be met.
 - d. Collocation would result in electronic, electromagnetic, obstruction, or other radio frequency interference.

D. Landscaping. The following standards apply to all wireless communication facilities with any primary or accessory equipment located on the ground and visible from a residential use or the public right-of-way.

1. Vegetation and materials shall be selected and sited to produce a drought resistant landscaped area.
2. The perimeter of the wireless communication facilities shall be enclosed with a security fence or wall. Such barriers shall be landscaped in a manner that provides a natural sight obscuring screen around the barrier to a minimum height of six feet.
3. The outer perimeter of the wireless communication facilities shall have a landscaped buffer zone ten feet in width.
4. The landscaped area shall be irrigated and maintained to provide for proper growth and health of the vegetation.
5. One tree shall be required per 20 feet of the landscape buffer zone to provide a continuous canopy around the perimeter of the wireless communication facilities. Each tree shall have a caliper of two inches, measured at breast height, at the time of planting.

E. Visual Impacts

1. Wireless communication facilities shall be located in the area of minimal visual impact within the site which will allow the facility to function consistent with its purpose.
2. Wireless communication facilities, in any zone, must be set back from any residential zone a distance equal to twice its overall height. The setback requirement may be reduced if, as determined by the approval authority, it can be demonstrated through findings of fact that increased mitigation of visual impact can be achieved within of the setback area. Underground accessory equipment is not subject to the setback requirement.
3. Antennas attached to a pre-existing or alternative structure shall be integrated into the existing building architecturally and to the greatest extent possible shall not exceed the height of the pre-existing or alternative structure.
4. Antennas attached to a pre-existing or alternative structure shall have a non-reflective finish and color that blends with the color and design of the structure to which it is attached.
5. All wireless communication support structures must have a non-reflective finish and color that will mitigate visual impact, unless otherwise required by other government agencies.
6. Exterior lighting for a wireless communication facility is permitted only when required by a federal or state authority.
7. Should it be deemed necessary by the approval authority for the mitigation of visual impact of the wireless communication facility, additional design measures may be required. These may include, but are not limited to: additional camouflage materials and designs, facades, specific colors and materials, masking, and shielding techniques.

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Staff Report

ASHLAND PLANNING DEPARTMENT STAFF REPORT

July 9, 2024

PLANNING ACTION: PA-APPEAL-2024-00019, appeal of PA-T1-2024-00233

OWNER: Southern Oregon University (SOU)

APPLICANT/APELLANT: Verizon Wireless

LOCATION: 1250 Ashland Street

ZONE DESIGNATION: SO

COMP. PLAN DESIGNATION: Southern Oregon University District

ORDINANCE REFERENCES:

Southern Oregon University Campus Master Plan Update:

http://www.ashland.or.us/files/SOU_MasterPlan_4.2010.pdf

Ashland Land Use Ordinance:

<https://ashland.municipal.codes/LandUse>

18.3.6	Southern Oregon University District
18.4.10	Wireless Communication Facilities
18.4.3	Parking, Access, and Circulation
18.4.4	Landscaping, Lighting & Screening
18.4.6	Public Facilities
18.4.7	Signs
18.5	Application Review Procedures and Approval Criteria
18.5.1	General Review Procedures
18.5.2	Site Design Review
18.5.4	Conditional Use Permits
18.6.1	Definitions

APPLICATION DEEMED COMPLETE ON: Submitted April 1, 2024* *(The federal shot clock for placement on an existing structure is 90-days from the submittal date. The applicant has granted a 14-day extension to allow independent third-party review of the appeal materials, but to comply with the federal shot clock a decision and findings adoption are required by July 14, 2024.)*

REQUEST: An appeal of staff's denial of a request for a Site Design Review Permit to install wireless communication facilities (*antennas and associated equipment*) on the roof of the Science Building at 1250 Ashland Street on the Southern Oregon University Campus. The original application also includes a request for a Conditional Use Permit because with the installation of panels proposed to screen the wireless communication facility installation, the building height will exceed 40 feet.

I. Relevant Facts

1) Background - History of Application

In 2014, Planning Action #2014-00249 a request for Site Design Review was approved administratively. The project involved a major renovation and interior remodel of the SOU Science Building. The project included replacement of all of the HVAC, plumbing, electrical and lighting systems. This approval included an Exception to the Site Development and Design Standards to not provide visual or acoustic screening for new rooftop equipment based on the presence of several large, established trees that already served to screen this equipment.

Subsequently, Planning Action #2015-01212, a modification of the approved Tree Preservation and Protection Plan was approved administratively to allow the removal of five of the trees that had previously been identified as the basis for approval of the Exception to the Site Development and Design Standards. These removals were approved based on an arborist's recommendation that the tree's posed a safety hazard to pedestrians and structures in the area, and the approval included requirements that the removals be mitigated with four larger stature evergreen trees planted on the south side of the building.

Planning Action #PA-2017-01486, the same proposal as the current request, was administratively approved in May of 2018, and was subsequently appealed by a neighbor. Following the appeal hearing, the Planning Commission upheld the original approval. Building permits were submitted and approved but were never picked up by the applicant, and both the land use and building permit approvals have now expired.

Subsequent to the 2017 application, staff administratively approved PA-T1-2021-00158 which proposed an AT&T wireless communication facility installation on a stadium light standard at Raider Stadium, elsewhere on the Southern Oregon University campus. The staff approval was subsequently appealed to the Planning Commission and then to the Land Use Board of Appeals (LUBA) and was upheld in both instances. That WCF installation has been permitted and the facility is now in place.

There are no other planning actions of record for this property.

2) Detailed Description of the Site and Proposal

Site Description

The subject property is located at 1250 Ashland Street, on the south side of Ashland Street near its intersection with Roca Street. The parcel is roughly rectangular in shape, approximately 15.17 acres in area, and is part of the Southern Oregon University campus. The SOU Science Building underwent a major restoration and remodel which included the removal of five trees approximately ten years ago.

Current Proposal

The application involves a request for a Site Design Review Permit to install Wireless Communication Facilities (antennas and associated equipment) on the roof of the Science Building at 1250 Ashland Street on the Southern Oregon University Campus. The application also includes a request for a Conditional Use Permit because with the installation of panels proposed to screen the wireless installation, the building height will exceed 40 feet.

II. Project Impact

As detailed in AMC 18.4.10.020, wireless communication facilities (WCF) attached to existing structures in the Southern Oregon University are subject to Site Design Review.

The current application was denied by staff on May 14, 2024 with a 12-day appeal period which extended through the end of business on May 28, 2024. On May 23, 2024 prior to the end of the appeal period, the applicant Verizon Wireless timely filed a notice of land use appeal. The notice of appeal identified six specific grounds for which the decision should be reversed or modified as detailed in Section IV below.

AMC 18.5.1.050.G. explains that appeal hearings on Type I decisions made by the Staff Advisor are “*de novo*” hearings before the Planning Commission and follow the standard Type II public hearing procedure except that the decision of the Planning Commission is the final decision of the City. For *de novo* hearings, consideration of the appeal is not limited to the application materials, evidence and other documentation, and specific issues raised in the review leading up to the Type I decision but may include other relevant evidence and arguments including new submittals. The Commission may allow additional evidence, testimony, or argument concerning any relevant ordinance provision.

Site Design Review for Wireless Communication Facility (WCF) Installation

The application explains that the proposed rooftop antennas and associated equipment are designed to provide additional services to customers in and around the Southern Oregon University campus and to improve service capacity, thereby improving overall performance. The applicants emphasize that if additional WCF are not built soon to provide more capacity, Verizon Wireless’s existing sites will exhaust their capacity and no longer be able to provide service to customers in the area.

WCF installations are subject to Site Design Review approval. In this instance, the building itself and associated site improvements received Site Design Review approval in the last few years, and the application here is limited to considering how the addition of the proposed WCF complies with the applicable WCF design standards.

With regard to the design standards, the application explains that the antennas and associated equipment will be located on the roof and will be screened and concealed by the existing screen wall as well as a new proposed screening wall which will go around the remainder of the building and include fiberglass reinforced plastic (FRP) around the WCF, matching the existing screening wall to minimize any visual impacts. The equipment will be visually screened by the wall at the top of the building – the antennas and equipment cabinets are shorter than the wall and will not extend above the wall. No vegetative screening is proposed as the installation is entirely limited to the rooftop, and the rooftop installation is noted as

being only as high as necessary to achieve the coverage goals.

All equipment is proposed to be equal to or lesser in height to the existing screening wall. No signage beyond any required by state and federal laws is proposed to be posted, no exterior lighting is proposed, and the applicants agree to remove all equipment from the site and return it to its original condition within 90 days if and when the facility is ever abandoned for a period of greater than six months. The application asserts that the building is set back more than twice its overall height from any residential zone.

Conditional Use Permit to Exceed 40-foot Building Height

The subject property is located within the Southern Oregon University (SOU) District, a special district designed to provide for the unique needs of Southern Oregon University as a State educational institution functioning within the planning framework of the City. The SOU District is regulated under AMC Chapter 18.3.6 and by the SOU Campus Master Plan which has been adopted by the City as Ordinance #3014.

Within the SOU District, WCF are authorized subject to Chapter 18.4.10. In addition, any construction over 40 feet in height is subject to the approval of a Conditional Use Permit per Chapter 18.5.4. While WCF are exempted from height restrictions in each zone, with the addition of the proposed ten-foot tall FRP screen walls here, the height of the existing building will exceed 40 feet. Currently, the building is noted as 39.1 feet in height above the finished grade, with the existing mechanical equipment noted at 61.9 feet above finished grade at its highest point, and both the existing and proposed screen walls extend to 49.1 feet above finished grade.

Conditional Use Permits provide for discretionary review of the adverse material impacts of a request in comparison to adverse material impacts that could reasonably be expected from the property's target use, which for the SOU District is "*The permitted uses listed in... (chapter) 18.3.6 Southern Oregon University District... complying with all ordinance requirements.*" Consideration in the criteria include adequate capacity of city facilities, impacts on the livability of the impact area when considered in terms of scale, bulk, and coverage; traffic generation; architectural compatibility; air quality; generation of noise, light, and glare; the development of adjacent properties as envisioned in the Comprehensive Plan; and other factors found to be relevant by the hearing authority. Conditional use permits provide the city with the ability to impose conditions necessary to mitigate these adverse material impacts.

The application asserts that the proposal is in conformance with the standards of the SOU District and relevant Comprehensive Plan policies. The application further explains that because the proposal is for an unmanned WCF it will not impact access to city services, generate any additional traffic or impact transportation in any way. In addition, the applicants assert that the antennas and equipment that will be going on the roof will be screened with material that will match the current screening wall but extend around the whole building, and as such will have no greater impact on the livability of the surroundings than would the target use. The applicants emphasize that the installation will not affect air quality, and have provided an acoustic report which concludes that, "*the predicted noise levels are significantly lower than both the code limit and the existing ambient noise levels,*

and as such will not contribute to the existing noise environment.” No added exterior lighting is proposed in conjunction with this WCF installation. The applicants note that the proposal is limited to the campus and will not affect the future development of adjacent properties and is an allowed use in the district subject to the requirements of AMC Chapter 18.4.10.

In staff’s assessment, it is important to note that the building has a partial screen wall already in place and the applicants propose to place the antennas and all associated equipment on the building’s roof, rather than placing accessory equipment on the ground and screening it with vegetation. All equipment is to be screened entirely behind a screen wall which will extend the existing screen wall around the building roof’s full perimeter, and fiberglass reinforced plastic will be used to mitigate the visual and acoustic impacts of the WCF installation. The extension of the existing screening wall to enclose the full perimeter of the building with a matching wall which will conceal the proposed WCF installation is what is triggering the conditional use permit component of the application – the added height of the screening around the full perimeter of the building alters the building’s height as calculated by code – to exceed 40 feet, necessitating the conditional use permit. This installation is intended to match the height of the screen wall already in place, and to fully conceal the WCF. The application emphasizes the height of the proposed WCF equipment is to be lower than the screen wall, and includes an acoustic report demonstrating that the placement and screening of the WCF will be below not only the allowed noise levels of the code, but significantly below the ambient noise levels already generated by traffic in the area. In staff’s view, the benefits demonstrated by the applicants of installing the screening wall outweigh and mitigate the impacts associated with the additional height involved.

Staff Original Decision

Ashland’s standards regulate the placement and appearance of wireless communication facilities (WCF) while providing residents with the ability to access and adequately utilize the services that these facilities support. These standards are based in a recognition that, because of the physical characteristics of WCF, the visual and aesthetic impacts of these facilities affect not only the neighboring residents but also the community as a whole. The standards are intended to ensure that the visual and aesthetic impacts of wireless communication facilities are mitigated to the greatest extent possible, especially in or near residential areas.

Whenever a WCF is proposed, staff find it important to emphasize that the key concern most often raised in WCF applications – the environmental health impacts associated with such installations – is explicitly precluded from consideration by federal law. This preclusion applies to moratoria, as well as to individual land use decisions. As such, WCF applications must be carefully considered in terms of the applicable local land use regulations including requirements for design review approval, specific design standards and in this instance an associated conditional use permit related to the proposed increase in building height.

The WCF design standards in AMC 18.4.10.030.B include a “stepped hierarchy” of preferred designs which are to be considered in succession. The feasibility of a preferred design must first be exhausted before moving to the next alternative. Under this hierarchy, collocation on an existing wireless facility is the preferred option and placement on an existing structure may only be considered once collocation has been demonstrated to be

technically not feasible or the location unavailable.

Staff initially administratively denied the application. As provided in the ordinance, the city retained the services of a qualified, independent third-party reviewer who analyzed the application and determined that the application's collocation study included insufficient objective evidence to meet the requirements of the collocation standards or show that the proposed site produces acceptable performance and fills the area's coverage/capacity needs. Specifically, the city's independent third-party reviewer William Johnson noted:

- The original analysis submitted by the applicant was silent with regard to mid-band RF coverage which represents roughly 90 percent of the available licensed spectrum. Analysis of the need for the proposed site as well as evaluation of alternative sites is heavily dependent on the propagation limitations of mid-band spectrum, and in Johnson's review there was no information about this important band from the applicant other than to mention that it will be deployed.
- Johnson further noted that no trend metrics such as Forward Data Volume (FDV), Average Scheduled Eligible Users (ASEU), and Average Active Connections (AvgAC) were provided to support claims that a new base station facility was needed to off-load traffic or draw local mobile subscribers onto the new site using mid-band spectrum to free up low-band spectrum.
- Johnson added that the scale of the RF propagation plots provided made it nearly impossible to identify locations where in-building service was needed and how the proposed base station would be able to satisfy that need.
- Johnson noted that for the alternate site analysis, city staff eyes-on observations had shown that two of the potential collocation sites did not appear to have any existing WCF in place and there was no record of any approved facilities at these locations. Johnson recommends that the applicant revisit the alternate site analysis to ascertain how realistic the alternative sites are to the present application.
- Finally, Johnson noted that the application materials lack supporting documentation to show that existing structure collocation on the new AT&T light standard at Raider Stadium approved in 2017-2018 is not possible for design or loading issues, and while the materials indicated the land owner was unwilling to allow collocation, there was no documentation provided to support that assertion.

After considering all information in the record, the Staff Advisor found that the application as initially presented failed to meet the burden of proof in that the applicant's collocation study/alternative sites analysis was insufficient in demonstrating a service gap and in demonstrating that collocation or placement on an existing structure was not feasible. Relief from the collocation requirements calls for a clear and defensible demonstration both of a service gap in the coverage area and that sufficient height cannot be achieved by modifying existing structures or towers. In the initial application materials, a service gap was not clearly and adequately demonstrated and while the applicant suggested that the alternative site on the light standard at Raider Stadium was not available, there was insufficient documentation to support that assertion.

III. Initial Comments Received

Subsequent to the mailing of a Notice of Complete Application (NOCA), nine parties submitted written comments with regard to the proposal during the public comment period.

- **David DeHaas** submitted comments in opposition asking that the applicant be required to prove with “*facts of real measurements*” their gap in coverage. He emphasized that the applicant has not proven they have a significant gap in coverage for cell phone calls, and that the maps provided show no real data. He suggested that 5G towers are for broadband data, not for cell phone calls and as the proposal is for broadband it can be rejected outright.
- **Elaine Sayre** asked that the comment deadline be extended and a better effort to inform the neighborhood residents be made. She added that the science building is in a residential area and that she has health concerns and concerns with her view.
- **Marilyn Lindsay** expressed frustration that the city has allowed wireless technology to be advanced/updated to out compete for profit telecommunication wireless communication facilities (WCFs) in terms of data speed, capacity, security and safety (from both RF radiation, and fire). She suggests that no matter how many citizens gave their time to research and educate the city on the ill health effects of RF radiation and the advantage of fiber optics as a safe alternative, the city was determined to pursue its agenda.
- **Laura McLellan** expressed her opposition to the proposal, noting that there is no proof that WCF’s are safe, that many scientists believe they pose health hazards, and that this will make Ashland and the neighborhood unsafe, especially for children.
- **Robert McLellan** contested the proposed WCF installation, noting concerns with the health issues caused by 5G technology. He suggested that placing a WCF on a campus and so close to a densely populated neighborhood is a major concern as opposed to placing it in an open space across the freeway and asked that the project be rejected.
- **Paul Mozina** suggested that relying on the Telecommunications Act of 1996 as a basis for not considering health impacts is willful ignorance and disregard for the impacts WCFs have on living things. He noted that he lives in the area and has adequate cell service, and suggested that this real world test should outweigh computer modeling that shows a service gap. He further emphasized that the Telecommunications Act of 1996 was never intended to support the ‘internet of things’ at the heart of 5G technology, and that the Federal Communications Commission has failed to respond to the August 31, 2021 decision of the US Court of Appeals for the DC District. He cited the Flower Hill case, which is now under appeal, as precedent that new uses of wireless such as broadband and other services are not protected by the 1996 Telecommunications Act. Mozina’s materials conclude suggesting that cities should consider denying small cell applications unless there is a demonstrable gap in phone coverage.
- An **anonymous** commenter suggested that they did not know enough about the 5G issue to have an informed opinion, but they nonetheless urged weighing development considerations against the potential long-term health consequences.
- **Steve Belsky** expressed his dissatisfaction with the city’s approach in recent wireless applications, suggesting that the height limitation imposed on the AT&T WCF installation on the light standard at Raider Stadium was counter to the city’s own standards and had the effect of preventing collocation, in an area that was better-suited for WCF installation by virtue of being farther from residential neighborhoods. He suggested that the city

reconsider whether the stadium light standard could be reconstructed to enable collocation.

- **Kelly Marcotulli** urged denial, suggesting that there was ample service for Verizon customers; she expressed concerns with environmental and health impacts, killing of pollinators and increased fire risk.

In terms of consideration of the health impacts of wireless communication facilities noted by several of those commenting, Title 47 U.S. Code, Chapter 5, Subchapter III, Part 1 §332.7.B.iv “*Mobile Services – Preservation of Local Zoning Authority*” provides that “*No state or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the (Federal Communication) Commission’s regulations concerning such emissions.*” Federal law explicitly precludes the city’s consideration of potential environmental health impacts of wireless communication facilities through the city’s local zoning authority. This preclusion prevents the city from considering health impacts in individual land use decisions and would also prevent the city from imposing a moratorium on facilities of this nature.

In terms of concerns over adequate notice and requests to extend the comment period, the timeline for comment is set in state law and city code at 14 days, and there are timelines established in state and federal law specifically for wireless applications that require that the city reach a decision within a specific number of days or the application must be approved by default. There are no allowances for the city to extend those timelines. Notices making the comment period clear were mailed to all property owners within 200 feet of the property as required by the city’s code. That notice can be seen on-line at: <https://gis.ashland.or.us/arcgis/rest/services/planning/PlanningAction2/FeatureServer/0/81634/attachments/111254> . Signs with the notice were also posted at the subject property so as to be visible from the right-of-way, and the applicant conducted a neighborhood meeting prior to making application and provided written notice to all neighbors within 300 feet as required in the city’s code. Details of the neighborhood meeting are included in the full application submittal on the city’s website at: <https://gis.ashland.or.us/arcgis/rest/services/planning/PlanningAction2/FeatureServer/0/84434/attachments/116454>, and were publicized in the Ashland News at <https://ashland.news/verizon-to-host-public-meeting-thursday-about-proposed-cell-antenna/> and <https://ashland.news/verizon-cell-tower-meeting-draws-concerned-ashland-residents/>.

Mr. Belsky suggested that the city erred in limiting the height of the AT&T WCF installation on the light standard at Raider Stadium, violating the city design standard that, “*All new wireless communication support structures shall be constructed so as to allow other users to collocate on the facility*” because the additional height would’ve supported collocation here. The Planning Commission decision on that application was based on the application failing to demonstrate the additional height was necessary based on another design standard that, “*Wireless communication facilities shall be installed at the minimum height and mass necessary for its intended use.*” The decision in that application (PA-T1-2021-00158) was appealed to the Planning Commission and then on to the Land Use Board of Appeals (LUBA) and was upheld by both bodies.

IV. Appeal Request

On May 23, 2024 prior to the end of the appeal period, the applicant Verizon Wireless timely filed a notice of land use appeal. As the applicant, Verizon Wireless had standing to appeal. The notice of appeal identified six grounds upon which the decision should be reversed or modified:

1. The Director erred by denying a proposal that is identical to the proposal approved by the Director and the Planning Commission in 2018. Both the Director and the Planning Commission approved the identical proposal in 2018 (PA #2017-01486), but that land use approval ultimately expired. The current proposal and the City's approval standards are identical to the 2018 proposal and standards. The Director failed to explain why he denied the Application given that it is identical to the proposal approved in 2018 subject to the same approval standards.
2. The Director erred by denying the Application based exclusively on comments from the City RF consultant which the Applicant was never provided an opportunity to respond to or address. The City RF consultant's letter is dated April 24, 2024, but the City did not provide the Applicant a copy of the letter until it issued the Director's decision on May 14, 2024. The City RF consultant's letter raises several questions and issues that the Applicant could have corrected or clarified. Nonetheless, the Applicant will respond to the City RF consultant's letter as part of this appeal.
3. The Director erred by denying the Application based on the City RF consultant's request for specific technical information that is not required under the City's application submittal or approval standards. AMC Chapter 18.4.10 does not require the Applicant to provide RF propagation maps that identify and address different bands of operation, trend metrics, or scales of RF propagation plots. The City cannot deny the Application based on the lack of technical information that the Applicant was not required to provide under the City's submittal or approval standards. Nonetheless, the Applicant will respond to these City RF consultant's comments as part of this appeal.
4. The Director erred by denying the Application on the grounds that the Applicant failed to demonstrate a "service gap" in the coverage area. The Applicant provided substantial evidence demonstrating that there is a significant coverage and capacity gap in this area of the City. The City RF consultant did not dispute this claim, but rather merely requested additional technical information that the Applicant was not required to submit under AMC Chapter 18.4.10. Additionally, the Applicant would not undertake the time and expense of pursuing approval of the proposed wireless communications facility if it was unnecessary to resolve a coverage and capacity gap in this area. Nonetheless, the Applicant will provide additional information and clarification demonstrating there is a significant coverage and capacity gap in this area of the City.
5. The Director erred in denying the Application on the grounds that the Applicant failed to demonstrate "that collocation or placement on an existing structure are not feasible." The Application proposes a wireless communications facility that will be attached to an existing structure, and therefore the Applicant did demonstrate that placement on an existing structure is feasible consistent with AMC 18.4.10.040(B)(2). The Applicant demonstrated that the AT&T reconstructed stadium light standard at Raider Stadium is not a feasible collocation option for several reasons. The City staff is well aware of the Applicant's efforts to explore collocation opportunities on the AT&T light standard since the Applicant specifically

requested the City staff's assistance in pursuing this option. The Applicant contacted AT&T before it constructed the light standard and was advised by AT&T that it is not feasible to collocate on this facility because it is a custom fabricated concrete pole that cannot structurally support an additional wireless communication facility. AT&T rejected any proposal to collocate on the stadium light facility due to the inability to support another wireless communication facility. The Applicant asked the City to assist in exploring collocation options with AT&T that could accommodate an additional wireless communication facility, but the City advised the Applicant that it is not appropriate, nor does the City have the authority, to require AT&T to work with the Applicant on this issue. AT&T has since constructed the replacement stadium light standard and it is unable to support another wireless communication facility. Since the replacement stadium light standard cannot support another wireless communication facility, the Applicant cannot force AT&T to allow for collocation and the City was unwilling to require AT&T to do so, this collocation option is not available. Even if the City RF consultant was correct that two of the rooftop options the Applicant considered do not have existing wireless communication facilities, that does not provide a basis for denying the Application. The proposal is a rooftop option that is a preferred design option consistent with AMC 18.4.10.040(B)(2) if no collocation options are feasible and therefore the Applicant is not required to rule out other rooftop options that do not have existing wireless communication facilities. The City RF consultant did not identify any other collocation options. Nonetheless, the Applicant will provide additional information and evidence supporting the conclusion that there are no feasible collocation options under AMC 18.4.10.040(B)(2) and the proposal is consistent with the preferred design standards.

6. The Applicant reserves the right to raise additional appeal issues since AMC 18.5.010.050(G)(3) does not limit the appeal to the specific grounds listed in the notice of appeal.

V. Staff Response

Third Party Review of New Technical Material

The applicants initially provided the code-required collocation study, and as required by ordinance the City retained the services of an independent third-party reviewer. The code requires that the applicants deposit funds with the city with their application fee to pay for this independent third-party review. William P. Johnson, RF Engineering Consultant, reviewed the application materials to ensure that the site approvals are based on an objective need. In his initial review, Johnson concluded that the applicants had failed to provide sufficient objective evidence relevant to the proposal documenting the need for additional RF coverage and capacity. With their appeal submittal, the applicants have provided additional technical submittals in response to the deficiencies identified in the third-party review. In reviewing these subsequent materials submitted by the applicants in response to his initial report, William Johnson notes that:

1. The target area is currently served to some extent by existing sites shown in #3 page 7 that are between one- and two-miles away. Sites at that distance might provide some low-band RF coverage, but it is often unreliable and service quality depends on subscriber location and local RF "clutter." It is nearly impossible for sites at that distance to provide reliable mid-band RF coverage in an urban/suburban area.

2. Existing spotty low-band (700/850MHz) RF coverage from existing neighbor sites provides about ten percent of Appellant's bandwidth. Item #3 pages 14-15 and 18-19 show existing and proposed low-band RF coverage. Mid-band spectrum, which accounts for about 90 percent of Appellant's subscriber bandwidth, is likewise spotty and served from existing neighbor sites at or below the outdoor service level. See Item #3 pages 21-22 and 25-26. We therefore conclude that Appellant has shown an RF service coverage gap in the vicinity of the proposed site that could be remedied by a new WCF.
3. In addition to the RF coverage gaps noted above, Appellant has provided Forward Data Volume (FDV) and Average Scheduled Eligible Users (ASEU) metric plots for an un-named existing neighbor site sector. The plots do not identify the band of operation, but we suspect they are for existing low-band services. Those plots show, at least for that un-named sector, two issues that will affect reliable service. First, the FDV plot shows that the serving sector cannot support the number of users and their bandwidth demands during the busiest times each day. Second, the ASEU plot likely reflects the make-and-break connections subscribers experience while trying to hold voice and data sessions on the LTE network from the un-named sector. Both metrics tend to support Appellant's claim of need for a WCF in the vicinity of the proposed site.
4. Appellant has also supplemented their materials with "Crowd-sourced" data from the "*Ookla Verizon 4G*" database that show user devices reporting less-than-reliable service levels in the vicinity of the proposed site. See Item #3 page 11. That crowd-sourced data is consistent with the existing RF coverage levels shown for low-band and mid-band and is consistent with Appellant's ASEU metrics that show excessive sessions held by the existing WCF sector in question.
5. Due to the propagation characteristics of both low-band and mid-band signals, any prospective alternate sites that are more distant than Appellant's existing WCF sites are likely to fail to provide sufficient signal strength to the target coverage area.
6. Documentation Item #2 "Alternate Site Analysis" lists site numbers 1 through 4. Sites 1, 2 and 3 are either located near existing sites operated by Appellant or are at comparable distances to existing sites. These alternate sites would likely have the same signal level issues discussed above for existing low-band and mid-band service that create the need for a WCF in the vicinity of the proposed site.
7. Appellant states that Site 4, the 85-foot light pole location, provides acceptable performance, but Appellant states that location is "not available." See Item #2 page 20.
8. Additional alternate sites identified by city staff or during public comment near the target area, if any, that have lower antenna center line (ACL) elevation or that are located at other coordinates will require additional propagation modeling by Appellant to assess performance should they be considered.

Materials with Regard to Feasibility of Collocation

In addition to the new technical materials provided with the appeal, the applicant has also provided a letter with attachments speaking to the feasibility of collocation on the new AT&T wireless facility at Raider Stadium, on a light standard, elsewhere on the SOU campus. The letter and associated attachments total 31 pages to document the applicant/appellant's efforts to pursue collocation on the AT&T facility. In summary, the University as the property owner has indicated to the applicant/appellant that while the

University does not “*have any objections to collocating with AT&T*” the applicant/appellant would need to discuss feasibility with AT&T. In subsequent outreach to AT&T, AT&T indicated that the light standard as approved and installed is “*fairly short*” and “*would not be suitable for additional collocators*”. The applicant/appellant further explains:

First, AT&T rejected Verizon’s attempts to explore any proposal to collocate on the stadium light facility based on AT&T’s position that the reconstructed stadium light standard is incapable of supporting another WCF. ... Both AT&T and its consultant made it clear that a collocation of another WCF at this site is not feasible due to the lower approved height and the fact that the AT&T reconstructed stadium light standard is a custom fabricated concrete pole that cannot structurally support another WCF. Since AT&T is unwilling and/or unable to allow collocation on the reconstructed stadium light standard and Verizon cannot force AT&T to permit collocation, this is not a feasible option.

Second, the property owner (Southern Oregon University) was unable or unwilling to assist Verizon in facilitating collocation on the reconstructed stadium light standard. Since Southern Oregon University is the property owner for both the AT&T stadium light facility and Verizon’s proposed rooftop site, Verizon reached out to Southern Oregon University to facilitate a discussion with AT&T about collocating on the stadium light standard. As reflected in the attached emails between Southern Oregon University and Acom, Southern Oregon University was unable or unwilling to assist.

Third, the City was unable or unwilling to assist Verizon in facilitating collocation on the reconstructed stadium light standard before AT&T constructed it....

The same proposal was previously approved in the same location. With there now being adequate technical data in the application to support the request based on independent third-party review, the only change in conditions since the previous approval is that there is now an AT&T facility at Raider Stadium that needs to be ruled out for collocation before the applicant can move on to the next step in the stepped hierarchy of the design standards and locate on an existing structure. In staff’s assessment, the letter and associated attachments provided can be found to demonstrate that “*a reasonable effort was made to locate collocation sites that meet the applicant’s service coverage area needs*” and that “*alternative sites have been considered and are technologically unfeasible or unavailable.*”

VI. Procedural - Required Burden of Proof

The criteria for Site Review approval from the Site Design Review Chapter are detailed in AMC 18.5.2.050 as follows:

- A. ***Underlying Zone:*** *The proposal complies with all of the applicable provisions of the underlying zone (part 18.2), including but not limited to: building and yard setbacks, lot area and dimensions, density and floor area, lot coverage, building height, building orientation, architecture, and other applicable standards.*
- B. ***Overlay Zones:*** *The proposal complies with applicable overlay zone requirements (part 18.3).*

- C. **Site Development and Design Standards:** *The proposal complies with the applicable Site Development and Design Standards of part 18.4, except as provided by subsection E, below.*
- D. **City Facilities:** *The proposal complies with the applicable standards in section 18.4.6 Public Facilities and that adequate capacity of City facilities for water, sewer, electricity, urban storm drainage, paved access to and throughout the property and adequate transportation can and will be provided to the subject property.*
- E. **Exception to the Site Development and Design Standards.** *The approval authority may approve exceptions to the Site Development and Design Standards of part 18.4 if the circumstances in either subsection 1 or 2, below, are found to exist.*
 - 1. *There is a demonstrable difficulty meeting the specific requirements of the Site Development and Design Standards due to a unique or unusual aspect of an existing structure or the proposed use of a site; and approval of the exception will not substantially negatively impact adjacent properties; and approval of the exception is consistent with the stated purpose of the Site Development and Design; and the exception requested is the minimum which would alleviate the difficulty.; or*
 - 2. *There is no demonstrable difficulty in meeting the specific requirements, but granting the exception will result in a design that equally or better achieves the stated purpose of the Site Development and Design Standards.*

The Wireless Communication Facility Design Standards are described in AMC 18.4.10.030 as follows:

All wireless communication facilities shall be located, designed, constructed, treated, and maintained in accordance with the following standards.

A. General Provisions

- 1. *All facilities shall be installed and maintained in compliance with the requirements of the Building Code. At the time of building permit application, written statements from the Federal Aviation Administration (FAA), the Aeronautics Section of the Oregon Department of Transportation, and the Federal Communication Commission (FCC) confirming that the proposed wireless communication facility complies with regulations administered by that agency or that the facility is exempt from regulation.*
- 2. *All associated transmittal equipment must be housed in a building, above or below ground level, which must be designed and landscaped to achieve minimal visual impact with the surrounding environment.*
- 3. *Wireless communication facilities shall be exempted from height limitations imposed in each zone.*
- 4. *Wireless communication facilities shall be installed at the minimum height and mass necessary for its intended use. A submittal verifying the proposed height and mass shall be prepared by a licensed engineer.*
- 5. *Lattice towers are prohibited as freestanding wireless communication support structures.*
- 6. *Signage for wireless communication facilities shall consist of a maximum of two non-illuminated signs, with a maximum of two square feet each, stating the name of the facility operator and a contact phone number.*

7. The applicant is required to remove all equipment and structures from the site and return the site to its original condition, or condition as approved by the Staff Advisor, if the facility is abandoned for a period greater than six months. Removal and restoration must occur within 90 days of the end of the six-month period.
8. All new wireless communication support structures shall be constructed so as to allow other users to collocate on the facility.

B. Preferred Designs. The following preferred designs are a stepped hierarchy, and the standards shall be applied in succession from subsection a to e, with the previous standard exhausted before moving to the following design alternative. For the purpose of chapter 18.4.10, feasible is defined as capable of being done, executed or effected; possible of realization. A demonstration of feasibility requires a substantial showing that a preferred design can or cannot be accomplished.

1. **Collocation.** Where possible, the use of existing wireless communication facilities sites for new installations shall be encouraged. Collocation of new facilities on existing facilities shall be the preferred option. Where technically feasible, collocate new facilities on pre-existing structures with wireless communication facilities in place or on pre-existing towers.
2. **Attached to Existing Structure.** If (a) above is not feasible, wireless communication facilities shall be attached to pre-existing structures, when feasible.
3. **Alternative Structure.** If (a) or (b) above are not feasible, alternative structures shall be used with design features that conceal, camouflage, or mitigate the visual impacts created by the proposed wireless communication facilities.
4. **Freestanding Support Structure.** If (1), (2), or (3) listed above are not feasible, a monopole design shall be used with the attached antennas positioned in a vertical manner to lessens the visual impact compared to the antennas in a platform design. Platform designs shall be used only if it is shown that the use of an alternate attached antenna design is not feasible.
5. **Lattice towers** are prohibited as freestanding wireless communication support structures.

C. Collocation Standards

1. The collocation feasibility study shall meet all of the following requirements.
 - a. Document that alternative sites have been considered and are technologically unfeasible or unavailable.
 - b. Demonstrate that a reasonable effort was made to locate collocation sites that meet the applicant's service coverage area needs.
 - c. Document the reasons collocation can or cannot occur.
2. Relief from collocation under this section may be granted at the discretion of the approval authority if the application and independent third party analysis demonstrate collocation is not feasible because one or more of the following conditions exist at prospective collocation sites.
 - a. A significant service gap in coverage area.
 - b. Sufficient height cannot be achieved by modifying existing structure or towers.
 - c. Structural support requirements cannot be met.
 - d. Collocation would result in electronic, electromagnetic, obstruction, or other radio

frequency interference.

D. Landscaping. *The following standards apply to all wireless communication facilities with any primary or accessory equipment located on the ground and visible from a residential use or the public right-of-way.*

- 1. Vegetation and materials shall be selected and sited to produce a drought resistant landscaped area.*
- 2. The perimeter of the wireless communication facilities shall be enclosed with a security fence or wall. Such barriers shall be landscaped in a manner that provides a natural sight obscuring screen around the barrier to a minimum height of six feet.*
- 3. The outer perimeter of the wireless communication facilities shall have a landscaped buffer zone ten feet in width.*
- 4. The landscaped area shall be irrigated and maintained to provide for proper growth and health of the vegetation.*
- 5. One tree shall be required per 20 feet of the landscape buffer zone to provide a continuous canopy around the perimeter of the wireless communication facilities. Each tree shall have a caliper of two inches, measured at breast height, at the time of planting.*

E. Visual Impacts

- 1. Wireless communication facilities shall be located in the area of minimal visual impact within the site which will allow the facility to function consistent with its purpose.*
- 2. Wireless communication facilities, in any zone, must be set back from any residential zone a distance equal to twice its overall height. The setback requirement may be reduced if, as determined by the approval authority, it can be demonstrated through findings of fact that increased mitigation of visual impact can be achieved within of the setback area. Underground accessory equipment is not subject to the setback requirement.*
- 3. Antennas attached to a pre-existing or alternative structure shall be integrated into the existing building architecturally and to the greatest extent possible shall not exceed the height of the pre-existing or alternative structure.*
- 4. Antennas attached to a pre-existing or alternative structure shall have a non-reflective finish and color that blends with the color and design of the structure to which it is attached.*
- 5. All wireless communication support structures must have a non-reflective finish and color that will mitigate visual impact, unless otherwise required by other government agencies.*
- 6. Exterior lighting for a wireless communication facility is permitted only when required by a federal or state authority.*
- 7. Should it be deemed necessary by the approval authority for the mitigation of visual impact of the wireless communication facility, additional design measures may be required. These may include, but are not limited to: additional camouflage materials and designs, facades, specific colors and materials, masking, and shielding techniques.*

The criteria for a Conditional Use Permit are described in AMC 18.5.4.050.A as follows:

- 1. That the use would be in conformance with all standards within the zoning district in which the use is proposed to be located, and in conformance with relevant Comprehensive plan policies that are not*

- implemented by any City, State, or Federal law or program.
2. That adequate capacity of City facilities for water, sewer, electricity, urban storm drainage, paved access to and throughout the development, and adequate transportation can and will be provided to the subject property.
 3. That the conditional use will have no greater adverse material effect on the livability of the impact area when compared to the development of the subject lot with the target use of the zone, pursuant with subsection 18.5.4.050.A.5, below. When evaluating the effect of the proposed use on the impact area, the following factors of livability of the impact area shall be considered in relation to the target use of the zone.
 - a. Similarity in scale, bulk, and coverage.
 - b. Generation of traffic and effects on surrounding streets. Increases in pedestrian, bicycle, and mass transit use are considered beneficial regardless of capacity of facilities.
 - c. Architectural compatibility with the impact area.
 - d. Air quality, including the generation of dust, odors, or other environmental pollutants.
 - e. Generation of noise, light, and glare.
 - f. The development of adjacent properties as envisioned in the Comprehensive Plan.
 - g. Other factors found to be relevant by the approval authority for review of the proposed use.
 4. A conditional use permit shall not allow a use that is prohibited or one that is not permitted pursuant to this ordinance.
 5. For the purposes of reviewing conditional use permit applications for conformity with the approval criteria of this subsection, the target uses of each zone are as follows.
 - a. **WR and RR.** Residential use complying with all ordinance requirements, developed at the density permitted by chapter 18.2.5 Standards for Residential Zones.
 - b. **R-1.** Residential use complying with all ordinance requirements, developed at the density permitted by chapter 18.2.5 Standards for Residential Zones.
 - c. **R-2 and R-3.** Residential use complying with all ordinance requirements, developed at the density permitted by chapter 18.2.5 Standards for Residential Zones.
 - d. **C-1.** The general retail commercial uses listed in chapter 18.2.2 Base Zones and Allowed Uses, developed at an intensity of 0.35 floor to area ratio, complying with all ordinance requirements; and within the Detailed Site Review overlay, at an intensity of 0.50 floor to area ratio, complying with all ordinance requirements.
 - e. **C-1-D.** The general retail commercial uses listed in chapter 18.2.2 Base Zones and Allowed Uses, developed at an intensity of 1.00 gross floor to area ratio, complying with all ordinance requirements.
 - f. **E-1.** The general office uses listed in chapter 18.2.2 Base Zones and Allowed Uses, developed at an intensity of 0.35 floor to area ratio, complying with all ordinance requirements; and within the Detailed Site Review overlay, at an intensity of 0.50 floor to area ratio, complying with all ordinance requirements.
 - g. **M-1.** The general light industrial uses listed in chapter 18.2.2 Base Zones and Allowed Uses, complying with all ordinance requirements.
 - h. **CM-C1.** The general light industrial uses listed in chapter 18.3.2 Croman Mill District, developed at an intensity of 0.50 gross floor to area ratio, complying with all ordinance requirements.
 - i. **CM-OE and CM-MU.** The general office uses listed in chapter 18.3.2 Croman Mill District, developed at an intensity of 0.60 gross floor to area, complying with all ordinance requirements.
 - k. **CM-NC.** The retail commercial uses listed in chapter 18.3.2 Croman Mill District, developed at an intensity of 0.60 gross floor to area ratio, complying with all ordinance requirements.
 - l. **HC, NM, and SOU.** The permitted uses listed in chapters 18.3.3 Health Care Services, 18.3.5

VII. Conclusions and Recommendations

Staff's initial denial of the application was based on the materials provided not meeting the burden of proof in demonstrating that collocation on an existing WCF was not feasible; and that there was a demonstrated service gap. The WCF design standards in AMC 18.4.10.030.B include a "stepped hierarchy" of preferred designs which are to be considered in succession. The feasibility of a preferred design must first be exhausted before moving to the next alternative. Under this hierarchy, collocation on an existing wireless facility is the preferred option and placement on an existing structure may only be considered once collocation has been demonstrated to be technically not feasible or the location unavailable.

The same proposal was previously approved in the same location. With there now being adequate technical data in the application to support the request as confirmed by the independent third-party reviewer, the only change in conditions since the previous approval is that there is now an AT&T facility at Raider Stadium that needs to be ruled out for collocation before the applicant can move on to the next step in the stepped hierarchy of the design standards and locate on an existing structure. In staff's assessment, the letter and associated attachments provided can be found to demonstrate that collocation on the light standard at Raider Stadium is not feasible. Should the Planning Commission concur and make such a finding, staff would support the reversal of the initial denial and approval of the application subject to the conditions detailed below:

1. That all proposals of the applicant shall be conditions of approval unless otherwise specifically modified herein, including:
 - a. That a screening wall matching the existing partial screening wall, with FRP paneling at antenna areas, shall be extended around the full perimeter of the building roof as proposed by the applicants;
 - b. That the proposed equipment cabinet, battery cabinet and antennas shall not extend above the level of the screen wall;
 - c. That vertical conduit attached to the building façade shall be painted to match the existing building;
 - d. That there shall be no new exterior lighting in conjunction with the proposal; and
 - e. That no associated equipment, other than the existing power transformers and generator, shall be placed on the ground.
2. That all conditions of the previous land use approvals for the Science Building shall remain in effect unless otherwise specifically modified herein.
3. That the applicants shall obtain required building permits, including any structural, mechanical and electrical permits; pay associated fees and charges; and obtain all required inspection approvals. All requirements of the Building Division, including but not limited to: that final drawings prepared by an Oregon-licensed design professional may be necessary to complete the submission for permits; that permit drawings shall address any applicable Oregon Structural Specialty Code requirements (i.e. wind, seismic and tributary loads, and forms of attachment).

4. That the building permit submittals shall include written communications from the Federal Aviation Administration, the Aeronautics section of the Oregon Department of Transportation, and the Federal Communications Commission that the proposed wireless communication facility complies with the regulations of their respective agencies or is exempt from those regulations.
5. That the plans submitted for the building permit shall be in conformance with those approved as part of this application. If the plans submitted for the building permit are not in substantial conformance with those approved as part of this application, an application to modify this Site Design Review and Conditional Use Permit approval shall be submitted and approved prior to issuance of a building permit.
6. That prior to the issuance of a building permit, the applicants shall obtain a business license from the City of Ashland.
7. That prior to use of the proposed wireless communications facility (WCF), the applicants shall paint, texture or otherwise treat the proposed screening wall in a non-reflective finish and color to match the existing screening wall.

WILLIAM P. JOHNSON
RF ENGINEERING CONSULTANT
PO Box 20263
ROCHESTER, NY 14602

June 26, 2024

Mr. Derek Severson, Planning Manager VIA EMAIL
CITY of ASHLAND
51 Winburn Way
Ashland, Oregon 97520

RE: Radio-frequency Engineering Review of Appellant Verizon Wireless
Materials for PA-APPEAL-2024-00019 Appeal of Zoning Permit
Application PA-T1-2024-00233 for a Wireless Communications Facility at
1250 Ashland Street

Dear Mr. Severson,

We have been retained by the City of Ashland to provide radio-frequency (RF) review and recommendations for the subject zoning permit application and subsequent appeal by Acom Consulting on behalf of Verizon Wireless (collectively “Applicant” or “Appellant”) for the Verizon Wireless “Madrone” site. We have reviewed the application and appeal materials submitted to date and offer the following observations relevant to the radio-frequency (“RF”) engineering aspects of the project materials and the materials provided by Appellant. Our goal is to ensure that the city planning commission and staff have objective information upon which to evaluate the RF service needs for a new facility and how the proposed facility is the least intrusive means to satisfy that service need. That goal is defeated when permit application materials lack substantive objective information as was the case with the initial materials.

As part of this appeal, Appellant provided additional materials that show RF propagation for the proposed site and alternate sites and included metrics for existing network capacity . For convenience of the reader, the eight (8) findings from our April 24, 2024, report are shown in Appendix A attached to this report. While we assume Appellant would not pursue a new WCF in the City of Ashland without well-considered justifications, the initial lack of engineering support documenting the need to densify their network and provide stronger signal levels was not included in the initial permit application materials. The supplemental materials produced by Appellant largely correct that situation. The reader may have questions as to why such supporting documentation is important and even, perhaps, why a minimal showing under the City of Ashland Code is not sufficient. Placing the matter in context requires a brief overview of typical planning and zoning considerations related to the RF issues.

At the most basic level, planning and zoning efforts engaged by municipal staff and boards “help cities keep their character as they grow.”¹ Zoning ordinances serve to promote and preserve community values by permitting only reasonable departures from historical approaches that facilitate planned density and separation of residential and commercial facilities. Since the early 1980’s, and later facilitated by passage of the federal Communications Act of 1996 and subsequent federal actions, the proliferation of commercial wireless communication facilities (“WCF”) by each FCC licensed wireless telecommunications service provider (“Service Provider”) to expand access to ubiquitous mobile services has continued well beyond initial forecasts. Municipalities typically scrutinize any new WCF to assure they (1) address a real wireless service need² beyond speculative development of income-generating “vertical” real estate and (2) that the proposed WCF is, among all reasonable locations and technical options, likely the minimally intrusive approach to provision of that need and not just the easiest and least costly approach without consideration of community values. Residents do not want to take a Service Provider’s word for it that a new site is needed without a thorough review of all the alleged reasons on the record. Toward that end our experience has been that many municipalities scrutinize both the technical permit application materials that tends to support need and the aesthetic evaluation of both the proposed site and any alternative sites that may be viable candidates for a less intrusive approach to providing the stated need. Our initial report observations on April 24, 2024, regarding the initial permit application materials, were made in light of these principles. The technical documentation suggested for addition to the permit application materials in the initial report is, or should be, familiar to Appellant since they generate and use those materials during their internal site development activities. Those technical materials were, or should have been, easily available without additional work on their part and can help guide the city and staff on the extent and limitations of need so that reasonable zoning and planning efforts can be informed by their content. Lacking said materials places the planning commission and staff at a disadvantage as they need to make undue assumptions about the technical and alternative site issues which, when lacking, arguably should result in a denial. We consider that these principles are implied in the statement of legislative purpose in the City of Ashland zoning ordinance for Wireless Communication Facilities.

¹ See <https://www.investopedia.com/terms/z/zoning-ordinance.asp#toc-what-are-the-advantages-of-zoning>

² There are several ways by which a wireless telecommunications service provider can establish site need for a “covered service.” A “covered service” is “a telecommunications service or a personal wireless service”. See “Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment,” FCC 18-133, 85 FR 51867, at ¶ 37 and footnote 85 (October 15, 2018) (the FCC regulatory test for establishing an effective prohibition is whether “a state or local legal requirement materially inhibits a provider’s ability to engage in any of a variety of activities related to its provision of a covered service,” and this test is met “not only when filling a coverage gap but also when densifying a wireless network, introducing new services or otherwise improving service capabilities”)

City of Ashland Municipal Code
Wireless Communications Facilities
18.4.10.010 Purpose

The purpose of this section is to establish standards that regulate the placement, appearance, and impact of wireless communication facilities while providing residents with the ability to access and adequately utilize the services that these facilities support. Because of the physical characteristics of wireless communication facilities, the impacts imposed by these facilities affect not only the neighboring residents but also the community as a whole. The standards are intended to ensure that the visual and aesthetic impacts of wireless communication facilities are mitigated to the greatest extent possible, especially in or near residential areas. AMC §18.4.10.010.

Regarding the present appeal materials, Appellant has now provided substantial technical documentation consistent with many of the initial observations from April 24, 2024, to show need for a WCF in the vicinity of the proposed site. The additional appeal documents available for our review are listed below.

ITEM # FILE NAME

1. Ashland_1250_PA-APPEAL-2024-00019_Appeal Submittal.pdf
2. VZW_MADRUNE Alternate Tower Analysis v3 (Reduced File).pdf
3. VZW_MADRUNE RF Justification v2 (Reduced File).pdf
4. Zoning Permit Application - PA-T1-2024-00233 - Consulting RF Engineer Response v2.pdf

The following new observations are presented for your review (documents above are referenced by their ITEM #).

1. The target area is currently served to some extent by existing sites shown in #3 page 7 that are between 1-2 miles away. Sites at that distance might provide some low-band RF coverage but it is often unreliable and service quality depends on subscriber location and local RF “clutter.” It is nearly impossible for sites at that distance to provide reliable mid-band RF coverage in an urban/suburban area.
2. Existing spotty low-band (700/850MHz) RF coverage from existing neighbor sites provides about 10% of Appellant’s bandwidth. Item #3 pages 14-15 and 18-19 show existing and proposed low-band RF coverage. Mid-band spectrum, which accounts for about 90% of Appellant’s subscriber bandwidth, is likewise spotty and served from existing neighbor sites at or below the outdoor service level. See Item #3 pages 21-22 and 25-26. We therefore conclude that Appellant has shown an RF service coverage gap in the vicinity of the proposed site that could be remedied by a new WCF.
3. In addition to the RF coverage gaps noted above, Appellant has provided Forward Data Volume (FDV) and Average Scheduled Eligible Users (ASEU) metric plots for an un-

named existing neighbor site sector. The plots do not identify the band of operation, but we suspect they are for existing low-band services. Those plots show, at least that un-named sector, two issues that will affect reliable service. First, the FDV plot shows that the serving sector cannot support the number of users and their bandwidth demands during the busiest times each day. Second, the ASEU plot likely reflects the make-and-break connections subscribers experience while trying to hold voice and data sessions on the LTE network from the un-named sector. Both metrics tend to support Appellant's claim of need for a WCF in the vicinity of the proposed site.

4. Appellant has also supplemented their materials with "Crowd-sourced" data from the "Ookla Verizon 4G" database that show user devices reporting less-than-reliable service levels in the vicinity of the proposed site. See Item #3 page 11. That crowd-sourced data is consistent with the existing RF coverage levels shown for low-band and mid-band and is consistent with Appellant's ASEU metrics that show excessive sessions held by the existing WCF sector in question.
5. Due to the propagation characteristics of both low-band and mid-band signals, any prospective alternate sites that are more distant than Appellant's existing WCF sites are likely to fail to provide sufficient signal strength to the target coverage area.
6. Documentation Item #2 "Alternate Site Analysis" lists site numbers 1 through 4. Sites 1, 2 and 3 are either located near existing sites operated by Appellant or are at comparable distances to existing sites. These alternate sites would likely have the same signal level issues discussed above for existing low-band and mid-band service that create the need for a WCF in the vicinity of the proposed site.
7. Appellant states that Site 4, the 85' light pole location, provides acceptable performance, but Appellant states that location is "not available." See Item #2 page 20.
8. Additional alternate sites identified by city staff or during public comment near the target area, if any, that have lower antenna center line (ACL) elevation or that are located at other coordinates will require additional propagation modeling by Appellant to assess performance should they be considered.

Thank you for the opportunity once again to assist the City of Ashland. Please do not hesitate to let me know if you have any questions or need additional information.

Very truly yours,



William P. Johnson
RF Engineering Consultant

cc. April Lucas via email april.lucas@ashland.or.us

APPENDIX A: Initial RF Engineering Review Findings from April 24, 2024

1. Applicant states in several places that the proposed facility is intended to address in-building RF signal coverage, increased user capacity, and off-load of excessive capacity demands on existing neighbor sites.
2. The application materials contain several RF propagation plots that are not labeled for band of operation, but I believe they are representing “low band” (700/850 MHz band) RF coverage. The RF propagation plots are color-coded for “Green” (-85 dBm³), “Yellow” (-95 dBm), and “Red” (-105 dBm).
3. Applicant typically deploys base station facilities that serve low-band and mid-band signals. When only low-band and mid-band spectrum is deployed, low-band constitutes only about 10% of available licensed spectrum. Mid-band constitutes the remaining 90%.
4. The permit application materials are silent about mid-band RF coverage which, besides being the largest percentage of spectrum, propagates less effectively than low-band and make it a driving factor in base station placement. Analysis of need for the proposed site as well as evaluation of alternative sites will depend heavily on the propagation limitations of mid-band spectrum. We have no information about this important band from Applicant other than mention that it will be deployed.
5. Likewise, we learn from Applicant that at least one existing neighbor site is approaching capacity saturation or already at capacity saturation. Traffic off-load from existing saturated sites will be important when evaluating alternate sites or justification for the proposed site. There are no trend metrics such as Forward Data Volume (FDV), Avg Scheduled Eligible Users (ASEU), and Average Active Connections (AvgAC) that would serve to support claims that a new base station facility is needed to off-load traffic or draw local mobile subscribers onto the new site using mid-band spectrum to free up low-band spectrum.
6. The scale of the RF propagation plots makes it nearly impossible to identify locations where in-building service is needed and how the proposed base station is able to satisfy that need. We recommend that RF propagation plots, both for low-band and mid-band, be zoomed in to the target coverage area showing the neighbor site existing coverage and a before/after using the proposed base station facility.
7. For alternate site analysis, we understand from city staff that eyes-on observations show that several of the potential co-location sites do not appear to have any existing antenna support structures in place and there is no record of any approved facilities at some of those locations. We recommend that Applicant revisit the alternate site analysis to ascertain how realistic any of those alternatives are to the present application.
8. The application materials also lack supporting documentation to show that existing structure co-location such as that approved in 2017-2018 is not possible for design or

³ The term “dBm” is a reference to power level in decibels with respect to 0.001 Watts. Mathematically dBm is defined as $\text{dBm} = 10 \cdot \log_{10}(\text{Watts} / 0.001)$. In this case the power level of the LTE metric Reference Signal Received Power (RSRP). Where sufficient user capacity is available from the base station, RSRP gives an initial estimate of mobile wireless communication reliability. Less negative values are stronger power levels.

loading issues. There is also no documentation to show that the land owner is unwilling to consider approval of a new structure for purposes of consolidating facilities in a location that already has several vertical light support structures as well as a support pole for AT&T Mobility.

APPELLANT'S SUBMITTAL

PA-APPEAL-2024-00019
1250 Ashland Street

Notice of Land Use Appeal – Type I Ashland Municipal Code § 18.5.1.050.G.		
A. Name(s) of Person Filing Appeal:	B. Address(es):	
Verizon Wireless/Acom Consulting	Verizon: 5430 NE 122nd Ave. Portland, OR 97230 Acom: 5200 SW Meadows Rd., Ste. 150 Lake Oswego, OR 97035	
2.		
Attach additional pages of names and addresses if other persons are joining the appeal.		
C. Decision Being Appealed		
Date of Decision: May 14, 2024	Planning Action #: PA-T1-2024-00233	Title of planning action: Site Design Review
D. How Person(s) Filing Appeal Qualifies as a Party (For each person listed above in Box A, check the appropriate box below.)		
The person named in Box A.1. above qualifies as a party because:	☒ I am the applicant. ☐ I received notice of the planning action. ☐ I was entitled to receive notice of the action but did not receive notice due to error.	
The person named in Box A.2. above qualifies as a party because:	☐ I am the applicant. ☐ I received notice of the planning action. ☐ I was entitled to receive notice of the action but did not receive notice due to error.	
Attach additional pages if others have joined in the appeal and describe how each qualifies as a party.		
E. Specific Grounds for Appeal		
1. The first specific ground for which the decision should be reversed or modified is (attach additional pages if necessary): The specific grounds for appeal are set forth in the attached Exhibit A. This is an error because the applicable criteria or procedure in the Ashland Municipal Code § or other law in § requires that (attach additional pages if necessary):		
2. The second specific ground for which the decision should be reversed or modified is (attach additional pages if necessary): This is an error because the applicable criteria or procedure in the Ashland Municipal Code § or other law in § requires that (attach additional pages if necessary):		
3. The third specific ground for which the decision should be reversed or modified is (attach additional pages if necessary): This is an error because the applicable criteria or procedure in the Ashland Municipal Code § or other law in § requires that (attach additional pages if necessary):		

4. (On attached pages, list other grounds, in a manner similar to the above, that exist. For each ground list the applicable criteria or procedures in the Ashland Municipal Code or other law that were violated.)

Appeal Fee

With this notice of appeal I(we) submit the sum of **\$150.00** which is the appeal fee required by § 18.5.1.050 of the Ashland Municipal Code.

Date: 5/23/24

Signature(s) of person(s) filing appeal (attach additional pages if necessary):

A handwritten signature in black ink, appearing to read "Sarah Blum", with a horizontal line extending to the right.

Note: This completed Notice of Land Use Appeal together with the appeal fee must be filed with the Community Development Department, Attn: Planning Commission Secretary, 20 E Main St, Ashland, OR 97520, telephone 541-488-5305, prior to the effective date of the decision sought to be reviewed. Effective dates of decisions are set forth in Ashland Municipal Code Section 18.5.1.050.

EXHIBIT A – GROUNDS FOR APPEAL

Appeal of Community Development Director’s decision, dated May 14, 2024
Application No. PA-T1-2024-00233
Site Design Review – Wireless Communications Facility

Appellant/Applicant: Verizon Wireless
Representative: E. Michael Connors, Attorney

A. The Appellant/Applicant Verizon Wireless (the “Applicant”) is appealing the Community Development Director’s (the “Director”) decision, dated May 14, 2024, denying Application No. PA-T1-2024-00233 - a site design review application for approval of a wireless communications facility (the “Application”).

B. The Applicant has standing to appeal because it is the applicant who filed the Application that is the subject of this appeal.

C. The Applicant is raising the following issues on appeal:

1. The Director erred by denying a proposal that is identical to the proposal approved by the Director and the Planning Commission in 2018. Both the Director and the Planning Commission approved the identical proposal in 2018 (PA #2017-01486), but that land use approval ultimately expired. The current proposal and the City’s approval standards are identical to the 2018 proposal and standards. The Director failed to explain why he denied the Application given that it is identical to the proposal approved in 2018 subject to the same approval standards.

2. The Director erred by denying the Application based exclusively on comments from the City RF consultant which the Applicant was never provided an opportunity to respond to or address. The City RF consultant’s letter is dated April 24, 2024, but the City did not provide the Applicant a copy of the letter until it issued the Director’s decision on May 14, 2024. The City RF consultant’s letter raises several questions and issues that the Applicant could have corrected or clarified. Nonetheless, the Applicant will respond to the City RF consultant’s letter as part of this appeal.

3. The Director erred by denying the Application based on the City RF consultant’s request for specific technical information that is not required under the City’s application submittal or approval standards. AMC Chapter 18.4.10 does not require the Applicant to provide RF propagation maps that identify and address different bands of operation, trend metrics, or scales of RF propagation plots. The City cannot deny the Application based on the lack of technical information that the Applicant was not required to provide under the City’s submittal or approval standards. Nonetheless, the Applicant will respond to these City RF consultant’s comments as part of this appeal.

4. The Director erred by denying the Application on the grounds that the Applicant failed to demonstrate a “service gap” in the coverage area. The Applicant provided substantial evidence demonstrating that there is a significant coverage and capacity gap in

this area of the City. The City RF consultant did not dispute this claim, but rather merely requested additional technical information that the Applicant was not required to submit under AMC Chapter 18.4.10. Additionally, the Applicant would not undertake the time and expense of pursuing approval of the proposed wireless communications facility if it was unnecessary to resolve a coverage and capacity gap in this area. Nonetheless, the Applicant will provide additional information and clarification demonstrating there is a significant coverage and capacity gap in this area of the City.

5. The Director erred in denying the Application on the grounds that the Applicant failed to demonstrate “that collocation or placement on an existing structure are not feasible.” The Application proposes a wireless communications facility that will be attached to an existing structure, and therefore the Applicant did demonstrate that placement on an existing structure is feasible consistent with AMC 18.4.10.040(B)(2). The Applicant demonstrated that the AT&T reconstructed stadium light standard at Raider Stadium is not a feasible collocation option for several reasons. The City staff is well aware of the Applicant’s efforts to explore collocation opportunities on the AT&T light standard since the Applicant specifically requested the City staff’s assistance in pursuing this option. The Applicant contacted AT&T before it constructed the light standard and was advised by AT&T that it is not feasible to collocate on this facility because it is a custom fabricated concrete pole that cannot structurally support an additional wireless communication facility. AT&T rejected any proposal to collocate on the stadium light facility due to the inability to support another wireless communication facility. The Applicant asked the City to assist in exploring collocation options with AT&T that could accommodate an additional wireless communication facility, but the City advised the Applicant that it is not appropriate, nor does the City have the authority, to require AT&T to work with the Applicant on this issue. AT&T has since constructed the replacement stadium light standard and it is unable to support another wireless communication facility. Since the replacement stadium light standard cannot support another wireless communication facility, the Applicant cannot force AT&T to allow for collocation and the City was unwilling to require AT&T to do so, this collocation option is not available. Even if the City RF consultant was correct that two of the rooftop options the Applicant considered do not have existing wireless communication facilities, that does not provide a basis for denying the Application. The proposal is a rooftop option that is a preferred design option consistent with AMC 18.4.10.040(B)(2) if no collocation options are feasible and therefore the Applicant is not required to rule out other rooftop options that do not have existing wireless communication facilities. The City RF consultant did not identify any other collocation options. Nonetheless, the Applicant will provide additional information and evidence supporting the conclusion that there are no feasible collocation options under AMC 18.4.10.040(B)(2) and the proposal is consistent with the preferred design standards.

6. The Applicant reserves the right to raise additional appeal issues since AMC 18.5.010.050(G)(3) does not limit the appeal to the specific grounds listed in the notice of appeal.

D. The Applicant is raising appeal issues that were raised during the public comment period. The Director denied the Application based exclusively on the comments from the City RF consultant submitted during the public comment period. The Applicant was never provided an

opportunity to respond to or address the City RF consultant's comments, but it will respond to these comments as part of the appeal.



Biwabkos Consultants LLC

18756 W Luke Ave

Litchfield Park, Arizona 85340-0018

www.biwabkos.com

623-522-8681

June 2, 2024

City of Ashland

Attn: Mr. Derek Severson, Planning Manager VIA Email

51 Winburn Way

Ashland, Oregon 97520

RE: Zoning Permit Application PA-T1-2024-00233

Applicant Consulting RF Engineer response to Jurisdictional Consultant

Mr. Severson,

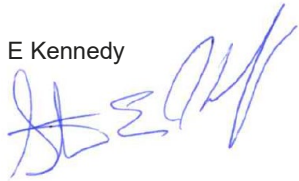
We have been retained by Acom Consulting/Verizon Wireless (the "Applicants") to provide Radio Frequency Engineering Consulting for the above named application. I have reviewed the materials and offer the following assessments and assertions responding to the questions raised by the letter from the City's RF consultant, William P. Johnson (the "Jurisdictional Consultant"), dated April 24, 2024. I have provided an RF Justification package and an alternative site analysis package as part of this information. The following is my response to each of the questions or statements in the Jurisdictional Consultant's letter.

1. I agree with the Jurisdictional Consultant that this site has been designed to increase the indoor service quality in the area around the proposed site as well as provide increased user capacity and offload the excessive capacity demands of the existing sites covering the area. Please see the RF Justification / RF Design Analysis for explanation. Please see pages 10-12 of the RF Justification deck for mobile reports showing the coverage levels in the area of the proposed site.
2. The updated RF Justification has a legend in the upper right corner for pages 14 – 26 of the RF Justification deck. Please note there are also Best Server plots in the deck. Both low band 700 MHz and mid band 2100MHz RSRP modeling has been completed.
3. I agree with the Jurisdictional Consultant's statement that the low band allocation for Commercial Wireless Operators is only around 10-15% of overall spectrum.

4. See answer to question 2, mid-band plots are in the RF Justification package as well as the Alternative Site Analysis package. The mid-band plots and modeling demonstrate that there is a need for an additional site to address the lack of indoor coverage and offload excessive capacity demands.
5. We provided the requested information. Please see pages 8 & 9 for FDV and ASEU charts for the neighbor site that is overloaded.
6. We provided the requested information. See pages 10-12 of the RF Justification deck and pages 18, 19, 25 and, 26 for zoomed in map showing the streets in the area.
7. The Alternative Site Analysis deck addresses the coverage impacts of each alternate site and the coverage they provide. The Applicants included the two roof-top alternative sites because they were included in alternative sites in the same proposal approved by the City in 2018 (PA-2017-01486).
8. The Applicants will provide additional documentation addressing why the AT&T reconstructed stadium light standard is not a feasible/available collocation option.

Sincerely,

Steven E Kennedy



Owner / Director of Engineering
Biwabkos Consultants LLC

WIRELESS NETWORK CONSULTING

Verizon Madrone
Capacity Site
Rooftop Colocation

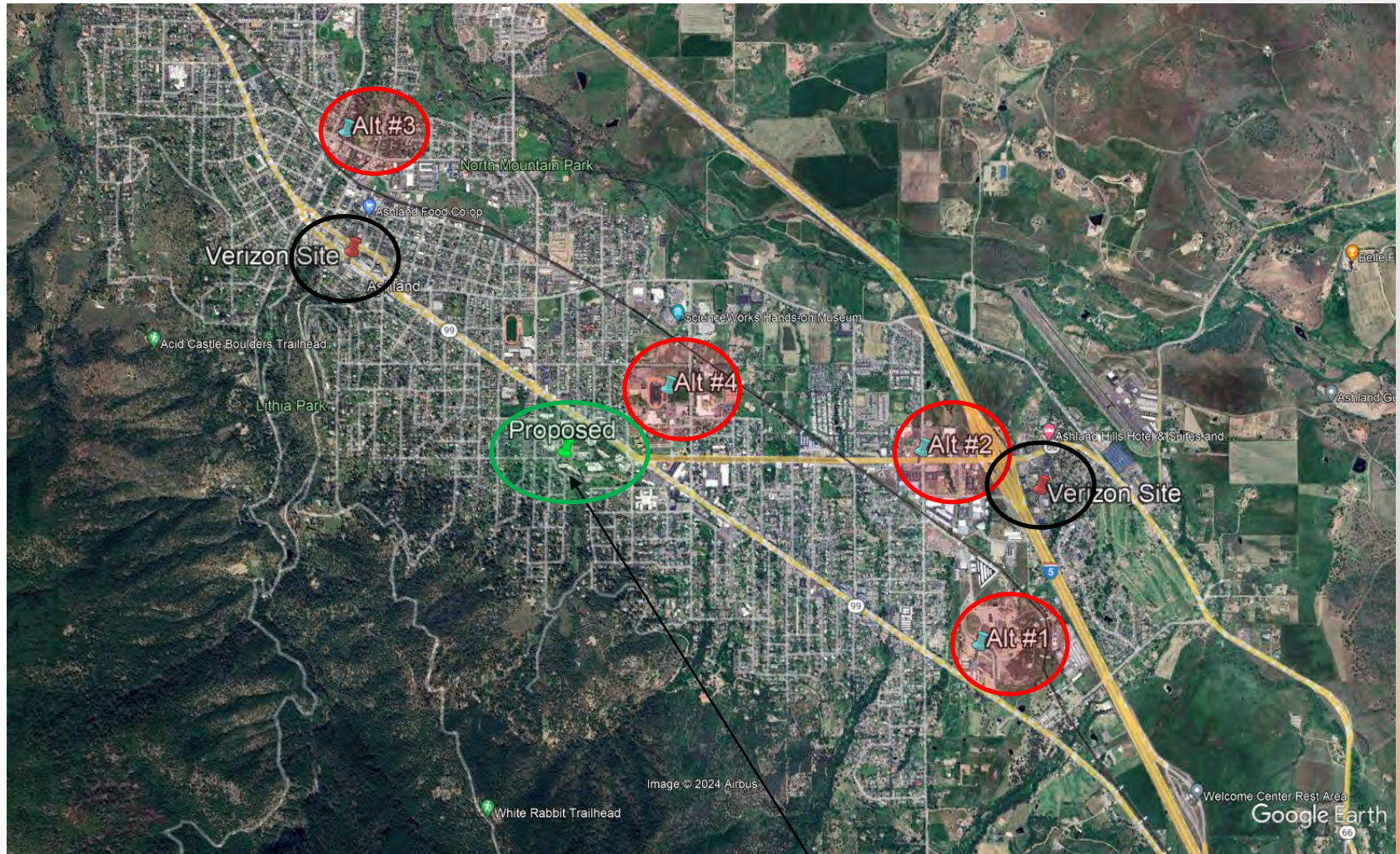
ALTERNATE SITE ANALYSIS



Alternate Site

- † Requested to review alternative site locations
- † All (4) alternates are within 1.75 miles of proposed
- † Primary objective is to provide coverage and capacity in and around Southern Oregon University

Area



Proposed Site

2024

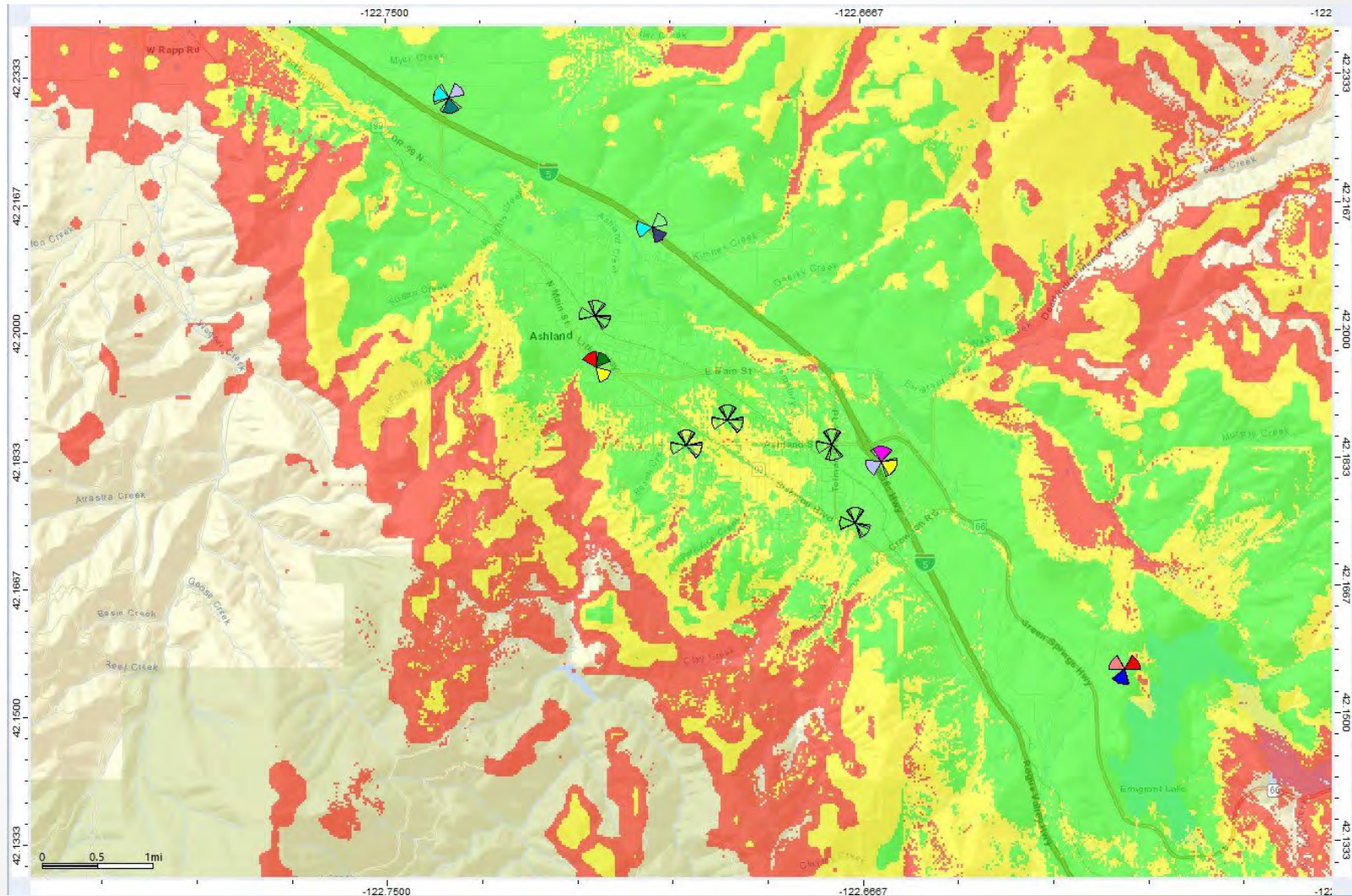
Total Page Number: 98

Alternate Sites

- † Alternate #1 - TowerCo 120' AGL Tower
42.174984, -122.174984
- † Alternate #2 – Rooftop 25' Tall
42.185200, -122.671900
- † Alternate #3 – Rooftop 25' Tall
42.202200, -122.713300
- † Alternate #4 – 85' Light Standard
– Mounting Height – 65'
42.188500, -122.690100

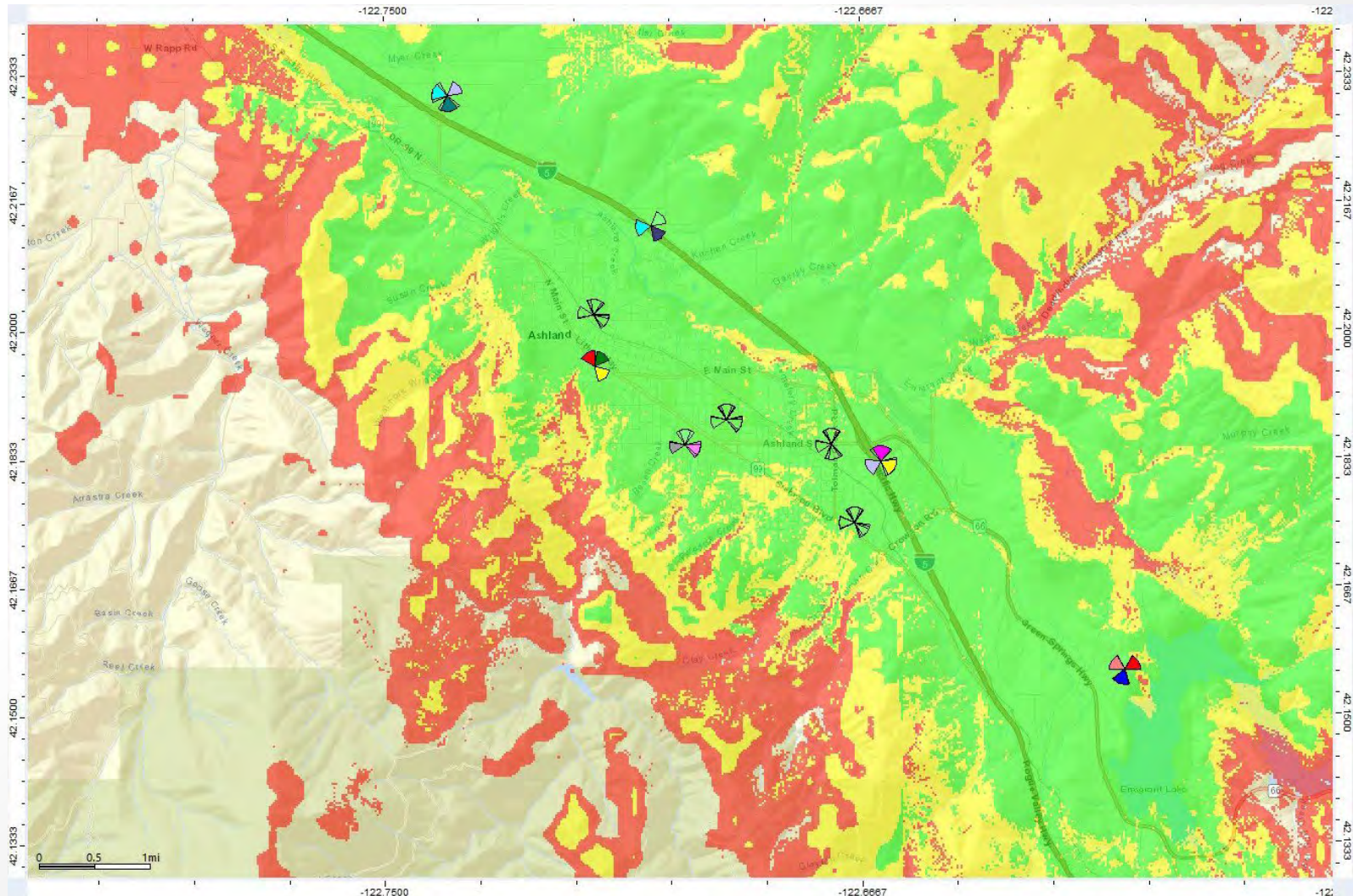
RSRP Coverage – Existing Low Band

LEGEND	
	Indoor ≥ -85 dbm
	In-Vehicle ≥ -95 dbm
	On-Street ≥ -106 dbm



RSRP Coverage – Proposed Low Band

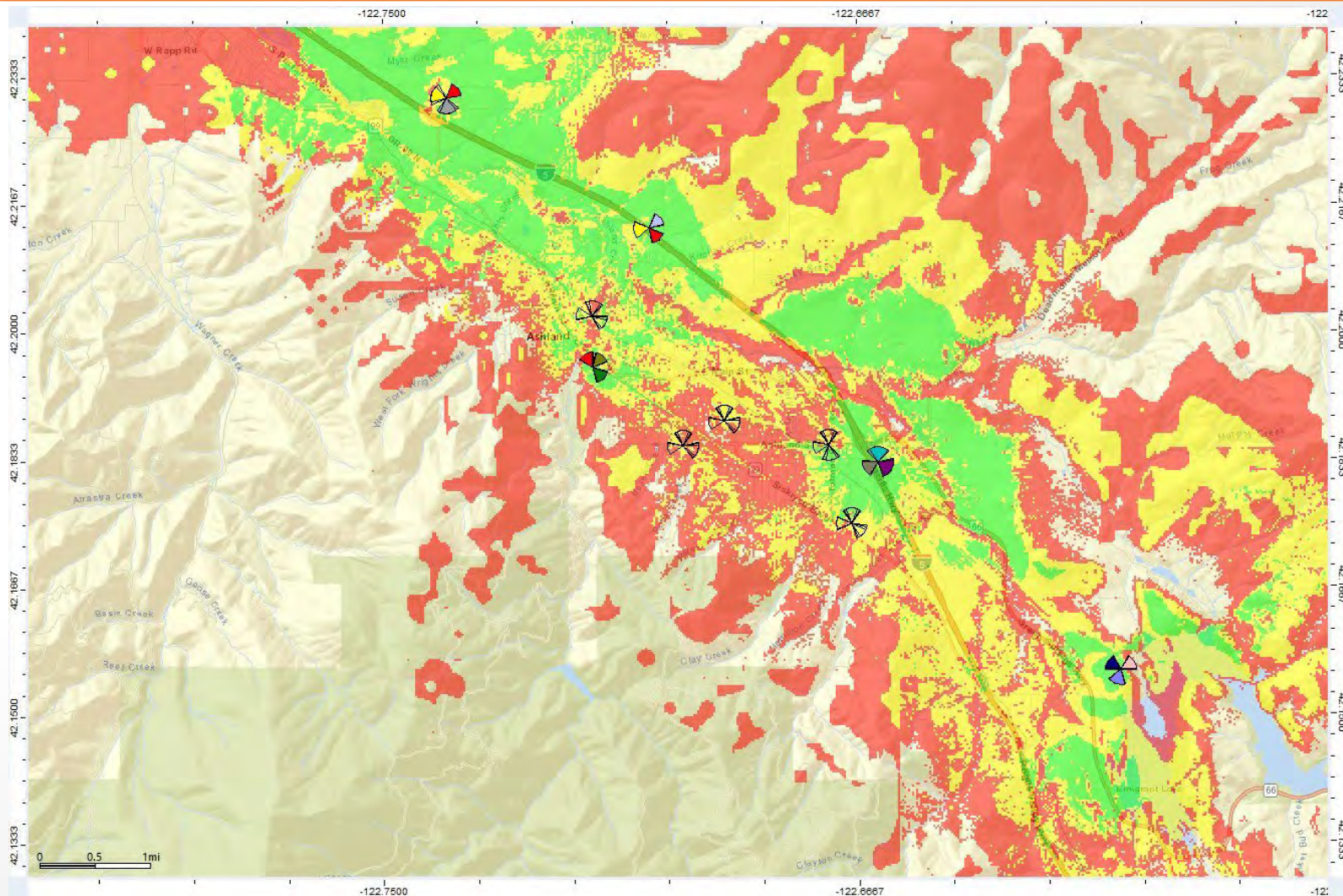
LEGEND	
	Indoor ≥ -85 dbm
	In-Vehicle ≥ -95 dbm
	On-Street ≥ -106 dbm



2024

RSRP Coverage – Existing Mid Band

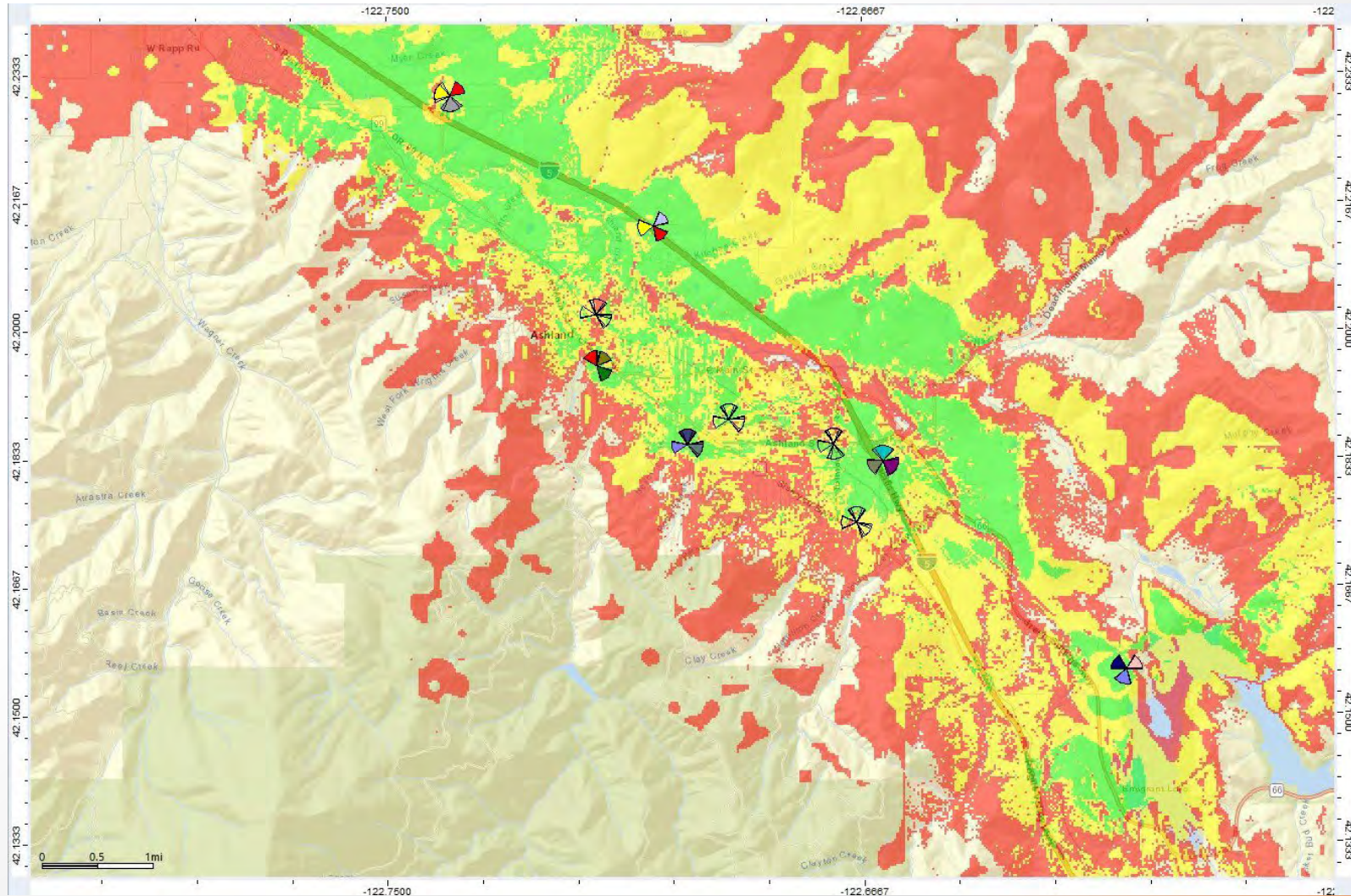
LEGEND	
	Indoor ≥ -85 dbm
	In-Vehicle ≥ -95 dbm
	On-Street ≥ -106 dbm



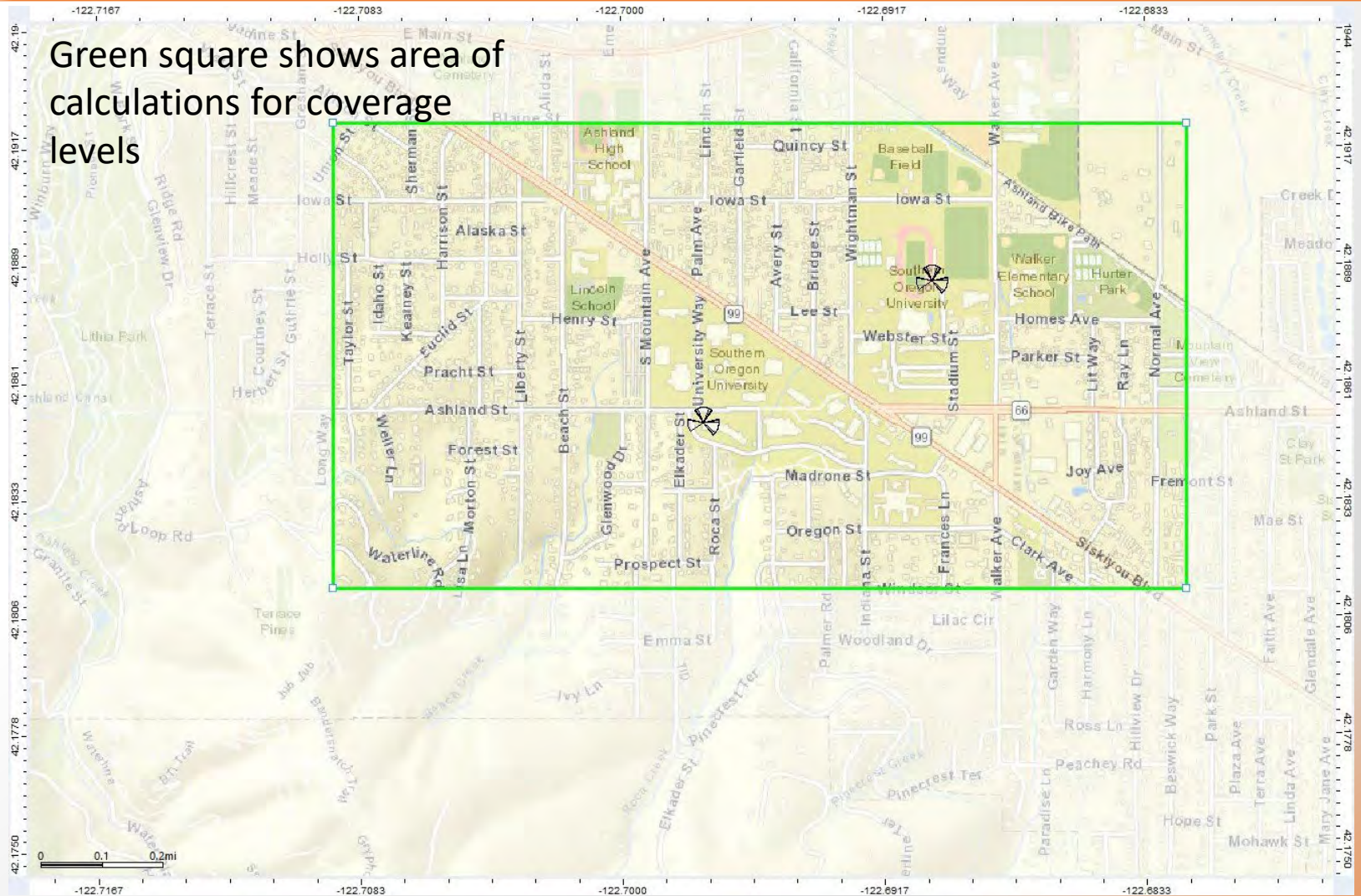
2024

RSRP Coverage – Proposed Mid Band

LEGEND	
	Indoor ≥ -85 dbm
	In-Vehicle ≥ -95 dbm
	On-Street ≥ -106 dbm



Focus Zone



RSRP Coverage – low band

Proposed vs Existing Coverage

LEGEND	
	Indoor >= -85 dbm
	In-Vehicle >= -95 dbm
	On-Street >= -106 dbm

Blue oval shows indoor and in-vehicle coverage provided by proposed

Zone	Prediction	Legend	Zone Surface (km²)	Surface (km²)	% of Covered Area	% Focus Zone
Focus Zone	LTE_NW-Mobility_RSRP-dBm (0)		2.739368	2.7306	100	99.7
		RSRP Level (DL) (dBm) >= -85		2.6154	95.8	95.5
		RSRP Level (DL) (dBm) >= -95		2.7306	100	99.7
		RSRP Level (DL) (dBm) >= -106		2.7306	100	99.7

Left Picture and upper table Proposed data showing 2.61 square kilometers are covered with indoor service vs lower picture, lower left table showing data showing 1.62 square kilometers covered with indoor service a 38% reduction in coverage compared to proposed.

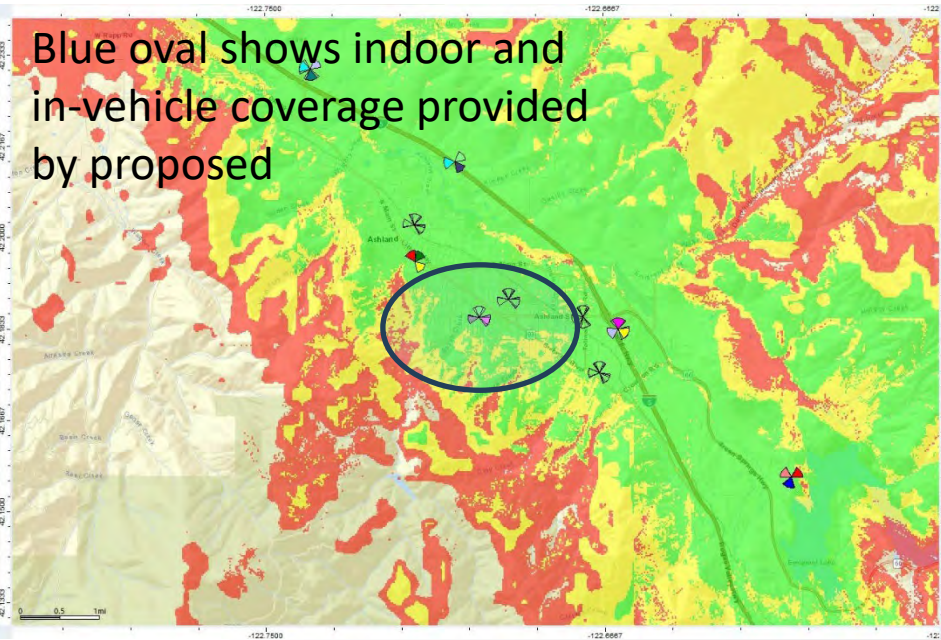
Blue oval shows indoor and in-vehicle coverage provided by proposed

Zone	Prediction	Legend	Zone Surface (km²)	Surface (km²)	% of Covered Area	% Focus Zone
Focus Zone	LTE_NW-Mobility_RSRP-dBm (0)		2.739368	2.7306	100	99.7
		RSRP Level (DL) (dBm) >= -85		1.6299	59.7	59.5
		RSRP Level (DL) (dBm) >= -95		2.7225	99.7	99.4
		RSRP Level (DL) (dBm) >= -106		2.7306	100	99.7

RSRP Coverage – low band Proposed vs Alternate #1

LEGEND	
	Indoor >= -85 dbm
	In-Vehicle >= -95 dbm
	On-Street >= -106 dbm

Blue oval shows indoor and in-vehicle coverage provided by proposed

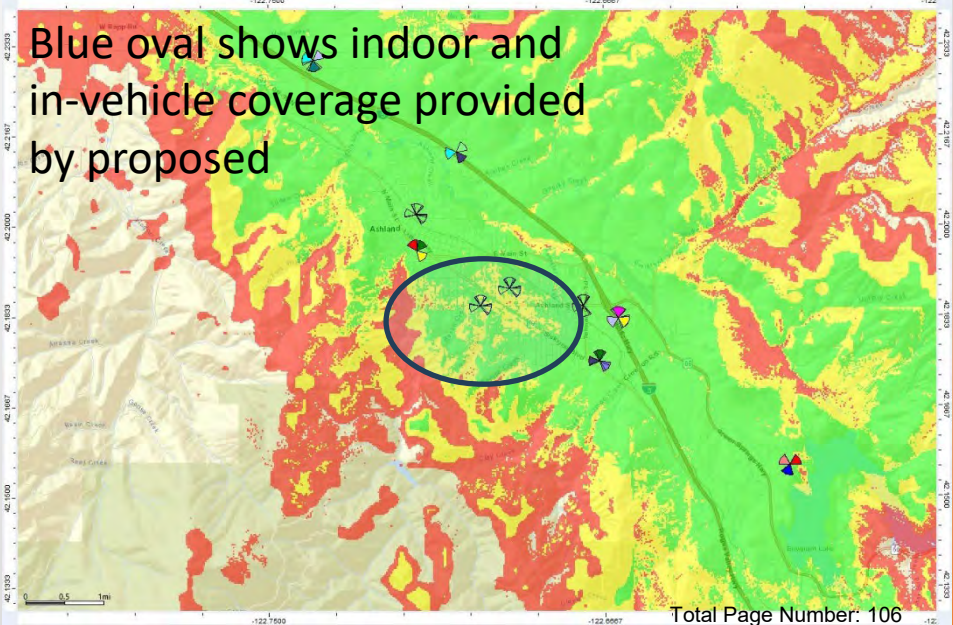


Focus Zone	LTE_NW-Mobility_RSRP-dBm (0)	2.739368	2.7306	100	99.7
	RSRP Level (DL) (dBm) >= -85		1.7829	65.3	65.1
	RSRP Level (DL) (dBm) >= -95		2.7261	99.8	99.5
	RSRP Level (DL) (dBm) >= -106		2.7306	100	99.7

Zone	Prediction	Legend	Zone Surface (km ²)	Surface (km ²)	% of Covered Area	% Focus Zone
Focus Zone	LTE_NW-Mobility_RSRP-dBm (0)		2.739368	2.7306	100	99.7
	RSRP Level (DL) (dBm) >= -85			2.6154	95.8	95.5
	RSRP Level (DL) (dBm) >= -95			2.7306	100	99.7
	RSRP Level (DL) (dBm) >= -106			2.7306	100	99.7

Left Picture and upper table Proposed data showing 2.61 square kilometers are covered with indoor service vs lower picture, lower left table showing data showing 1.78 square kilometers covered with indoor service a 32% reduction in coverage compared to proposed.

Blue oval shows indoor and in-vehicle coverage provided by proposed



RSRP Coverage – low band

Proposed vs Alternate #2

LEGEND	
	Indoor >= -85 dbm
	In-Vehicle >= -95 dbm
	On-Street >= -106 dbm

Blue oval shows indoor and in-vehicle coverage provided by proposed

Zone	Prediction	Legend	Zone Surface (km ²)	Surface (km ²)	% of Covered Area	% Focus Zone
Focus Zone	LTE_NW-Mobility_RSRP-dBm (0)		2.739368	2.7306	100	99.7
		RSRP Level (DL) (dBm) >= -85		2.6154	95.8	95.5
		RSRP Level (DL) (dBm) >= -95		2.7306	100	99.7
		RSRP Level (DL) (dBm) >= -106		2.7306	100	99.7

Left Picture and upper table Proposed data showing 2.61 square kilometers are covered with indoor service vs lower picture, lower left table showing data showing 1.92 square kilometers covered with indoor service a 27% reduction in coverage compared to proposed.

Blue oval shows indoor and in-vehicle coverage provided by proposed

Zone	Prediction	Legend	Zone Surface (km ²)	Surface (km ²)	% of Covered Area	% Focus Zone
Focus Zone	LTE_NW-Mobility_RSRP-dBm (0)		2.739368	2.7306	100	99.7
		RSRP Level (DL) (dBm) >= -85		1.9215	70.4	70.1
		RSRP Level (DL) (dBm) >= -95		2.7306	100	99.7
		RSRP Level (DL) (dBm) >= -106		2.7306	100	99.7

RSRP Coverage – low band

Proposed vs Alternate #3

LEGEND	
	Indoor >= -85 dbm
	In-Vehicle >= -95 dbm
	On-Street >= -106 dbm

Blue oval shows indoor and in-vehicle coverage provided by proposed

Zone	Prediction	Legend	Zone Surface (km ²)	Surface (km ²)	% of Covered Area	% Focus Zone
Focus Zone	LTE_NW-Mobility_RSRP-dBm (0)		2.739368	2.7306	100	99.7
		RSRP Level (DL) (dBm) > =-85	2.6154	95.8	95.5	
		RSRP Level (DL) (dBm) > =-95	2.7306	100	99.7	
		RSRP Level (DL) (dBm) > =-106	2.7306	100	99.7	

Left Picture and upper table Proposed data showing 2.61 square kilometers are covered with indoor service vs lower picture, lower left table showing data showing 1.63 square kilometers covered with indoor service a 38% reduction in coverage compared to proposed.

Blue oval shows indoor and in-vehicle coverage provided by proposed

Zone	Prediction	Legend	Zone Surface (km ²)	Surface (km ²)	% of Covered Area	% Focus Zone
Focus Zone	LTE_NW-Mobility_RSRP-dBm (0)		2.739368	2.7306	100	99.7
		RSRP Level (DL) (dBm) >= -85	1.6389	60	59.8	
		RSRP Level (DL) (dBm) >= -95	2.7225	99.7	99.4	
		RSRP Level (DL) (dBm) >= -106	2.7306	100	99.7	

RSRP Coverage – low band

Proposed vs Alternate #4

LEGEND	
	Indoor >= -85 dbm
	In-Vehicle >= -95 dbm
	On-Street >= -106 dbm

Blue oval shows indoor and in-vehicle coverage provided by proposed

Zone	Prediction	Legend	Zone Surface (km ²)	Surface (km ²)	% of Covered Area	% Focus Zone
Focus Zone	LTE_NW-Mobility_RSRP-dBm (0)		2.739368	2.7306	100	99.7
		RSRP Level (DL) (dBm) > =-85	2.6154	95.8	95.5	
		RSRP Level (DL) (dBm) > =-95	2.7306	100	99.7	
		RSRP Level (DL) (dBm) > =-106	2.7306	100	99.7	

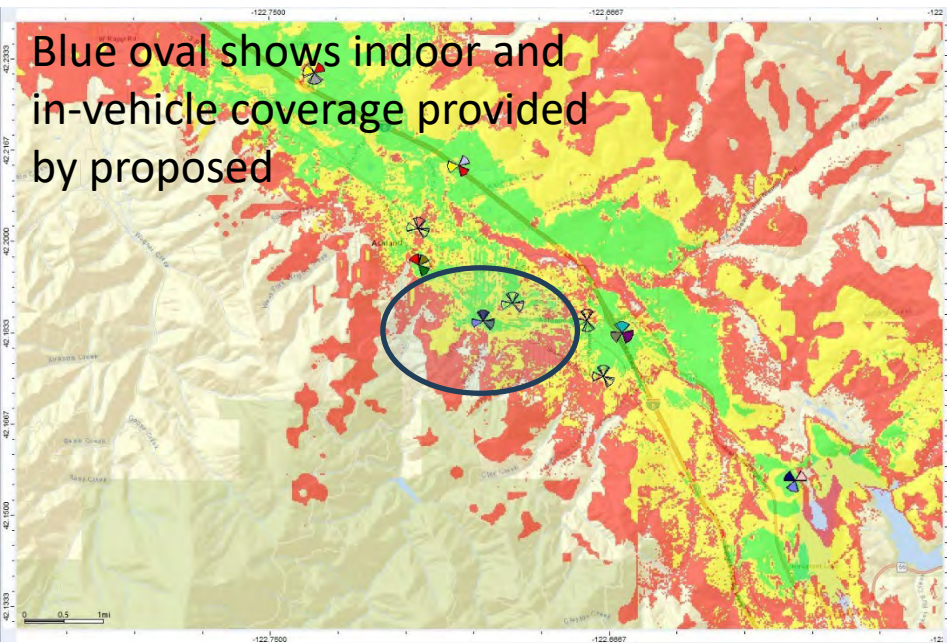
Left Picture and upper table Proposed data showing 2.61 square kilometers are covered with indoor service vs lower picture, lower left table showing data showing 2.63 square kilometers covered with indoor service essentially equal in coverage compared to proposed.

Blue oval shows indoor and in-vehicle coverage provided by proposed

Zone	Prediction	Legend	Zone Surface (km ²)	Surface (km ²)	% of Covered Area	% Focus Zone
Focus Zone	LTE_NW-Mobility_RSRP-dBm (0)		2.739368	2.7306	100	99.7
		RSRP Level (DL) (dBm) > =-85	2.637	96.6	96.3	
		RSRP Level (DL) (dBm) > =-95	2.7306	100	99.7	
		RSRP Level (DL) (dBm) > =-106	2.7306	100	99.7	

RSRP Coverage – mid band Proposed vs Existing Coverage

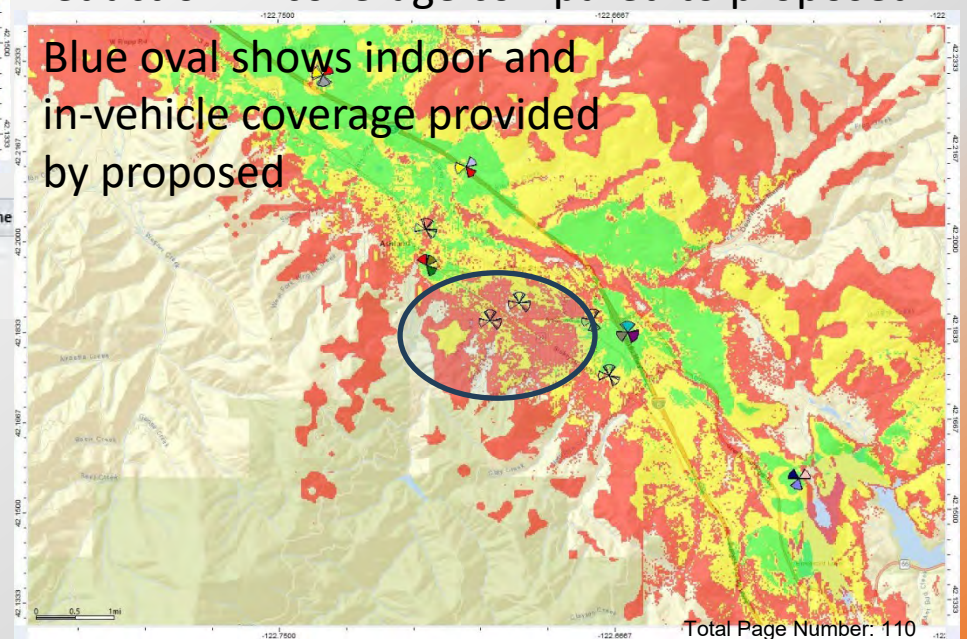
LEGEND	
	Indoor >= -85 dbm
	In-Vehicle >= -95 dbm
	On-Street >= -106 dbm



Zone	Prediction	Legend	Zone Surface (km ²)	Surface (km ²)	% of Covered Area	% Focus Zone
Focus Zone	LTE_NW-Mobility_RSRP-dBm (0)		2.739368	2.6244	100	95.8
		RSRP Level (DL) (dBm) >= -85		0.027	1	1
		RSRP Level (DL) (dBm) >= -95		0.9522	36.3	34.8
		RSRP Level (DL) (dBm) >= -106		2.6244	100	95.8

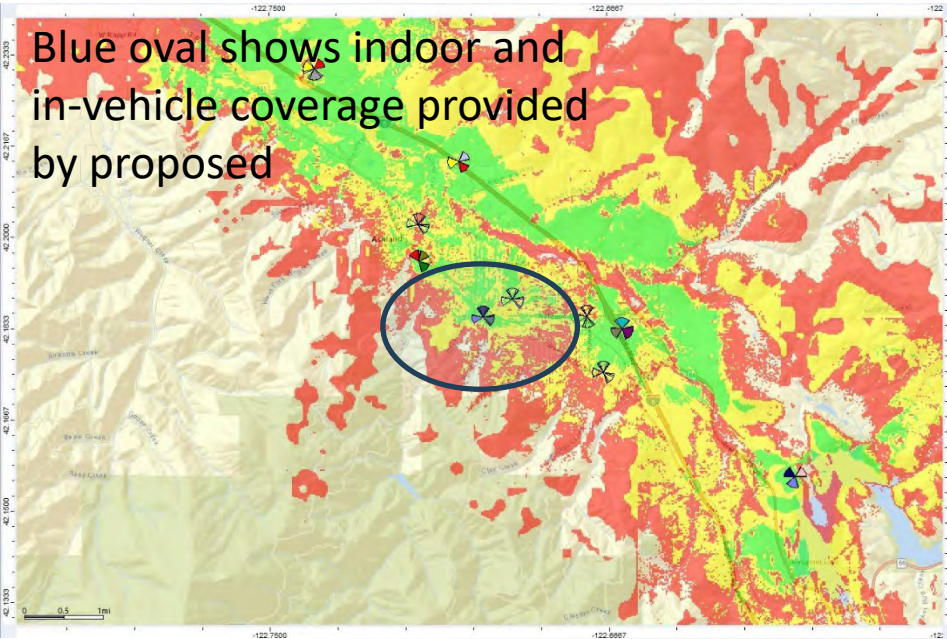
Zone	Prediction	Legend	Zone Surface (km ²)	Surface (km ²)	% of Covered Area	% Focus Zone
Focus Zone	LTE_NW-Mobility_RSRP-dBm (0)		2.739368	2.7144	100	99.1
		RSRP Level (DL) (dBm) >= -85		0.8658	31.9	31.6
		RSRP Level (DL) (dBm) >= -95		2.214	81.6	80.8
		RSRP Level (DL) (dBm) >= -106		2.7144	100	99.1

Left Picture and upper table Proposed data showing .86 square kilometers are covered with indoor service vs lower picture, lower left table showing data showing .02 square kilometers covered with indoor service a 98% reduction in coverage compared to proposed.



RSRP Coverage – mid band Proposed vs Option 1

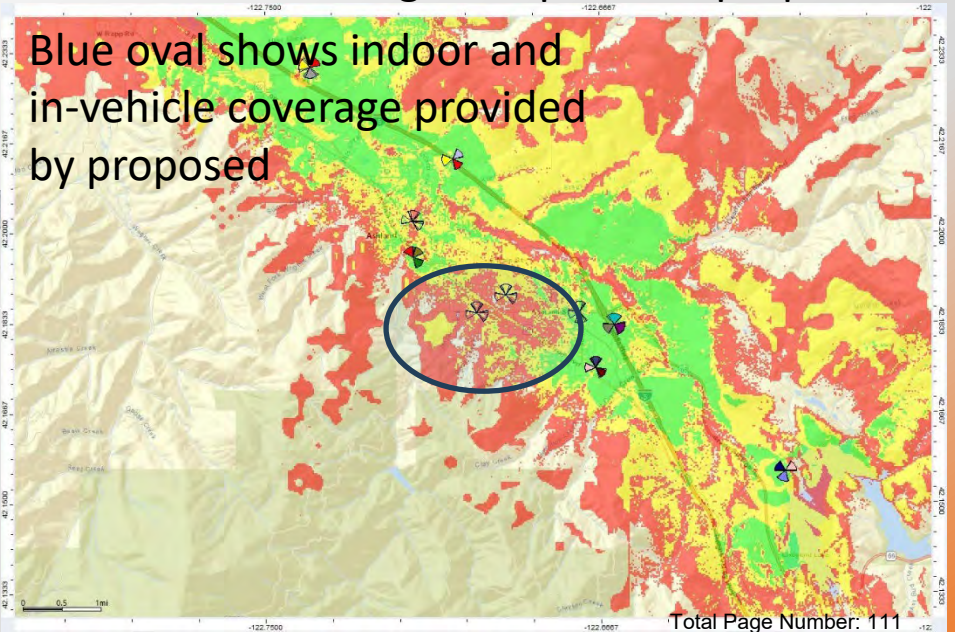
LEGEND	
	Indoor >= -85 dbm
	In-Vehicle >= -95 dbm
	On-Street >= -106 dbm



Zone	Prediction	Legend	Zone Surface (km ²)	Surface (km ²)	% of Covered Area	% Focus Zone
Focus Zone	LTE_NW-Mobility_RSRP-dBm (0)		2.739368			
		RSRP Level (DL) (dBm) >= -85		2.6451	100	96.6
		RSRP Level (DL) (dBm) >= -95		0.0549	2.1	2
		RSRP Level (DL) (dBm) >= -106		1.0818	40.9	39.5
				2.6451	100	96.6

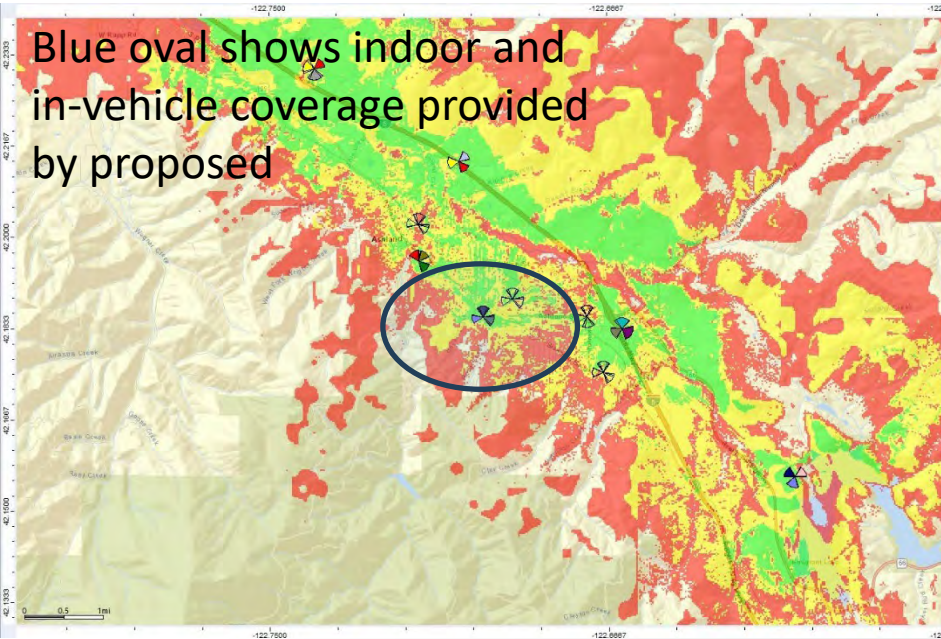
Zone	Prediction	Legend	Zone Surface (km ²)	Surface (km ²)	% of Covered Area	% Focus Zone
Focus Zone	LTE_NW-Mobility_RSRP-dBm (0)		2.739368			
		RSRP Level (DL) (dBm) >= -85		2.7144	100	99.1
		RSRP Level (DL) (dBm) >= -95		0.8658	31.9	31.6
		RSRP Level (DL) (dBm) >= -106		2.214	81.6	80.8
				2.7144	100	99.1

Left Picture and upper table Proposed data showing .86 square kilometers are covered with indoor service vs lower picture, lower left table showing data showing .05 square kilometers covered with indoor service a 95% reduction in coverage compared to proposed.



RSRP Coverage – mid band Proposed vs Option 2

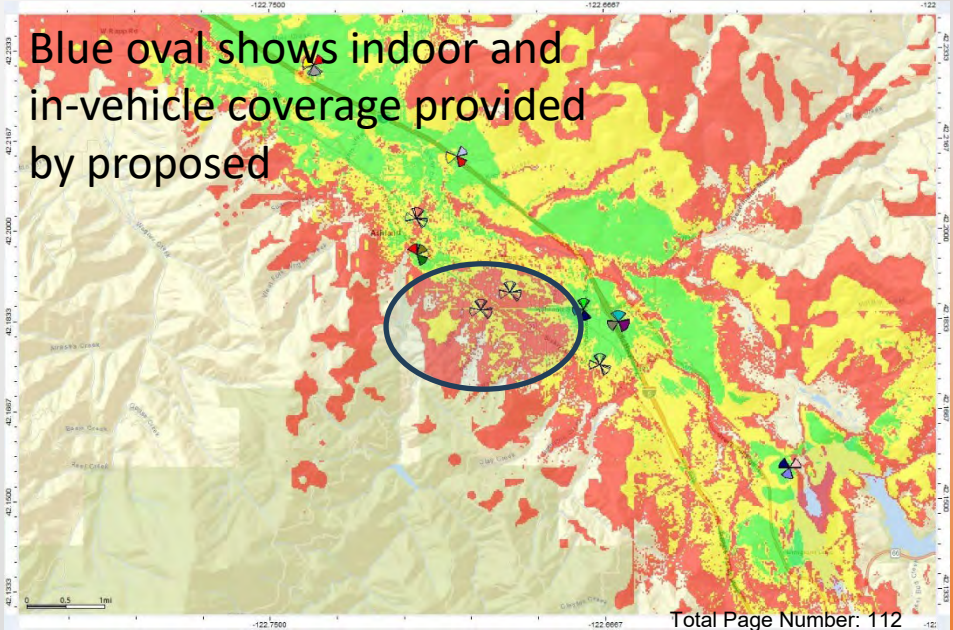
LEGEND	
	Indoor >= -85 dbm
	In-Vehicle >= -95 dbm
	On-Street >= -106 dbm



Zone	Prediction	Legend	Zone Surface (km ²)	Surface (km ²)	% of Covered Area	% Focus Zone
Focus Zone	LTE_NW-Mobility_RSRP-dBm (0)		2.739368	2.6811	100	97.9
		RSRP Level (DL) (dBm) >= -85		0.0459	1.7	1.7
		RSRP Level (DL) (dBm) >= -95		1.1043	41.2	40.3
		RSRP Level (DL) (dBm) >= -106		2.6811	100	97.9

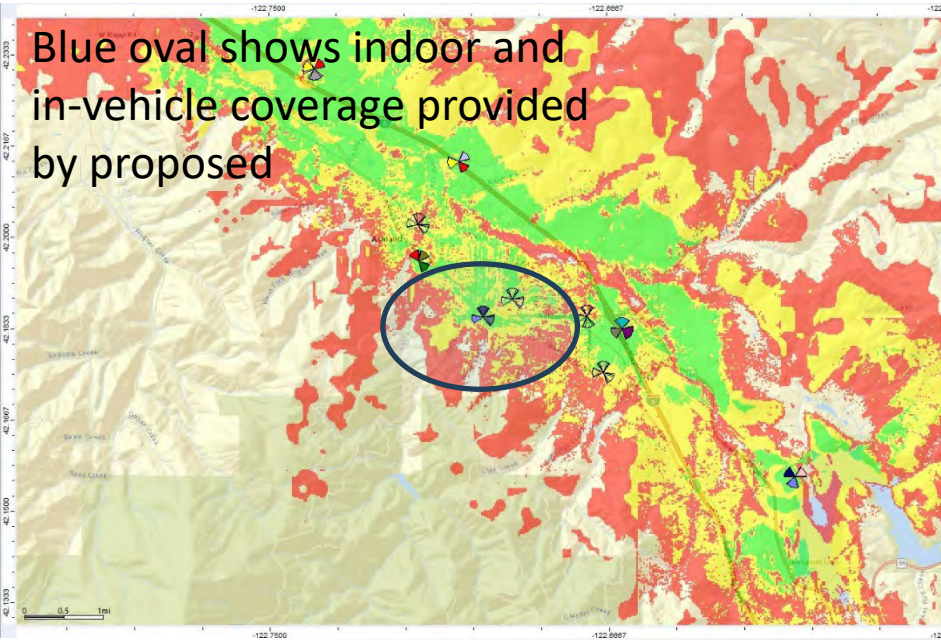
Zone	Prediction	Legend	Zone Surface (km ²)	Surface (km ²)	% of Covered Area	% Focus Zone
Focus Zone	LTE_NW-Mobility_RSRP-dBm (0)		2.739368	2.7144	100	99.1
		RSRP Level (DL) (dBm) >= -85		0.8658	31.9	31.6
		RSRP Level (DL) (dBm) >= -95		2.214	81.6	80.8
		RSRP Level (DL) (dBm) >= -106		2.7144	100	99.1

Left Picture and upper table Proposed data showing .86 square kilometers are covered with indoor service vs lower picture, lower left table showing data showing .04 square kilometers covered with indoor service a 96% reduction in coverage compared to proposed.



RSRP Coverage – mid band Proposed vs Option 3

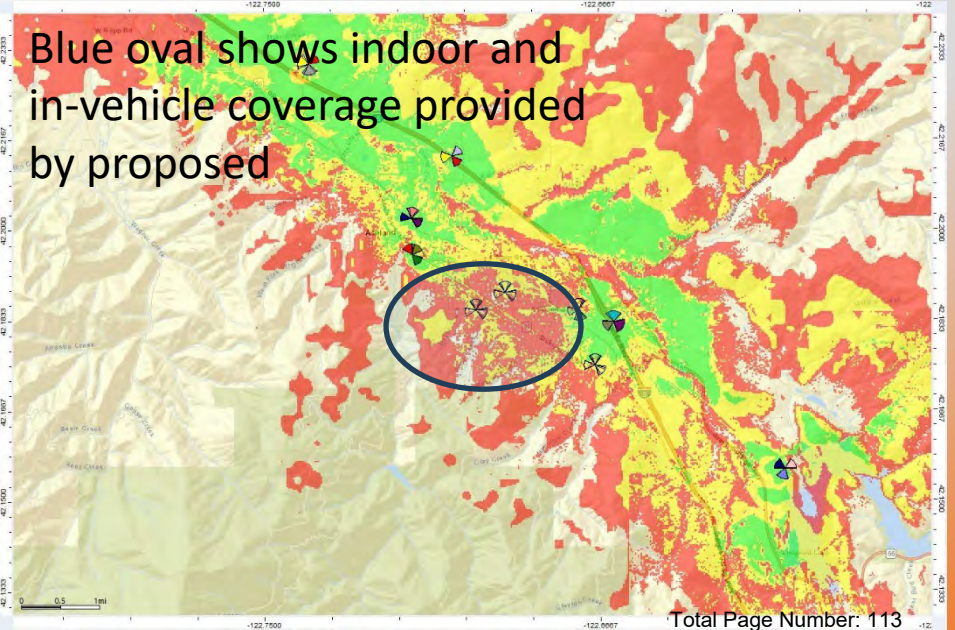
LEGEND	
	Indoor >= -85 dbm
	In-Vehicle >= -95 dbm
	On-Street >= -106 dbm



Zone	Prediction	Legend	Zone Surface (km²)	Surface (km²)	% of Covered Area	% Focus Zone
Focus Zone	LTE_NW-Mobility_RSRP-dBm (0)		2.739368	2.6289	100	96
		RSRP Level (DL) (dBm) >= -85		0.027	1	1
		RSRP Level (DL) (dBm) >= -95		0.9549	36.3	34.9
		RSRP Level (DL) (dBm) >= -106		2.6289	100	96

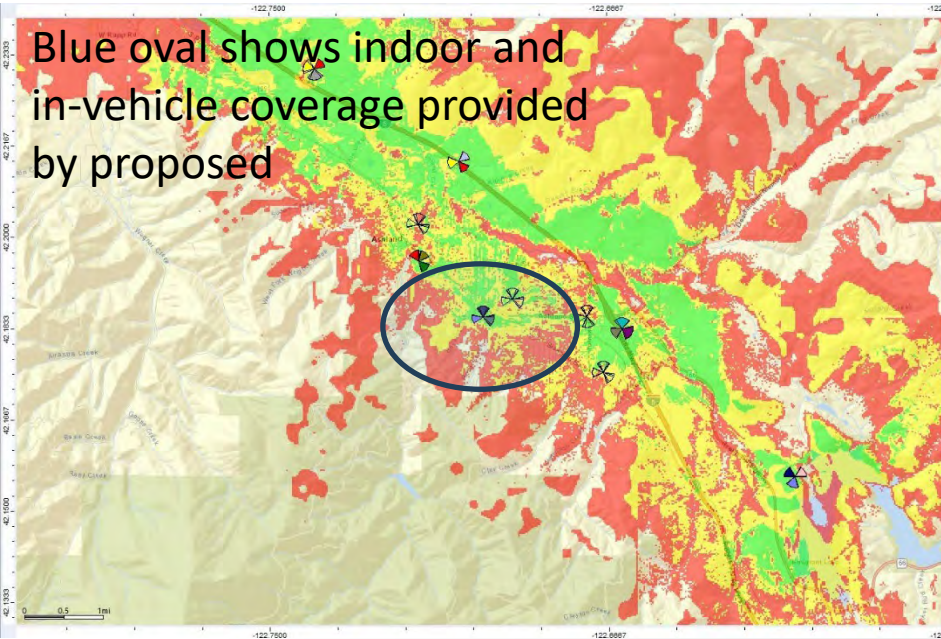
Zone	Prediction	Legend	Zone Surface (km²)	Surface (km²)	% of Covered Area	% Focus Zone
Focus Zone	LTE_NW-Mobility_RSRP-dBm (0)		2.739368	2.7144	100	99.1
		RSRP Level (DL) (dBm) >= -85		0.8658	31.9	31.6
		RSRP Level (DL) (dBm) >= -95		2.214	81.6	80.8
		RSRP Level (DL) (dBm) >= -106		2.7144	100	99.1

Left Picture and upper table Proposed data showing .86 square kilometers are covered with indoor service vs lower picture, lower left table showing data showing .02 square kilometers covered with indoor service a 98% reduction in coverage compared to proposed.



RSRP Coverage – mid band Proposed vs Option 4

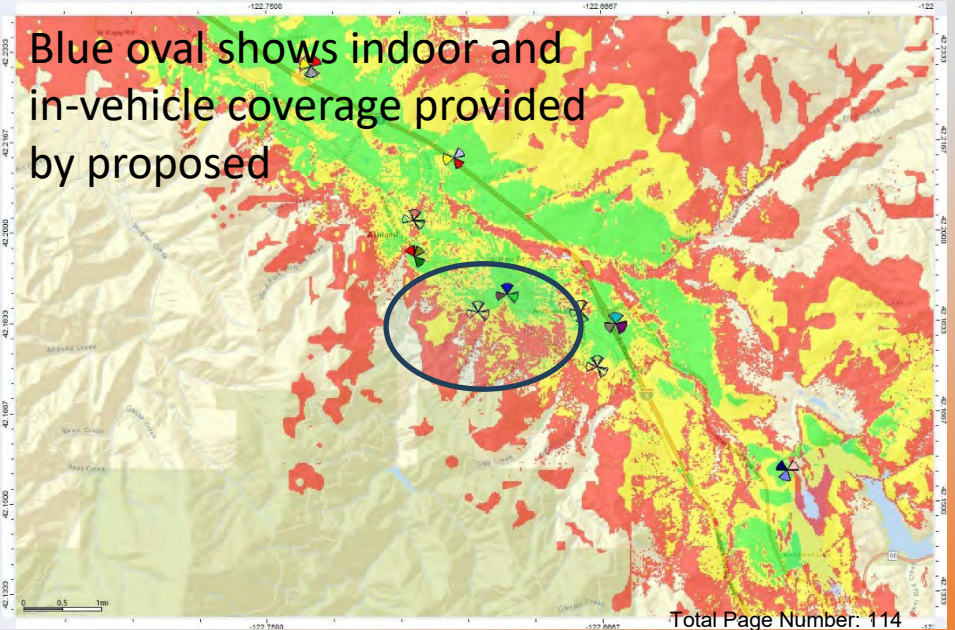
LEGEND	
	Indoor >= -85 dbm
	In-Vehicle >= -95 dbm
	On-Street >= -106 dbm



Zone	Prediction	Legend	Zone Surface (km ²)	Surface (km ²)	% of Covered Area	% Focus Zone
Focus Zone	LTE_NW-Mobility_RSRP-dBm (0)		2.739368			
		RSRP Level (DL) (dBm) >= -85		2.7162	100	99.2
		RSRP Level (DL) (dBm) >= -95		0.9936	36.6	36.3
		RSRP Level (DL) (dBm) >= -106		2.1474	79.1	78.4
				2.7162	100	99.2

Zone	Prediction	Legend	Zone Surface (km ²)	Surface (km ²)	% of Covered Area	% Focus Zone
Focus Zone	LTE_NW-Mobility_RSRP-dBm (0)		2.739368			
		RSRP Level (DL) (dBm) >= -85		2.7144	100	99.1
		RSRP Level (DL) (dBm) >= -95		0.8658	31.9	31.6
		RSRP Level (DL) (dBm) >= -106		2.214	81.6	80.8
				2.7144	100	99.1

Left Picture and upper table Proposed data showing .86 square kilometers are covered with indoor service vs lower picture, lower left table showing data showing .99 square kilometers covered with indoor service a 15% increase in coverage compared to proposed.



Conclusion

- † Alternate #1,2,3 sites do not compare in coverage and do not satisfy the coverage/capacity objectives for this site
- † Alternate #4 provides comparable coverage as the proposed for the primary coverage objective but, this alternative is not available.
- † AT&T's light standard is a fabricated concrete pole that cannot structurally support another antenna facility and AT&T refused to consider any collocation proposal.
- † Recommend approval of the proposed colocation of antennas on an existing rooftop.

WIRELESS NETWORK CONSULTING

Verizon Madrone
Capacity site
Rooftop Colocation

RF DESIGN ANALYSIS



Coverage vs Capacity

† **Capacity is providing bandwidth or processing capacity to service the customers in the area.**

- Areas where large numbers of users are in a specific geographic areas
- Areas where users are demanding higher data rates for services
- Areas with a large amount of indoor users

† **Coverage is providing service where service does not exist, calls drop, or “no service”.**

- Areas where sites are farther apart
- Areas where terrain or buildings block signals
- Areas where indoor service is low or nonexistent

Objective of new site

Capacity

- Provide additional bandwidth for customers in the area surrounding the proposed site
- Provide better throughput for indoor users in the area
- Offload surrounding sites

Coverage

- Provide coverage along Siskiyou Blvd and feeder roads
- Provide indoor service to surrounding suburban area

Why is this site important?

- 96% of Americans own a Cellular Phone
- 57% of American Homes rely exclusively on cellular phones
- 84% or more of 9-1-1 emergency calls are made from wireless devices

Proposed Site



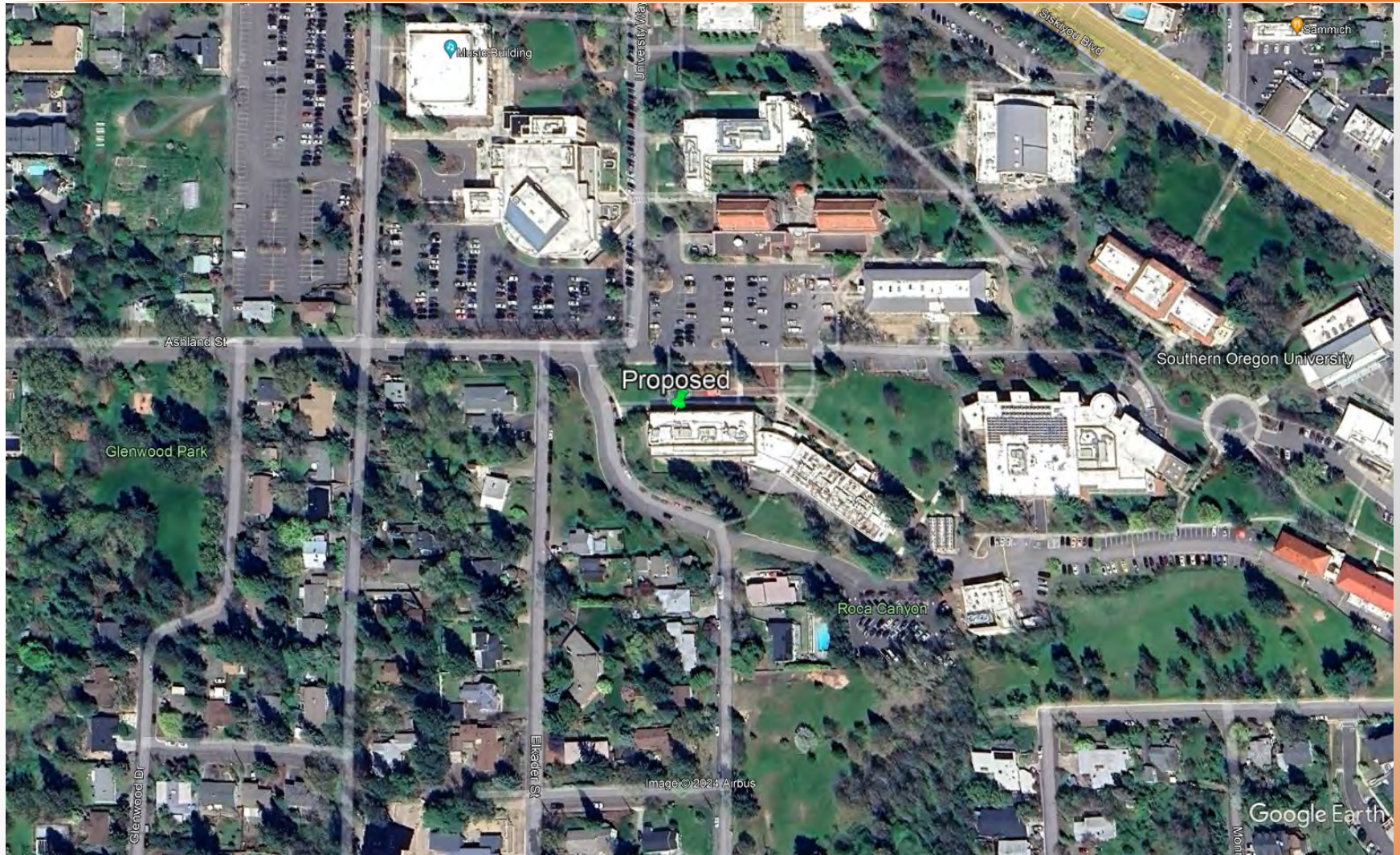
Existing Rooftop

- 39.1' top of parapet
- 48.2' top of antennas
- 61.9' top of structure
- 1250 Ashland Street Ashland, OR 97520
 - Alpha & Gamma Sectors
 - Latitude: 42.185167 N (NAD83)
 - Longitude: -122.697389 W (NAD83)
 - Beta Sectors
 - Latitude: 42.185111 N (NAD83)
 - Longitude: -122.696889 W (NAD83)
 - Ground Elevation: 2063.7' (NAVD88)
 - Tenant is Verizon
- Antenna Centerline at 44.2' AGL

Why here?

- † This area is currently served with in-vehicle and patchy indoor service by sectors that are over capacity.
- † The throughput per user is low in the area
- † Surrounding sectors are overloaded
- † Indoor users are not being provided quality indoor service
- † Users' mobiles are reporting bad quality connections from Crowd Source Data (Ookla, Open Signal, CellMapper).
- † Both mid band and low band modeling show lack of coverage which is validated by the crowd source data

Zoom – proposed site



2024

Proposed with Verizon neighbor site



Capacity

Forward Data Volume (FDV)



- † Chart above shows sector in overload on FDV
- † Blue is actual usage on the sector, and we can see that the site is carrying traffic above the amount it can sustain for high quality bandwidth per user
- † Also note the trendline is moving up for the sector hence the need for a capacity offload site

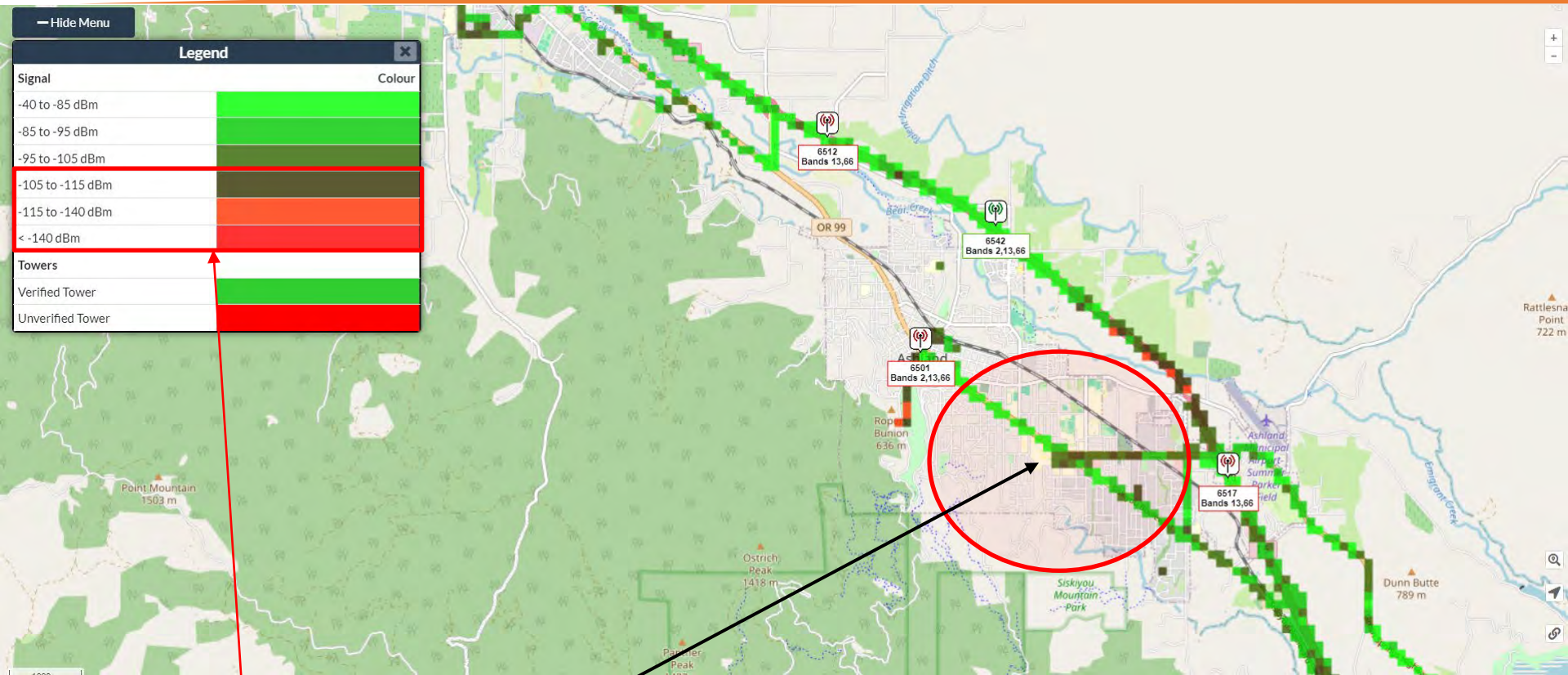
Capacity

Average Scheduled Eligible Users (ASEU)



- † Chart above shows scheduler for the sector is overloaded and the trend is steadily increasing
- † Blue is actual usage on the sector, and we can see that the site is carrying traffic above the amount it can sustain for high quality bandwidth per user

Verizon CellMapper

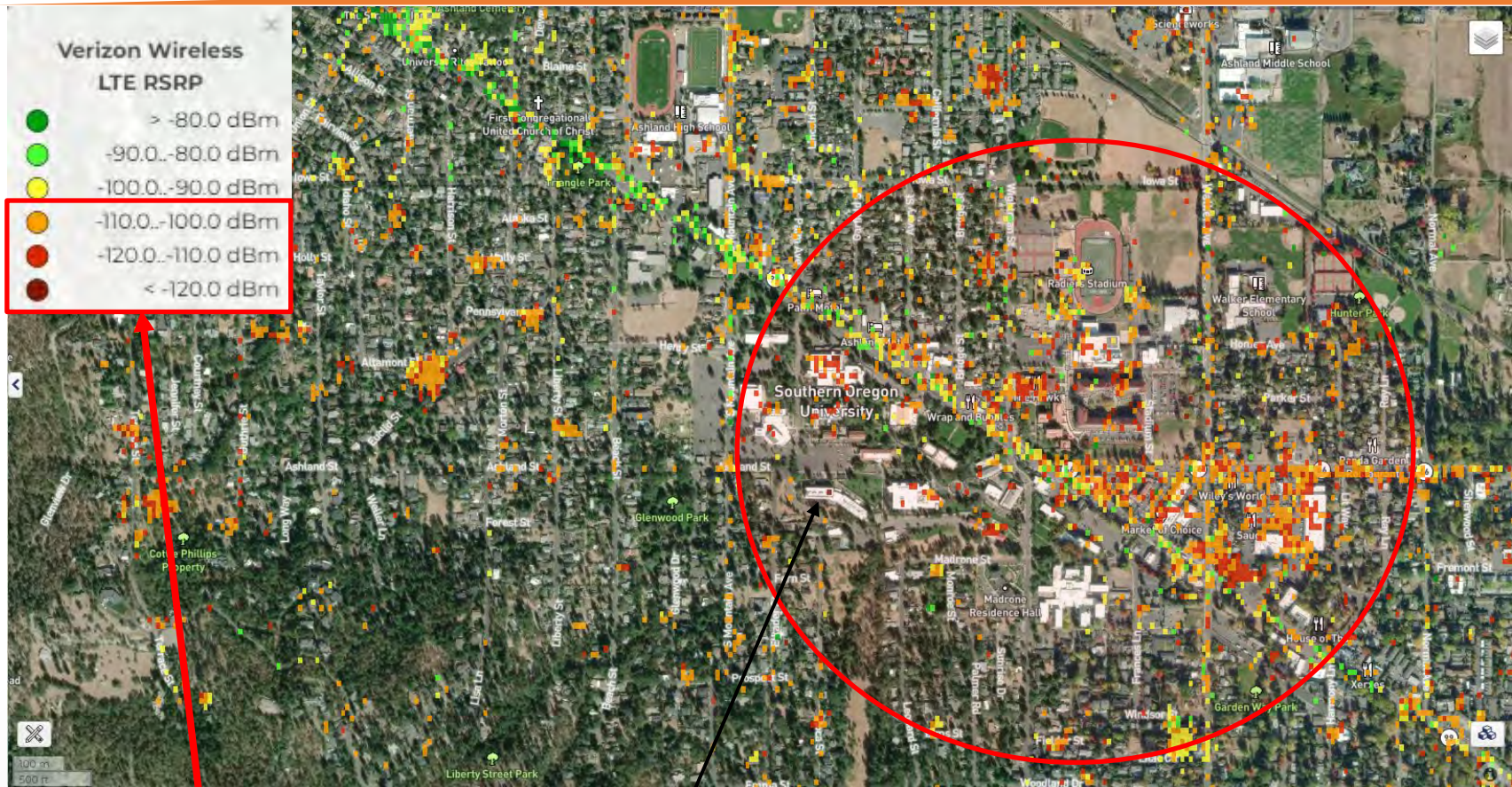


Proposed Site

The area in the red circle is what the proposed site would impact

The area is showing less than outdoor coverage around the proposed

Ookla Verizon 4G



Less than on Street Coverage

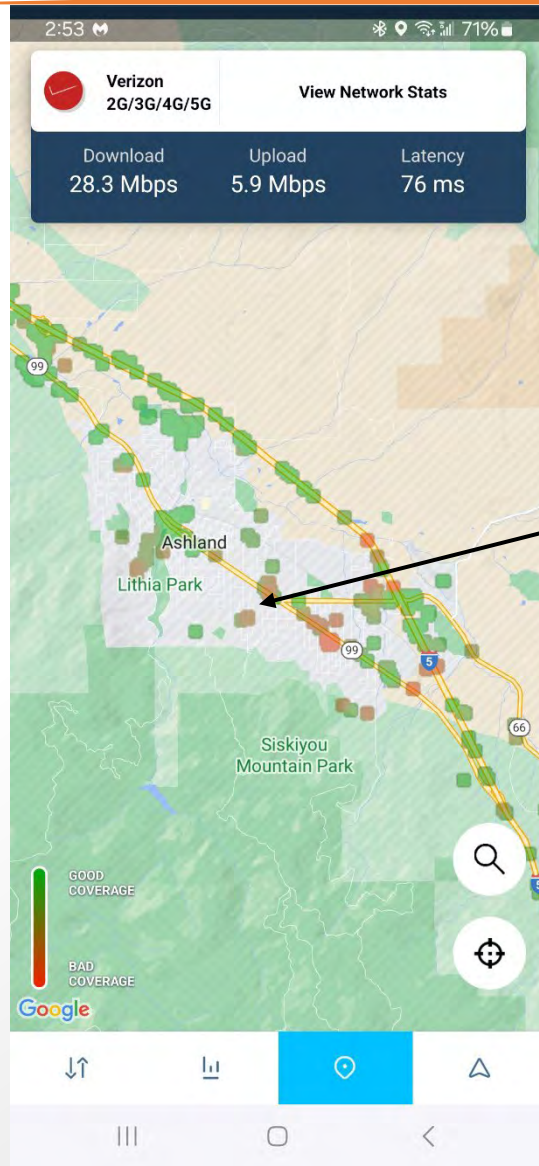
Proposed Site

The area in the red circle is what the proposed site would impact

The area is showing a significant number of mobiles reporting less than outdoor service where there is a large amount of indoor users

2024

Open Signal Verizon Quality Map



This map shows mobiles reporting quality of their connections to the network. This is crowdsource data from Verizon users made available by the OpenSignal App: <https://www.opensignal.com/apps#section-os-app>

Green data points show good coverage and red data points show bad coverage and lack of data points show no coverage

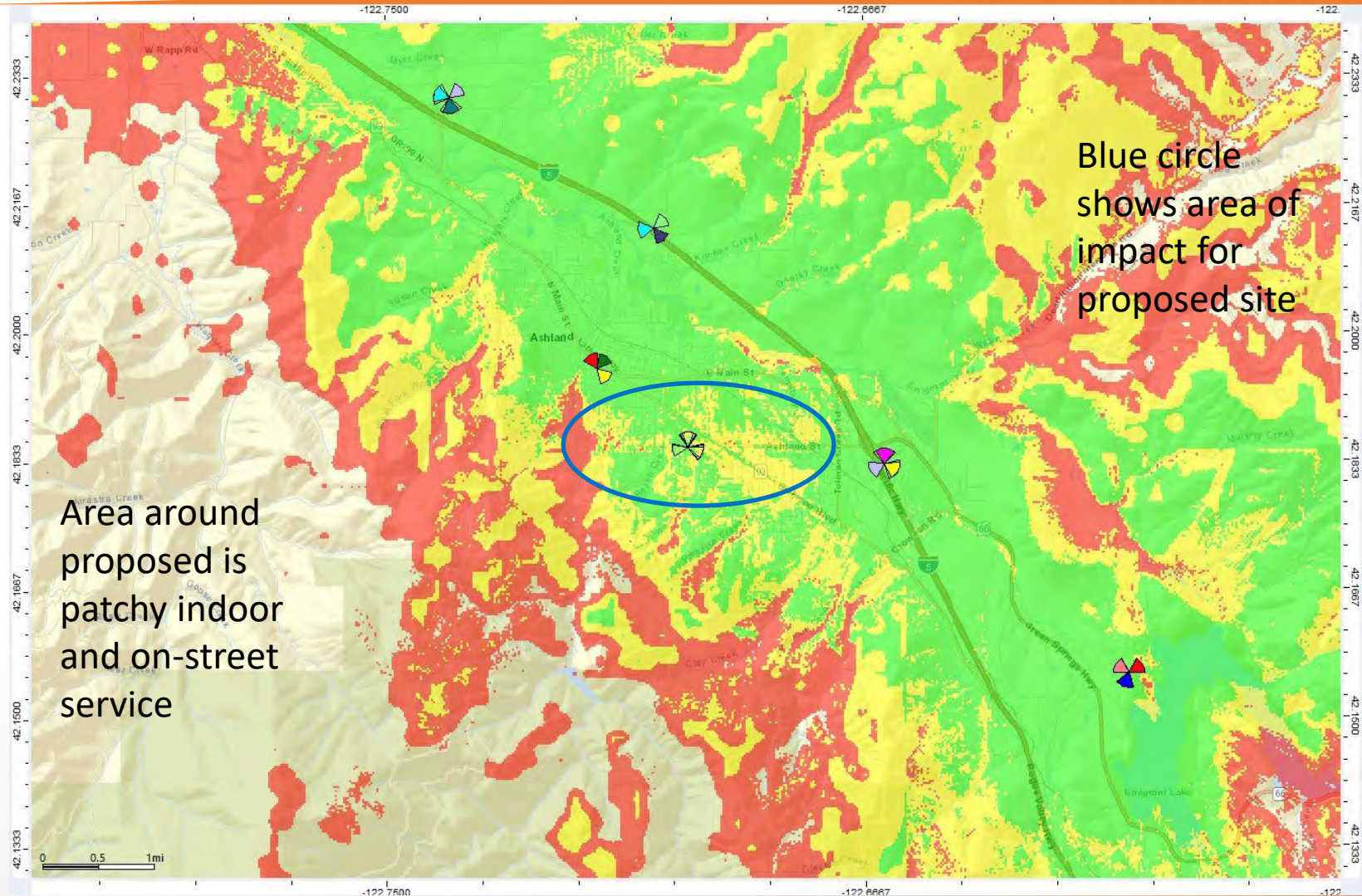
Notice the area around the proposed is showing bad coverage data points with a small mix of good coverage data points to the NW and East



LOW BAND MODELING

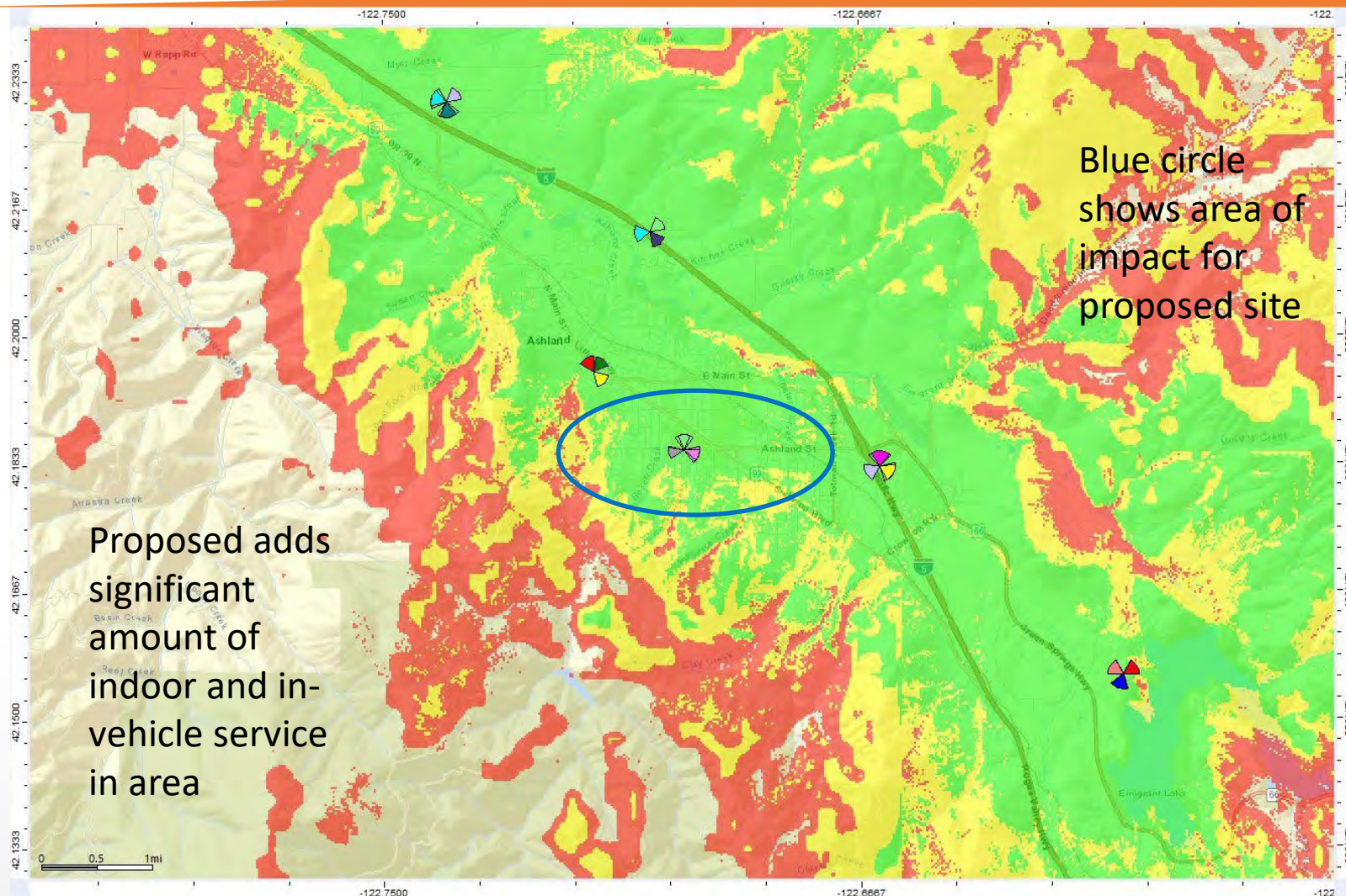
Verizon RSRP low band Current Coverage

LEGEND	
	Indoor ≥ -85 dbm
	In-Vehicle ≥ -95 dbm
	On-Street ≥ -106 dbm



Verizon RSRP low band Proposed Coverage

LEGEND	
	Indoor ≥ -85 dbm
	In-Vehicle ≥ -95 dbm
	On-Street ≥ -106 dbm

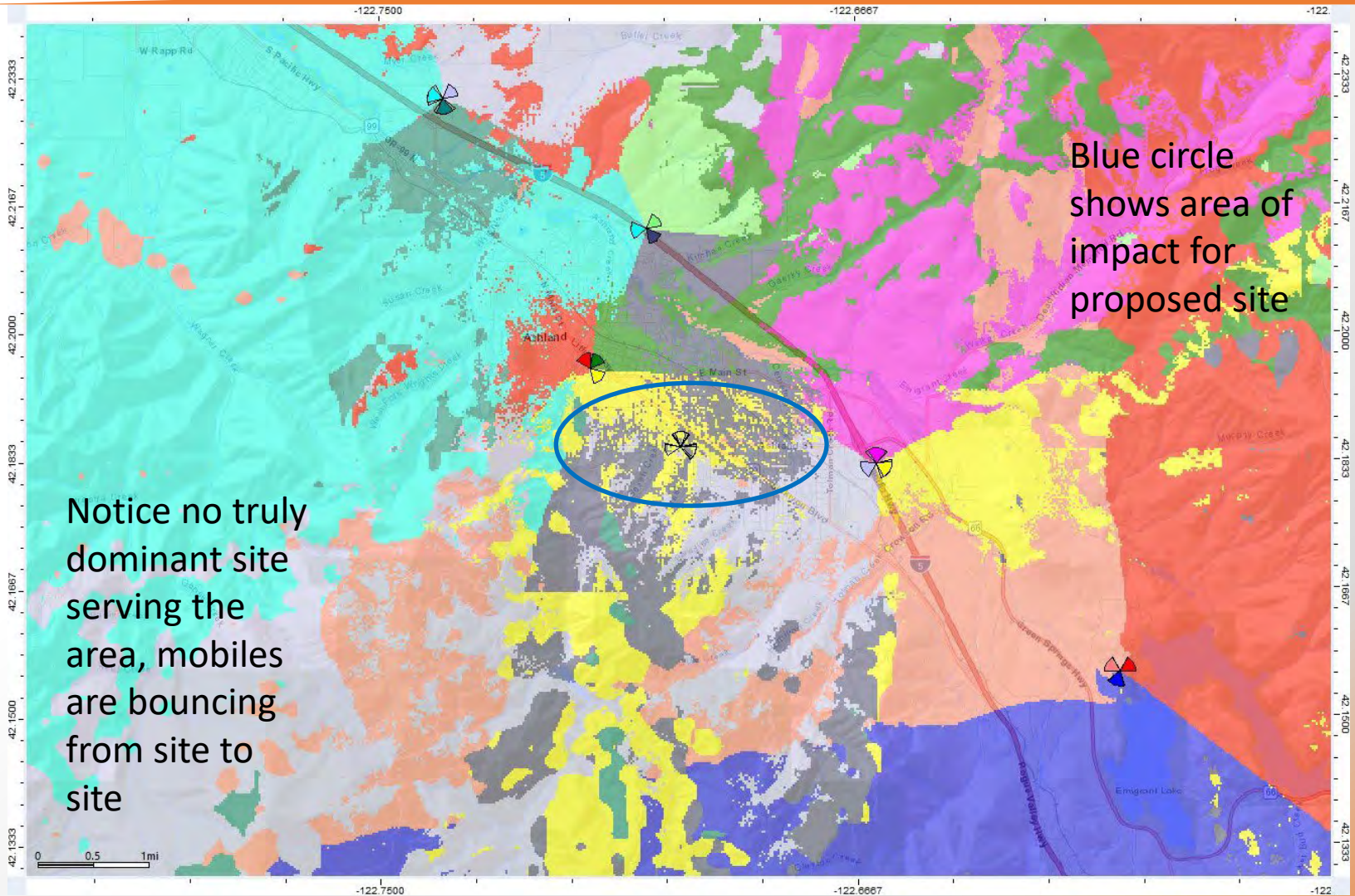


Blue circle shows area of impact for proposed site



Proposed adds significant amount of indoor and in-vehicle service in area

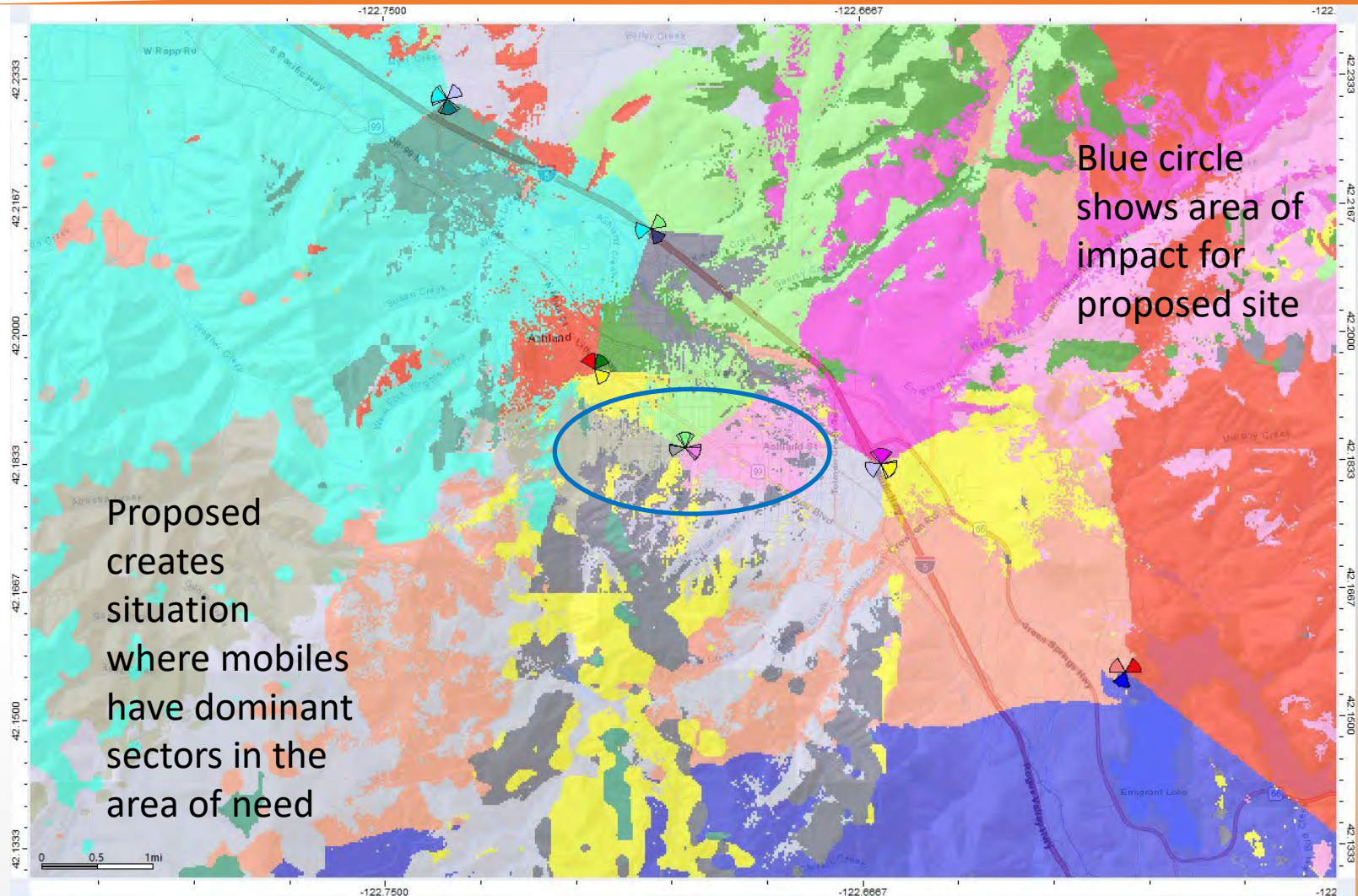
Verizon low band Current Best Server



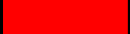
2024

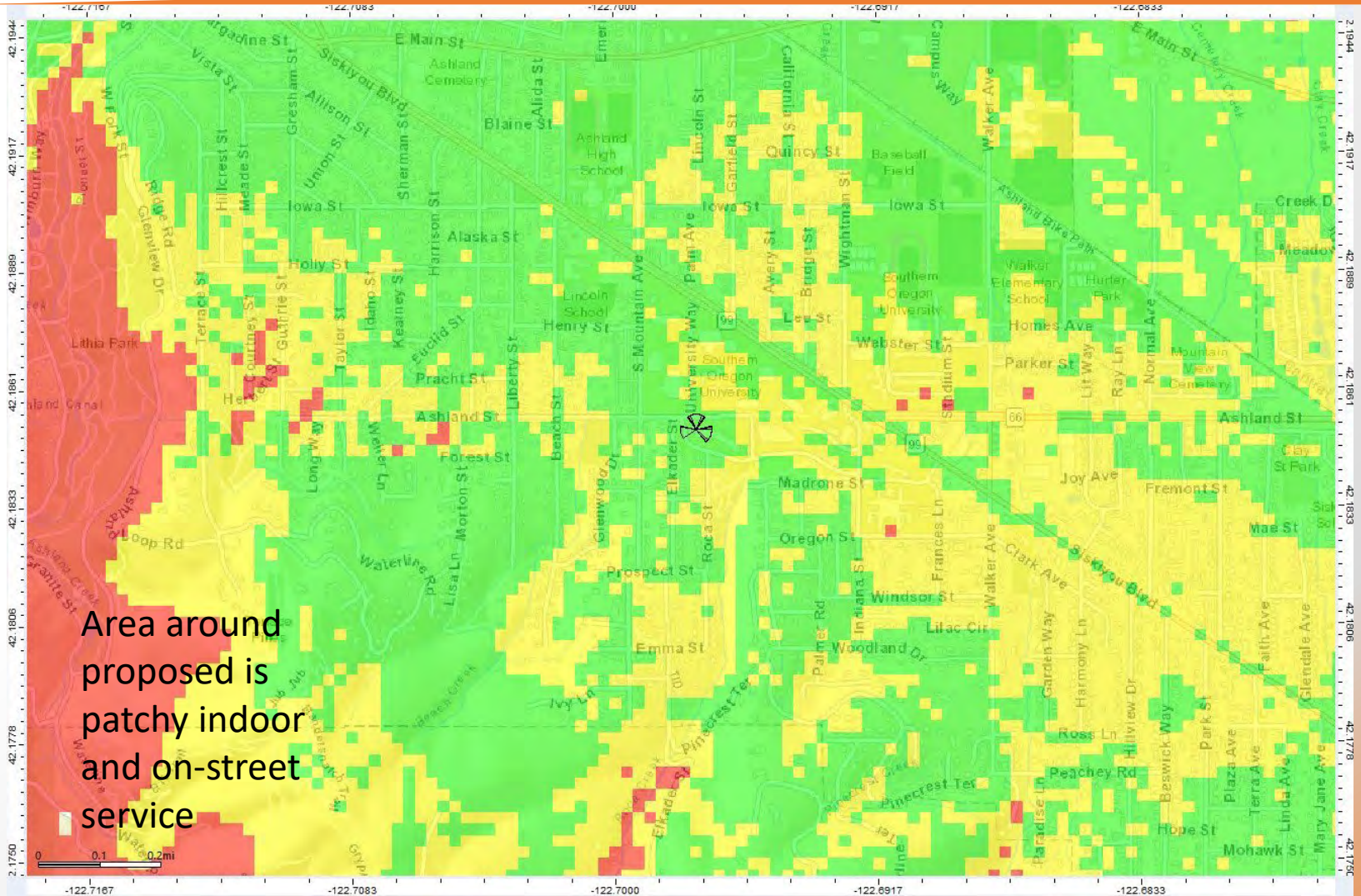
Verizon low band

Proposed Best Server



Verizon RSRP low band Current Coverage - zoomed

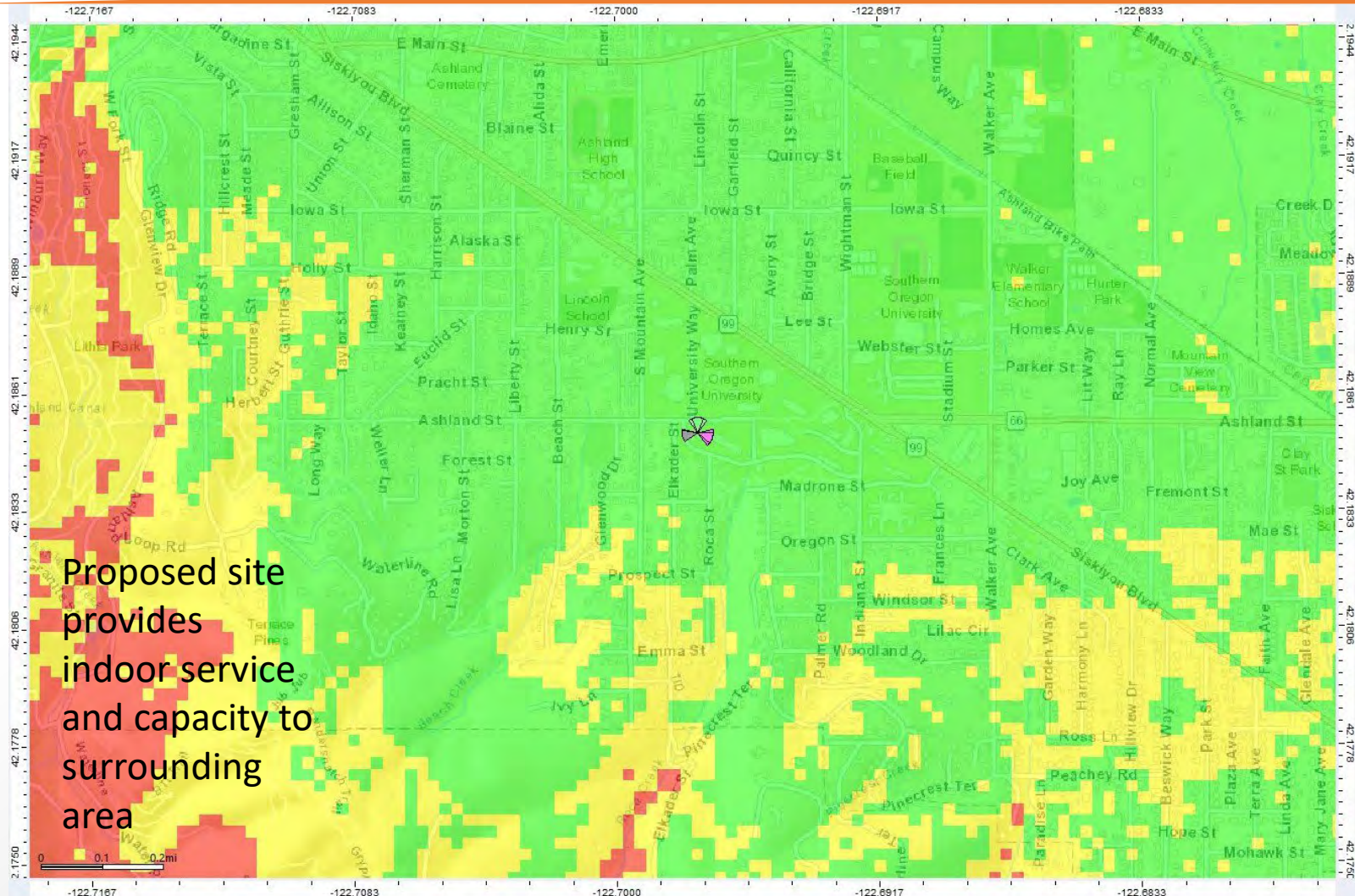
LEGEND	
	Indoor ≥ -85 dbm
	In-Vehicle ≥ -95 dbm
	On-Street ≥ -106 dbm



2024

Verizon RSRP low band Proposed Coverage - zoomed

LEGEND	
	Indoor ≥ -85 dbm
	In-Vehicle ≥ -95 dbm
	On-Street ≥ -106 dbm

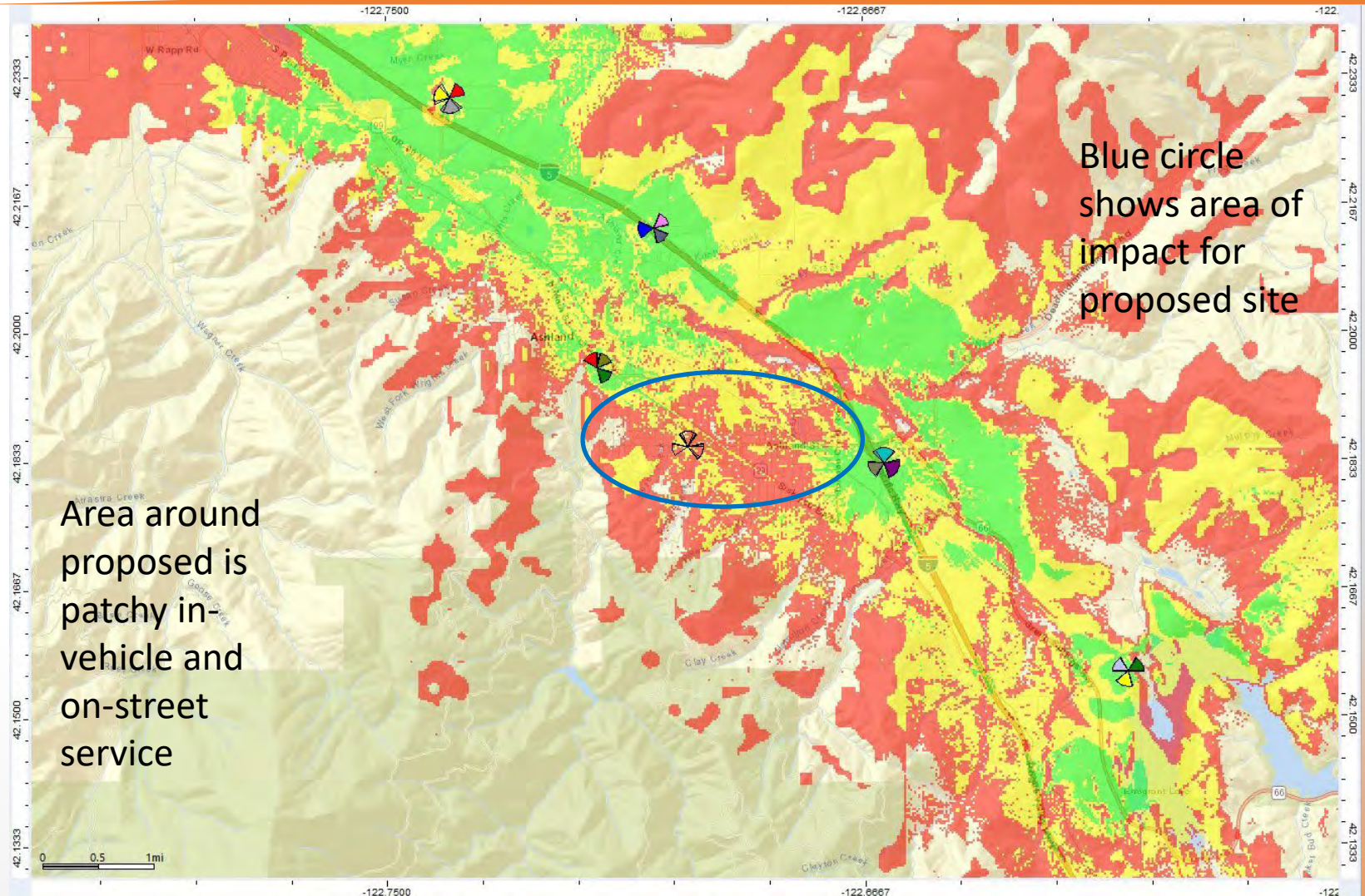


2024

MID BAND MODELING

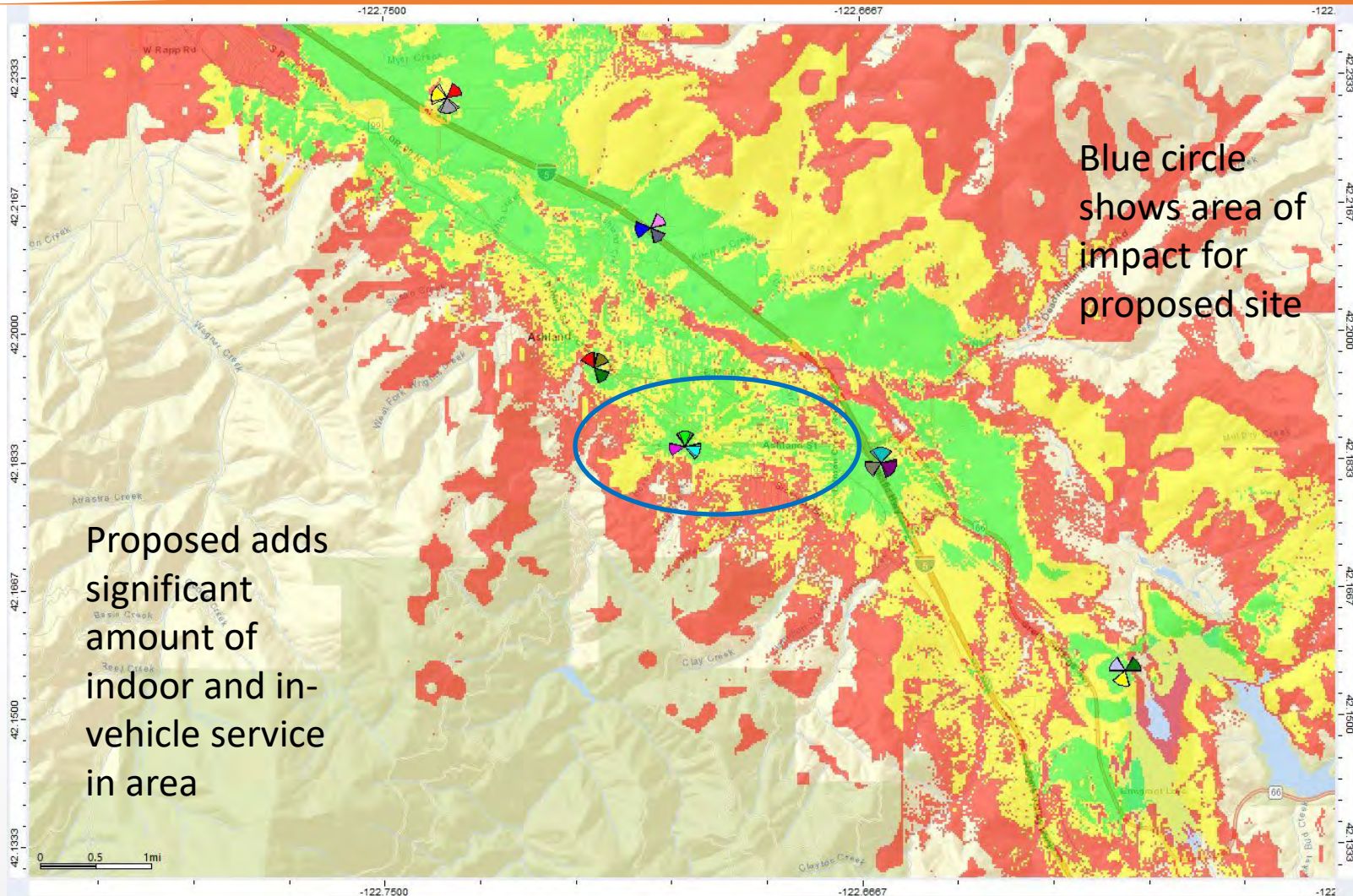
Verizon RSRP mid band Current Coverage

LEGEND	
	Indoor ≥ -85 dbm
	In-Vehicle ≥ -95 dbm
	On-Street ≥ -106 dbm

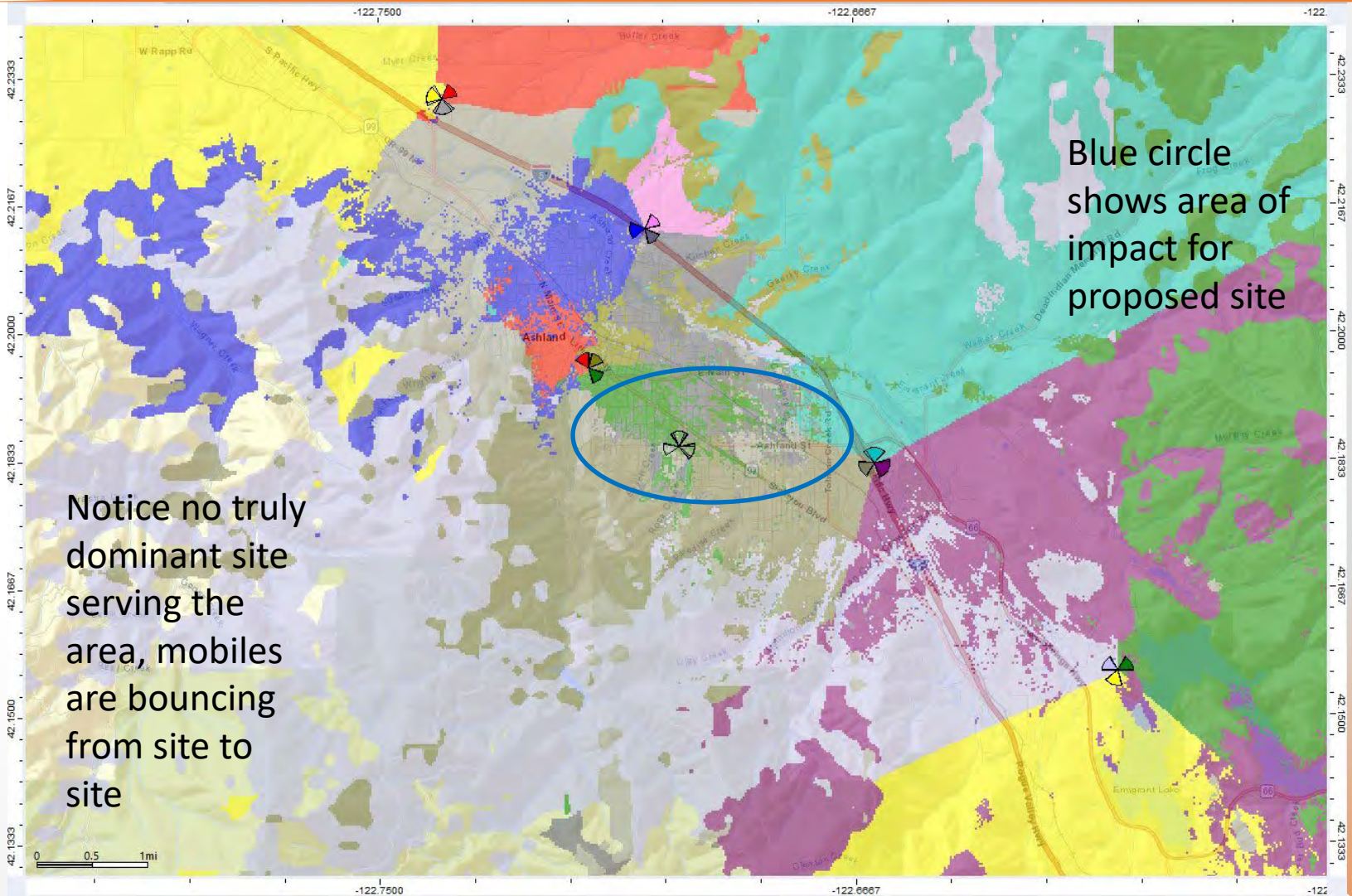


Verizon RSRP mid band Proposed Coverage

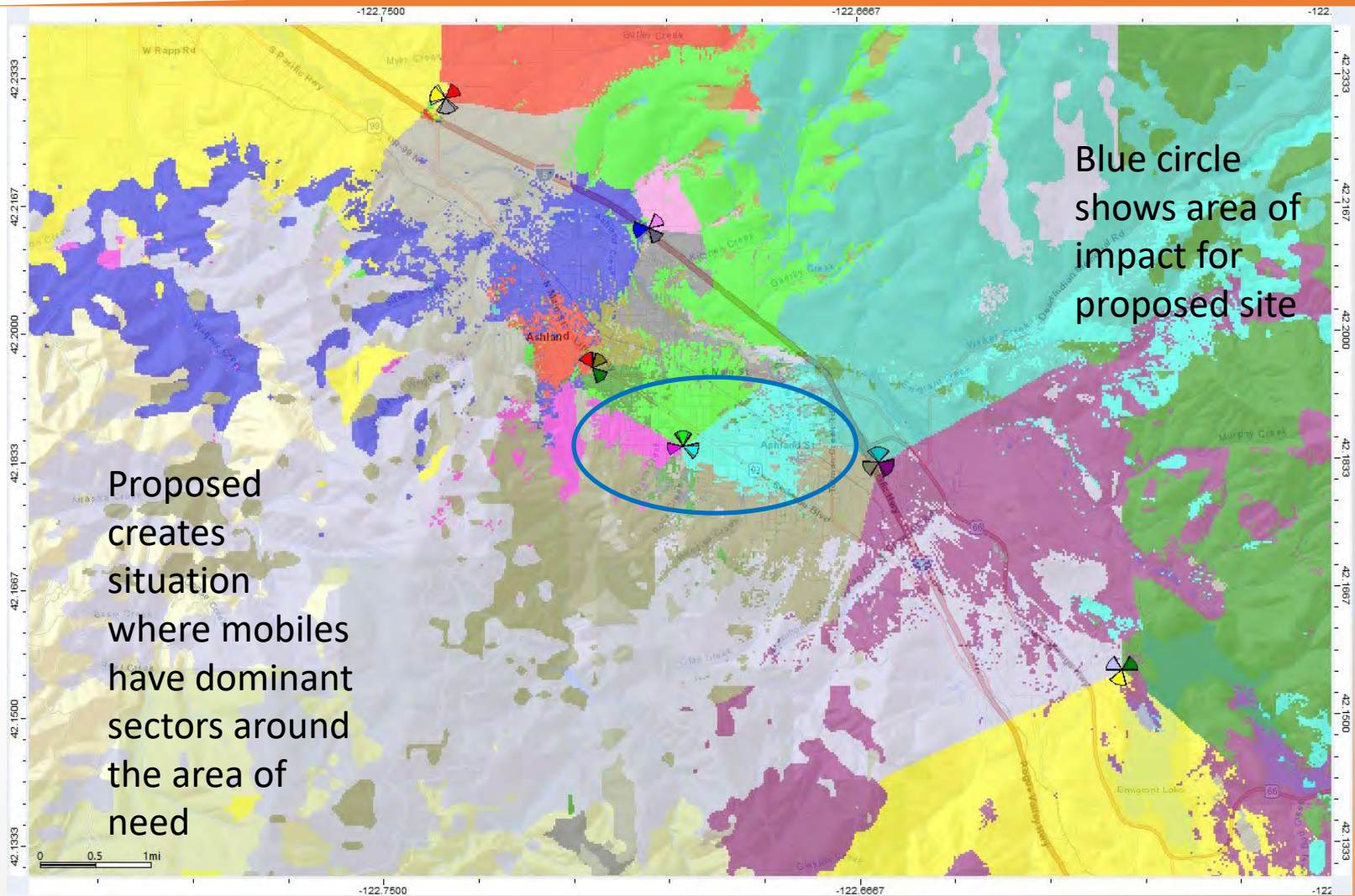
LEGEND	
	Indoor ≥ -85 dbm
	In-Vehicle ≥ -95 dbm
	On-Street ≥ -106 dbm



Verizon mid band Current Best Server

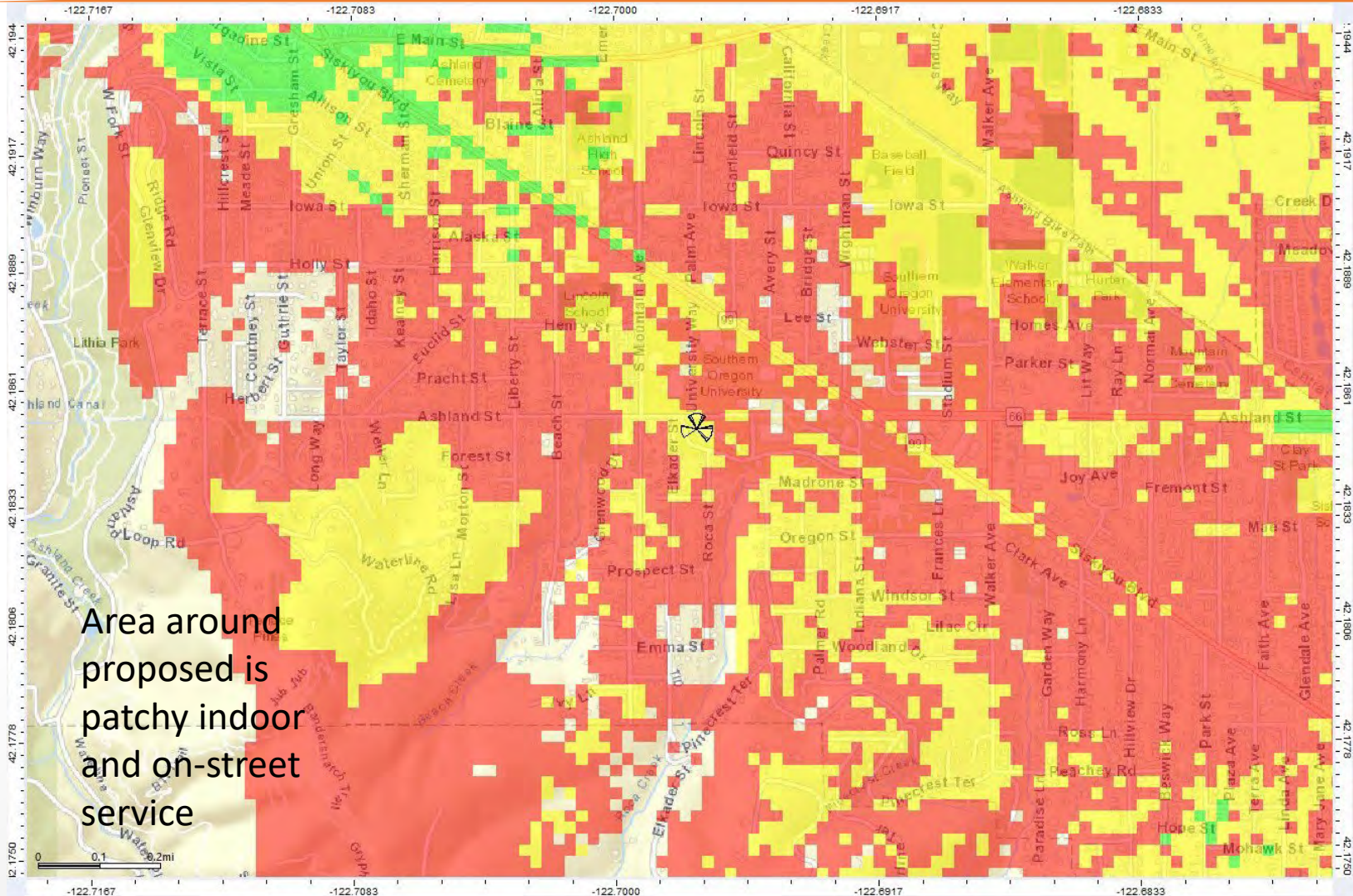


Verizon mid band Proposed Best Server



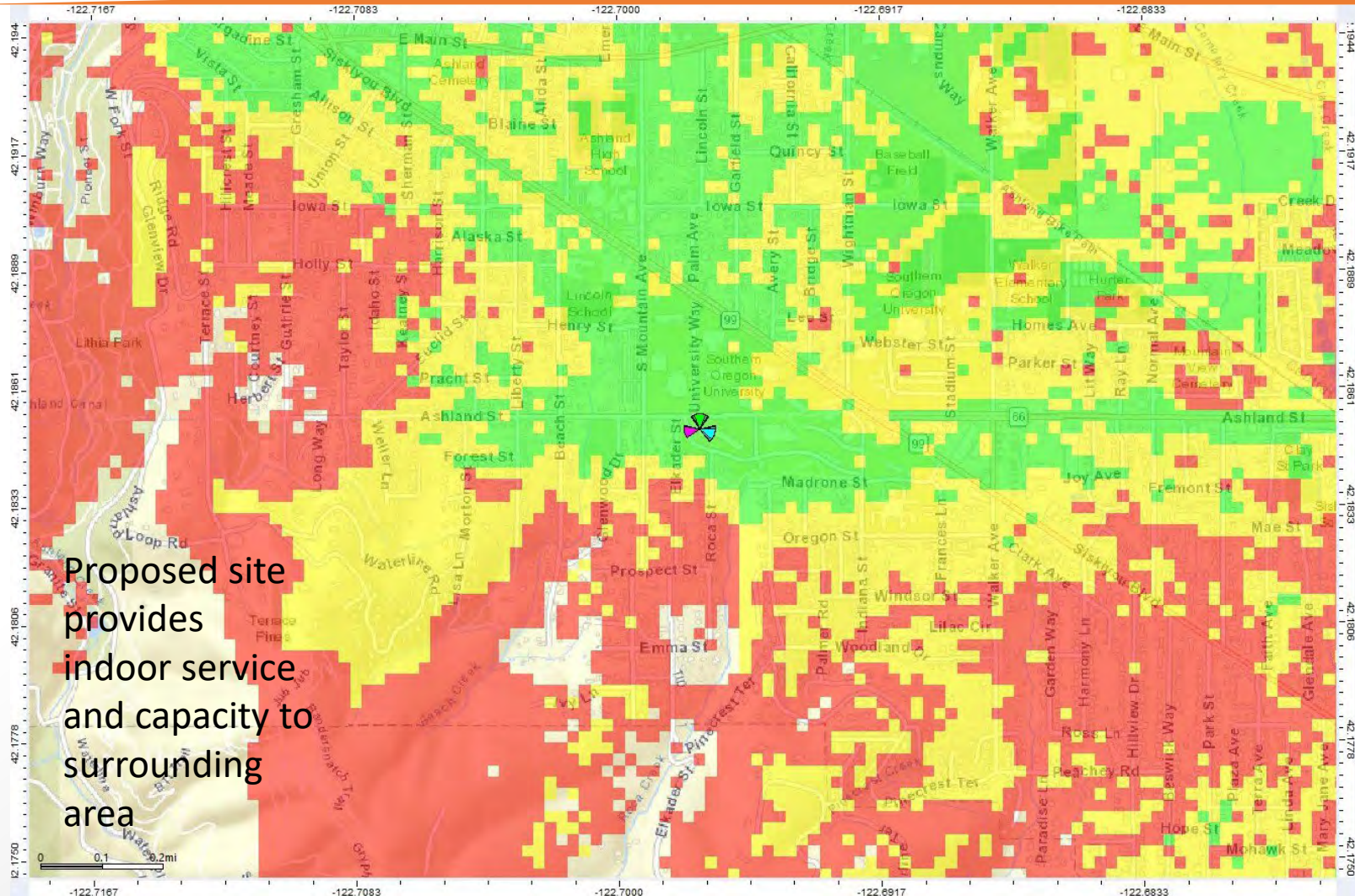
Verizon RSRP mid band Current Coverage - zoomed

LEGEND	
	Indoor ≥ -85 dbm
	In-Vehicle ≥ -95 dbm
	On-Street ≥ -106 dbm



Verizon RSRP mid band Proposed Coverage - zoomed

LEGEND	
	Indoor >= -85 dbm
	In-Vehicle >= -95 dbm
	On-Street >= -106 dbm



2024

Total Page Number: 141

Conclusion / Recommendation

- † Poor indoor service in the area for users on all (3) of the major carrier networks
- † FDV and ASEU slides show data from overutilized sectors that are not providing good throughput per user
- † Proposed site is a colocation on an existing structure instead of a new structure
- † A lack of quality throughput per subscriber in the area
- † Both low and mid band show a need for an additional site for capacity and indoor coverage
- † **Recommend approval for the attachment of antennas to the existing structure**



HATHAWAY LARSON

Koback · Connors · Heth

June 27, 2024

VIA EMAIL (derek.severson@ashland.or.us)

Derek Severson, Senior Planner
Department of Community Development
City of Ashland
51 Winbury Way
Ashland, OR 97520

Re: Verizon Wireless/ACOM
Wireless Communication Facility
Application No. PA-T1-2024-00233
Site: 1250 Ashland Street, Southern Oregon University

Dear Mr. Severson:

As you know, this firm represents Verizon Wireless (“Verizon”) with respect to the above-referenced site design review application for approval of a wireless communications facility (“WCF”) that is proposed on the roof of the Science Building located at 1250 Ashland Street on the Southern Oregon University campus (the “Application”). We are submitting this letter and the attached documents to explain why the AT&T reconstructed stadium light standard at Raider Stadium is not a feasible collocation option for the WCF. The AT&T reconstructed stadium light standard is not a feasible collocation option for multiple reasons.

First, AT&T rejected Verizon’s attempts to explore any proposal to collocate on the stadium light facility based on AT&T’s position that the reconstructed stadium light standard is incapable of supporting another WCF. Verizon contacted AT&T before it constructed the light standard and was advised by AT&T that it is not feasible to collocate on this facility. We attached multiple emails between Verizon’s consultant (ACOM), AT&T and AT&T’s consultant in which Verizon inquired about the potential to collocate on the stadium light facility. Both AT&T and its consultant made it clear that a collocation of another WCF at this site is not feasible due to the lower approved height and the fact that the AT&T reconstructed stadium light standard is a custom fabricated concrete pole that cannot structurally support another WCF. Since AT&T is unwilling and/or unable to allow collocation on the reconstructed stadium light standard and Verizon cannot force AT&T to permit collocation, this is not a feasible option.

Second, the property owner (Southern Oregon University) was unable or unwilling to assist Verizon in facilitating collocation on the reconstructed stadium light standard. Since Southern Oregon University is the property owner for both the AT&T stadium light facility and Verizon’s proposed rooftop site, Verizon reached out to Southern Oregon University to facilitate a discussion

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(503) 303-3101 Main

with AT&T about collocating on the stadium light standard. As reflected in the attached emails between Southern Oregon University and Acom, Southern Oregon University was unable or unwilling to assist.

Third, the City was unable or unwilling to assist Verizon in facilitating collocation on the reconstructed stadium light standard before AT&T constructed it. During the pre-application conference for the Application, the City advised Verizon that it will need to consider the yet-to-be-constructed AT&T stadium light standard to satisfy the preferred design requirements under AMC 18.4.10.040(B)(1). On June 5, 2023, I sent the City the attached letter explaining why Verizon did not agree that it is required to first consider and rule-out the yet-to-be-constructed AT&T's stadium light standard before it can proceed with the proposed WCF. On June 28, 2023, the City responded via email and disagreed with Verizon's position. The City's email noted that AT&T is preparing final drawings for building permit review and stated that "[t]he fact that the structure is not yet constructed could also be seen as facilitating design modifications to accommodate the additional height to support collocation."

On July 20, 2023, I responded to the City's email and noted that based on the quote above "We interpreted this comment as a suggestion that since AT&T does not have its building permits yet, Verizon might be able to pursue a design modification that would enable AT&T's pole to accommodate our wireless communication facility (WCF) as well." I explained that Verizon had reached out to AT&T to discuss this opportunity, but we were advised by AT&T that collocation of another WCF at this site is not feasible due to the lower approved height and structural issues. I asked if the City would assist us by facilitating a discussion between AT&T, Verizon and the City before AT&T's building permit is approved and told the City that the AT&T option is not viable without the City's assistance. I sent a follow-up email on August 3, 2023 and again asked "Is the City willing to assist us by getting directly involved in this matter and facilitating a discussion between AT&T, Verizon and the City before AT&T's building permit is approved?"

On August 28, 2023, the City advised me via telephone that the City does not believe it is appropriate, nor does the City have the authority, to require AT&T to work with Verizon to coordinate the stadium light standard construction and see if there is a collocation proposal that will work for both parties. Although I clarified that we were not asking the City to require AT&T to do so, but we were merely asking the City to facilitate a discussion between AT&T, Verizon and the City on this issue before AT&T's building permit is approved, the City reiterated that it is not the City's role to facilitate discussions between carriers. As a result, AT&T constructed the stadium light standard as approved.

Derek Severson, Senior Planner
June 27, 2024
Page 3

As explained in this letter and the attached emails and documents, Verizon made significant efforts to pursue a collocation opportunity on the AT&T stadium light standard but was unable to make it work for reasons beyond Verizon's control. AT&T, Southern Oregon University and the City were unable or unwilling to consider this option or assist in facilitating a discussion to explore it further. For these reasons, the AT&T stadium light standard is not a feasible collocation option.

Very truly yours,

HATHAWAY LARSON LLP

/s/ E. Michael Connors

E. Michael Connors

EMC/ep

Enclosures

cc: Verizon Wireless
ACOM

From: Sarah Blanchard sarah.blanchard@acomconsultinginc.com
Subject: Fwd: AT&T question MF22 SOUTHERN OREGON UNIVERSITY
Date: January 13, 2023 at 3:45 PM
To: Mike Unger mike.unger@acomconsultinginc.com

SB

Please see below. I will reach out to Brian and copy you.

----- Forwarded message -----

From: Lelah Vaga <lelah.vaga@wirelesspolicy.com>
Date: Fri, Jan 13, 2023 at 3:42 PM
Subject: Re: AT&T question MF22 SOUTHERN OREGON UNIVERSITY
To: Sarah Blanchard <sarah.blanchard@acomconsultinginc.com>

Sarah,

I've checked into it and this is a light standard with no room for a collocation, but I understand there are other poles in the area. The best contact at AT&T for more information is Brian Gullen.

Brian Gullen

AT&T | PNW ACE NSB
503.498.4103 | bc385u@att.com

Thanks,

Lelah Vaga
Wireless Policy Group LLC
(206) 459-8791
lelah.vaga@wirelesspolicy.com

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From: Lelah Vaga <lelah.vaga@wirelesspolicy.com>
Sent: Friday, January 13, 2023 10:53 AM
To: Sarah Blanchard <sarah.blanchard@acomconsultinginc.com>
Subject: Re: AT&T question MF22 SOUTHERN OREGON UNIVERSITY

I am not familiar with it but I will ask around.

Lelah Vaga
Wireless Policy Group LLC
(206) 459-8791
lelah.vaga@wirelesspolicy.com

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From: Sarah Blanchard <sarah.blanchard@acomconsultinginc.com>

Sent: Friday, January 13, 2023 8:34:19 AM

To: Lelah Vaga <lelah.vaga@wirelesspolicy.com>

Subject: AT&T question MF22 SOUTHERN OREGON UNIVERSITY

Lelah,

I know that you work with AT&T and I need to get some information about a site that they have in development in Southern Oregon MF22 SOUTHERN OREGON UNIVERSITY. You aren't working on it but I am hoping that you can point me in the right direction. Verizon has a rooftop location nearby with an expired land use and we need to refile. The city let us know about the AT&T site which might be a better colocation option for Verizon.

AT&T has land use approval but has not filed for a BP. I need to find out what the timeline is to build and what RAD Verizon could get at the site. We tried reaching out to AT&T inbound colo person who won't respond until AT&T is on air. I also tried the site acq listed on the drawings with no response. Do you know who else I could contact at AT&T?

Thank you,
Sarah

--
Sarah Blanchard
503-310-0544

--
Sarah Blanchard 503-310-0544

From: GULLEN, BRIAN bc385u@att.com
Subject: RE: AT&T question MF22 SOUTHERN OREGON UNIVERSITY
Date: January 24, 2023 at 4:55 PM
To: Sarah Blanchard sarah.blanchard@acomconsultinginc.com
Cc: Mike Unger mike.unger@acomconsultinginc.com

BG

Hi Sarah,

The site that AT&T is working to develop will be a fairly short light standard replacement that would not be suitable for additional collocators, so I don't think a relo would be viable here. I can tell you that developing a new site here has been very difficult, so if it's possible to renew the land use approval at the existing site that will probably be your best bet..

Thanks,

Brian Gullen

AT&T | PNW ACE NSB
503.498.4103 | bc385u@att.com

From: Sarah Blanchard <sarah.blanchard@acomconsultinginc.com>
Sent: Tuesday, January 24, 2023 12:20 PM
To: GULLEN, BRIAN <bc385u@att.com>
Cc: Mike Unger <mike.unger@acomconsultinginc.com>
Subject: Re: AT&T question MF22 SOUTHERN OREGON UNIVERSITY

Brian,

I wanted to follow up to see if you have any information on this site or if there is someone else that I can reach out to about colocation opportunities for Verizon.

Thank you,
Sarah

On Fri, Jan 13, 2023 at 4:12 PM Sarah Blanchard <sarah.blanchard@acomconsultinginc.com> wrote:

Brian,

Acom Consulting represents Verizon and I am looking for some information about an AT&T site in development, MF22 SOUTHERN OREGON UNIVERSITY. Verizon has a rooftop location nearby with an expired land use and we need to refile. The city let us know about the AT&T site which might be a better colocation option for Verizon.

AT&T has land use approval but has not filed for a BP. I need to find out what the timeline is to build and what RAD Verizon could get at the site. We tried reaching out to our AT&T inbound colo contact but she said that she cannot respond until the AT&T site is on air.

Is there any information that you can provide or is there someone else that I should contact?

Thank you,
Sarah

--

Sarah Blanchard

Real Estate Consultant for Verizon

Real Estate Consultant for Verizon
503-310-0544

--

Sarah Blanchard
503-310-0544



Sarah Blanchard <sarah.blanchard@acomconsultinginc.com>

FA #: 14647585 / USID: 231979 MF22 SOUTHERN OREGON UNIVERSITY

2 messages

Sarah Blanchard <sarah.blanchard@acomconsultinginc.com>
To: "SKIPPER, ALISON" <as317b@att.com>

Fri, Jun 30, 2023 at 2:09 PM

Allison,

AT&T has land use approval on a light standard replacement in Ashland OR (see attached zoning drawings). According to the city, AT&T is close to submitting for a building permit. Verizon is looking for a site in the area and the City of Ashland is telling us that colocating on the AT&T site is preferred based on the code.

I know that AT&T will not accept applications on sites until they are on air. I am hoping that you can tell me:

1. this tower, once constructed, will it be colocatable? (asking because it is a light standard replacement not a standard tower)
2. What RAD center would be available?

Thank you!
Sarah

--

Sarah Blanchard
Real Estate Consultant for Verizon
503-310-0544



ATTCH 11_Zoning Drawings_MF22 Southern Oregon University (3) (1).pdf
4999K

SKIPPER, ALISON <as317b@att.com>
To: Sarah Blanchard <sarah.blanchard@acomconsultinginc.com>

Mon, Jul 10, 2023 at 12:55 PM

I don't have access to any information until the site is on air. Feel free to check back with me as needed.

Alison Skipper | 470.413.6770 | as317b@att.com

[Quoted text hidden]



Sarah Blanchard <sarah.blanchard@acomconsultinginc.com>

AT&T question MF22 SOUTHERN OREGON UNIVERSITY

3 messages

Sarah Blanchard <sarah.blanchard@acomconsultinginc.com>

Fri, Jan 13, 2023 at 7:12 PM

To: bc385u@att.com

Cc: Mike Unger <mike.unger@acomconsultinginc.com>

Brian,

Acom Consulting represents Verizon and I am looking for some information about an AT&T site in development, MF22 SOUTHERN OREGON UNIVERSITY. Verizon has a rooftop location nearby with an expired land use and we need to refile. The city let us know about the AT&T site which might be a better colocation option for Verizon.

AT&T has land use approval but has not filed for a BP. I need to find out what the timeline is to build and what RAD Verizon could get at the site. We tried reaching out to our AT&T inbound colo contact but she said that she cannot respond until the AT&T site is on air.

Is there any information that you can provide or is there someone else that I should contact?

Thank you,
Sarah

--

Sarah Blanchard
Real Estate Consultant for Verizon
503-310-0544

Sarah Blanchard <sarah.blanchard@acomconsultinginc.com>

Tue, Jan 24, 2023 at 3:19 PM

To: bc385u@att.com

Cc: Mike Unger <mike.unger@acomconsultinginc.com>

Brian,

I wanted to follow up to see if you have any information on this site or if there is someone else that I can reach out to about colocation opportunities for Verizon.

Thank you,
Sarah

[Quoted text hidden]

--

Sarah Blanchard
503-310-0544

GULLEN, BRIAN <bc385u@att.com>

Tue, Jan 24, 2023 at 7:54 PM

To: Sarah Blanchard <sarah.blanchard@acomconsultinginc.com>

Cc: Mike Unger <mike.unger@acomconsultinginc.com>

Hi Sarah,

The site that AT&T is working to develop will be a fairly short light standard replacement that would not be suitable for additional collocators, so I don't think a relo would be viable here. I can tell you that developing a new site here has been very difficult, so if it's possible to renew the land use approval at the existing site that will probably be your best bet..

Thanks,

7/16/23, 11:21 AM

Acom Consulting, Inc Mail - AT&T question MF22 SOUTHERN OREGON UNIVERSITY

Brian Gullen

AT&T | PNW ACE NSB

503.498.4103 | bc385u@att.com

[Quoted text hidden]

From: Mike Unger mike.unger@acomconsultinginc.com
Subject: Re: Verizon at Southern Oregon University (Madrone)
Date: January 11, 2024 at 8:40 AM
To: James McNamara mcnamaraj@sou.edu
Cc: Leon Crouch crouchl@sou.edu



Hi Jim,

I wanted to follow up on this matter. Would the University support Verizon working with AT&T to co-develop a slightly taller light standard at the stadium instead of locating on the Science Building?

Thanks.

Mike Unger
206-604-5538

On Jan 5, 2024, at 11:19 AM, Mike Unger <mike.unger@acomconsultinginc.com> wrote:

Hi Jim,

I wanted to follow up on this conversation again now that the holidays are behind us.

Would the University be supportive of Verizon working to co-develop a new light standard with AT&T instead of proceeding with a new land use application for a facility on the Science Building?

Thanks.

Mike Unger
206-604-5538

On Dec 18, 2023, at 2:04 PM, Mike Unger <mike.unger@acomconsultinginc.com> wrote:

Jim,

As a collocation, which the City ranks as their most favored type of wireless facility, we would have a less intensive land use process. We've held several meetings with the City. They informed us that Verizon would need to demonstrate that we are unable to collocate with AT&T in order to justify the Science Building location.

Regarding the height, AT&T was not able to justify the additional 10-15' based on radio propagation. We would be able to justify the additional height because it would be necessary to serve two wireless carriers and still accommodate the stadium lights.

Mike Unger
206-604-5538

On Dec 18, 2023, at 11:58 AM, James McNamara <mcnamaraj@sou.edu> wrote:

Mike,

How do you propose to get approval for a taller pole? The process to get the current pole approved took over 2 1/2 years and included local appeals and a LUBA appeal. The land use approval limited the height to 85 ft.

Jim McNamara
Capital Projects Manager
SOUTHERN OREGON UNIVERSITY
Facilities Management & Planning
351 Walker Avenue
Ashland, OR 97520
Phone: 541-552-6888
Email: mcnamaraj@sou.edu

<image.png>

On Mon, Dec 18, 2023 at 11:33 AM Mike Unger <mike.unger@acomconsultinginc.com> wrote:

Hi Jim,

Ashland is strongly encouraging Verizon to work with AT&T to co-develop a facility. This is because the City's land use code prioritizes (favors) collocating on an existing site to constructing a new site, even if Verizon is proposing a stealth rooftop.

I had heard that AT&T had started construction. It would require a new, taller light standard. Does the University have a preference for a co-developed light standard instead of the Science Building rooftop? If so, the University's encouragement could help AT&T agree to work with Verizon.

I appreciate your help.

Mike Unger

Mike Unger
206-604-5538

On Dec 18, 2023, at 11:20 AM, James McNamara <mcnamaraj@sou.edu> wrote:

Mike

We at SOU would not have any objections to co-locating with AT&T but you will need to check with them on the feasibility. The AT&T pole will be 85 ft. high. SOU's field lighting fixtures will be located at 75 ft. above ground. Originally, AT&T proposed a 100+ ft pole, but the height was reduced during the City approval process.

FYI the AT&T installation is underway. The underground conduits are installed and the concrete pad for the equipment is poured. The new pole is set to be installed in February according to the last schedule we received

Jim McNamara
Capital Projects Manager
SOUTHERN OREGON UNIVERSITY
Facilities Management & Planning
351 Walker Avenue
Ashland, OR 97520
Phone: 541-552-6888
Email: mcnamaraj@sou.edu

<image.png>

On Fri, Dec 15, 2023 at 11:04 AM Mike Unger <mike.unger@acomconsultinginc.com> wrote:

Hi Jim,

This is a follow-up to a voicemail I left this morning. You and my colleague, Sarah Blanchard, communicated about Verizon's proposed wireless facility on the Science Building. I am taking over the site from Sarah. As she previously mentioned, the City of Ashland is strongly encouraging Verizon to work with AT&T on their facility on a stadium light standard instead of locating on the Science Building. Verizon would like to gauge the University's openness to Verizon locating on AT&T's light standard. This would require redeveloping the AT&T's light standard.

Please let me know if you are available to discuss the issue.

Thanks.

Mike Unger
206-604-5538

From: [Sarah Blanchard](#)
To: [Mike Connors](#)
Cc: [Cope, Camille Ann](#); [Mike Unger](#)
Subject: Re: [E] FW: SOU/1250 Ashland Street (Madrone)
Date: Monday, January 22, 2024 1:29:38 PM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)

[External Email]

Mike,

I reached out to the University contact Jim McNamara who is with SOU Facilities and has been our contact for the University. I kept missing him and so I asked Mike U to try to get ahold of him and discuss. Mike did speak with Jim and explained the situation and asked for the University's support in reaching out to AT&T but he has gone dark now. I suspect that they do not want to be involved between AT&T and Verizon. I am not sure what our next step should be. Maybe we should regroup and come up with a game plan.

Thanks,
Sarah

On Tue, Sep 5, 2023 at 9:18 AM Mike Connors <mike@hathawaylarson.com> wrote:

E. Michael Connors
Partner



HATHAWAY LARSON

Koback · Connors · Heth

June 5, 2023

VIA EMAIL (derek.severson@ashland.or.us)

Derek Severson, Senior Planner
Department of Community Development
City of Ashland
51 Winbury Way
Ashland, OR 97520

Re: Verizon Wireless/ACOM
Wireless Communication Facility
Site: 1250 Ashland Street, Southern Oregon University

Dear Mr. Severson:

As you know, this firm represents Verizon Wireless (“Verizon”) with respect to the above-referenced wireless communications facility (“WCF”) that is being proposed on the roof of the Science Building located at 1250 Ashland Street on the Southern Oregon University campus. I appreciate you taking time to talk to Mike Unger and myself about this matter a few weeks ago and agreeing to allow us to follow up our conversation with this letter. This letter summarizes our legal analysis as to why we believe that Verizon is not required to consider the yet-to-be-constructed AT&T stadium light standard at an increased height to satisfy the preferred design requirements under Ashland Municipal Code (“AMC”) 18.4.10.040(B)(1).

Background

Verizon is proposing to site the WCF on the roof of the Science Building located on the Southern Oregon University Campus. Since the height of the screening panels will exceed 40 feet, a Site Design Review and Conditional Use Permit will be required. The City approved this same proposal in 2018 (Planning Action PA-2017-01486), but that approval expired before Verizon constructed the WCF. Verizon is essentially requesting that the City re-approve the same proposal. Since the 2018 approval, AT&T obtained approval for a WCF on a reconstructed stadium light standard at Raider Stadium located at 351 Walker Avenue/390 Stadium Street on the Southern Oregon University campus. AT&T proposed a 95-foot replacement stadium light standard to accommodate their WCF, but the City planning commission determined that AT&T failed to justify this height and only approved an 85-foot replacement stadium light standard. AT&T’s proposal was approved by the City in 2021 (Planning Action TI-2021-00158) and affirmed by LUBA in 2022 (*Marcotulli v. City of Ashland*, __ Or LUBA __ (LUBA No. 2022-01), dated June 13, 2022). AT&T has yet to submit for building permits or commence construction.

E. Michael Connors
1125 NW Couch Street, Suite 550
Portland, OR 97209
mike@hathawaylarson.com
(503) 303-3111 Direct
(503) 303-3101 Main

During the pre-application conference for Verizon's new proposal, the City advised Verizon that it will need to consider the yet-to-be-constructed AT&T stadium light standard at an increased height to satisfy the preferred design requirements under AMC 18.4.10.040(B)(1). Verizon contacted AT&T to discuss this option. AT&T is not sure when they will obtain building permits and/or commence construction. More importantly, AT&T advised Verizon that another WCF cannot be accommodated on the replacement stadium light standard due to the lower approved height and structural issues.

Legal Analysis

AMC 18.4.10.040(B) provides the hierarchy of preferred designs that must be considered before a WCF applicant can propose an alternative design. AMC 18.4.10.040(B)(1) provides: "Where possible, the use of existing wireless communication facilities sites for new installations shall be encouraged. Collocation of new facilities on existing facilities shall be the preferred option. Where technically feasible, collocate new facilities on pre-existing structures with wireless communication facilities in place or on pre-existing towers." (Emphasis added). If an existing WCF is not available under AMC 18.4.10.040(B)(1), an applicant must next consider attaching the WCF to "pre-existing structures, when feasible." AMC 18.4.10.040(B)(2). Verizon's rooftop WCF proposal qualifies under AMC 18.4.10.040(B)(2). The question for purposes of this legal analysis is whether Verizon is required to first consider and rule-out the yet-to-be-constructed AT&T's stadium light standard at an increased height before it can proceed with the proposed WCF. Verizon maintains that it is not required to do so for several reasons.

First, AMC 18.4.10.040(B)(1) does not require Verizon to consider approved but yet-to-be constructed WCFs. AMC 18.4.10.040(B)(1) only requires the consideration of "existing facilities," "pre-existing structures with wireless communication facilities in place" or on "pre-existing towers." The terms "existing" and "pre-existing" make it clear that this requirement only applies to WCFs that have already been constructed and exist at the time of the application. It does not require consideration of approved and/or yet-to-be constructed WCFs.

Second, neither Verizon nor the City have the authority to force AT&T to change the approved design or increase the height of the pole. AT&T has final land use approval, and that approval has been upheld by LUBA. *Marcotulli v. City of Ashland*, __ Or LUBA __ (LUBA No. 2022-01, dated June 13, 2022). Verizon cannot require a competitor to redesign an approved facility to accommodate Verizon's WCF. Nor can the City force AT&T to reconsider and redesign a development that already has final approval and has been affirmed by LUBA.

Third, the City specifically denied AT&T's request for a taller pole on the grounds that this height was not justified. AT&T requested a 95-foot pole, but the City only approved an 85-foot pole based on AMC 18.4.10.040(A)(4). If the City already rejected a taller pole and determined that 85-feet is the minimum height necessary to satisfy AMC 18.4.10.040(A)(4), the City cannot now

claim that AT&T and/or Verizon must request approval for an even taller pole than the original one they rejected before Verizon can proceed with its project.

Fourth, the City cannot make Verizon's project completely beholden to AT&T and its project. AT&T may delay its project (which it appears to already be doing) or decide not to construct it. That is especially true if AT&T is told it must redesign and increase the height of its facility. Verizon would not be able to pursue its facility until AT&T went through another land use process (including a likely LUBA appeal) and constructed the facility. Verizon's inability to satisfy its coverage/capacity needs because it is forced to wait until AT&T completes these actions would clearly violate the Federal Telecommunications Act. 47 U.S.C. Section 332(c)(7)(B).

Fifth, there is nothing in the City code that requires a wireless carrier to consider or pursue the reconstruction of an existing facility to accommodate their coverage needs. So even if AT&T had already constructed its facility, there is nothing in the City code that would require AT&T or Verizon to reconstruct it in order to accommodate Verizon's WCF. AMC 18.4.10.040(B)(1) only requires the consideration of "existing facilities," "pre-existing structures" or "pre-existing towers." It does not require an applicant to consider a modified "existing" and "pre-existing" structure. If that were a requirement, it would be expressly stated in the code. We are not aware of any wireless code that imposes that stringent of a collocation requirement.

Sixth, it is our understanding that the City believes AT&T's land use approval requires AT&T to accommodate a collocation proposal and therefore the City may be able to force AT&T to redesign the WCF or take additional actions to accommodate a collocation. The City is relying on condition of approval no. 9, which provides: "That prior to the issuance of a building permit, the applicants shall provide a copy of the signed lease evidencing that collocation is not precluded by the lease agreement." Condition of approval no. 9 does not support this position. Condition of approval no. 9 only requires a copy of a lease that does not preclude collocation, it does not require that AT&T redesign the facility or take other steps to allow for collocation.

Please understand that if it was feasible for Verizon to collocate on the AT&T stadium light standard in a timely manner and at a sufficient height to accommodate its coverage and capacity objectives, Verizon would pursue this option. Such an option would avoid having to file for a Conditional Use Permit, make it easier to obtain approval and be a more efficient process. However, Verizon cannot collocate on the AT&T stadium light standard because it has not been constructed, cannot structurally accommodate another WCF, and does not provide sufficient height to satisfy its coverage/capacity needs for this WCF.

We appreciate your consideration of this legal analysis and hope it is helpful to the City as part of its consideration of Verizon's WCF proposal. We suggest scheduling another conference call to discuss this issue further after the City has an opportunity to review this legal analysis.

Derek Severson, Senior Planner
June 5, 2023
Page 4

If you have any questions regarding this legal analysis or any related matters, please do not hesitate to let us know. We look forward to working with you on this project.

Very truly yours,

HATHAWAY LARSON LLP

A handwritten signature in cursive script, reading "E. Michael Connors".

E. Michael Connors

EMC/ep

cc: Verizon Wireless
ACOM

From: [Derek Severson](#)
To: [Mike Connors](#); [Mike Unger](#)
Cc: [Aaron Anderson](#)
Subject: Re: SOU/1250 Ashland Street (Madrone)
Date: Wednesday, June 28, 2023 11:48:09 AM
Attachments: [image001.png](#)
[image002.png](#)
[Outlook-wdshxz5h.png](#)

[External Email]

Mike & Mike,

While I think there is certainly a legal argument to be made with regard to consideration of the approved-but-not-yet-built AT&T facility, the Planning Commission and Council are likely to look at the city code as requiring that AT&T's arrangements with Southern Oregon University require that collocation on the light pole already approved may not be precluded, and that applications must first demonstrate that collocation on existing wireless facilities is not feasible before considering other options. In addition, the next step after considering collocation in the stepped hierarchy in Ashland's code is looking at existing structures - even if the pole were not required to be considered on the basis of collocation, it would still need to be exhausted and proven not feasible as an existing structure which has previously been found feasible for WCF installation.

So, an argument that a facility which is approved but not yet built need not be considered may not be enough for our local approval authorities to find that you've demonstrated that collocation isn't feasible, and would still face the "existing structure" hurdle. The fact that the structure is not yet constructed could also be seen as facilitating design modifications to accommodate the additional height to support collocation. I don't believe the decision makers here opposed the additional height to prevent collocation, they simply found that AT&T had failed to demonstrate it was necessary for the proposal being considered at the time, and they discussed that collocation could lead to additional height in the future.

For what it's worth, AT&T's proposal included a collocation feasibility study that looked at the Verizon facility approved on the Southern Oregon University Science Building even though it was not yet constructed (as well as other SOU facilities without WCF in place or approved). And it is our understanding that AT&T is preparing their final drawings for a permit submittal in short order.

I'm happy to schedule a follow-up conversation, but I don't believe this is an issue that will be able to be definitively resolved with staff, and however it is ultimately resolved I believe it is likely to be challenged.

Derek Severson, Planning Manager

Pronouns He/him/his



City of Ashland

Community Development

51 Winburn Way, Ashland, Oregon 97520

541.552.2040 | TTY 800.735.2900

derek.severson@ashland.or.us

Online ashland.or.us; social media (Facebook @CityOfAshlandOregon | Twitter @CityofAshland)

This email transmission is official business of the City of Ashland, and it is subject to Oregon Public Records Law for disclosure and retention. If you have received this message in error, please contact me at 541.552.2040.

From: Mike Connors <mike@hathawaylarson.com>

Sent: Monday, June 5, 2023 01:46 PM

To: Derek Severson <derek.severson@ashland.or.us>; Aaron Anderson <aaron.anderson@ashland.or.us>

Cc: Mike Unger <mike.unger@acomconsultinginc.com>

Subject: SOU/1250 Ashland Street (Madrone)

[EXTERNAL SENDER]

Derek & Aaron,

Thanks for taking time to talk to Mike Unger and myself a few weeks ago about the Madrone site and agreeing to allow us to follow up our conversation with a letter. Per our call, I've attached the letter summarize our legal analysis as to why we believe that Verizon is not required to consider the yet-to-be-constructed AT&T stadium light standard to satisfy the preferred design requirements.

Please let us know if we can schedule a follow up call to discuss your thoughts on the letter after you have an opportunity to review it internally. We look forward to hearing back from you. Thanks,
Mike

E. Michael Connors
Partner



Hathaway Larson LLP

1125 NW Couch St Ste 550

Portland, OR 97209

503-303-3111 (Direct)

503-303-3101 (Main)

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From: [Mike Connors](#)
To: [Derek Severson](#); [Mike Unger](#)
Cc: [Aaron Anderson](#)
Subject: RE: SOU/1250 Ashland Street (Madrone)
Date: Thursday, July 20, 2023 9:31:00 AM
Attachments: [Acom Consulting, Inc Mail - FA # 14647585 USID 231979 MF22 SOUTHERN OREGON UNIVERSITY.pdf](#)
[image001.png](#)
[image002.png](#)
[image003.png](#)
[Acom Consulting, Inc Mail - AT&T question MF22 SOUTHERN OREGON UNIVERSITY.pdf](#)
[Acom Consulting, Inc Mail - Fwd MF22 Southern Oregon University \(FA# 14647585\).pdf](#)

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Partner



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Sent: Wednesday, June 28, 2023 11:48 AM

To: Mike Connors <mike@hathawaylarson.com>; Mike Unger
<mike.unger@acomconsultinginc.com>

Cc: Aaron Anderson <aaron.anderson@ashland.or.us>

Subject: Re: SOU/1250 Ashland Street (Madrone)

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Derek Severson, Planning Manager

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541.552.2040 | TTY 800.735.2900

derek.severson@ashland.or.us

Online ashland.or.us; social media (Facebook @CityOfAshlandOregon | Twitter @CityofAshland)

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Cc: [Aaron Anderson](#)
Subject: RE: SOU/1250 Ashland Street (Madrone)
Date: Thursday, August 3, 2023 1:49:00 PM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)

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PA-APPEAL-2024-00019
1250 Ashland Street



May 14, 2024

Notice of Final Decision

On May 14, 2024, the Community Development Director denied the request for the following:

Planning Action: PA-T1-2024-00233

Subject Property: 1250 Ashland Street (SOU Science Building)

Applicant: Southern Oregon University/Verizon Wireless

Description: A request for a Site Design Review Permit to install wireless communication facilities (antennas and associated equipment) on the roof of the Science Building at 1250 Ashland Street on the Southern Oregon University Campus. The application also includes a request for a Conditional Use Permit because with the installation of panels proposed to screen the wireless communication facility installation, the building height will exceed 40 feet. (The proposal is the same as one previously approved by the city in PA-2017-01486 but which subsequently expired, and the applicant proposes to comply with the conditions of the prior approval.) **COMPREHENSIVE PLAN DESIGNATION:** Southern Oregon University District; **ZONING:** SO; **ASSESSOR'S MAP:** 39 1E 15BB; **TAX LOT #:** 100

The Community Development Director's decision becomes final and is effective on the 12th day after the Notice of Final Decision is mailed.

The application, all associated documents and evidence submitted, and the applicable criteria are available for review at the Ashland Community Development Department, located at 51 Winburn Way. Copies of file documents can be requested and are charged based on the City of Ashland copy fee schedule.

Prior to the final decision date, anyone who was mailed this Notice of Final Decision may request a reconsideration of the action as set forth in the Ashland Land Use Ordinance (ALUO) 18.5.1.050(F) and/or file an appeal to the Ashland Planning Commission as provided in ALUO 18.5.1.050(G). The ALUO sections covering reconsideration and appeal procedures are attached. The appeal may not be made directly to the Oregon Land Use Board of Appeals.

If you have any questions regarding this decision, please contact Derek Severson in the Community Development Department at (541) 488-5305.

cc: Parties of record and property owners within 200 ft

COMMUNITY DEVELOPMENT DEPARTMENT

51 Winburn Way
Ashland, Oregon 97520
ashland.or.us

Tel: 541.488.5305
Fax: 541.552.2050
TTY: 800.735.2900



ASHLAND PLANNING DIVISION

FINDINGS & ORDERS

PLANNING ACTION: PA-T1-2024-00233
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OWNER/APPLICANT: Southern Oregon University/Verizon Wireless
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ZONING: SO; **ASSESSOR'S MAP:** 39 1E 15BB; **TAX LOT #:** 100

SUBMITTAL DATE:	April 1, 2024
DEEMED COMPLETE DATE:	April 12, 2024
STAFF DECISION DATE:	May 14, 2024
APPEAL DEADLINE (4:30 P.M.):	May 28, 2024
FINAL DECISION DATE (4:30 P.M.):	May 28, 2024

DECISION

The application involves a request for Site Design Review approval to install Wireless Communication Facilities (WCF) including antennas and associated equipment on the roof of the Southern Oregon University (SOU) Science Building at 1250 Ashland Street. The application also includes a request for a Conditional Use Permit because with the panels proposed to screen the WCF installation, the building height will exceed 40 feet. The application notes that the proposal is the same as one previously approved by the city in PA-2017-01486 but which subsequently expired, and the applicant proposes to comply with the conditions of that prior approval.

Subject Property

The subject property is located at 1250 Ashland Street, on the South side of Ashland Street near its intersection with Roca Street. The parcel is roughly rectangular in shape, and is approximately 15.17 acres in area.

History of Applications

For the subject property and building, Site Design Review approval PA #2014-00249 was granted administrative approval in 2014 for a major renovation and interior remodel of the SOU Science Building. The project included replacement of all of the HVAC, plumbing, electrical and lighting systems. This approval included an Exception to the Site Development and Design Standards to not provide visual or acoustic screening for new rooftop equipment based on the presence of several large, established trees that already served to screen this equipment. Subsequently, the applicants obtained approval as PA #2015-01212 for the modification of the approved Tree

Preservation and Protection Plan to remove five of the trees that had previously been identified as the basis for approval of the Exception to the Site Development and Design Standards. These removals were approved based on an arborist's recommendation that the tree's posed a safety hazard to pedestrians and structures in the area, and the approval included requirements that the removals be mitigated with four larger stature evergreen trees planted on the south side of the building.

An identical proposal to place WCF on the building rooftop here was approved through PA #2017-01486. That approval was ministerially extended, and building permits for the installation were approved, however both the land use and building permit approvals expired without the building permits being picked up or work commencing.

Proposal

The application involves a request for Site Design Review approval to install Wireless Communication Facilities (WCF) including antennas and associated equipment on the roof of the Southern Oregon University (SOU) Science Building at 1250 Ashland Street. The application also includes a request for a Conditional Use Permit because with the panels proposed to screen the WCF installation, the building height will exceed 40 feet.

Site Design Review for WCF Installation

The application explains that the proposed rooftop antennas and associated equipment are designed to provide additional services to customers in and around the Southern Oregon University campus and to improve service capacity, thereby improving overall performance. The applicants emphasize that if additional WCF are not built soon to provide more capacity, Verizon Wireless's existing sites will exhaust their capacity and no longer be able to provide service to customers in the area.

WCF installations are subject to Site Design Review approval. In this instance, the building itself and associated site improvements recently received Site Design Review approval and the application here is limited to considering how the addition of the proposed WCF complies with the applicable WCF design standards.

With regard to the design standards, the application explains that the antennas and associated equipment will be located on the roof, and will be screened and concealed by the existing screen wall as well as a new proposed screening wall which will go around the remainder of the building and include fiberglass reinforced plastic (FRP) around the WCF, matching the existing screening wall to minimize any visual impacts. The equipment will be visually screened by the wall at the top of the building – the antennas and equipment cabinets are shorter than the wall and will not extend above the wall. No vegetative screening is proposed as the installation is entirely limited to the rooftop, and the rooftop installation is noted as being only as high as necessary to achieve the coverage goals. All equipment is proposed to be equal to or lesser in height to the existing screening wall. No signage beyond any required by state and federal laws is proposed to be posted, no exterior lighting is proposed, and the applicants agree to remove all equipment from the site and return it to its original condition within 90 days if and when the facility is ever abandoned for a period of greater than six months. The application asserts that the building is set back more than twice its overall height from any residential zone.

Third Party Review

The applicants have provided the code-required collocation study, and as required by ordinance the City has retained the services of an independent third-party reviewer. The code requires that the applicants deposit funds with the city with their application fee to pay for this independent third-party review. William P. Johnson, RF Engineering Consultant, reviewed the application materials to ensure that the proposed site approvals are based on an objective need. In his initial review, Johnson noted the following:

- ❑ The application materials contain several RF propagation plots that are not labeled for band of operation, but which Johnson believed were representing “low band” (700/850 MHz band) RF coverage. The RF propagation plots are color-coded for “Green” (-85 dBm¹), “Yellow” (-95 dBm), and “Red” (-105 dBm). The applicant typically deploys base station facilities that serve low-band and mid-band signals. Where only low-band and mid-band spectrum are deployed, low-band constitutes only about ten percent of the available licensed spectrum, while mid-band constitutes the remaining 90 percent. The permit application materials are silent about mid-band RF coverage which, besides being the largest percentage of spectrum, propagates less effectively than low-band and make it a driving factor in base station placement. Analysis of the need for the proposed site as well as evaluation of alternative sites is heavily dependent on the propagation limitations of mid-band spectrum, and in Johnson’s review there is no information about this important band from the applicant other than to mention that it will be deployed.
- ❑ Johnson further notes that the applicant’s materials indicate that at least one existing neighbor site is approaching capacity saturation or already at capacity saturation. Traffic off-load from existing saturated sites will be important when evaluating alternate sites or justification for the proposed site, however there are no trend metrics such as Forward Data Volume (FDV), Average Scheduled Eligible Users (ASEU), and Average Active Connections (AvgAC) that would serve to support claims that a new base station facility is needed to off-load traffic or draw local mobile subscribers onto the new site using mid-band spectrum to free up low-band spectrum.
- ❑ Johnson’s analysis also finds that the scale of the RF propagation plots makes it nearly impossible to identify locations where in-building service is needed and how the proposed base station is able to satisfy that need. Johnson recommend that the RF propagation plots, both for low-band and mid-band, be zoomed in to the target coverage area showing the neighbor site existing coverage and a before/after using the proposed base station facility.
- ❑ Johnson notes that for alternate site analysis, city staff eyes-on observations have shown that two of the potential collocation sites (2290 Ashland Street and 30 West Hersey Street) do not appear to have any existing wireless facilities in place and there is no record of any approved facilities at these locations. Two existing facilities with WCF approvals (212 East Main Street and 565 Clover Lane) are not discussed, as both already contain Verizon facilities. Johnson recommends that the applicant revisit the alternate site analysis to ascertain how realistic the alternative sites considered are to the present application.
- ❑ Finally, Johnson notes that the application materials lack supporting documentation to show that existing structure collocation on the light standard at Raider Stadium approved in 2017-2018 is not possible for design or loading issues. In addition, while the materials indicate the land owner is unwilling to allow collocation, there is no documentation provided to demonstrate that this alternative site is unavailable.

Conditional Use Permit to Exceed 40-foot Building Height

The subject property is located within the Southern Oregon University (SOU) District, a special district designed to provide for the unique needs of Southern Oregon University as a State educational institution functioning within the planning framework of the City. The SOU District is regulated under AMC Chapter 18.3.6 and by the SOU Campus Master Plan which has been adopted by the City as Ordinance #3014.

Within the SOU District, WCF are authorized subject to Chapter 18.4.10. In addition, any construction over 40 feet in height is subject to the approval of a conditional use permit per Chapter 18.5.4. While WCF are exempted from height restrictions in each zone, with the addition of the proposed ten-foot tall FRP screen walls here, the height of the existing building will exceed 40 feet. Currently, the building is noted as 39.1 feet in height above the finished grade, with the existing mechanical equipment noted at 61.9 feet above finished grade at its highest point, and both the existing and proposed screen walls extend to 49.1 feet above finished grade.

Conditional use permits provide for discretionary review of the adverse material impacts of a request in comparison to adverse material impacts that could reasonably be expected from the property's target use, which for the SOU District is "*The permitted uses listed in... (chapter) 18.3.6 Southern Oregon University District... complying with all ordinance requirements.*" Consideration in the criteria include adequate capacity of city facilities, impacts on the livability of the impact area when considered in terms of scale, bulk, and coverage; traffic generation; architectural compatibility; air quality; generation of noise, light, and glare; the development of adjacent properties as envisioned in the Comprehensive Plan; and other factors found to be relevant by the hearing authority. Conditional use permits provide the city with the ability to impose conditions necessary to mitigate these adverse material impacts.

The application asserts that the proposal is in conformance with the standards of the SOU District and relevant Comprehensive Plan policies. The application further explains that because the proposal is for an unmanned WCF it will not impact access to city services, generate any additional traffic or impact transportation in any way. In addition, the applicants assert that the antennas and equipment that will be going on the roof will be screened with material that will match the current screening wall but extend around the whole building, and as such will have no greater impact on the livability of the surroundings than would the target use. The applicants emphasize that the installation will not affect air quality, and have provided an acoustic report which concludes that, "the predicted noise levels are significantly lower than both the code limit and the existing ambient noise levels, and as such will not contribute to the existing noise environment." No added exterior lighting is proposed in conjunction with this WCF installation. The applicants note that the proposal is limited to the campus and will not affect the future development of adjacent properties, and is an allowed use in the district subject to the requirements of AMC Chapter 18.4.10.

In staff's assessment, it is important to note that the building has a partial screen wall already in place and the applicants propose to place the antennas and all associated equipment on the building's roof, rather than placing accessory equipment on the ground and screening it with vegetation. All equipment is to be screened entirely behind a screen wall which will extend the existing screen wall around the building roof's full perimeter, and fiberglass reinforced plastic will be used to mitigate the visual and acoustic impacts of the WCF installation. The extension of the

existing screening wall to enclose the full perimeter of the building with a matching wall which will conceal the proposed WCF installation is what is triggering the conditional use permit component of the application – the added height of the screening around the full perimeter of the building alters the building’s height as calculated by code – to exceed 40 feet, necessitating the conditional use permit. This installation is intended to match the height of the screen wall already in place, and to fully conceal the WCF. The application emphasizes the height of the proposed WCF equipment is to be lower than the screen wall, and includes an acoustic report demonstrating that the placement and screening of the WCF will be below not only the allowed noise levels of the code, but significantly below the ambient noise levels already generated by traffic in the area. In staff’s view, the benefits demonstrated by the applicants of installing the screening wall outweigh and mitigate the impacts associated with the additional height involved.

Comments Received

Subsequent to the mailing of a Notice of Complete Application (**NOCA**), nine parties submitted written comments with regard to the proposal during the public comment period.

David DeHaas submitted comments in opposition asking that the applicant be required to prove with “*facts of real measurements*” their gap in coverage. He emphasized that the applicant has not proven they have a significant gap in coverage for cell phone calls, and that the maps provided show no real data. He suggested that 5G towers are for broadband data, not for cell phone calls and as it is broadband it can be rejected outright.

Elaine Sayre asked that the comment deadline be extended and a better effort to inform the neighborhood residents be made. She added that the science building is in a residential area and that she has health concerns and concerns with her view.

Marilyn Lindsay expressed frustration that the city has allowed wireless technology to be advanced/updated to out compete for profit telecommunication wireless communication facilities (WCFs) in terms of data speed, capacity, security and safety (from both RF radiation, and fire). She suggests that no matter how many citizens gave their time to research and educate the city on the ill health effects of RF radiation and the advantage of fiber optics as a safe alternative, the city was determined to pursue its agenda.

Laura McLellan expressed her opposition to the proposal, noting that there is no proof that WCF’s are safe, that many scientists believe they pose health hazards, and that this will make Ashland and the neighborhood unsafe, especially for children.

Robert McLellan contested the proposed WCF installation, noting concerns with the health issues caused by 5G technology. He suggested that placing a WCF on a campus and so close to a densely populated neighborhood is a major concern as opposed to placing it in an open space across the freeway and asked that the project be rejected.

Paul Mozina suggested that relying on the Telecommunications Act of 1996 as a basis for not considering health impacts is willful ignorance and disregard for the impacts WCFs have on living things. He noted that he lives in the area and has adequate cell service, and suggested that this real world test should outweigh computer modeling that shows a service gap. He further emphasized that the Telecommunications Act of 1996 was never intended to support the ‘internet of things’ at

the heart of 5G technology, and that the Federal Communications Commission has failed to respond to the August 31, 2021 decision of the US Court of Appeals for the DC District. He cited the Flower Hill case, which is now under appeal, as precedent that new uses of wireless such as broadband and other services are not protected by the 1996 Telecommunications Act. Mozina's materials conclude suggesting that cities should consider denying small cell applications unless there is a demonstrable gap in phone coverage.

An anonymous commenter suggested that they did not know enough about the 5G issue to have an informed opinion, but urged weighing development considerations against the potential long-term health consequences.

Steve Belsky expressed his dissatisfaction with the city's approach in recent wireless applications, suggesting that the height limitation imposed on the AT&T WCF installation on the light standard at Raider Stadium was counter to the city's own standards and had the effect of preventing collocation, in an area that was better-suited for WCF installation by virtue of being farther from residential neighborhoods. He suggested that the city reconsider whether the stadium light standard could be reconstructed to enable collocation.

Kelly Marcotulli urged denial, suggesting that there was ample service for Verizon customers; she expressed concerns with environmental and health impacts, killing of pollinators and increased fire risk.

In terms of consideration of the health impacts of wireless communication facilities noted by several of those commenting, Title 47 U.S. Code, Chapter 5, Subchapter III, Part 1 §332.7.B.iv *"Mobile Services – Preservation of Local Zoning Authority"* provides that *"No state or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the (Federal Communication) Commission's regulations concerning such emissions."* Federal law explicitly precludes the city's consideration of potential environmental health impacts of wireless communication facilities through the city's local zoning authority. This preclusion prevents the city from considering health impacts in individual land use decisions and would also prevent the city from imposing a moratorium on facilities of this nature.

In terms of concerns over adequate notice and requests to extend the comment period, the timeline for comment is set in state law and city code at 14 days, and there are timelines established in state and federal law specifically for wireless applications that require that the city reach a decision within a specific number of days or the application must be approved by default. There are no allowances for the city to extend those timelines. Notices making the comment period clear were mailed to all property owners within 200 feet of the property as required by the city's code. That notice can be seen on-line at: <https://gis.ashland.or.us/arcgis/rest/services/planning/PlanningAction2/FeatureServer/0/81634/attachments/111254> . Signs with the notice were also posted on the subject property so as to be visible from the right-of-way, and the applicant conducted a neighborhood meeting prior to making application and provided written notice to all neighbors within 300 feet as required in the city's code. Details of the neighborhood meeting are included in the full application submittal on the city's website at:

<https://gis.ashland.or.us/arcgis/rest/services/planning/PlanningAction2/FeatureServer/0/81634/attachments/110854>, and were publicized in the Ashland News at <https://ashland.news/verizon-to-host-public-meeting-thursday-about-proposed-cell-antenna/> and <https://ashland.news/verizon-cell-tower-meeting-draws-concerned-ashland-residents/>.

Mr. Belsky suggested that the city erred in limiting the height of the AT&T WCF installation on the light standard at Raider Stadium, violating the city design standard that, “*All new wireless communication support structures shall be constructed so as to allow other users to collocate on the facility*” because the additional height would’ve supported collocation here. The Planning Commission decision on that application was based on the application failing to demonstrate the additional height was necessary based on another design standard that, “*Wireless communication facilities shall be installed at the minimum height and mass necessary for its intended use.*” The decision in that application (PA-T1-2021-00158) was appealed to the Planning Commission and to the Land Use Board of Appeals (LUBA) and was upheld. While the ability to revisit that decision has passed, the applicant could certainly further explore what would be necessary to collocate on that facility.

The approval criteria for Site Design Review are detailed in AMC Section 18.5.2.050 as follows:

The following criteria shall be used to approve or deny an application:

- A. **Underlying Zone:** The proposal complies with all of the applicable provisions of the underlying zone (part 18.2), including but not limited to: building and yard setbacks, lot area and dimensions, density and floor area, lot coverage, building height, building orientation, architecture, and other applicable standards.
- B. **Overlay Zones:** The proposal complies with applicable overlay zone requirements (part 18.3).
- C. **Site Development and Design Standards:** The proposal complies with the applicable Site Development and Design Standards of part 18.4, except as provided by subsection E, below.
- D. **City Facilities:** The proposal complies with the applicable standards in section 18.4.6 Public Facilities and that adequate capacity of City facilities for water, sewer, electricity, urban storm drainage, paved access to and throughout the property and adequate transportation can and will be provided to the subject property.
- E. **Exception to the Site Development and Design Standards:** The approval authority may approve exceptions to the Site Development and Design Standards of part 18.4 if the circumstances in either subsection 1 or 2, below, are found to exist.
 - 1. There is a demonstrable difficulty meeting the specific requirements of the Site Development and Design Standards due to a unique or unusual aspect of an existing structure or the proposed use of a site; and approval of the exception will not substantially negatively impact adjacent properties; and approval of the exception is consistent with the stated purpose of the Site Development and Design; and the exception requested is the minimum which would alleviate the difficulty.; or
 - 2. There is no demonstrable difficulty in meeting the specific requirements, but granting the exception will result in a design that equally or better achieves the stated purpose of the Site Development and Design Standards.

The approval criteria for a Conditional Use Permit are described in AMC Section 18.5.4.050.A as follows:

A Conditional Use Permit shall be granted if the approval authority finds that the application meets all of the following criteria, or can be made to conform through the imposition of conditions.

1. That the use would be in conformance with all standards within the zoning district in which the use is proposed to be located, and in conformance with relevant Comprehensive plan policies that are not implemented by any City, State, or Federal law or program.
2. That adequate capacity of City facilities for water, sewer, electricity, urban storm drainage, paved access to and throughout the development, and adequate transportation can and will be provided to the subject property.
3. That the conditional use will have no greater adverse material effect on the livability of the impact area when compared to the development of the subject lot with the target use of the zone, pursuant with subsection 18.5.4.050.A.5, below. When evaluating the effect of the proposed use on the impact area, the following factors of livability of the impact area shall be considered in relation to the target use of the zone.
 - a. Similarity in scale, bulk, and coverage.
 - b. Generation of traffic and effects on surrounding streets. Increases in pedestrian, bicycle, and mass transit use are considered beneficial regardless of capacity of facilities.
 - c. Architectural compatibility with the impact area.
 - d. Air quality, including the generation of dust, odors, or other environmental pollutants.
 - e. Generation of noise, light, and glare.
 - f. The development of adjacent properties as envisioned in the Comprehensive Plan.
 - g. Other factors found to be relevant by the approval authority for review of the proposed use.
4. A conditional use permit shall not allow a use that is prohibited or one that is not permitted pursuant to this ordinance.
5. For the purposes of reviewing conditional use permit applications for conformity with the approval criteria of this subsection, the target uses of each zone are as follows.
 - I. **HC, NM, and SOU.** The permitted uses listed in chapters 18.3.3 Health Care Services, 18.3.5 North Mountain Neighborhood, and 18.3.6 Southern Oregon University District, respectively, complying with all ordinance requirements.

The Wireless Communication Facility Design Standards are detailed in AMC Section 18.4.10.040 as follows:

All wireless communication facilities shall be located, designed, constructed, treated, and maintained in accordance with the following standards.

A. General Provisions

1. All facilities shall be installed and maintained in compliance with the requirements of the Building Code. At the time of building permit application, written statements from the Federal Aviation

Administration (FAA), the Aeronautics Section of the Oregon Department of Transportation, and the Federal Communication Commission (FCC) confirming that the proposed wireless communication facility complies with regulations administered by that agency or that the facility is exempt from regulation.

2. All associated transmittal equipment must be housed in a building, above or below ground level, which must be designed and landscaped to achieve minimal visual impact with the surrounding environment.
3. Wireless communication facilities shall be exempted from height limitations imposed in each zone.
4. Wireless communication facilities shall be installed at the minimum height and mass necessary for its intended use. A submittal verifying the proposed height and mass shall be prepared by a licensed engineer.
5. Lattice towers are prohibited as freestanding wireless communication support structures.
6. Signage for wireless communication facilities shall consist of a maximum of two non-illuminated signs, with a maximum of two square feet each, stating the name of the facility operator and a contact phone number.
7. The applicant is required to remove all equipment and structures from the site and return the site to its original condition, or condition as approved by the Staff Advisor, if the facility is abandoned for a period greater than six months. Removal and restoration must occur within 90 days of the end of the six-month period.
8. All new wireless communication support structures shall be constructed so as to allow other users to collocate on the facility.

B. Preferred Designs. The following preferred designs are a stepped hierarchy, and the standards shall be applied in succession from subsection a to e, with the previous standard exhausted before moving to the following design alternative. For the purpose of chapter 18.4.10, feasible is defined as capable of being done, executed or effected; possible of realization. A demonstration of feasibility requires a substantial showing that a preferred design can or cannot be accomplished.

1. **Collocation.** Where possible, the use of existing wireless communication facilities sites for new installations shall be encouraged. Collocation of new facilities on existing facilities shall be the preferred option. Where technically feasible, collocate new facilities on pre-existing structures with wireless communication facilities in place or on pre-existing towers.
2. **Attached to Existing Structure.** If (a) above is not feasible, wireless communication facilities shall be attached to pre-existing structures, when feasible.
3. **Alternative Structure.** If (a) or (b) above are not feasible, alternative structures shall be used with design features that conceal, camouflage, or mitigate the visual impacts created by the proposed wireless communication facilities.
4. **Freestanding Support Structure.** If (1), (2), or (3) listed above are not feasible, a monopole design shall be used with the attached antennas positioned in a vertical manner to lessens the visual impact compared to the antennas in a platform design. Platform designs shall be used only if it is shown

that the use of an alternate attached antenna design is not feasible.

5. **Lattice towers** are prohibited as freestanding wireless communication support structures.

C. Collocation Standards

1. The collocation feasibility study shall meet all of the following requirements.
 - a. Document that alternative sites have been considered and are technologically unfeasible or unavailable.
 - b. Demonstrate that a reasonable effort was made to locate collocation sites that meet the applicant's service coverage area needs.
 - c. Document the reasons collocation can or cannot occur.
2. Relief from collocation under this section may be granted at the discretion of the approval authority if the application and independent third party analysis demonstrate collocation is not feasible because one or more of the following conditions exist at prospective collocation sites.
 - a. A significant service gap in coverage area.
 - b. Sufficient height cannot be achieved by modifying existing structure or towers.
 - c. Structural support requirements cannot be met.
 - d. Collocation would result in electronic, electromagnetic, obstruction, or other radio frequency interference.

D. Landscaping. The following standards apply to all wireless communication facilities with any primary or accessory equipment located on the ground and visible from a residential use or the public right-of-way.

1. Vegetation and materials shall be selected and sited to produce a drought resistant landscaped area.
2. The perimeter of the wireless communication facilities shall be enclosed with a security fence or wall. Such barriers shall be landscaped in a manner that provides a natural sight obscuring screen around the barrier to a minimum height of six feet.
3. The outer perimeter of the wireless communication facilities shall have a landscaped buffer zone ten feet in width.
4. The landscaped area shall be irrigated and maintained to provide for proper growth and health of the vegetation.
5. One tree shall be required per 20 feet of the landscape buffer zone to provide a continuous canopy around the perimeter of the wireless communication facilities. Each tree shall have a caliper of two inches, measured at breast height, at the time of planting.

E. Visual Impacts

1. Wireless communication facilities shall be located in the area of minimal visual impact within the site which will allow the facility to function consistent with its purpose.
2. Wireless communication facilities, in any zone, must be set back from any residential zone a distance

equal to twice its overall height. The setback requirement may be reduced if, as determined by the approval authority, it can be demonstrated through findings of fact that increased mitigation of visual impact can be achieved within of the setback area. Underground accessory equipment is not subject to the setback requirement.

3. Antennas attached to a pre-existing or alternative structure shall be integrated into the existing building architecturally and to the greatest extent possible shall not exceed the height of the pre-existing or alternative structure.
4. Antennas attached to a pre-existing or alternative structure shall have a non-reflective finish and color that blends with the color and design of the structure to which it is attached.
5. All wireless communication support structures must have a non-reflective finish and color that will mitigate visual impact, unless otherwise required by other government agencies.
6. Exterior lighting for a wireless communication facility is permitted only when required by a federal or state authority.
7. Should it be deemed necessary by the approval authority for the mitigation of visual impact of the wireless communication facility, additional design measures may be required. These may include, but are not limited to: additional camouflage materials and designs, facades, specific colors and materials, masking, and shielding techniques.

Decision

In response to the limits of the Telecommunications Act of 1996, Ashland’s standards regulate the placement, appearance, and impact of wireless communication facilities (WCF) while providing residents with the ability to access and adequately utilize the services that these facilities support. These standards are based in a recognition that, because of the physical characteristics of WCF, the impacts imposed by these facilities affect not only the neighboring residents but also the community as a whole. The standards are intended to ensure that the visual and aesthetic impacts of wireless communication facilities are mitigated to the greatest extent possible, especially in or near residential areas.

For staff, it is first important to emphasize that the key concern most often raised in WCF applications, and a concern raised by a number of commenters here – the environmental health impacts associated with such installations – is explicitly precluded from consideration by federal law. This preclusion applies to moratoria, as well as to individual land use decisions. As such, applications must be carefully considered in terms of the applicable local land use regulations including requirements for Site Design Review approval, specific design standards and in this instance a Conditional Use Permit necessary due to the height proposed screening walls.

Staff would also note to be clear that recently adopted changes to the Ashland Municipal Code with regard to “small cell” wireless facilities installed within the public right-of-way are not applicable to the current request which is located on property belonging to Southern Oregon University.

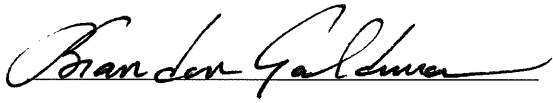
Here, the installation is proposed to be placed on an existing structure, behind an existing screening wall which would be extended to encircle the rooftop perimeter. This wall would entirely conceal the WCF installation on the existing Science Building's rooftop with no associated equipment on the ground, meeting the applicable design standards. The application includes an acoustic report by an engineer which concludes that the predicted noise levels are significantly lower than both the code-allowed noise limits and the existing ambient noise levels, and as such will not contribute to the existing noise environment.

However, the city has retained the services of a qualified, independent third party reviewer who has analyzed the application and determined that the application's collocation study includes insufficient objective evidence to meet the requirements of the collocation standards or show that the proposed site produces acceptable performance and fills the area's coverage/capacity needs. According to the city's third party reviewer William Johnson:

- The analysis submitted by the applicant is silent with regard to mid-band RF coverage which represents roughly 90 percent of the available licensed spectrum. Analysis of the need for the proposed site as well as evaluation of alternative sites is heavily dependent on the propagation limitations of mid-band spectrum, and in Johnson's review there is no information about this important band from the applicant other than to mention that it will be deployed.
- Johnson further notes that there are no trend metrics such as Forward Data Volume (FDV), Average Scheduled Eligible Users (ASEU), and Average Active Connections (AvgAC) that would serve to support claims that a new base station facility is needed to off-load traffic or draw local mobile subscribers onto the new site using mid-band spectrum to free up low-band spectrum.
- Johnson adds that the scale of the RF propagation plots makes it nearly impossible to identify locations where in-building service is needed and how the proposed base station is able to satisfy that need.
- Johnson notes that for alternate site analysis, city staff eyes-on observations have shown that two of the potential collocation sites do not appear to have any existing WCF in place and there is no record of any approved facilities at these locations. Johnson recommends that the applicant revisit the alternate site analysis to ascertain how realistic the alternative sites are to the present application.
- Finally, Johnson notes that the application materials lack supporting documentation to show that existing structure collocation on the new AT&T light standard at Raider Stadium approved in 2017-2018 is not possible for design or loading issues, and while the materials indicate the land owner is unwilling to allow collocation, there is no documentation provided to support this assertion.

After consideration of all information contained in the record, the Staff Advisor finds that the application fails to meet the burden of proof in that the applicant's collocation study/alternative sites analysis is insufficient both in demonstrating a service gap and in demonstrating that collocation or placement on an existing structure are not feasible. Relief from collocation requirements calls for a clear and defensible demonstration both of a service gap in the coverage area and that sufficient height cannot be achieved by modifying existing structures or towers. Here, a service gap has not been clearly demonstrated and while the applicant suggests that the alternative site on the light standard at Raider Stadium is not available, there is insufficient documentation to support that assertion.

On that basis, Planning Action PA-T1-2024-00233 is denied.

A handwritten signature in black ink, reading "Brandon Goldman", written over a horizontal line.

Brandon Goldman, *Director*
Department of Community Development

May 14, 2024

Date

NOTICE OF APPLICATION

PLANNING ACTION: PA-T1-2024-00233

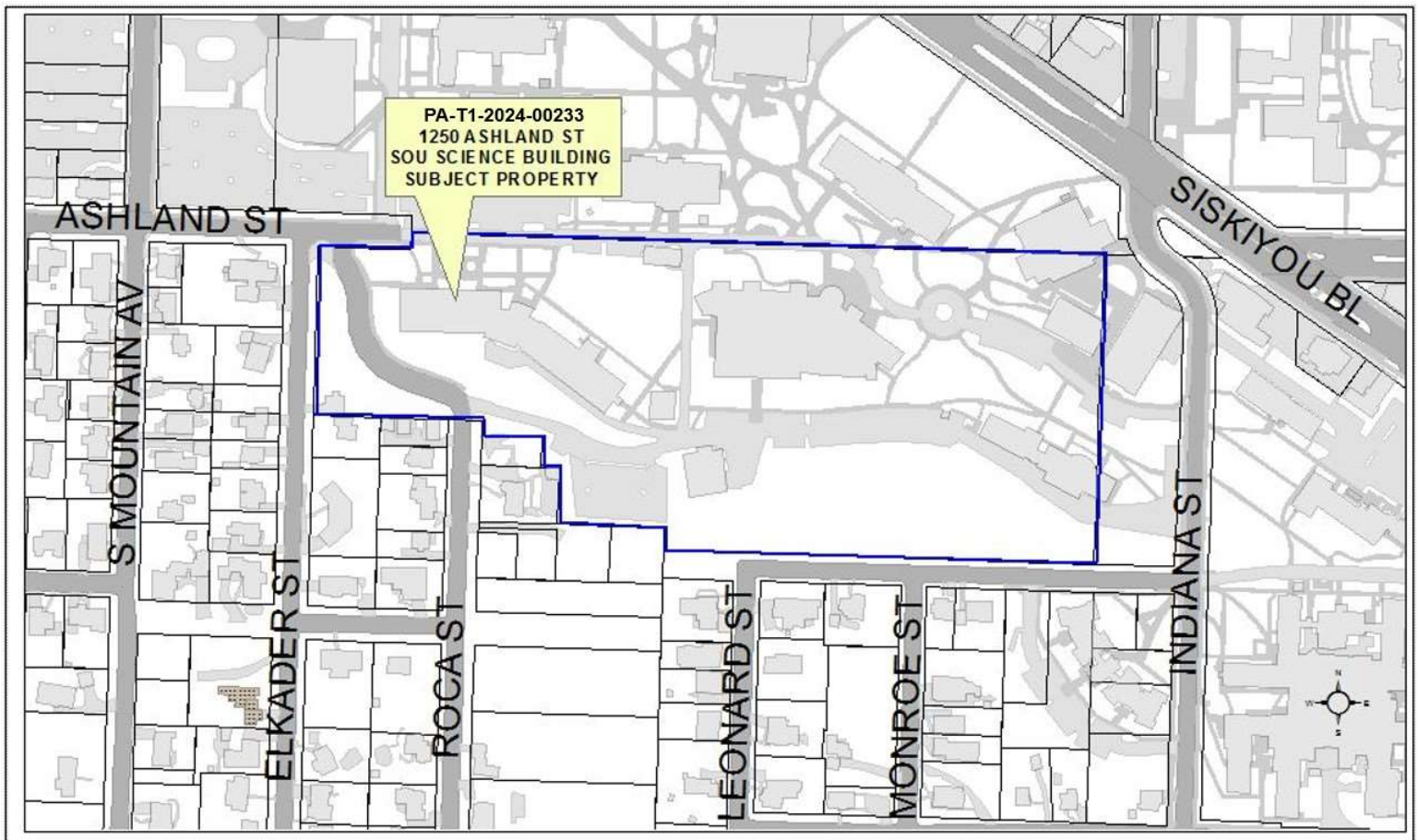
SUBJECT PROPERTY: 1250 Ashland Street (SOU Science Building)

OWNER/APPLICANT: Southern Oregon University/Verizon Wireless

DESCRIPTION: A request for a Site Design Review Permit to install wireless communication facilities (*antennas and associated equipment*) on the roof of the Science Building at 1250 Ashland Street on the Southern Oregon University Campus. The application also includes a request for a Conditional Use Permit because with the installation of panels proposed to screen the wireless communication facility installation, the building height will exceed 40 feet. (*The proposal is the same as one previously approved by the city in PA-2017-01486 but which subsequently expired, and the applicant proposes to comply with the conditions of the prior approval.*) **COMPREHENSIVE PLAN DESIGNATION:** Southern Oregon University District; **ZONING:** SO; **ASSESSOR'S MAP:** 39 1E 15BB; **TAX LOT #:** 100

NOTICE OF COMPLETE APPLICATION: April 12, 2024

DEADLINE FOR SUBMISSION OF WRITTEN COMMENTS: April 26, 2024



COMMUNITY DEVELOPMENT DEPARTMENT

51 Winburn Way
Ashland, Oregon 97520
ashland.or.us

Tel: 541.488.5305
Fax: 541.552.2050
TTY: 800.735.2900

The Ashland Planning Division Staff has received a complete application for the property noted on Page 1 of this notice.

A copy of the application, including all documents, evidence and applicable criteria are available online at "What's Happening in my City" at <https://gis.ashland.or.us/developmentproposals/>. Copies of application materials will be provided at reasonable cost, if requested. Application materials may be requested to be reviewed in-person at the Ashland Community Development & Engineering Services Building, 51 Winburn Way, via a pre-arranged appointment by calling (541) 488-5305 or emailing planning@ashland.or.us.

Any affected property owner or resident has a right to submit written comments within the 14-day comment period to planning@ashland.or.us or to the City of Ashland Planning Division, 51 Winburn Way, Ashland, Oregon 97520 prior to 4:30 p.m. on the deadline date shown on Page 1.

Ashland Planning Division Staff determine if a land use application is complete within 30 days of submittal. Upon determination of completeness, a notice is sent to surrounding properties within 200 feet of the property submitting the application. After the comment period and not more than 45 days from the application being deemed complete, the Planning Division Staff shall make a final decision on the application. A notice of decision is mailed to the same properties within 5 days of decision. An appeal to the Planning Commission of the Planning Division Staff's decision must be made in writing to the Ashland Planning Division within 12 days from the date of the mailing of final decision. (AMC 18.5.1.050.G)

The ordinance criteria applicable to this application are attached to this notice. Oregon law states that failure to raise an objection concerning this application, by letter, or failure to provide sufficient specificity to afford the decision maker an opportunity to respond to the issue, precludes your right of appeal to the Land Use Board of Appeals (LUBA) on that issue. Failure to specify which ordinance criterion the objection is based on also precludes your right of appeal to LUBA on that criterion. Failure of the applicant to raise constitutional or other issues relating to proposed conditions of approval with sufficient specificity to allow this Department to respond to the issue precludes an action for damages in circuit court.

If you have questions or comments concerning this request, please feel free to contact Derek Severson at 541-552-2040 or derek.severson@ashland.or.us

In compliance with the American with Disabilities Act, if you need special assistance to participate in this meeting, please contact the City Administrator's office at 541-488-6002 (TTY phone number 1-800-735-2900). Notification 72 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to the meeting. (28 CFR 35.102.-35.104 ADA Title I).

SITE DESIGN AND USE STANDARDS

18.5.2.050

The following criteria shall be used to approve or deny an application:

- A. **Underlying Zone:** The proposal complies with all of the applicable provisions of the underlying zone (part 18.2), including but not limited to: building and yard setbacks, lot area and dimensions, density and floor area, lot coverage, building height, building orientation, architecture, and other applicable standards.
- B. **Overlay Zones:** The proposal complies with applicable overlay zone requirements (part 18.3).
- C. **Site Development and Design Standards:** The proposal complies with the applicable Site Development and Design Standards of part 18.4, except as provided by subsection E, below.
- D. **City Facilities:** The proposal complies with the applicable standards in section 18.4.6 Public Facilities and that adequate capacity of City facilities for water, sewer, electricity, urban storm drainage, paved access to and throughout the property and adequate transportation can and will be provided to the subject property.
- E. **Exception to the Site Development and Design Standards:** The approval authority may approve exceptions to the Site Development and Design Standards of part 18.4 if the circumstances in either subsection 1 or 2, below, are found to exist.

1. There is a demonstrable difficulty meeting the specific requirements of the Site Development and Design Standards due to a unique or unusual aspect

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of an existing structure or the proposed use of a site; and approval of the exception will not substantially negatively impact adjacent properties; and approval of the exception is consistent with the stated purpose of the Site Development and Design; and the exception requested is the minimum which would alleviate the difficulty.; or

2. There is no demonstrable difficulty in meeting the specific requirements, but granting the exception will result in a design that equally or better achieves the stated purpose of the Site Development and Design Standards.

CONDITIONAL USE PERMITS (See <https://ashland.municipal.codes/LandUse/18.5.4.050>)

A Conditional Use Permit shall be granted if the approval authority finds that the application meets all of the following criteria, or can be made to conform through the imposition of conditions.

1. That the use would be in conformance with all standards within the zoning district in which the use is proposed to be located, and in conformance with relevant Comprehensive plan policies that are not implemented by any City, State, or Federal law or program.
2. That adequate capacity of City facilities for water, sewer, electricity, urban storm drainage, paved access to and throughout the development, and adequate transportation can and will be provided to the subject property.
3. That the conditional use will have no greater adverse material effect on the livability of the impact area when compared to the development of the subject lot with the target use of the zone, pursuant with subsection 18.5.4.050.A.5, below. When evaluating the effect of the proposed use on the impact area, the following factors of livability of the impact area shall be considered in relation to the target use of the zone.
 - a. Similarity in scale, bulk, and coverage.
 - b. Generation of traffic and effects on surrounding streets. Increases in pedestrian, bicycle, and mass transit use are considered beneficial regardless of capacity of facilities.
 - c. Architectural compatibility with the impact area.
 - d. Air quality, including the generation of dust, odors, or other environmental pollutants.
 - e. Generation of noise, light, and glare.
 - f. The development of adjacent properties as envisioned in the Comprehensive Plan.
 - g. Other factors found to be relevant by the approval authority for review of the proposed use.
4. A conditional use permit shall not allow a use that is prohibited or one that is not permitted pursuant to this ordinance.
5. For the purposes of reviewing conditional use permit applications for conformity with the approval criteria of this subsection, the target uses of each zone are as follows.
 - a. **WR and RR.** Residential use complying with all ordinance requirements, developed at the density permitted by chapter 18.2.5 Standards for Residential Zones.
 - b. **R-1.** Residential use complying with all ordinance requirements, developed at the density permitted by chapter 18.2.5 Standards for Residential Zones.
 - c. **R-2 and R-3.** Residential use complying with all ordinance requirements, developed at the density permitted by chapter 18.2.5 Standards for Residential Zones.
 - d. **C-1.** The general retail commercial uses listed in chapter 18.2.2 Base Zones and Allowed Uses, developed at an intensity of 0.35 floor to area ratio, complying with all ordinance requirements; and within the Detailed Site Review overlay, at an intensity of 0.50 floor to area ratio, complying with all ordinance requirements.
 - e. **C-1-D.** The general retail commercial uses listed in chapter 18.2.2 Base Zones and Allowed Uses, developed at an intensity of 1.00 gross floor to area ratio, complying with all ordinance requirements.
 - f. **E-1.** The general office uses listed in chapter 18.2.2 Base Zones and Allowed Uses, developed at an intensity of 0.35 floor to area ratio, complying with all ordinance requirements; and within the Detailed Site Review overlay, at an intensity of 0.50 floor to area ratio, complying with all ordinance requirements.
 - g. **M-1.** The general light industrial uses listed in chapter 18.2.2 Base Zones and Allowed Uses, complying with all ordinance requirements.
 - h. **CM-C1.** The general light industrial uses listed in chapter 18.3.2 Croman Mill District, developed at an intensity of 0.50 gross floor to area ratio, complying with all ordinance requirements.
 - i. **CM-OE and CM-MU.** The general office uses listed in chapter 18.3.2 Croman Mill District, developed at an intensity of 0.60 gross floor to area, complying with all ordinance requirements.
 - k. **CM-NC.** The retail commercial uses listed in chapter 18.3.2 Croman Mill District, developed at an intensity of 0.60 gross floor to

COMMUNITY DEVELOPMENT DEPARTMENT

51 Winburn Way
Ashland, Oregon 97520
ashland.or.us

Tel: 541.488.5305
Fax: 541.552.2050
TTY: 800.735.2900

area ratio, complying with all ordinance requirements.

- I. **HC, NM, and SOU.** The permitted uses listed in chapters 18.3.3 Health Care Services, 18.3.5 North Mountain Neighborhood, and 18.3.6 Southern Oregon University District, respectively, complying with all ordinance requirements.

WIRELESS COMMUNICATION FACILITY DESIGN STANDARDS

18.4.10.040

All wireless communication facilities shall be located, designed, constructed, treated, and maintained in accordance with the following standards.

A. General Provisions

1. All facilities shall be installed and maintained in compliance with the requirements of the Building Code. At the time of building permit application, written statements from the Federal Aviation Administration (FAA), the Aeronautics Section of the Oregon Department of Transportation, and the Federal Communication Commission (FCC) confirming that the proposed wireless communication facility complies with regulations administered by that agency or that the facility is exempt from regulation.
2. All associated transmittal equipment must be housed in a building, above or below ground level, which must be designed and landscaped to achieve minimal visual impact with the surrounding environment.
3. Wireless communication facilities shall be exempted from height limitations imposed in each zone.
4. Wireless communication facilities shall be installed at the minimum height and mass necessary for its intended use. A submittal verifying the proposed height and mass shall be prepared by a licensed engineer.
5. Lattice towers are prohibited as freestanding wireless communication support structures.
6. Signage for wireless communication facilities shall consist of a maximum of two non-illuminated signs, with a maximum of two square feet each, stating the name of the facility operator and a contact phone number.
7. The applicant is required to remove all equipment and structures from the site and return the site to its original condition, or condition as approved by the Staff Advisor, if the facility is abandoned for a period greater than six months. Removal and restoration must occur within 90 days of the end of the six-month period.
8. All new wireless communication support structures shall be constructed so as to allow other users to collocate on the facility.

B. Preferred Designs. The following preferred designs are a stepped hierarchy, and the standards shall be applied in succession from subsection a to e, with the previous standard exhausted before moving to the following design alternative. For the purpose of chapter 18.4.10, feasible is defined as capable of being done, executed or effected; possible of realization. A demonstration of feasibility requires a substantial showing that a preferred design can or cannot be accomplished.

1. **Collocation.** Where possible, the use of existing wireless communication facilities sites for new installations shall be encouraged. Collocation of new facilities on existing facilities shall be the preferred option. Where technically feasible, collocate new facilities on pre-existing structures with wireless communication facilities in place or on pre-existing towers.
2. **Attached to Existing Structure.** If (a) above is not feasible, wireless communication facilities shall be attached to pre-existing structures, when feasible.
3. **Alternative Structure.** If (a) or (b) above are not feasible, alternative structures shall be used with design features that conceal, camouflage, or mitigate the visual impacts created by the proposed wireless communication facilities.
4. **Freestanding Support Structure.** If (1), (2), or (3) listed above are not feasible, a monopole design shall be used with the attached antennas positioned in a vertical manner to lessens the visual impact compared to the antennas in a platform design. Platform designs shall be used only if it is shown that the use of an alternate attached antenna design is not feasible.
5. **Lattice towers** are prohibited as freestanding wireless communication support structures.

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C. Collocation Standards

1. The collocation feasibility study shall meet all of the following requirements.
 - a. Document that alternative sites have been considered and are technologically unfeasible or unavailable.
 - b. Demonstrate that a reasonable effort was made to locate collocation sites that meet the applicant's service coverage area needs.
 - c. Document the reasons collocation can or cannot occur.
2. Relief from collocation under this section may be granted at the discretion of the approval authority if the application and independent third party analysis demonstrate collocation is not feasible because one or more of the following conditions exist at prospective collocation sites.
 - a. A significant service gap in coverage area.
 - b. Sufficient height cannot be achieved by modifying existing structure or towers.
 - c. Structural support requirements cannot be met.
 - d. Collocation would result in electronic, electromagnetic, obstruction, or other radio frequency interference.

D. Landscaping. The following standards apply to all wireless communication facilities with any primary or accessory equipment located on the ground and visible from a residential use or the public right-of-way.

1. Vegetation and materials shall be selected and sited to produce a drought resistant landscaped area.
2. The perimeter of the wireless communication facilities shall be enclosed with a security fence or wall. Such barriers shall be landscaped in a manner that provides a natural sight obscuring screen around the barrier to a minimum height of six feet.
3. The outer perimeter of the wireless communication facilities shall have a landscaped buffer zone ten feet in width.
4. The landscaped area shall be irrigated and maintained to provide for proper growth and health of the vegetation.
5. One tree shall be required per 20 feet of the landscape buffer zone to provide a continuous canopy around the perimeter of the wireless communication facilities. Each tree shall have a caliper of two inches, measured at breast height, at the time of planting.

E. Visual Impacts

1. Wireless communication facilities shall be located in the area of minimal visual impact within the site which will allow the facility to function consistent with its purpose.
2. Wireless communication facilities, in any zone, must be set back from any residential zone a distance equal to twice its overall height. The setback requirement may be reduced if, as determined by the approval authority, it can be demonstrated through findings of fact that increased mitigation of visual impact can be achieved within of the setback area. Underground accessory equipment is not subject to the setback requirement.
3. Antennas attached to a pre-existing or alternative structure shall be integrated into the existing building architecturally and to the greatest extent possible shall not exceed the height of the pre-existing or alternative structure.
4. Antennas attached to a pre-existing or alternative structure shall have a non-reflective finish and color that blends with the color and design of the structure to which it is attached.
5. All wireless communication support structures must have a non-reflective finish and color that will mitigate visual impact, unless otherwise required by other government agencies.
6. Exterior lighting for a wireless communication facility is permitted only when required by a federal or state authority.
7. Should it be deemed necessary by the approval authority for the mitigation of visual impact of the wireless communication facility, additional design measures may be required. These may include, but are not limited to: additional camouflage materials and designs, facades, specific colors and materials, masking, and shielding techniques.

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PUBLIC COMMENT RECEIVED AFTER THE DEADLINE

Michael Sullivan

To: Michael Sullivan
Subject: FW: PA-T1-2024-00233 Public Comment

From: Belle <Belle336@protonmail.com>
Sent: Friday, April 26, 2024 07:49 PM
To: Derek Severson <derek.severson@ashland.or.us>
Subject: FW: PA-T1-2024-00233 Public Comment

[EXTERNAL SENDER]

From: Janet Bell
321 Clay St. #39
Ashland OR

Dear Mr. Severson,

I am using the well thought out text of Mr. Paul Mozina to you with the assumption you will pass it on to all relevant parties.

Please record this public comment regarding Verizon's application PA-T1-2024-00233.

Given that a WCF has already been approved at this location and survived an appeal, I acknowledge that my opposition to Verizon's new application for a rooftop WCF on the SOU Science Building is in vain. Nevertheless, I feel it important to put the reasons for my opposition on the record.

The sanctimonious claims made in the application that RFR emissions from Verizon's new WCF will be below the outdated FCC maximum permissible exposure limits to humans — a "standard" set back in 1996 when the Telecommunications Act supported only the ability to connect a mobile phone to a landline — perpetuate the fraud that meaningful studies of the effects on living things of the levels of RFR emitted by the current technology have been done, and that these ancient (in terms of technological advancements) limits are somehow relevant and protective in today's world. The FCC and the Judicial branch of the USG have long been captured by the Telecom Industry as evidenced by the fact that municipalities are precluded from even considering the effects of RFR emissions on living things when evaluating applications for new WCFs. In the case of the Ashland City Council, they are self-censoring and have utterly failed to openly discuss both sides of the scientific debate regarding RFR maximum permissible exposure limits. Rather, the Council and administrative bureaucracy behind it, are content to act under the color of law by approving these deployments in willful ignorance and disregard for the impacts they may have on living things.

Paul puts in his personal location and I cannot provide that same perspective....He goes on to say "the Ashland Municipal Code does not require any real world test for a significant gap in service and it allows justification for new WCFs based on computer models. The images displayed on pages 7 and 8 of Exhibit 2 show that the goals of this new WCF are to improve the capability of providing coverage in homes and vehicles. Coverage for what? For the Internet of Things (IoT) and streaming data intensive video content? This functionality was not even a glimmer in the eyes of legislators back in 1996 when the TCA was passed, yet the captured FCC and Courts have violated the standard rules of legal interpretation to accede to

Telecom's view that wireless communication services and wireless communication facilities mean what ever they want them to mean. The hypocrisy of allowing a completely wide open and fraudulent reinterpretation of the actual language and meaning of the words used in the 1996 TCA to suit their purposes, while at the same time denying any requirement to revisit the maximum permissible exposure limits shows how utterly bereft of morality and ethics the Congress, FCC and Courts are.

At the second reading of the amendments to AMC CH 16 Telecommunications on April 2, Rola Masri, the Director of Government Outreach for the Environmental Health Trust, reminded the Council that the FCC has failed to respond to the August 13, 2021 decision by the United States Court of Appeals for the DC District (<https://childrenshealthdefense.org/wp-content/uploads/chd-v-fcc-we-won-decision.pdf>).

WILKINS, Circuit Judge: Environmental Health Trust and several other groups and individuals petition for review of an order of the Federal Communications Commission ("the Commission") terminating a notice of inquiry regarding the adequacy of the Commission's guidelines for exposure to radiofrequency radiation. The notice of inquiry requested comment on whether the Commission should initiate a rulemaking to modify its guidelines. The Commission concluded that no rulemaking was necessary. Petitioners argue that the Commission violated the requirements of the Administrative Procedure Act by failing to respond to significant comments. Petitioners also argue that the National Environmental Policy Act required the Commission to issue an environmental assessment or environmental impact statement regarding its decision to terminate its notice of inquiry. We grant the petitions in part and remand to the Commission. The Commission failed to provide a reasoned explanation for its determination that its guidelines adequately protect against the harmful effects of exposure to radiofrequency radiation unrelated to cancer.

The failure — to this day — of the FCC to respond to the remand by the court is a flagrant disregard for the rule-of-law. And still municipalities are not allowed to consider and contest the lack of adequate, non-industry funded, research establishing the safety of the levels of exposure to RFR that living things are being increasingly exposed to when considering WCF applications. It's disgusting.

And there are still some U.S. Courts that apply a strict, and legitimately correct, interpretation of the scope of the language employed in the 1996 TCA. Yet this too is ignored and Telecom, at least here in Ashland, Oregon, is given carte blanc to deploy anything it wants to call wireless communications services.

Here is the Americans For Responsible Tech's analysis of the Flower Hill Decision <https://www.americansforresponsibletech.org/flower-hill-decision>

In a landmark legal decision in July of 2022, Judge Frederic Block, Senior United States District Judge for the Eastern District of New York, found that the Village of Flower Hill, NY, was justified in denying the application of ExteNet (acting as an agent for Verizon Wireless) to place 18 small cell antennas in the Village.

The Judge quoted from the 1996 Telecommunications Act, citing the provision that "nothing in this chapter shall limit or affect the authority of a State or local government or instrumentality thereof over decisions regarding the placement, construction, and modification of personal wireless service facilities."

He noted that other courts have found the Act to be "in many important respects a model of ambiguity or indeed even self-contradiction." Nevertheless, he reasoned, a plain reading of the text supports the claim by the Village that it has acted legally, establishing a strong written record and denying the applications based on legitimate principles.

Most importantly, the Judge ruled that the provisions of the 1996 Act do not necessarily apply to the new uses of wireless to provide broadband and other services, as the FCC claimed in a 2018 Ruling.

Most importantly, the Judge ruled that the provisions of the 1996 Act do not necessarily apply to the new uses of wireless to provide broadband and other services, as the FCC claimed in a 2018 Ruling. "Improved capacity and speed are desirable (and, no doubt, profitable) goals in the age of smartphones," he wrote, "but they are not protected by the Act."

The judge quoted a previous court case, in which the court found that "It is not up to the FCC to construe the [1996 Telecommunications Act] to say something it does not say, nor up to the Court to find broadband communication encompassed by the law."

This decision is at odds with a very confusing decision from the Ninth Circuit in California concerning the legitimacy of the FCC's action and whether or not Congress intended the Telecommunications Act to apply not only to talk and text, but to a broad array of new services. The Flower Hill case is being appealed to the Second Circuit; if the Appeals Court agrees with Judge Block the issue could go to the Supreme Court.

Nevertheless, for the moment, at least in the Eastern District of New York, local governments should consider denying permits for small cell antennas until and unless the applicant can prove that there is a significant gap in phone coverage in the area.

A copy of the judge's decision can be found here <https://casetext.com/case/extenet-sys-v-vill-of-flower-hill>.

It appears sadly true that the municipal corporation doing business as "The City of Ashland, Oregon" will continue to go along to get along and fail to protect the natural rights of the people of Ashland to NOT BE EXPOSED TO UNWANTED AND EXCESSIVE RFR EMISSIONS.

Please stand for the health and well being of the Ashland population.

Janet Bell
321 Clay St. #39
Ashland, OR

THIRD-PARTY REVIEW

WILLIAM P. JOHNSON
RF ENGINEERING CONSULTANT
PO Box 20263
ROCHESTER, NY 14602

April 24, 2024

Mr. Derek Severson, Planning Manager VIA EMAIL
CITY of ASHLAND
51 Winburn Way
Ashland, Oregon 97520

RE: Zoning Permit Application PA-T1-2024-00233.
Acom Consulting/Verizon Wireless Communications Facility
1250 Ashland Street

Dear Mr. Severson,

We have been retained by the City of Ashland to provide radio-frequency (RF) review and recommendations for the subject zoning permit application by Acom Consulting on behalf of Verizon Wireless (collectively “Applicant”) for the Verizon Wireless “Madrone” site. I have reviewed the application materials submitted to date and offer the following observations with the intent to assure that the city planning commission has objective information upon which to evaluate service need for a new facility and how the proposed facility is the least intrusive means to satisfy that service need.

1. Applicant states in several places that the proposed facility is intended to address in-building RF signal coverage, increased user capacity, and off-load of excessive capacity demands on existing neighbor sites.
2. The application materials contain several RF propagation plots that are not labeled for band of operation, but I believe they are representing “low band” (700/850 MHz band) RF coverage. The RF propagation plots are color-coded for “Green” (-85 dBm¹), “Yellow” (-95 dBm), and “Red” (-105 dBm).
3. Applicant typically deploys base station facilities that serve low-band and mid-band signals. When only low-band and mid-band spectrum is deployed, low-band constitutes only about 10% of available licensed spectrum. Mid-band constitutes the remaining 90%.
4. The permit application materials are silent about mid-band RF coverage which, besides being the largest percentage of spectrum, propagates less effectively than low-band and make it a driving factor in base station placement. Analysis of need for the proposed site

¹ The term “dBm” is a reference to power level in decibels with respect to 0.001 Watts. Mathematically dBm is defined as $\text{dBm} = 10 \cdot \log_{10}(\text{Watts} / 0.001)$. In this case the power level of the LTE metric Reference Signal Received Power (RSRP). Where sufficient user capacity is available from the base station, RSRP gives an initial estimate of mobile wireless communication reliability. Less negative values are stronger power levels.

as well as evaluation of alternative sites will depend heavily on the propagation limitations of mid-band spectrum. We have no information about this important band from Applicant other than mention that it will be deployed.

5. Likewise, we learn from Applicant that at least one existing neighbor site is approaching capacity saturation or already at capacity saturation. Traffic off-load from existing saturated sites will be important when evaluating alternate sites or justification for the proposed site. There are no trend metrics such as Forward Data Volume (FDV), Avg Scheduled Eligible Users (ASEU), and Average Active Connections (AvgAC) that would serve to support claims that a new base station facility is needed to off-load traffic or draw local mobile subscribers onto the new site using mid-band spectrum to free up low-band spectrum.
6. The scale of the RF propagation plots makes it nearly impossible to identify locations where in-building service is needed and how the proposed base station is able to satisfy that need. We recommend that RF propagation plots, both for low-band and mid-band, be zoomed in to the target coverage area showing the neighbor site existing coverage and a before/after using the proposed base station facility.
7. For alternate site analysis, we understand from city staff that eyes-on observations show that several of the potential co-location sites do not appear to have any existing antenna support structures in place and there is no record of any approved facilities at some of those locations. We recommend that Applicant revisit the alternate site analysis to ascertain how realistic any of those alternatives are to the present application.
8. The application materials also lack supporting documentation to show that existing structure co-location such as that approved in 2017-2018 is not possible for design or loading issues. There is also no documentation to show that the land owner is unwilling to consider approval of a new structure for purposes of consolidating facilities in a location that already has several vertical light support structures as well as a support pole for AT&T Mobility.

Thank you for the opportunity once again to assist the City of Ashland. Please do not hesitate to let me know if you have any questions or need additional information.

Very truly yours,



William P. Johnson
RF Engineering Consultant

cc. April Lucas via email april.lucas@ashland.or.us

PUBLIC COMMENTS

Michael Sullivan

From: steveb@bisp.net
Sent: Thursday, April 25, 2024 2:02 PM
To: planning
Subject: Re: PA-T1-2024-00233

Follow Up Flag: Follow up
Flag Status: Flagged

[EXTERNAL SENDER]
Greetings,

I am sending this letter in response to the abovementioned application request by Verizon to locate a new Wireless Communication Facility (WCF) atop the Science Building on the SOU campus (PA-T1-2024-00233). After reading through all of the information that I could find, I am dissatisfied with the approach that City has taken with Telcos in the past, regarding their efforts to build new WCFs. I am referring specifically to the City's approval of an AT&T WCF on a new light standard in 2021 near the football field on the SOU campus and Verizon's renewed effort to implement their new WCF atop the Science building, again on the SOU campus.

At the public meeting on the SOU campus some weeks ago, I approached a representative of Acom Consulting and asked as to the reason why the Verizon WCF could not be collocated on the existing AT&T tower located near the SOU football field. He indicated that that structure would be unable to support a second WCF but was unable to provide the reason.

Verizon's Zoning Permit application to the City (PA-T1-2024-00233) contains the results of a colocation study analyzing existing wireless communication facilities in the City. One of the options considered was an existing AT&T WCF located on a light standard near the SOU football field. The collocation feasibility study concluded that "there are no existing wireless communication sites that would meet Verizon's coverage and capacity requirements and states the reasons why collocation cannot occur." With regards to the possible collocation options, page 22 of the application included the following:

>>Colocation Option 4: This colocation option is an 85' AT&T light standard facility - 42.1885, - 122.6901 – that is a reconstructed stadium light standard at Raider Stadium located at 351 Walker Avenue/390 Stadium Street on the Southern Oregon University campus. AT&T proposed a 95-foot replacement stadium light standard, but the City only approved an 85' replacement stadium light standard. AT&T's proposal was approved by the City in 2021.<<

Going back to 2021, I question why the City's Planning Division approved AT&T's proposal (TI-2021-00158), as it appears by all accounts to be out of compliance with item #8 of the General Provisions of the City's Wireless Communication Facility Design Standards, to wit:

"All new wireless communication support structures shall be constructed so as to allow other users to collocate on the facility."

In response to Colocation option #4 indicated above, page 23 of the Zoning Permit Application states the following:

>>(Planning Action TI-2021-00158). Verizon contacted AT&T before it constructed the facility and was advised by AT&T that it is not feasible to collocate on this facility because it is a custom fabricated concrete pole that cannot structurally support an additional wireless communication facility. AT&T rejected any proposal to collocate on the stadium light facility. Verizon asked the City to assist in exploring collocation or replacement stadium light options with AT&T that could accommodate an additional wireless communication facility, but the City advised Verizon that it does not believe it

is appropriate, nor does the City have the authority, to require AT&T to work with Verizon to coordinate the stadium pole construction and see if there is a collocation proposal that will work for both parties. Verizon asked the Southern Oregon University to assist in exploring collocation or replacement stadium light options with AT&T that could accommodate an additional wireless communication facility, but the Southern Oregon University was unwilling to do so. AT&T has since constructed the new stadium light standard. Since Verizon cannot force AT&T to allow for collocation, and the City and the Southern Oregon University are unwilling to require AT&T to do so, this collocation option is not available. As a result, this collocation option is not available.<<

If Verizon did in fact ask the City to intervene on its behalf “to assist in exploring collocation or replacement stadium light options with AT&T that could accommodate an additional wireless communication facility” and the City, in effect, refused that request stating that it “advised Verizon that it does not believe it is appropriate, nor does the City have the authority, to require AT&T to work with Verizon to coordinate the stadium pole construction and see if there is a collocation proposal that will work for both parties,” then why did the City approve AT&T’s request to locate its WCF on the stadium light standard and NOT require AT&T to meet the City’s WCF Design Standard?

Now, it may be true that the City does not have the authority to require AT&T to work with any other Telco to coordinate stadium pole construction or even to see if there is a possible proposal that will work for both parties. However, that position does nothing to address item #8 of the General Provisions of the City’s Wireless Communication Facility Design Standards, “All new wireless communication support structures shall be constructed so as to allow other users to collocate on the facility.”

In 2017, the City of Ashland knew that Verizon wished to build a new WCF atop the Science building on the SOU campus and, in fact, their application to do so was reviewed and approved by the City Planning division at that time. It is also true that Verizon did not act upon the approved planning request for reasons unknown, and the approval subsequently lapsed in 2020.

One year after the lapse of Verizon’s approval, AT&T approached the City Planning Division with a request to locate their new WCF on the SOU football field using a “reconstructed stadium light standard,” submitted in (TI-2021-00158). This request was somehow approved by the City. I have been unable to find any documentation of this planning action on the City website to determine why the City approved this request, as allowing AT&T to do so was in conflict with its own WCF Design Standards.

It is unknown if the City even considered that, on some future date, another Telco (Verizon, for example) might wish to collocate their WCF on the light standard proposed to be used by AT&T and approved by the City. That question has been rendered academic, because the City did not require AT&T to adhere to its established WCF Design Standards. Had it done so, Verizon would now be able to use that location as well. Further, it is important to recognize that the location of the AT&T WCF is not in close proximity to a residential area. By comparison, the SOU Science building is located at the base of Roca canyon which is in close proximity to dozens of residences, and a large number of my neighbors have expressed concerns about electromagnetic radiation that will be generated by this WCF.

With the information that is available to me, I am forced to conclude that the City erred and was irresponsible in authorizing AT&T to mount its WCF on a sub-standard light standard and in violation of its own Design Standards. Because of this, I request that the City of Ashland take a step back before approving Verizon’s latest application to see how the AT&T light standard may be upgraded or replaced to meet the City’s WCF Design Standard, thereby allowing Verizon to collocate their WCF at that location.

Thank you for your consideration.

Steven Belsky
609 Elkader St
Ashland, OR 97520

Michael Sullivan

From: zero <zero.2150@proton.me>
Sent: Wednesday, April 24, 2024 10:12 AM
To: planning
Subject: Please Invest Wisely

Follow Up Flag: Follow up
Flag Status: Completed

[EXTERNAL SENDER]

Hello,

I don't know enough about the 5G issue to have an informed opinion. On behalf of my concerned neighbors - please ensure that you are weighing your investment and development considerations against the potential long-term health consequences.

Thank you

Michael Sullivan

From: Robert McLellan <robert@mclellanwritingteam.com>
Sent: Tuesday, April 23, 2024 4:36 PM
To: planning
Subject: Stop the installation of the 5G Tower at SOU

Follow Up Flag: Follow up
Flag Status: Flagged

[EXTERNAL SENDER]

Dear Ashland Planning Department,

I'm writing to contest the installation of the 5G cellular tower on the SOU campus. We live on South Mountain Ave across from the university and we are concerned with the health issues caused by the 5G technology. If it was across the freeway on open space (like most towers), it would be one thing. But on a campus and so close to a densely populated neighborhood is a major concern for us. We ask that you cancel this project.

Thank you for allowing and encouraging citizen input.

Kind regards,
Robert McLellan

Robert McLellan
President | McLellan Writing Team
Office: 541.488.2270 x1112 | www.mclellanwritingteam.com
Enterprise Storytellers for the Digital Age™

Michael Sullivan

From: Laura McLellan <laura.mcl11@yahoo.com>
Sent: Tuesday, April 23, 2024 10:46 AM
To: planning
Subject: NO CELL TOWER at SOU

Follow Up Flag: Follow up
Flag Status: Flagged

[EXTERNAL SENDER]

To whom it may concern,
I just found out that you are considering putting a cell tower at the university. I live in the neighborhood next to the University, and I am a strong NO for this. As Rathsam and McClure stated in the article at Ashland.news, on April 23, 2024, there is no proof that they are safe. If you research, there are a lot of reputable scientists that show that they are hazardous to our health. This will make our town and neighborhood unsafe, especially for children. I have lived in Ashland for 25 years and it has always been a place that cared more about its people than lining the pockets of big business. I am hoping this administration does the right thing and puts the wellbeing of its citizens above money interest's. We DO NOT need a verizon cell tower in the middle of our neighborhood or on a campus full of young people.
Sincerely, Laura McLellan

From: Marilyn Lindsay <marilynindsay@comcast.net>
Sent: Tuesday, April 23, 2024 09:45 AM
To: Derek Severson <derek.severson@ashland.or.us>
Subject: Re: Verizon's application PA-T1-2024-00233

[EXTERNAL SENDER]

Derek,

Please record this **revised** public comment regarding Verizon's application PA-T1-2024-00233

While cities everywhere are facing this egregious proliferation of WCFs by telecom corporations, I had hoped that Ashland would lead, would be a leader against such corruption. Afterall, prior city council members (1997) had the insight and vision to establish a fiber optic infrastructure – AFN. All the current city council had to do is advance / update this technology to out compete for profit telecom wireless communication facilities (WCFs) in terms of data speed, capacity, security and safety (from both RF radiation, and fire).

It is clear that the current city council had an agenda, from the start. No matter how many citizens gave their time to research and educate them on the ill health effects of RF radiation, the advantage of fiber optic – a safe tech alternative, the CC was determined to pursue their agenda - the internet of things - no matter what the people of Ashland wanted.

The names of all six CC members, who approved our current Telecommunications ordinance, will go down in history. You will be remembered for the destruction to all living organisms that WCFs are known to cause. What a legacy.

Marilyn Lindsay
1487 Windsor Street
Ashland, OR 97520

Michael Sullivan

Subject:

FW: PA-T1-2024-00233 Public Comment

From: Paul Mozina <paulmozina@gmail.com>

Sent: Tuesday, April 23, 2024 08:55 AM

To: Derek Severson <derek.severson@ashland.or.us>

Subject: PA-T1-2024-00233 Public Comment

[EXTERNAL SENDER]

Dear Mr. Severson,

Please record this public comment regarding Verizon's application PA-T1-2024-00233.

Given that a WCF has already been approved at this location and survived an appeal, I acknowledge that my opposition to Verizon's new application for a rooftop WCF on the SOU Science Building is in vain. Nevertheless, I feel it important to put the reasons for my opposition on the record.

The sanctimonious claims made in the application that RFR emissions from Verizon's new WCF will be below the outdated FCC maximum permissible exposure limits to humans — a "standard" set back in 1996 when the Telecommunications Act supported only the ability to connect a mobile phone to a landline — perpetuate the fraud that meaningful studies of the effects on living things of the levels of RFR emitted by the current technology have been done, and that these ancient (in terms of technological advancements) limits are somehow relevant and protective in today's world. The FCC and the Judicial branch of the USG have long been captured by the Telecom Industry as evidenced by the fact that municipalities are precluded from even considering the effects of RFR emissions on living things when evaluating applications for new WCFs. In the case of the Ashland City Council, they are self-censoring and have utterly failed to openly discuss both sides of the scientific debate regarding RFR maximum permissible exposure limits. Rather, the Council and administrative bureaucracy behind it, are content to act under the color of law by approving these deployments in willful ignorance and disregard for the impacts they may have on living things.

My wife and I live up Roca ST, a couple blocks from the SOU Science Building, and we currently enjoy adequate cell coverage when using our iPhones from the existing 4 Verizon WCFs already deployed in the Ashland area. I can stream videos on my iPhone in the basement of our home and most definitely make a 911 phone call from anywhere in our home or on our property. But the Ashland Municipal Code does not require any real world test for a significant gap in service and it allows justification for new WCFs based on computer models. The images displayed on pages 7 and 8 of Exhibit 2 show that the goals of this new WCF are to improve the capability of providing coverage in homes and vehicles. Coverage for what? For the Internet of Things (IoT) and streaming data intensive video content. This functionality was not even a glimmer in the eyes of legislators back in 1996 when the TCA was passed, yet the captured FCC and Courts have violated the standard rules of legal interpretation to accede to Telecom's view that wireless communication services and wireless communication facilities mean what ever they want them to mean. The hypocrisy of allowing a completely wide open and fraudulent reinterpretation of the actual language and meaning of the words used in the 1996 TCA to suit their purposes, while at the same time denying any requirement to revisit the maximum permissible exposure limits shows how utterly bereft of morality and ethics the Congress, FCC and Courts are.

At the second reading of the amendments to AMC CH 16 Telecommunications on April 2, Rola Masri, the Director of Government Outreach for the Environmental Health Trust, reminded the Council that the FCC has failed to respond to the August 13, 2021 decision by the United States Court of Appeals for the DC District (<https://childrenshealthdefense.org/wp-content/uploads/chd-v-fcc-we-won-decision.pdf>).

WILKINS, *Circuit Judge*: Environmental Health Trust and several other groups and individuals petition for review of an order of the Federal Communications Commission ("the Commission") terminating a notice of inquiry regarding the adequacy of the Commission's guidelines for exposure to radiofrequency radiation. The notice of inquiry requested comment on whether the Commission should initiate a rulemaking to modify its guidelines. The Commission concluded that no rulemaking was necessary. Petitioners argue that the Commission violated the requirements of the Administrative Procedure Act by failing to respond to significant comments. Petitioners also argue that the National Environmental Policy Act required the Commission to issue an environmental assessment or environmental impact statement regarding its decision to terminate its notice of inquiry.

We grant the petitions in part and remand to the Commission. The Commission failed to provide a reasoned explanation for its determination that its guidelines adequately protect against the harmful effects of exposure to radiofrequency radiation unrelated to cancer.

The failure — to this day — of the FCC to respond to the remand by the court is a flagrant disregard for the rule-of-law. And still municipalities are not allowed to consider and contest the lack of adequate, non-industry funded, research establishing the safety of the levels of exposure to RFR that living things are being increasingly exposed to when considering WCF applications. It's disgusting.

And there are still some U.S. Courts that apply a strict, and legitimately correct, interpretation of the scope of the language employed in the 1996 TCA. Yet this too is ignored and Telecom, at least here in Ashland, Oregon, is given carte blanc to deploy anything it wants to call wireless communications services.

Here is the Americans For Responsible Tech's analysis of the Flower Hill Decision <https://www.americansforresponsibletech.org/flower-hill-decision>

In a landmark legal decision in July of 2022, Judge Frederic Block, Senior United States District Judge for the Eastern District of New York, found that the Village of Flower Hill, NY, was justified in denying the application of ExteNet (acting as an agent for Verizon Wireless) to place 18 small cell antennas in the Village.

The Judge quoted from the 1996 Telecommunications Act, citing the provision that "nothing in this chapter shall limit or affect the authority of a State or local government or instrumentality thereof over decisions regarding the placement, construction, and modification of personal wireless service facilities."

He noted that other courts have found the Act to be "in many important respects a model of ambiguity or indeed even self-contradiction." Nevertheless, he reasoned, a plain reading of the text supports the claim by the Village that it has acted legally, establishing a strong written record and denying the applications based on legitimate principles.

Most importantly, the Judge ruled that the provisions of the 1996 Act do not necessarily apply to the new uses of wireless to provide broadband and other services, as the FCC claimed in a 2018 Ruling.

Most importantly, the Judge ruled that the provisions of the 1996 Act do not necessarily apply to the new uses of wireless to provide broadband and other services, as the FCC claimed in a 2018 Ruling. "Improved capacity and speed are desirable (and, no doubt, profitable) goals in the age of smartphones," he wrote, "but they are not protected by the Act."

The judge quoted a previous court case, in which the court found that "It is not up to the FCC to construe the [1996 Telecommunications Act] to say something it does not say, nor up to the Court to find broadband communication encompassed by the law."

This decision is at odds with a very confusing decision from the Ninth Circuit in California concerning the legitimacy of the FCC's action and whether or not Congress intended the Telecommunications Act to apply not only to talk and text, but to a broad array of new services. The Flower Hill case is being appealed to the Second Circuit; if the Appeals Court agrees with Judge Block the issue could go to the Supreme Court.

Nevertheless, for the moment, at least in the Eastern District of New York, local governments should consider denying permits for small cell antennas until and unless the applicant can prove that there is a significant gap in phone coverage in the area.

A copy of the judge's decision can be found here <https://casetext.com/case/extenet-sys-v-vill-of-flower-hill>.

It appears sadly true that the municipal corporation doing business as "The City of Ashland, Oregon" will continue to go along to get along and fail to protect the natural rights of the people of Ashland to NOT BE EXPOSED TO UNWANTED AND EXCESSIVE RFR EMISSIONS.

Paul Mozina
767 Roca ST.

Michael Sullivan

From: Elaine Sayre <elaine.sayre3@gmail.com>
Sent: Monday, April 22, 2024 2:26 PM
To: planning
Subject: Science Building Cell Tower

Follow Up Flag: Follow up
Flag Status: Completed

[EXTERNAL SENDER]

Hello,

I recently saw the sign in front of the science building announcing the proposal to install a cell tower on top of the building.

The deadline for input is the 26th, but I just saw the sign and have heard nothing else about it. I request that the deadline be extended and a better effort to inform the neighborhood residents be made.

The science building is in the middle of a residential area. I live across the street from it. I have concerns, health wise. We know that cell towers impact the life around them. Also, there have already been odd towers installed on top of the building along with a twelve foot wall blocking the view of whatever equipment is there. This right smack in the middle of my view out all of the north facing windows of my house.

I am not the only one close that will be affected.

This project should not move forward without more information for those affected and an opportunity to voice our own concerns.

I do not want a cell tower on top of the science building. They can find a place that is not in the middle of a residential area.

I await your reply!

I hope to hear of how other residents are being informed and what we need to do to stop the project.

I was unable to find information on the planning department website. Please send me a link ASAP.

Thank you,
Elaine

Michael Sullivan

From: Derek Severson
Sent: Monday, April 22, 2024 1:51 PM
To: Elaine Sayre
Subject: Re: Science Building Cell Tower

Ms. Sayre,

The timeline for comment is set in state law and city code at 14 days, and there are strict timelines established in state and federal law for wireless applications that require that the city reach a decision within a specific number of days or the application must be approved by default. There are no allowances for the city to extend those timelines. You can submit written comments detailing your concerns by the end of the day (4:30 p.m.) on Friday, April 26th. By commenting, you establish standing to appeal the decision to the Planning Commission.

In preparing comments, you should be aware that federal law prohibits the city from considering the health impacts of wireless service when it complies with federal regulations. Comments which focus on the city's approval criteria, detailed in the public notice linked below, will help city decision makers focus on aspects over which the city has authority.

In addition to the sign posted on the property, notices were mailed to all property owners within 200 feet of the property as required by the city's code. That notice can be seen on-line at:
<https://gis.ashland.or.us/arcgis/rest/services/planning/PlanningAction2/FeatureServer/0/81634/attachments/111254> .

The applicant also conducted a neighborhood meeting prior to making application and provided written notice to all neighbors within 300 feet as required in the city's code. Details of the neighborhood meeting are included in the full application submittal which is available on the city's website at:
<https://gis.ashland.or.us/arcgis/rest/services/planning/PlanningAction2/FeatureServer/0/81634/attachments/110854> , and were publicized in the Ashland News at <https://ashland.news/verizon-to-host-public-meeting-thursday-about-proposed-cell-antenna/> and <https://ashland.news/verizon-cell-tower-meeting-draws-concerned-ashland-residents/> .

We'll add your comments to the record for this matter, and include you on future notices with regard to this application. Thank you for comments.

Derek Severson, Planning Manager

[Pronouns](#) He/him/his



Better Together
City of Ashland

Community Development

51 Winburn Way, Ashland, Oregon 97520

541.552.2040 | TTY 800.735.2900

derek.severson@ashland.or.us

Online ashland.or.us; social media (Facebook @CityOfAshlandOregon | Twitter @CityofAshland)

This email transmission is official business of the City of Ashland, and it is subject to Oregon Public Records Law for disclosure and retention. If you have received this message in error, please contact me at 541.552.2040.

From: Elaine Sayre <elaine.sayre3@gmail.com>

Sent: Saturday, April 20, 2024 08:33 AM

To: Derek Severson <derek.severson@ashland.or.us>

Subject: Science Building Cell Tower

[EXTERNAL SENDER]

Hello Derek,

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The deadline for input is the 26th, but I just saw the sign and have heard nothing else about it.

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This right smack in the middle of my view out all of the north facing windows of my house.

I am not the only one close that will be affected.

This project should not move forward without more information for those affected and an opportunity to voice our own concerns.

I do not want a cell tower on top of the science building. They can find a place that is not in the middle of a residential area.

I await your reply!

I hope to hear of how other residents are being informed and what we need to do to stop the project.

I was unable to find information on the planning department website.

Please send me a link ASAP.

Thank you,

Elaine

FW: City Council Contact Form Submitted

Brandon Goldman <brandon.goldman@ashland.or.us>

Tue 2024-04-02 02:51 PM

To: Planning Commission - Public Testimony <PC-public-testimony@ashland.or.us>

From: City of Ashland, Oregon <administration@ashland.or.us>

Sent: Tuesday, April 02, 2024 1:28 PM

To: City Council <council@ashland.or.us>

Subject: City Council Contact Form Submitted

Full Name: **David DeHaas**

Phone: **2083781234**

Email: coachidaho@gmail.com

Subject: **reject the cell tower ordinance**

Message: **Please ask the applicant to prove with facts of real measurements there "Gap In Coverage". 5G towers are for broadband data and not for cell phone calls. Its a horrible technology and as it is broadband you can reject it outright. I don't see that they have proven they have a "Significant gap in coverage" for cell phone calls. Their maps show no real data. Its made Up. They do this at every application. Reject this.**

APPLICANT'S SUBMITTAL

PA-T1-2024-00233
1250 Ashland Street



Planning Division
51 Winburn Way, Ashland OR 97520
Phone: 541-488-5305 Fax: 541-488-6006
Email: Planning@ashland.or.us

Received 4.1.2024

ZONING PERMIT APPLICATION

PA-T1-2024-00233

FILE #

Better Together

DESCRIPTION OF PROJECT Verizon Wireless Communication Facility

DESCRIPTION OF PROPERTY

Pursuing LEED® Certification? ☐ YES ☒ NO

Street Address 1250 Ashland Street, Ashland, OR 97520

Assessor's Map No. 39 1E 15BB

Tax Lot(s) 0100

Zoning

Comp Plan Designation Southern Oregon University

APPLICANT

Name Verizon Wireless

Phone

E-Mail

Address 5430 NE 122nd Avenue

City Portland

Zip 97230

PROPERTY OWNER

Name Southern Oregon University

Phone 541-552-6888

E-Mail mcnamaraj@sou.edu

Address 351 Walker Avenue

City Ashland

Zip 97520

SURVEYOR, ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OTHER

Title AE Consultant

Name Acom Consulting

Phone

E-Mail

rick.matteson@acomconsultinginc.com

Address 5200 SW Meadows Rd., Ste 150

City Lake Oswego

Zip 97035

Title

Name

Phone

E-Mail

Address

City

Zip

I hereby certify that the statements and information contained in this application, including the enclosed drawings and the required findings of fact, are in all respects, true and correct. I understand that all property pins must be shown on the drawings and visible upon the site inspection. In the event the pins are not shown or their location found to be incorrect, the owner assumes full responsibility. I further understand that if this request is subsequently contested, the burden will be on me to establish:

- 1) that I produced sufficient factual evidence at the hearing to support this request;
- 2) that the findings of fact furnished justifies the granting of the request;
- 3) that the findings of fact furnished by me are adequate; and further
- 4) that all structures or improvements are properly located on the ground.

Failure in this regard will result most likely in not only the request being set aside, but also possibly in my structures being built in reliance thereon being required to be removed at my expense. If I have any doubts, I am advised to seek competent professional advice and assistance.

Sarah Plante

3/28/24

Applicant's Signature

Date

As owner of the property involved in this request, I have read and understood the complete application and its consequences to me as a property owner.

Jim McNamara

Jim McNamara, SOU FMP

3/22/24

Property Owner's Signature (required)

Date

[To be completed by City Staff]

Date Received 4.1.2024

Zoning Permit Type Type 1

Filing Fee \$

OVER ►►



Site Design Review and Conditional Use Permit For a Wireless Communication Facility

1250 Ashland Street
Ashland, OR 97520

March 29, 2024

Applicant:

Verizon Wireless
5230 NE 122nd Avenue
Portland, OR 97230

Applicant Agent:

Mike Unger / Acom Consulting
5200 SW Meadows Road, Suite 150
Lake Oswego, OR 97035
206-604-5538
mikeunger@acomconsultinginc.com

Table of Contents

Table of Contents	2
I. General Information	3
II. Project Overview	4
III. Coverage Needs and Site Selection.....	5
IV. Applicable Regulations	6
Chapter 18.4.10 Wireless Communication Facilities	7
18.4.10.020 Applicability	7
18.4.10.030 Application Submittal Requirements	7
18.4.10.040 Design Standards.....	9
Chapter 18.5.2 Site Design Review.....	14
18.5.2.040 Application Submission Requirements	14
18.5.2.050 Approval Criteria	15
Chapter 18.5.4 Conditional Use Permits	17
18.5.4.050 Approval Criteria	17

Exhibits

1. Zoning Drawings
2. RF Coverage Analysis and Collocation Study
3. Photo Simulations
4. Equipment Specification Sheets
5. Verizon Lease Agreement
6. Neighborhood Meeting Materials
7. Noise Study
8. NIER Report
9. FCC Compliance Assessment
10. Structural Analysis

I. General Information

Owner: Southern Oregon University
351 Walker Avenue
Ashland, OR 97520
Contact: Jim McNamara

Site Address: 1250 Ashland Street, Ashland, OR 97520

Applicant: Verizon Wireless
5430 NE 122nd Ave
Portland, OR 97230

Tax Lot: Tax lot #100 of Map 39 1E 15BB

Parcel Area: 15.17 Acres

Zoning: SOU (Southern Oregon University District)

Request: Site Plan Review and a Conditional Use Permit for a new wireless communication facility

Project Consultant: Acom Consulting, Inc. 5200 SW Meadows Rd., Ste 150
Lake Oswego, OR 97035

Contact: Mike Unger
206-604-5538
mike.unger@acomconsultinginc.com

II. Project Overview

Acom Consulting, Inc. is submitting a Site Design Permit on behalf of Verizon to install a wireless communication facility (antennas and associated equipment) on the roof of the Science Building at 1250 Ashland Street on the Southern Oregon University campus. The wireless communication facility (WCF) will be fully screened from public view by extending the existing mechanical screen wall around the antennas and equipment.

Although it is unclear if a Conditional Use Permit is required, the application includes a request for a Conditional Use Permit for the installation of panels to screen the wireless communication facility, which will exceed the 40' building height limit. It is unclear if a Conditional Use Permit is required because WCFs are exempt from the height restrictions in each zone. See AMC 18.4.10.040.A.3. Nonetheless, the application includes a Conditional Use Permit because the proposed screen panels will exceed 40'.

The City of Ashland previously approved Verizon's proposed wireless facility in 2018 (PA #2017-01486), but that land use approval expired in 2020. This current proposal is the same proposal approved by the City in 2018.

The current proposal will comply with the conditions of approval imposed by the City when it approved the 2018 proposal based on the following:

- The proposal includes a screening wall matching the existing partial screening wall, with FRP paneling at antenna areas, which is extended around the full perimeter of the building roof.
- The proposed equipment cabinet, battery cabinet, and antennas do not extend above the level of the screen wall.
- The vertical conduit attached to the building façade shall be painted to match the existing building.
- There will be no new exterior lighting in conjunction with the proposal.
- No associated equipment, other than the existing power transformers and generator, will be placed on the ground.
- Prior to use of the WCF, the applicant will paint, texture, or otherwise treat the proposed screening wall in a non-reflective finish and color to match the existing screening wall.

III. Coverage Needs and Site Selection

Verizon seeks to address a lack of coverage and capacity in the City of Ashland. The proposed WCF is designed to provide additional services to customers in and around the Southern Oregon University campus and improve service capacity, thereby improving overall system performance. If additional wireless facilities, including the proposed wireless facility, are not built soon to provide more capacity, Verizon's existing sites will exhaust their capacity and no longer be able to provide service to customers in the area. With the data use trends increasing rapidly, additional wireless facilities are greatly needed for the Ashland area. With the installation of the proposed wireless facility, Verizon is committed to providing quality wireless services to the City of Ashland for years to come.

Verizon constructs wireless communication facilities at carefully selected locations. The need for service was determined by market demand, coverage, and capacity requirements for a specific geographic area and the need to provide continuous coverage from one site to another. The following factors are considered when identifying the need and location of a new wireless facility:

1. Coverage. An antenna site must be located where the radio frequency broadcasts provide adequate coverage within any significant coverage gap. The RF engineer must consider the coverage objectives for the site and the terrain in and around the area to be covered. Since radio frequency broadcasts travel in a straight line and diminish as they travel further away from the antennas, placing an antenna site near the center of the desired coverage area is generally best. However, in certain cases, the search ring may be located away from the center of the desired coverage area due to the existing coverage, the surrounding terrain, or other features that might affect the radio frequency broadcasts, like buildings or sources of electrical interference.
2. Capacity. Capacity refers to the technological limitation of a wireless communication facility to provide communication. Mobile phones and wireless devices transmit to and receive radio frequency signals from antennas at wireless communication facilities. Antennas can transmit and receive a finite amount of signal – the capacity. When capacity is reached, busy signals on phones result, and data transmission is lost. Monitoring of each wireless facility is continuous, and the data collected is analyzed for planning to prevent overloading. Projections based on the data allow Verizon to plan, design, permit, and construct new facilities or modify existing wireless communication facilities before reaching or exceeding capacity, which can result in a loss of coverage.
3. Clutter. Verizon's antennas must "clear the clutter" in the area. Trees, buildings, and other natural and built obstacles adversely affect the radio frequencies used in Verizon's systems. Radio frequencies do not penetrate mountains, hills, rocks, or metal. Therefore, antennas must be installed above the "clutter" to provide high-quality communications services in the desired coverage areas. In addition, if the local code

requires us to accommodate additional carriers on the structure, the structure must be even higher to allow the other carriers' antennas to clear the clutter.

4. Call Handoff. The antenna site must be located where the radio broadcasts from this site will allow seamless call handoff with adjacent sites. "Call handoff" is a feature of a wireless communications system that allows an ongoing telephone conversation to continue uninterrupted as the user travels from the coverage area of one antenna site into the coverage area of an adjacent antenna site. This requires coverage overlap for a sufficient distance and/or time to support the handoff mechanism.
5. Quality of Service. Users of wireless communications services want to use their services where they live, work, commute, and play, including indoors. Verizon's coverage objectives include providing indoor coverage in areas with residences, businesses, and indoor recreational facilities.
6. Radio Frequencies Used by System. The designs of telecommunications systems will vary greatly based on the radio frequencies used by the carrier. If the carrier uses radio frequencies in the 850 MHz to 950 MHz range, the radio signals will travel further and penetrate buildings better than the radio frequencies in the 1900 MHz band. Thus, Verizon needs more antennas in a given area to support technologies that use the 1900 MHz band.
7. Enhanced 911 (E911) Requirements. In addition to providing improved service to Verizon customers, the proposed antenna location is needed to meet FCC requirements for Enhanced 911 (E911) service. The wireless E911 program is divided into two phases. Phase I requires wireless carriers, upon request from a local Public Safety Answering Point (PSAP), to report the telephone number of a wireless 911 caller and the location of the antenna that received the call. Phase II of the E911 program requires wireless carriers to provide far more precise location information, within 50 to 100 meters in most cases.

A comprehensive radio frequency coverage analysis and collocation study is provided as Exhibit 2.

IV. Applicable Regulations

The proposal is subject to the provisions of Ashland's land use regulations, including Chapter 18.4.10 Wireless Communication Facilities and Chapter 18.5.2 Site Design Review. Although it is unclear if a Conditional Use Permit is required, if it is required, the proposal is subject to Chapter 18.5.4 Conditional Use Permit.

Chapter 18.4.10 Wireless Communication Facilities

18.4.10.020 Applicability

A. All installation of wireless communication systems shall be subject to the requirements of this section in addition to all applicable Site Development and Design Standards. Installations of wireless communication systems are subject to the following review procedures.

Zoning Designations	Attached to Existing Structures	Alternative Structures	Freestanding Support Structures
SOU	Site Review	CUP	CUP

Response: The WCF is proposed to be attached to an existing structure within the SOU zoning district. Therefore, the proposal is subject to Site Review.

18.4.10.030 Application Submittal Requirements

A. A photo of each of the major components of a similar installation, including a photo montage of the overall facility as proposed.

Response: Photo simulations of the proposed WCF are provided as Exhibit 3. Specification sheets of the proposed equipment (antennas and cabinets) are provided as Exhibit 4.

B. Exterior elevations of the proposed wireless communication facility at a scale of at least one inch equals ten feet.

Response: Sheets A-3 and A-3.1 of the drawings set (Exhibit 1) show all exterior elevations consistent with the scale requirements.

C. A set of manufacturer's specifications of the support structure, antennas, and accessory buildings with a listing of materials being proposed, including colors of the exterior materials.

Response: Specification sheets of the proposed equipment (antennas and cabinets) with a list of materials and colors for the exterior materials being proposed are provided as Exhibit 4. A structural analysis of the rooftop is attached as Exhibit 10.

D. A site plan indicating all structures, land uses, and zoning designation within 150 feet of the site boundaries, or 300 feet if the height of the structure is greater than 80 feet.

Response: Sheet A-1 of the drawing set (Exhibit 1) is an overall site plan showing all structures, land uses, and zoning designations within 150 feet of the site boundary.

E. A map that includes the following information.

1. The coverage area of the proposed wireless communication facility.
2. A map showing the existing and approved wireless communication facility sites operated by the applicant, and all other wireless communication facilities within a five-mile radius of the proposed site.

Response: The RF Analysis and Collocation Study (Exhibit 2) provides a coverage map for the proposed WCF and shows all wireless communication facilities within a five-mile radius of the proposed site.

F. Details and specifications for exterior lighting.

Response: No exterior lighting is proposed for the WCF.

G. A collocation feasibility study that adequately indicates collocation efforts were made and states the reasons collocation can or cannot occur addressing the collocation standards in 18.4.10.040.C.

Response: The application includes a collocation study analyzing existing wireless communication facilities in the City, which is part of the RF Analysis and Collocation Study attached as Exhibit 2. The collocation study concluded that there are no existing wireless communication sites that would meet Verizon's coverage and capacity requirements and states the reasons why collocation cannot occur.

H. For applications requesting approval of installation of new wireless communication facilities that are not collocated on a structure used by one or more wireless communications providers, the applicant shall submit, along with the standard application fee, an additional fee to reimburse the City for the cost of having the application materials reviewed by an independent contractor. The contractor must provide objective advice based on professional qualifications and experience in telecommunication/radio frequency engineering, structural engineering, assessment of electromagnetic fields, telecommunications law, and other related fields of expertise. The fee for this independent analysis of application materials shall be in an amount established by resolution of the City Council.

Response: The applicant will provide an additional fee to reimburse the City for the costs of reviewing the application.

I. A copy of the lease agreement for the proposed site showing that the agreement does not preclude collocation.

Response: Verizon's lease agreement with the University is provided as Exhibit 5. The lease agreement does not preclude future collocation on the rooftop.

J. Documentation detailing the general capacity of the tower in terms of the number and type of antennas it is designed to accommodate.

Response: The proposed WCF will be located on a rooftop, not a tower. The applicant's WCF installation will not preclude other WCFs from locating on the building in the future.

K. Any other documentation the applicant feels is relevant to comply with the applicable design standards.

Response: The applicant has provided a noise study (Exhibit 7) demonstrating compliance with relevant noise standards and a NIER report (Exhibit 8) and FCC Compliance Assessment (Exhibit 9) documenting the applicant's compliance with federal wireless power standards.

L. Documentation that the applicant has held a local community meeting to inform members of the surrounding area of the proposed wireless communication facility. Meeting documentation shall include all of the following.

1. A copy of the mailing list to properties within 300 feet of the proposed facility.
2. A copy of the notice of community meeting, mailed one week prior to the meeting.
3. A copy of the newspaper ad placed in a local paper one week prior to the meeting.
4. A summary of issues raised during the meeting.

Response: A neighborhood meeting was held on March 28, 2024. The mailing list, meeting notice, newspaper notice, and summary of issues raised are provided as Exhibit 6.

18.4.10.040 Design Standards

All wireless communication facilities shall be located, designed, constructed, treated, and maintained in accordance with the following standards.

A. General Provisions.

1. All facilities shall be installed and maintained in compliance with the requirements of the Building Code. At the time of building permit application, written statements from the Federal Aviation Administration (FAA), the Aeronautics Section of the Oregon Department of Transportation, and the Federal Communication Commission (FCC) confirming that the proposed wireless communication facility complies with regulations administered by that agency or that the facility is exempt from regulation.

Response: The applicant will comply with all building code requirements. The applicant will provide compliance documents from the FAA, ODA, and FCC.

2. All associated transmittal equipment must be housed in a building, above or below ground level, which must be designed and landscaped to achieve minimal visual impact with the surrounding environment.

Response: The proposed WCF will be located on the rooftop of the University's Science Building. All the equipment will be screened behind a screen wall. The proposed screen wall will be painted to match the existing partial screen wall on the rooftop. Exhibit 3 is a photo simulation of the proposed facility.

3. Wireless communication facilities shall be exempted from height limitations imposed in each zone.

Response: It is unclear if a Conditional Use Permit is required because WCFs are exempt from the height restrictions pursuant to this code section. Nonetheless, the application includes a Conditional Use Permit because the proposed screen panels will exceed 40'.

4. Wireless communication facilities shall be installed at the minimum height and mass necessary for its intended use. A submittal verifying the proposed height and mass shall be prepared by a licensed engineer.

Response: The proposed WCF is the minimum height and bulk necessary to meet Verizon's coverage and capacity requirements. The antennas are eight feet tall and will be behind a 10-foot screen wall that matches the existing screen wall on the rooftop.

5. Lattice towers are prohibited as freestanding wireless communication support structures.

Response: The proposal does not include a freestanding wireless communication support structure or a lattice tower.

6. Signage for wireless communication facilities shall consist of a maximum of two non-illuminated signs, with a maximum of two square feet each, stating the name of the facility operator and a contact phone number.

Response: Only federally required signage will be provided, and the signage will comply with these requirements. The proposed signage is provided on Sheet A-7 Signage Information of the zoning drawings (Exhibit 1)

7. The applicant is required to remove all equipment and structures from the site and return the site to its original condition, or condition as approved by the Staff Advisor, if the facility is abandoned for a period greater than six months. Removal and restoration must occur within 90 days of the end of the six-month period.

Response: The applicant will comply with the removal requirement.

8. All new wireless communication support structures shall be constructed so as to allow other users to collocate on the facility.

Response: The applicant is not constructing a new support structure. The applicant's rooftop WCF will not preclude other wireless communication providers from locating on the rooftop in the future.

B. Preferred Designs. The following preferred designs are a stepped hierarchy, and the standards shall be applied in succession from subsection a to e, with the previous standard exhausted before moving to the following design alternative. For the purpose of chapter 18.4.10, feasible is defined as capable of being done, executed or effected; possible of realization. A demonstration of feasibility requires a substantial showing that a preferred design can or cannot be accomplished.

1. Collocation. Where possible, the use of existing wireless communication facilities sites for new installations shall be encouraged. Collocation of new facilities on existing facilities shall be the preferred option. Where technically feasible, collocate new facilities on pre-existing structures with wireless communication facilities in place or on pre-existing towers.
2. Attached to Existing Structure. If (a) above is not feasible, wireless communication facilities shall be attached to pre-existing structures, when feasible.
3. Alternative Structure. If (a) or (b) above are not feasible, alternative structures shall be used with design features that conceal, camouflage, or mitigate the visual impacts created by the proposed wireless communication facilities.

4. Freestanding Support Structure. If (1), (2), or (3) listed above are not feasible, a monopole design shall be used with the attached antennas positioned in a vertical manner to lessens the visual impact compared to the antennas in a platform design. Platform designs shall be used only if it is shown that the use of an alternate attached antenna design is not feasible.
5. Lattice towers are prohibited as freestanding wireless communication support structures.

Response: The applicant considered the preferred designs consistent with the stepped hierarchy in this section. As explained in the RF Analysis and Collocation Study attached as Exhibit 2, there are no existing wireless communication facilities, pre-existing towers, or pre-existing structures with wireless communication facilities in place available for collocation that can meet Verizon's significant coverage and capacity gap in the City. Therefore, the collocation option is not feasible. The proposed WCF complies with this section because it will be attached to an existing structure, the second preferred option.

C. Collocation Standards.

1. The collocation feasibility study shall meet all of the following requirements.
 - a. Document that alternative sites have been considered and are technologically unfeasible or unavailable.
 - b. Demonstrate that a reasonable effort was made to locate collocation sites that meet the applicant's service coverage area needs.
 - c. Document the reasons collocation can or cannot occur.
2. Relief from collocation under this section may be granted at the discretion of the approval authority if the application and independent third party analysis demonstrate collocation is not feasible because one or more of the following conditions exist at prospective collocation sites.
 - a. A significant service gap in coverage area.
 - b. Sufficient height cannot be achieved by modifying existing structure or towers.
 - c. Structural support requirements cannot be met.
 - d. Collocation would result in electronic, electromagnetic, obstruction, or other radio frequency interference.

Response: A collocation study consistent with the requirements of 18.4.10.040 (C) has been provided (Exhibit 2). The collocation study demonstrates that alternative sites were considered and are technologically unfeasible or unavailable, reasonable efforts were made to locate collocation sites that meet Verizon's significant coverage and capacity gap in the City, and explains why collocation on an existing wireless communication facility, pre-existing tower or pre-existing structure with wireless communication facilities in place cannot occur for one or more of the reasons set forth in subsection C.2.

D. Landscaping. The following standards apply to all wireless communication facilities with any primary or accessory equipment located on the ground and visible from a residential.

Response: The proposed WCF will be located on the rooftop. There will be no ground equipment, so landscaping is not required.

E. Visual Impacts.

1. Wireless communication facilities shall be located in the area of minimal visual impact within the site which will allow the facility to function consistent with its purpose.

Response: The proposed WCF will be located in the area of minimal visual impact within the site because it will be fully screened from public view. The existing mechanical screen wall on the roof will be extended to visually conceal the facility. The proposed WCF will not extend above the existing height of the building.

2. Wireless communication facilities, in any zone, must be set back from any residential zone a distance equal to twice its overall height. The setback requirement may be reduced if, as determined by the approval authority, it can be demonstrated through findings of fact that increased mitigation of visual impact can be achieved within the setback area. Underground accessory equipment is not subject to the setback requirement.

Response: The applicant is not proposing to construct a new support structure. The proposed location on the rooftop of the Science Building is approximately 280 feet from the nearest residentially zoned property, well more than a distance equal to twice its overall height.

3. Antennas attached to a pre-existing or alternative structure shall be integrated into the existing building architecturally and to the greatest extent possible shall not exceed the height of the pre-existing or alternative structure.

Response: The proposed WCF will be integrated into the existing building architecturally and fully concealed by extending the existing mechanical equipment screening around the

rooftop. The proposed WCF will not exceed the height of the building. Photo simulations of the proposed facility are included as Exhibit 3.

4. Antennas attached to a pre-existing or alternative structure shall have a non-reflective finish and color that blends with the color and design of the structure to which it is attached.

Response: The antennas will be fully concealed by extending the existing mechanical equipment screening around the rooftop, and will have a finish and color that blends with the color and design of the building.

5. All wireless communication support structures must have a non-reflective finish and color that will mitigate visual impact, unless otherwise required by other government agencies.

Response: A new support structure is not proposed.

6. Exterior lighting for a wireless communication facility is permitted only when required by a federal or state authority.

Response: No exterior lighting is proposed.

7. Should it be deemed necessary by the approval authority for the mitigation of visual impact of the wireless communication facility, additional design measures may be required. These may include, but are not limited to: additional camouflage materials and designs, facades, specific colors and materials, masking, and shielding techniques.

Response: The applicant understands that the City can request additional visual mitigation methods. Nonetheless, the proposed WCF will be fully concealed by extending the existing mechanical equipment screening around the rooftop.

Chapter 18.5.2 Site Design Review

18.5.2.040 Application Submission Requirements

B. Site Design Review Information. In addition to the general information required for site design review, the applicant shall provide the following information:

1. Basic Plan Information

Response: The basic plan information is provided on the applicant's zoning drawing set (Exhibit 1).

2. Site Analysis Map

Response: Relevant site analysis map information is provided on the applicant's zoning drawing set (Exhibit 1).

3. Proposed Site Plan

Response: Relevant site plan information is provided on the applicant's zoning drawing set (Exhibit 1).

4. Architectural Drawings

Response: Architectural drawings, including building elevations, are provided in the zoning drawing set (Exhibit 1).

5. Preliminary Grading and Drainage Plan

Response: The project will not require any site grading or drainage improvements.

6. Erosion Control Plan

Response: The project will not cause any ground disturbance. Erosion control is not required.

7. Landscape and Irrigation Plans

Response: The proposed wireless facility will be on the Science Building rooftop. There is no ground equipment. Therefore, no landscaping is required.

8. Narrative

Response: The applicant has provided a narrative document demonstrating compliance with relevant criteria.

18.5.2.050 Approval Criteria

An application for Site Design Review shall be approved if the proposal meets the criteria in subsections A, B, C, and D below. The approval authority may, in approving the application, impose conditions of approval, consistent with the applicable criteria.

A. Underlying Zone

The proposal complies with all of the applicable provisions of the underlying zone (part 18.2), including but not limited to: building and yard setbacks, lot area and dimensions, density and floor area, lot coverage, building height, building orientation, architecture, and other applicable standards.

Response: Wireless communication facilities are allowed in the Southern Oregon University (SO) district, subject to the provisions of Chapter 18.4.10 and Site Design Review. The proposed WCF complies with the SO district requirements and the applicable provisions of Chapter 18.4.10.

B. Overlay Zones

The proposal complies with applicable overlay zone requirements (part 18.3).

Response: The site is not within an overlay zone.

C. Site Development and Design Standards

The proposal complies with the applicable Site Development and Design Standards of part 18.4, except as provided by subsection E, below.

Response: Wireless Communication Facilities are subject to the provisions of Chapter 18.4.10. The applicant has demonstrated compliance with the provisions of 18.4.10.

D. City Facilities

The proposal complies with the applicable standards in section 18.4.6 Public Facilities, and that adequate capacity of City facilities for water, sewer, electricity, urban storm drainage, paved access to and throughout the property, and adequate transportation can and will be provided to the subject property.

Response: The proposed WCF complies with the Public Facility provisions of Chapter 18.4.6. It will be located on an existing building on the Southern Oregon University campus. No access improvements or landscaping are required. The WCF is unstaffed. A Verizon technician will visit it approximately once a month. Power and telco are the only facilities required, both of which are available to the Science Building.

E. Exception to the Site Development and Design Standards

The approval authority may approve exceptions to the Site Development and Design Standards of part 18.4 if the circumstances in either subsection 1, 2, or 3, below, are found to exist.

1. There is a demonstrable difficulty meeting the specific requirements of the Site Development and Design Standards due to a unique or unusual aspect of an existing structure or the proposed use of a site; and approval of the exception will not substantially negatively impact adjacent properties; and approval of the exception is consistent with the stated purpose of the Site Development and Design; and the exception requested is the minimum which would alleviate the difficulty;
2. There is no demonstrable difficulty in meeting the specific requirements, but granting the exception will result in a design that equally or better achieves the stated purpose of the Site Development and Design Standards; or
3. There is no demonstrable difficulty in meeting the specific requirements for a cottage housing development, but granting the exception will result in a design that equally or better achieves the stated purpose of section 18.2.3.090.

Response: The applicant is not requesting an exception to the Site Development standards.

Chapter 18.5.4 Conditional Use Permits

Although it is unclear if a Conditional Use Permit is required, the application includes a request for a Conditional Use Permit for the installation of panels to screen the proposed WCF because the building height limit in the SO zone is 40 feet, and the added screening panels will exceed this height. The conditional use permit only considers the height due to the screening wall, rather than the WCF installation itself.

18.5.4.050 Approval Criteria

1. That the use would be in conformance with all standards within the zoning district in which the use is proposed to be located, and in conformance with relevant Comprehensive plan policies that are not implemented by any City, State, or Federal law or program.

Response: As demonstrated through the findings for WCFs (section 18.4.10) and Site Design Review (section 18.5.2), the proposal is consistent with the standards of the zoning district and relevant comprehensive plan policies. Wireless communication facilities are exempt from height restrictions in each zone pursuant to subsection 18.4.10.040.A.3. Nonetheless, the application includes a Conditional Use Permit request because the proposed screen panels will exceed 40'. The conditional use proposal is limited to the extension of the existing mechanical screening around the rooftop which is necessary to fully conceal the proposed WCF. The existing building is 39.1' tall. The existing mechanical equipment on the rooftop is 61.9' tall. The existing screen wall is 10' tall (49.1' above ground). The applicant proposes to match the height and appearance of the existing screen wall.

2. That adequate capacity of City facilities for water, sewer, electricity, urban storm drainage, paved access to and throughout the development, and adequate transportation can and will be provided to the subject property.

Response: The conditional use request is to extend the existing mechanical screen wall around the rooftop to fully conceal the WCF. There will be no impact on existing City facilities.

3. That the conditional use will have no greater adverse material effect on the livability of the impact area when compared to the development of the subject lot with the target use of the zone, pursuant with subsection 18.5.4.050.A.5, below. When evaluating the effect of the proposed use on the impact area, the following factors of livability of the impact area shall be considered in relation to the target use of the zone.

- a. Similarity in scale, bulk, and coverage.
- b. Generation of traffic and effects on surrounding streets. Increases in pedestrian, bicycle, and mass transit use are considered beneficial regardless of capacity of facilities.
- c. Architectural compatibility with the impact area.
- d. Air quality, including the generation of dust, odors, or other environmental pollutants.
- e. Generation of noise, light, and glare.
- f. The development of adjacent properties as envisioned in the Comprehensive Plan.
- g. Other factors found to be relevant by the approval authority for review of the proposed use.

Response: The proposed extension of the existing screen wall will have no greater adverse material effect on the livability of the impact area and will in fact minimize the visual impact of the proposed WCF. The proposed extension of the existing screen wall will match the size and appearance of the existing screen wall. The expanded screen will not impact the development of the surrounding areas, impact air quality, generate any noise, light, or glare, and is architecturally compatible with the area.

4. A conditional use permit shall not allow a use that is prohibited or one that is not permitted pursuant to this ordinance.

Response: Screen walls are not a prohibited use. WCFs are permitted in the SO district, subject to the provisions of Chapter 18.4.10 and Site Design Review.

5. For the purposes of reviewing conditional use permit applications for conformity with the approval criteria of this subsection, the target uses of each zone are as follows.

I. HC, NM, and SOU. The permitted uses listed in chapters 18.3.3 Health Care Services, 18.3.5 North Mountain Neighborhood, and 18.3.6 Southern Oregon University District, respectively, complying with all ordinance requirements.

Response: The proposed screen walls conform with the approval criteria under 18.3.6 Southern Oregon University District. Wireless Communication Facilities are permitted uses in the SO district subject to Chapter 18.4.10. The proposed screen walls conform with the approval criteria of the SO district because they are part of a permitted use and will mitigate the impacts of the proposed WCF by concealing the WCF.



March 11, 2024

5430 NE 122nd Avenue, Portland, OR 97230

To City of Ashland
Community Development
20 East Main St,
Ashland, OR 97520

I am writing to explain the criteria we used in selecting our proposed cell site that Verizon Wireless calls "Madrone" and demonstrate that Verizon Wireless considered collocation options for this new facility on existing towers and existing structures with pre-existing wireless communication facilities in place consistent with Ashland Municipal Code Chapter 18.4.10. Verizon Wireless has built a communication network to provide wireless services, which include voice, data, and enhanced 911 emergency services in the City of Ashland, Oregon.

There are two main drivers that prompt the need for a new cell site. One is coverage and the other is capacity.

Coverage is the need to expand wireless service into an area that either has no service or bad service. The request for service often comes from customers or emergency personnel.

Capacity is the need for more wireless resources. Cell sites have a limited amount of resources (in terms of spectrum, number of antennas, radios and basebands) to handle voice calls, data connections and data volume. When these limits are reached, user experience quickly degrades. This could mean customers may no longer be able to make/receive calls nor be able to browse the internet. It could also mean that webpages will be very slow to download. We utilize sophisticated programs that use current usage trends to forecast future capacity needs. A good capacity cell site needs to be in the center of the user population which ensures even traffic distribution around the cell. A typical cell site is configured in a pie shape, with each slice (aka. sector) holding 33% of the resources. Optimal performance is achieved when traffic is evenly distributed across the 3 sectors.

For this project, the proposed cell site is designed to address both coverage and capacity related deficiencies. Currently, the City has some significant areas where we do not have adequate in-building coverage. Also, our existing site "Ashland" is overloaded with traffic causing our customers experience a slow data speed. Our objective for this new site "Madrone" is to improve in-building coverage and to offload traffic from site "Ashland" to provide high-speed data for our customers.

Verizon Wireless previously obtained approval from the City for this same rooftop wireless facility proposed in this case in 2018 (PA #2017-01486), but that land use approval expired in 2020. Since the 2018 approval expired, the coverage and capacity related deficiencies have worsened. The current proposal is the same proposal approved by the City in 2018. Although

the City approved this same proposal in 2018, Verizon Wireless performed a new collocation feasibility analysis based on updated information.

Site Location, Coverage Objectives & Collocation Feasibility

Verizon Wireless is working on improving its existing wireless communications network. The new wireless communication facility must be located within the applicant's search ring parameters to provide the required service to fulfill the applicant's gap in coverage and capacity. Irrespective of the City's collocation requirements, Verizon Wireless first considers collocating on existing towers or pre-existing structures with wireless communication facilities in place within the search area. If the existing collocation options are technologically unfeasible or unavailable, then Verizon will consider collocating the new facility on an existing structure. If the existing collocation options are technologically unfeasible or unavailable, Verizon will consider siting the facility on a new tower.

As part of the site search process for this proposal, we identified and evaluated four collocation options.

Collocation Option 1: This collocation option is a Towerco 120' wireless tower (110' RC) - 42.1750, -122.6679 - located at 255 Mistletoe Road. As shown on Figure 5, this option does not satisfy Verizon's coverage and capacity objectives for this site. This collocation option is not within the search ring area for this site. It is also too close to an existing site (LITHIA), which will result in the coverage overlapping with the existing sites. As a result, this collocation option does not provide any new coverage inside buildings or cars to fill the coverage gap in the targeted area.

Collocation Option 2: This collocation option is an approximate 25' rooftop with existing wireless communication facilities - 42.1852, -122.6719 – located at 2290 Ashland Street. As shown on Figure 6, this option does not satisfy Verizon's coverage and capacity objectives for this site. This collocation option is not within the search ring area for this site. It is also too close to an existing site (LITHIA), which will result in the coverage overlapping with the existing sites. As a result, this collocation option does not provide any new coverage inside buildings or cars to fill the coverage gap in the targeted area.

Collocation Option 3: This collocation option is an approximate 25' rooftop with existing wireless communication facilities - 42.2022, -122.7133 – located at 30 W Hershey. As shown on Figure 7, this option does not satisfy Verizon's coverage and capacity objectives for this site. This collocation option is not within the search ring area for this site. It is also too close to an existing site (ASHLAND), which will result in the coverage overlapping with the existing sites. As a result, this collocation option does not provide any new coverage inside buildings or cars to fill the coverage gap in the targeted area.

Collocation Option 4: This collocation option is an 85' AT&T light standard facility - 42.1885, -122.6901 – that is a reconstructed stadium light standard at Raider Stadium located at 351 Walker Avenue/390 Stadium Street on the Southern Oregon University campus. AT&T proposed a 95-foot replacement stadium light standard, but the City only approved an 85' replacement stadium light standard. AT&T's proposal was approved by the City in 2021

(Planning Action TI-2021-00158). Verizon contacted AT&T before it constructed the facility and was advised by AT&T that it is not feasible to collocate on this facility because it is a custom fabricated concrete pole that cannot structurally support an additional wireless communication facility. AT&T rejected any proposal to collocate on the stadium light facility. Verizon asked the City to assist in exploring collocation or replacement stadium light options with AT&T that could accommodate an additional wireless communication facility, but the City advised Verizon that it does not believe it is appropriate, nor does the City have the authority, to require AT&T to work with Verizon to coordinate the stadium pole construction and see if there is a collocation proposal that will work for both parties. Verizon asked the Southern Oregon University to assist in exploring collocation or replacement stadium light options with AT&T that could accommodate an additional wireless communication facility, but the Southern Oregon University was unwilling to do so. AT&T has since constructed the new stadium light standard. Since Verizon cannot force AT&T to allow for collocation, and the City and the Southern Oregon University are unwilling to require AT&T to do so, this collocation option is not available. As a result, this collocation option is not available.

Since none of the collocation options are feasible or available, the proposed rooftop location is the only option available and feasible to satisfy Verizon's coverage and capacity objectives for this site. This rooftop option is the preferred design option if no collocation options are feasible consistent with AMC 18.4.10.040.B and was previously approved by the City. As shown in Figure 4, it will provide a significant improvement to the coverage inside buildings and cars in the targeted area. Additionally, once this new site "Madrone" comes on air we will reduce the footprint of site "Ashland" so it is not overloaded anymore. Therefore, our customers will experience better coverage and data speed while they are on our network.

Design Criteria

To analyze our network design, Verizon Wireless uses a proprietary Radio Frequency prediction tool to predict the signal strength and analyze our network design. In the coverage plot:

Green represents a level of service adequate for providing reliable coverage inside a building.
Yellow represents a level of service adequate for providing reliable coverage outdoors or inside a car.

Red represents a level of service adequate for providing reliable coverage outdoors.

No color represents unreliable signal strength, may not be capable of reliably making and holding a call depending on environment. In our evaluation, figure 3 shows the coverage of our existing sites in the town of Ashland as seen with our prediction tool. Figure 4 shows the coverage with our proposed tower. Figure 5 thru 7 are the coverage with the first 3 collocation options.

Height Criteria

Picking the correct height for a new wireless communication facility is essential as it will determine if it will be able to provide adequate new coverage in the area. For this proposed facility, we need at least 44 feet centerline in order to ensure that the signal can get over the trees to the southeast of the proposed site. As Figure 9 (Point analysis) shows, most of the trees are almost 40 feet high in the southeast direction within a mile of the proposed site.

Evaluation Results

Figure 1 shows our search area map. Figure 2 shows all existing and planned Verizon sites within a 5-mile radius of our candidate. Figure 3 clearly shows we have some areas where we do not have good coverage inside buildings or cars in the town of Ashland, Oregon. Figure 4 shows that with our proposed site will provide additional coverage inside buildings or cars. It will also offload traffic from our site "Ashland" which is overloaded causing data speed to be slow in the town. Figures 5 thru 7 (Options 1-3) demonstrate that the colocation options are outside the search ring area and the coverage is overlapping with our existing sites as these collocations are too close to our existing sites. They also hardly provide any new coverage inside buildings or cars. Figure 8 shows Existing Registered Wireless Sites 5-Mile Radius.

Summary

Our proposed location places the cell site in a location that will significantly improve the existing coverage, add new inbuilding/cars coverage and offload our existing site. Therefore, it will help to create a quality network that will have better data speed as expected by Verizon Wireless customers. The proposed "Madrone" site is an essential communication facility for public service as part of Verizon Wireless' communication network providing Enhanced 911 services as well as serving many governmental agencies and emergency responders.

Regards,

Ertaz Islam
RF Design
Verizon Wireless
Pacific Northwest Region

Figure 1: Search area map

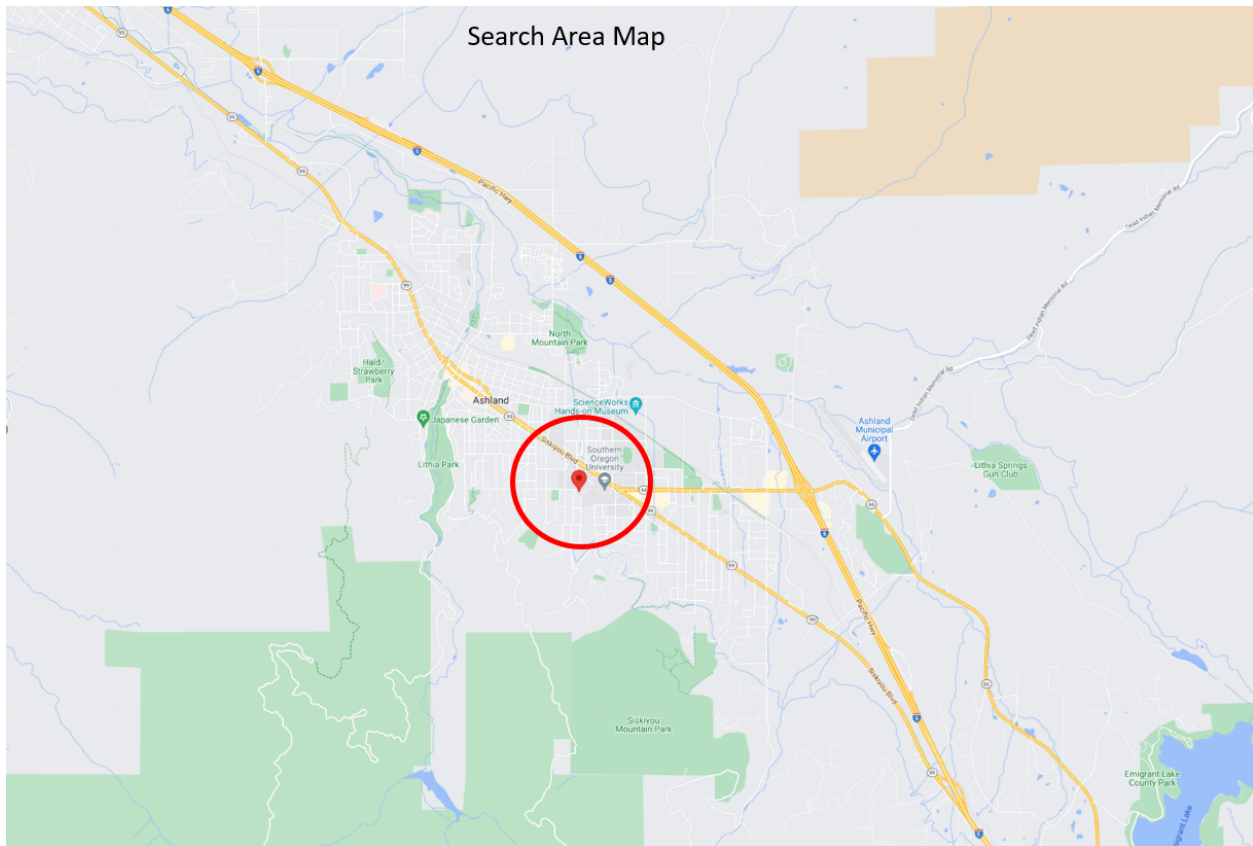


Figure 2: All existing and planned Verizon sites within a 5-mile radius of our candidate

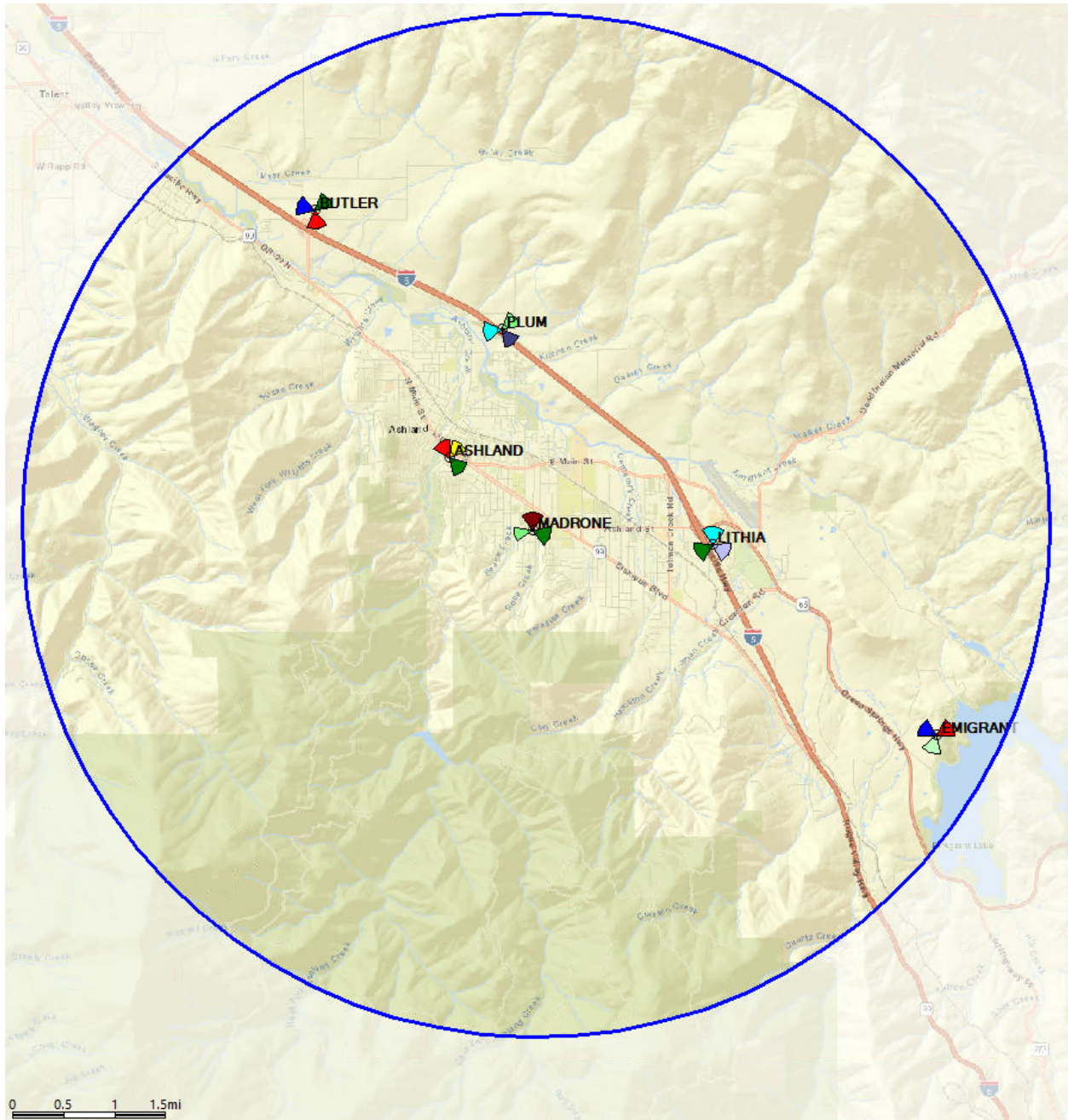


Figure 3: Current coverage

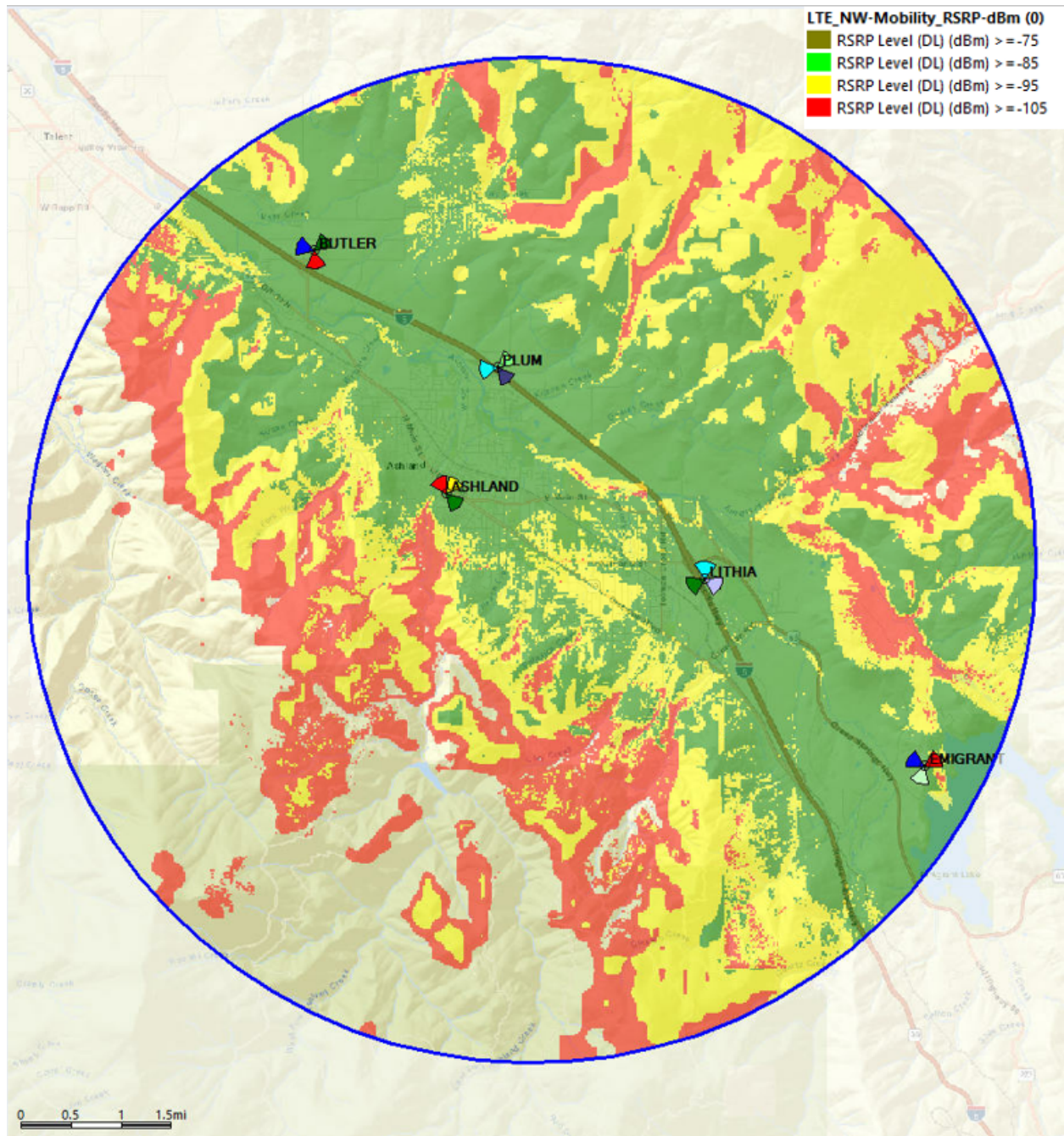


Figure 4: Coverage with our proposed site

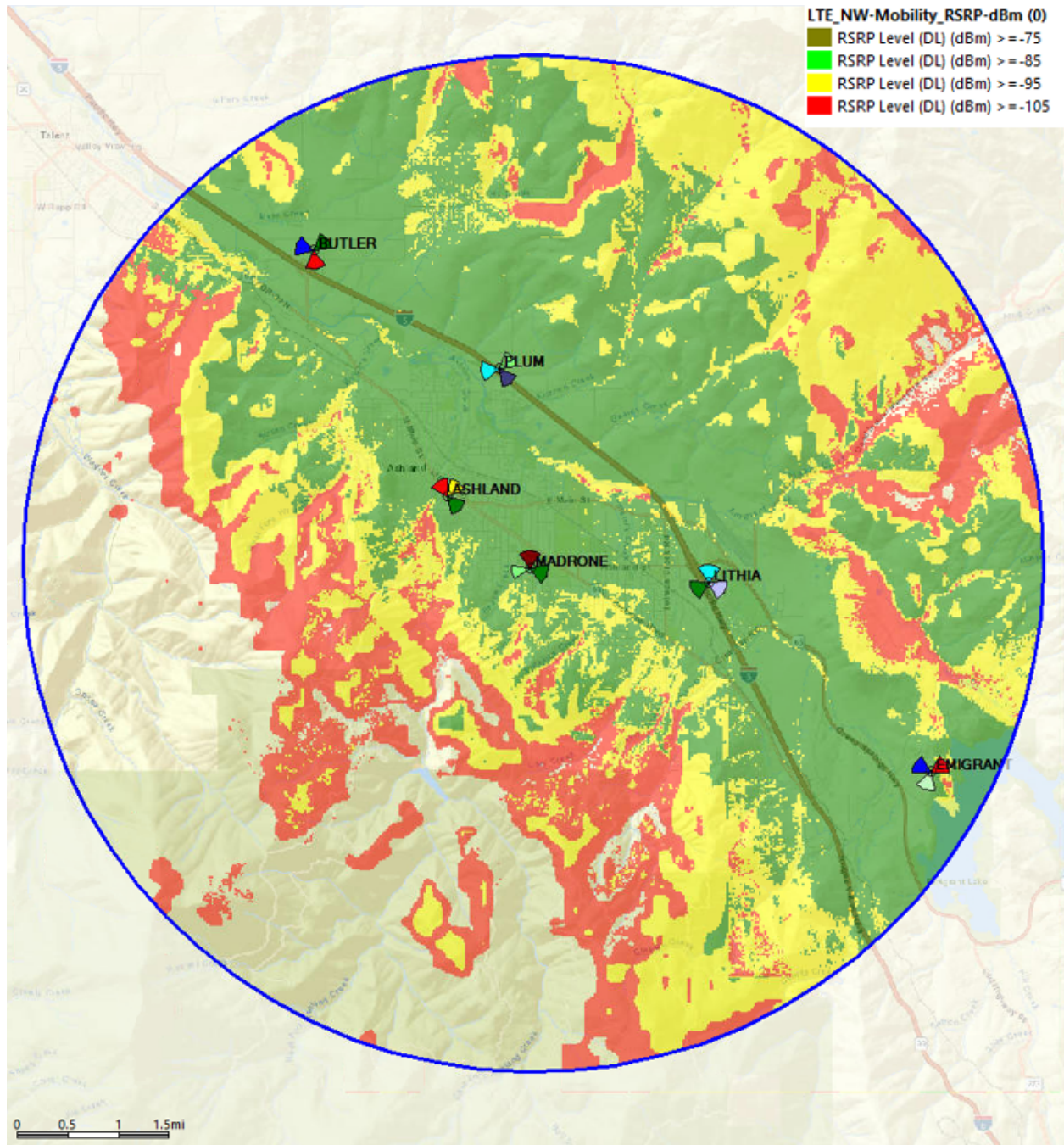


Figure 5: Coverage with 120' tower @ 255 Mistletoe Road

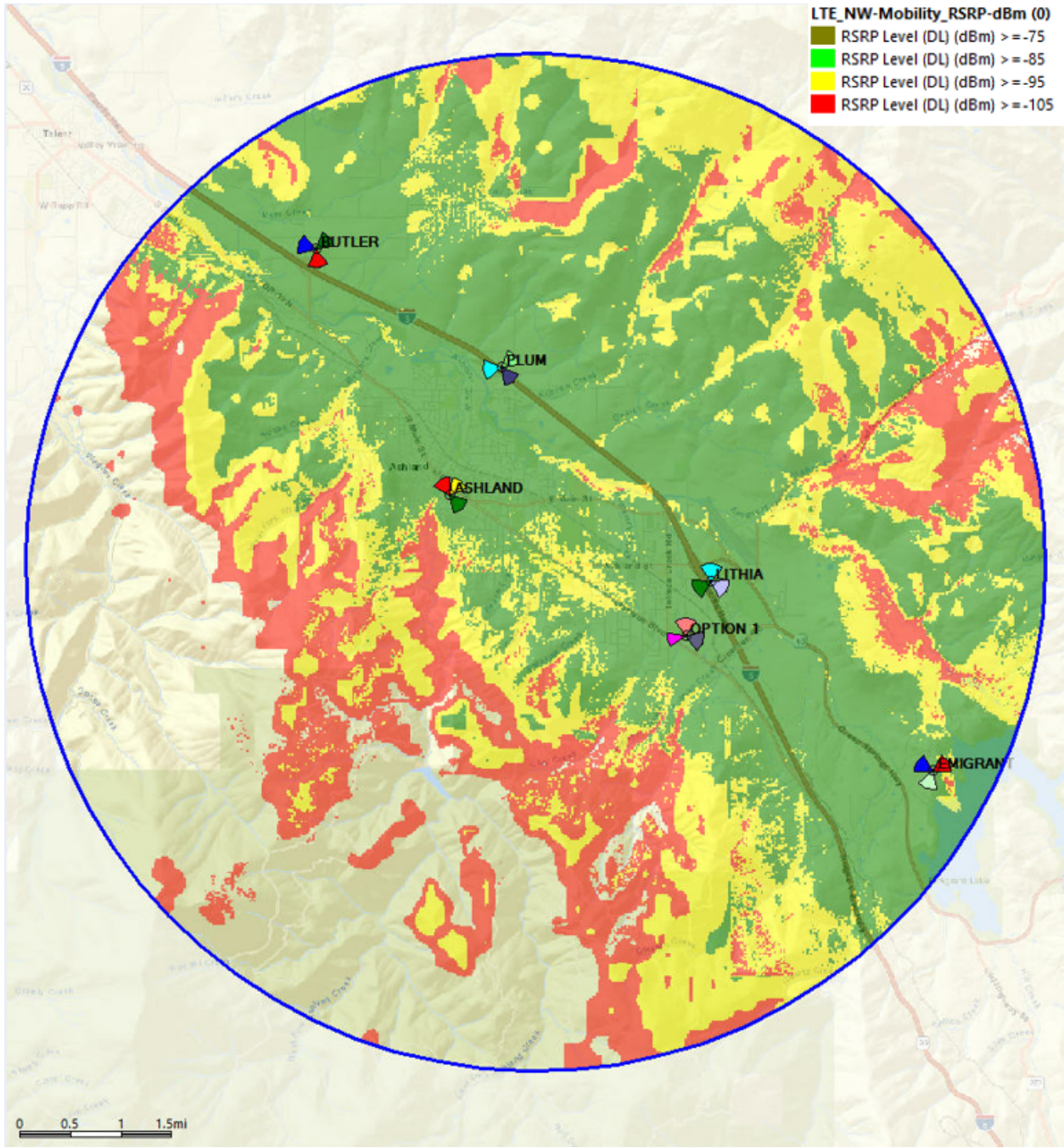


Figure 6: Coverage with 25' CL (Rooftop) @ 2290 Ashland Street

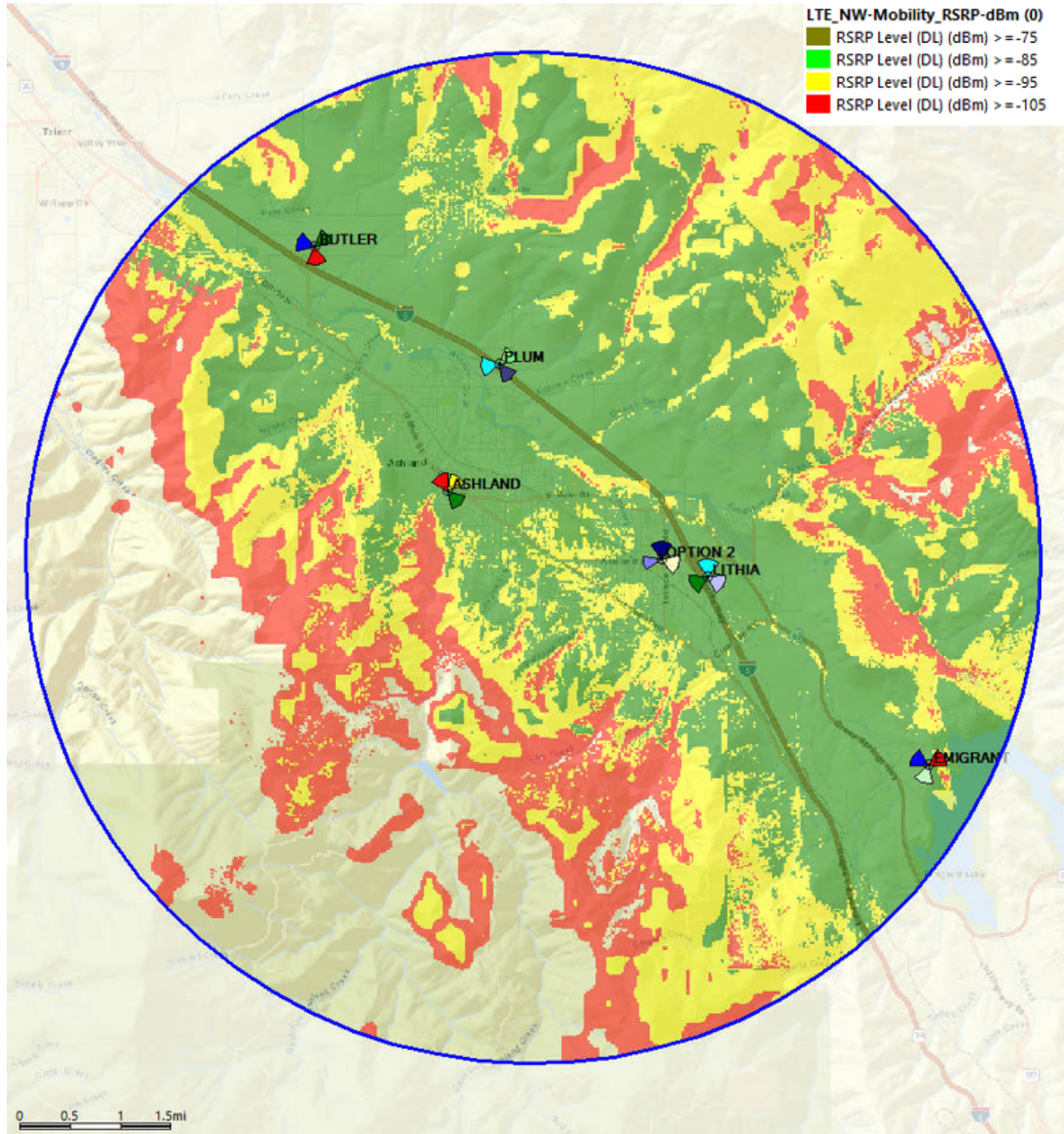


Figure 7: Coverage with 25' CL (Rooftop) @ 30 W Hershey

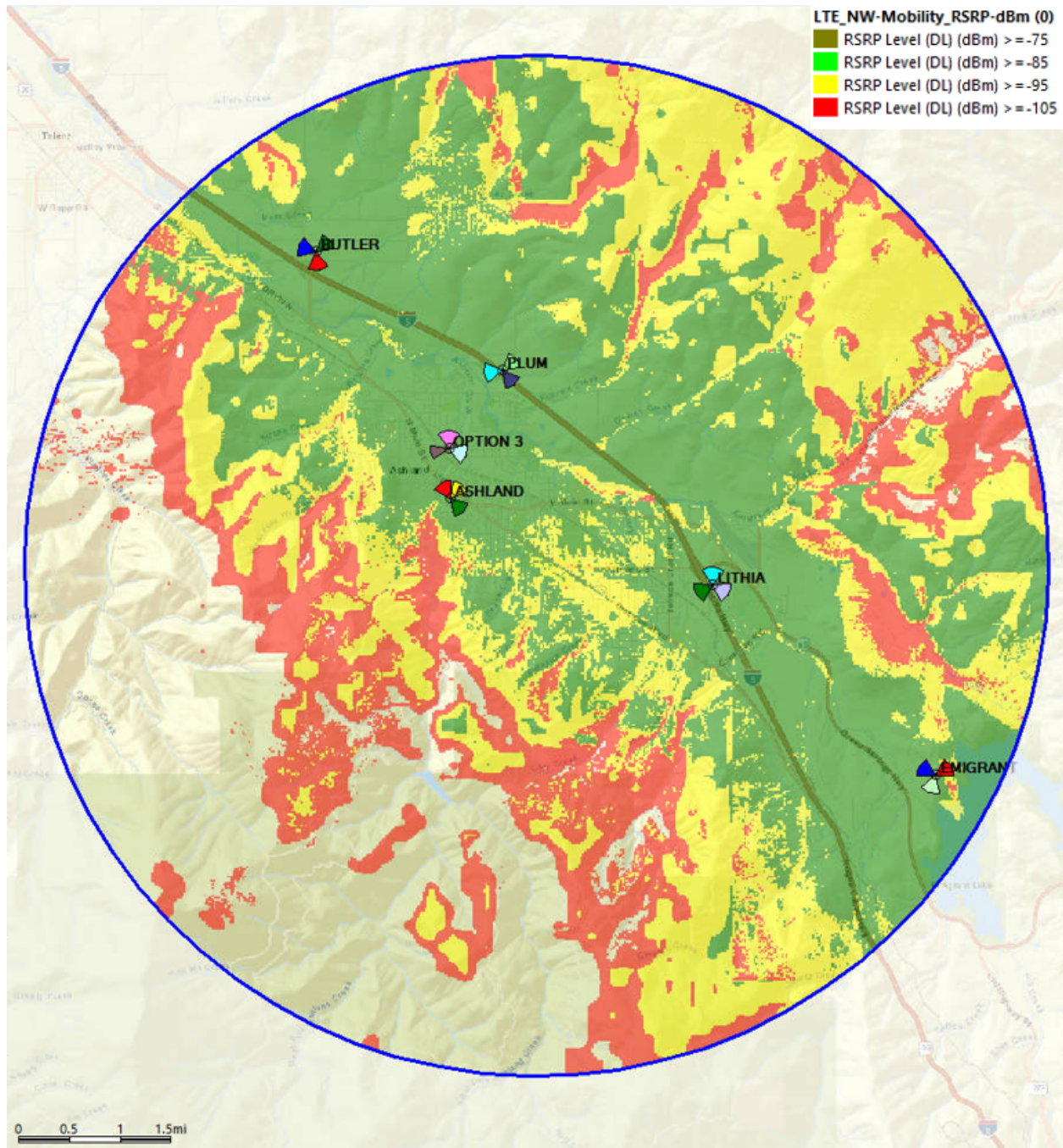


Figure 8: Existing Registered Wireless Sites 5-Mile Radius

SOURCE: ASR REGISTRATION FCC DATABASE

Green shows existing Verizon Cell Sites.
Yellow shows the proposed Madrone Location
Pink show colocation options in the search area
Purple show Colocation options addressed in letter

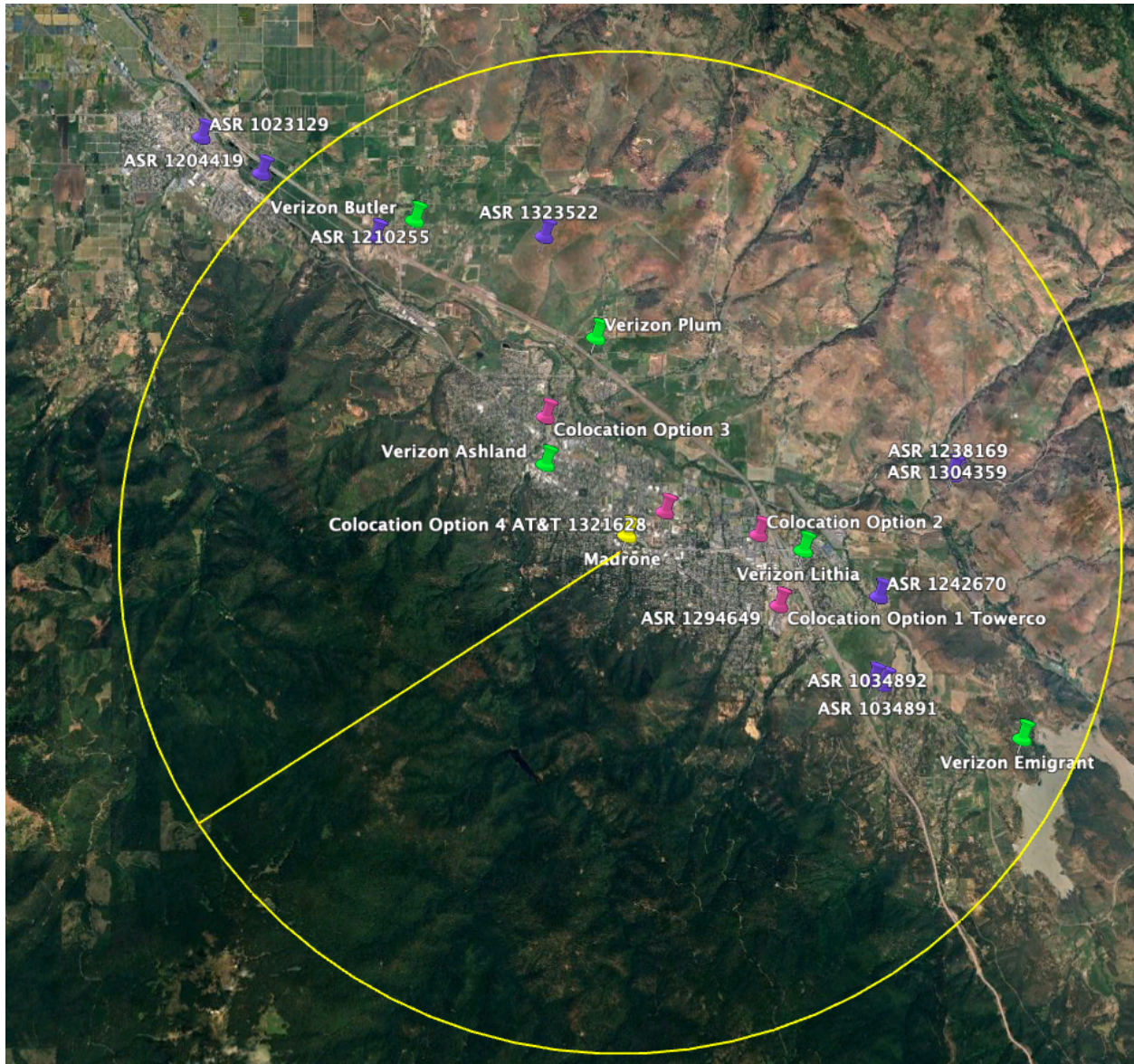
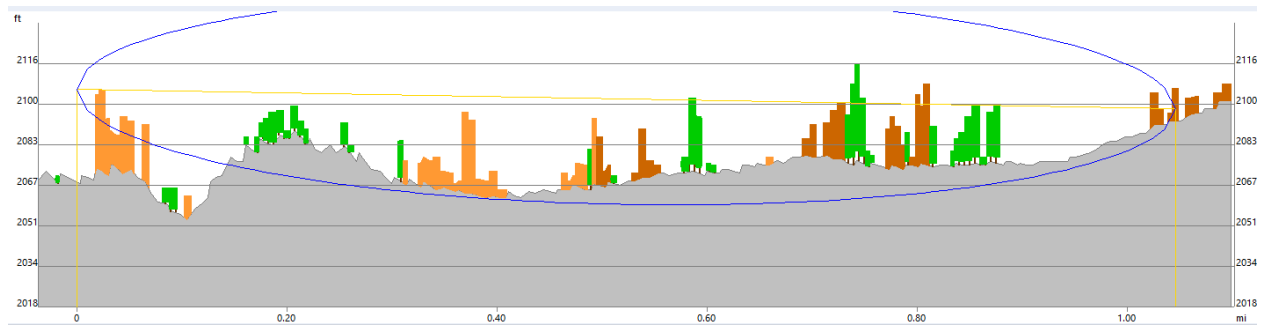


Figure 9: Point analysis from Madrone site to southeast





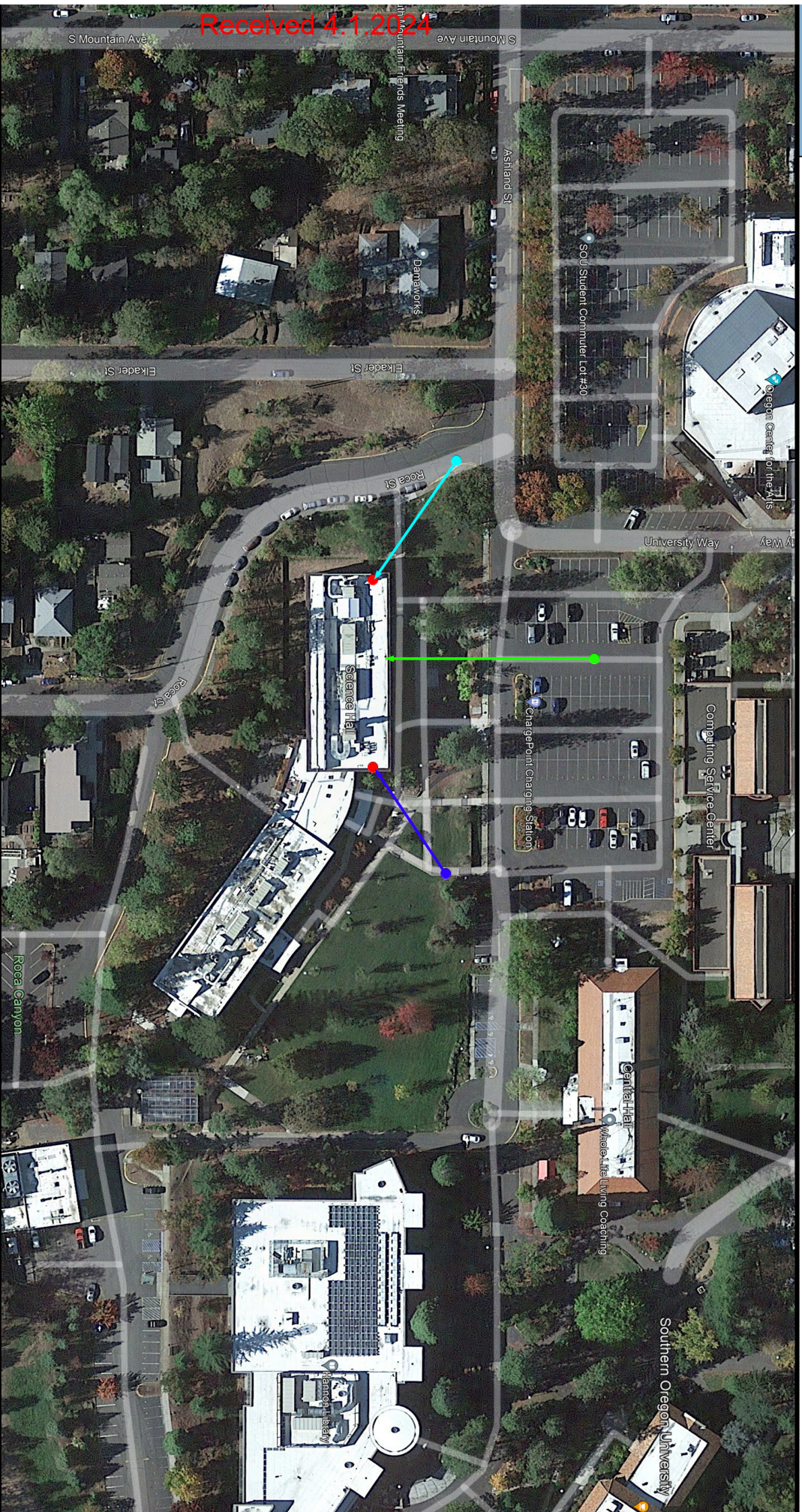
Verizon Wireless Communication Facility

Exhibits 3 - 10

3. Photo Simulations
4. Equipment Specification Sheets
5. Verizon Lease Agreement
6. Neighborhood Meeting Materials
7. Noise Study
8. NIER Report
9. FCC Compliance Assessment
10. Structural Analysis

MDF Madrone

Address: 1250 Ashland Street
Ashland, OR 97520



Received 4.1.2024

● Antenna locations

● Photosim #1 (Looking South West)

● Photosim #2 (Looking South East)

● Photosim #3 (Looking South)

MDF Madrone

Address: 1250 Ashland Street
Ashland, OR 97520

Received 4.1.2024



Before - Looking South West



After - Looking South West



This document is conceptual and informational only. Visual impacts will be affected by location and visibility of observer

Proposed Antenna Height: 48.8'
Existing Building Height: 39.1'
Existing Screen Wall Height: 49.1'

Project Description:

Adding new equipment, antennas and screening to proposed Verizon Wireless cell site

MDF Madrone

Address: 1250 Ashland Street
Ashland, OR 97520

Received 4.1.2024



Before - Looking South East



After - Looking South East



This document is conceptual and informational only. Visual impacts will be affected by location and visibility of observer

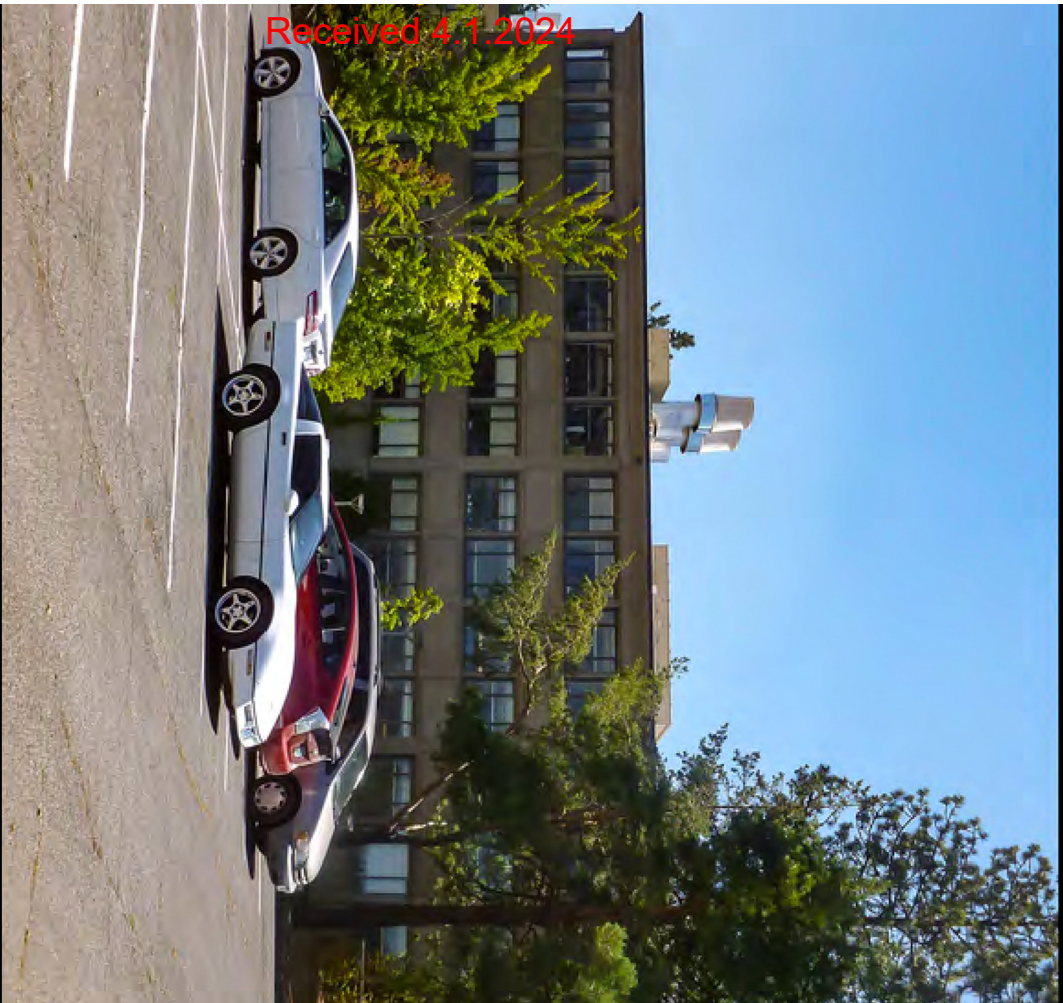
Proposed Antenna Height: 48.8'
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Adding new equipment, antennas and screening to proposed Verizon Wireless cell site

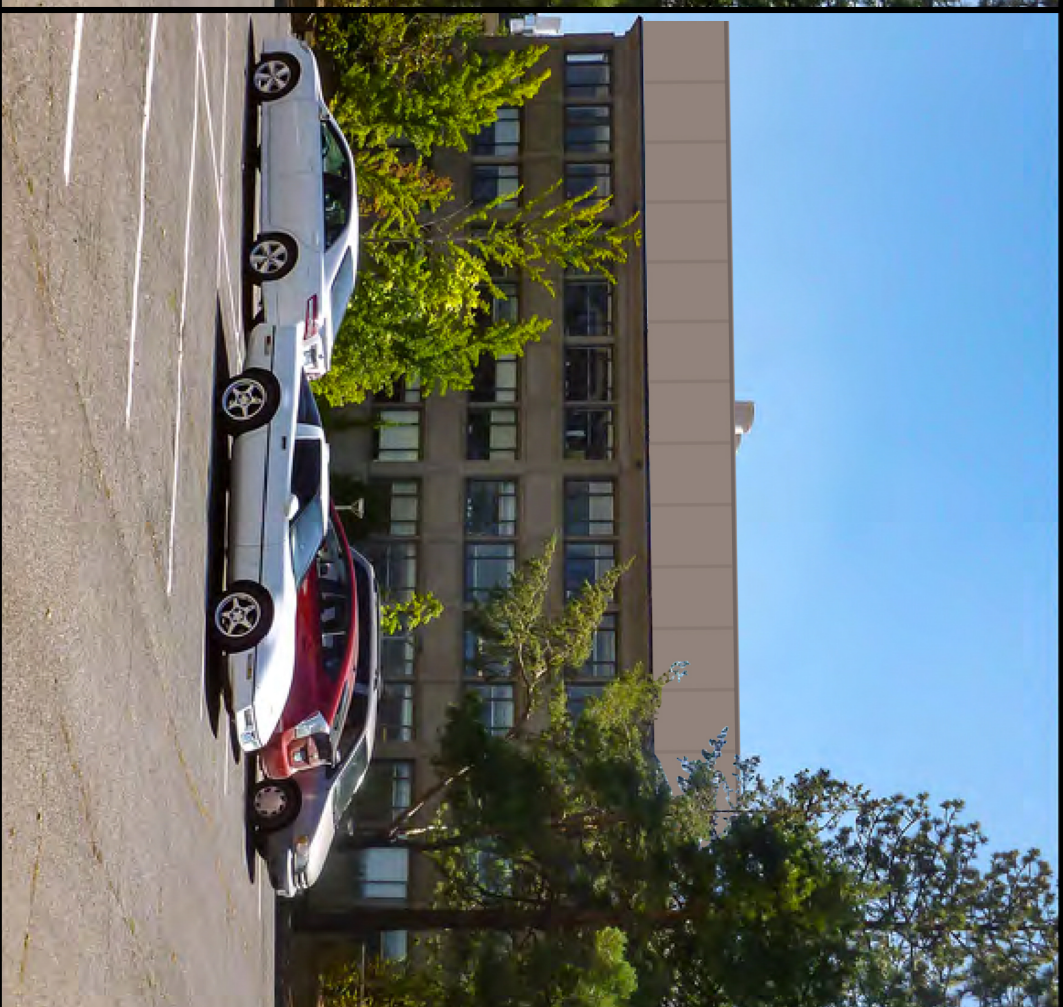
MDF Madrone

Address: 1250 Ashland Street
Ashland, OR 97520

Received 4.1.2024



Before - Looking South



After - Looking South



This document is conceptual and informational only. Visual impacts will be affected by location and visibility of observer

Proposed Antenna Height: 48.8'
Existing Building Height: 39.1'
Existing Screen Wall Height: 49.1'

Project Description:

Adding new equipment, antennas and screening to proposed Verizon Wireless cell site

Exhibit 4

Equipment Specification Sheets

Antennas

- JMA MX10FIT865
- JMA MX14FIT86501

Radios

- Ericsson Radio 4449
- Ericsson Radio 8843
- Ericsson Radio 8863

Cabinets

- CUBE BBU
- CUBE SS Series

Screen Wall Paint

- Sherman Williams

MX10FIT865-Bxx**NWAV™ X-Pol Ten-Port Antenna**
[Download this datasheet](#)
X-Pol Ten-Port 8 ft, 65° Form in Tighter with Smart Bias Ts, 698-4200 MHz:
2 ports 698-894 MHz, 4 ports 1695-2200 MHz, and 4 ports 3400-4200 MHz

- Excellent passive intermodulation (PIM) performance reduces harmful interference.
- Fully integrated (iRETs) with independent RET control for low band and mid band
- FET configured with internal RET for high band & ease of future network optimization.
- SON-Ready array spacing supports beamforming capabilities
- Suitable for 3G, 4G, and 5G interface technologies
- Integrated Smart Bias-Ts reduce leasing costs
- Optimized form factor for reduced wind loading
- Optimized CBRS radiation pattern for improved RSRP


NWAV™

Electrical specification (minimum/maximum)	Ports 1, 2		Ports 3, 4, 5, 6		
Frequency bands, MHz	698-806	806-894	1695-1880	1850-1990	1920-2200
Polarization	$\pm 45^\circ$		$\pm 45^\circ$		
Average gain over all tilts, dBi	15.0	15.5	17.6	17.9	18.2
Horizontal beamwidth (HBW), degrees¹	65.0	64.0	63.0	63.0	58.0
Front-to-back ratio, co-polar power @180°± 30°, dB	>22.0	>22.0	>28.0	>26.0	>25.0
X-Pol discrimination (CPR) at boresight, dB	>15.0	>15.0	>15.0	>15.0	>15.0
Vertical beamwidth (VBW), degrees¹	9.0	8.0	5.7	5.3	4.8
Electrical downtilt (EDT) range, degrees	2-12		0-9		
First upper side lobe (USLS) suppression, dB¹	≤ -15.0	≤ -15.0	≤ -16.0	≤ -16.0	≤ -16.0

Electrical specification (minimum/maximum)	Ports 1, 2		Ports 3, 4, 5, 6		
Cross-polar isolation, port-to-port, dB ¹	25	25	25	25	25
Max VSWR / return loss, dB	1.5:1 / -14.0		1.5:1 / -14.0		
Max passive intermodulation (PIM), 2x20W carrier, dBc	-153		-153		
Max input power per any port, watts	300		250		
Total composite power all ports (1-10), watts	1500				

¹ Typical value over frequency and tilt

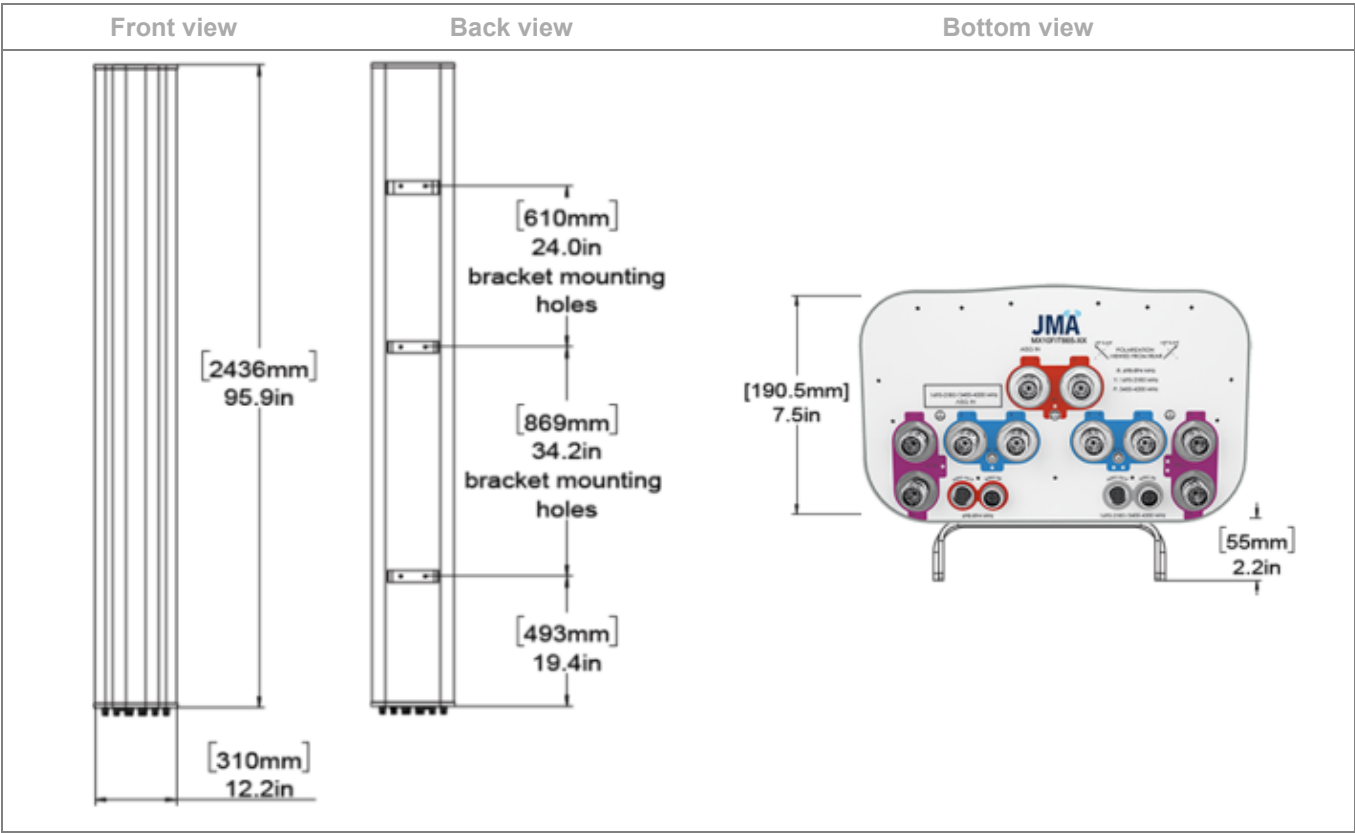
Electrical specification (minimum/maximum)	Ports 7, 8, 9, 10			
Frequency bands, MHz	3400-3550	3550-3700	3700-3950	3950-4200
Polarization	± 45°			
Average gain over all tilts, dBi	13.6	13.8	14.0	14.2
Horizontal beamwidth (HBW), degrees	65	63	61	59
Front-to-back ratio, co-polar power @180°± 30°, dB	>22	>22	>22	>22
Vertical beamwidth (VBW), degrees ¹	19.8	19.5	19.4	18.6
Electrical downtilt (EDT) range, degrees	2-12 orderable in 1 deg increments			
First upper side lobe (USLS) suppression, dB ¹	≤-15	≤-15	≤-15	≤-15
Cross-polar isolation, port-to-port, dB ¹	25	25	25	25
Max VSWR / return loss, dB	1.5:1 / -14.0			
Max input power per any port, watts	200			
Total composite power all ports (1-10), watts	1500			

¹ Typical value over frequency and tilt

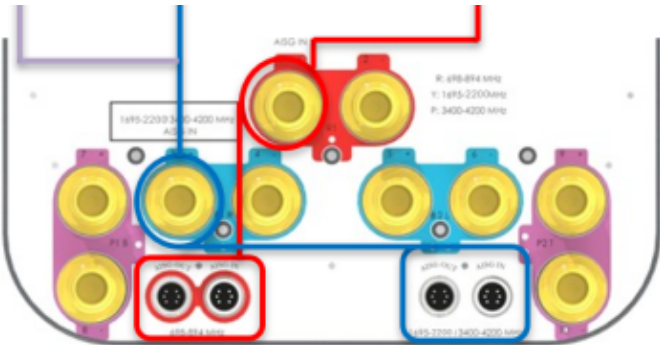
* For ports 7-10, the electrical downtilt is FET configured with internal RET, where the required electrical downtilt is defined at the time of order per the ordering information below.

Ordering information	
Antenna model	Description
MX10FIT865-Bxx (xx represents the FET in one degree increments for 3.4-4.2 GHz)	8F X- Pol 10 Port FIT 65° 2-12°/ 0-9°/ 2-12°, 4.3-10 & SBTs
	xx=02 thru 12 for each 1 degree tilt 3.4-4.2 GHz Examples MX10FIT865-B02 – 2deg, MX10FIT865-B09 – 9deg, MX10FIT865-B12-12deg
Optional accessories	
AISG cables	M/F cables for AISG connections
PCU-1000 RET controller	Stand-alone controller for RET control and configurations
91900314-03	Dual Mount Bracket (see 91900314 bracket document for details)

Mechanical specifications	
Dimensions height/width/depth, inches (mm)	95.9/ 12.2/ 7.5 (2436/ 310/ 190.5)
Shipping dimensions length/width/height, inches (mm)	106/ 20/ 14.5 (2692/ 508/ 368)
No. of RF input ports, connector type, and location	10 x 4.3-10 female, bottom
RF connector torque	96 lbf·in (10.85 N·m or 8 lbf·ft)
Net antenna weight, lb (kg)	59.0 (26.8)
Shipping weight, lb (kg)	105.6 (47.9)
Antenna mounting and downtilt kit included with antenna	91900318, 91900319 (middle bracket)
Net weight of the mounting and downtilt kit, lb (kg)	26 (11.82)
Range of mechanical up/down tilt	-2° to 12°
Rated wind survival speed, mph (km/h)	150 (241)
Frontal and lateral wind loading @ 150 km/h, lbf (N)	90.5 (402.6), 81.2 (361.2)
Equivalent flat plate @ 100 mph and Cd=2, sq ft	2.27
EPA frontal and lateral, ft ² , (m ²)	4.1 (0.38), 2.7 (0.25)



Remote electrical tilt (RET 1000) information	
RET location	Integrated into antenna
RET interface connector type	8-pin AISG connector per IEC 60130-9 or RF port bias-t

Remote electrical tilt (RET 1000) information													
RET connector torque	Min 0.5 N·m to max 1.0 N·m (hand pressure & finger tight)												
RET interface connector quantity	2 pairs of AISG male/female connectors and 2 RF port bias-ts												
RET interface connector location	Bottom of the antenna												
Total no. of internal RETs 698-894 MHz	1												
Total no. of internal RETs 1695-2200 MHz	1												
Total no. of internal RETs 3400-4200 MHz	1												
RET input operating voltage, vdc	10-30												
RET max power consumption, idle state, W	≤ 2.0												
RET max power consumption, normal operating conditions, W	≤ 13.0												
RET communication protocol	AISG 2.0 / 3GPP												
RET and RF connector topology													
Each RET device can be controlled either via the designated external AISG connector or RF smart bias-t port as shown below:													
<table><tr><th>Band</th><th>RF port</th><th>Band</th><th>RF port</th></tr><tr><td>3400-4200</td><td>7-10</td><td>1695-2200</td><td>3-6</td></tr></table><table><tr><th>Band</th><th>RF port</th></tr><tr><td>698-894</td><td>1-2</td></tr></table>		Band	RF port	Band	RF port	3400-4200	7-10	1695-2200	3-6	Band	RF port	698-894	1-2
Band	RF port	Band	RF port										
3400-4200	7-10	1695-2200	3-6										
Band	RF port												
698-894	1-2												
Note: The RET Device for 3400-4200 MHz is connected via the 1695-2200 Port 3 Bias T port or 1695-2200/3400-4200 MHz AISG ports.													

Array topology														
5 sets of radiating arrays R1: 698-894 MHz B1: 1695-2200 MHz B2: 1695-2200 MHz P1: 3400-4200 MHz P2: 3400-4200 MHz	<table><tr><th>Band</th><th>RF port</th></tr><tr><td>698-894</td><td>1-2</td></tr><tr><td>1695-2200</td><td>3-4</td></tr><tr><td>1695-2200</td><td>5-6</td></tr><tr><td>3400-4200</td><td>7-8</td></tr><tr><td>3400-4200</td><td>9-10</td></tr></table>	Band	RF port	698-894	1-2	1695-2200	3-4	1695-2200	5-6	3400-4200	7-8	3400-4200	9-10	
	Band	RF port												
	698-894	1-2												
	1695-2200	3-4												
	1695-2200	5-6												
	3400-4200	7-8												
	3400-4200	9-10												

V3.0

12/22/23

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MX14FIT865-01

NWAV™ X-Pol 14-Port Antenna


[Download this datasheet](#)

X-Pol 14-Port 8 ft, 65° Form in Tighter with Smart Bias Ts, 698-4200 MHz:

2 ports 698-894 MHz, 4 ports 1695-2200 MHz, and 8 ports 3700-4200 MHz

- Combination of Hex Port Antenna with integrated 5G 3.5 GHz 8T8R beamforming capability
- Optimized antenna array design for all 3.5 GHz beamforming combinations
- Maintains existing low and mid band RF performance
- New optimized form factor for reduced wind loading
- Lower antenna weight with new Integrated RF distribution design
- Excellent passive intermodulation (PIM) performance reduces harmful interference.
- Fully integrated internal (iRETs) with SBT for independent RET control on all bands



Electrical specification (minimum/maximum)	Ports 1, 2		Ports 3, 4, 5, 6		
Frequency bands, MHz	698-806	806-894	1695-1880	1850-1990	1920-2200
Polarization	$\pm 45^\circ$		$\pm 45^\circ$		
Gain over all tilts, dBi	15.5	16.2	17.4	17.7	18.0
Horizontal beamwidth (HBW), degrees ¹	67.0	62.0	63.0	63.0	58.0
Front-to-back ratio, @180°, dB	>29.0	>31.0	>30.0	>29.0	>29.0
X-Pol discrimination (CPR) at boresight, dB	>20.0	>18.0	>19.0	>17.0	>17.0
Vertical beamwidth (VBW), degrees ¹	8.9	7.9	5.7	5.3	4.8
Electrical downtilt (EDT) range, degrees	2-12		0-9		
First upper side lobe (USLS) suppression, dB ¹	≤ -15.0	≤ -15.0	≤ -16.0	≤ -16.0	≤ -16.0
Cross-polar isolation, port-to-port, dB ¹	25	25	25	25	25
Max VSWR / return loss, dB	1.5:1 / -14.0		1.5:1 / -14.0		
Max passive intermodulation (PIM), 2x20W carrier, dBc	-153		-153		

Electrical specification (minimum/maximum)	Received 4.1.2024	Ports 3, 4, 5, 6
Max input power per any port, watts	300	250
Total composite power all ports (1-14), watts	1500	

¹ Typical value over frequency and tilt

Electrical specification (minimum/maximum)	Ports 7, 8, 9, 10, 11, 12, 13, 14
Frequency bands, MHz	3700-4200
Gain over all tilts, dBi	16.0
Horizontal beamwidth (HBW), degrees ¹	85
Horizontal beam width tolerance, degrees	±5
Front-to-back ratio, @180°, dB	27
Vertical beamwidth (VBW), degrees ¹	7.5
Vertical beam width tolerance, degrees	±0.3
Beam tilt, degrees	2-12
First upper side lobe (USLS) suppression, dB ¹	15
Coupling level, Amp, Antenna port to Cal port, dB	26
Coupling level, max Amp Δ, Antenna port to Cal port, dB	±0.7
Coupler, max Amp Δ, Antenna port to Cal port, dB	0.65
Coupler, max Phase Δ, Antenna port to Cal port, degrees	4
Cross-polar isolation, port-to-port, dB ¹	25
Isolation, Inter-band, dB	25
Max VSWR / return loss, dB	1.5 / -14.0
PIM, 3rd Order, 2 x 20 W, dBc	-145
Max input power per any port at 50 °C, watts	75

¹ Typical value over frequency and tilt

Electrical specification, Broadcast 65°	Ports 7, 8, 9, 10, 11, 12, 13, 14
Frequency bands, MHz	3700-4200
Gain over all tilts, dBi	21.6
Horizontal beamwidth (HBW), degrees ¹	65
Horizontal beamwidth tolerance, degrees	±4
Vertical beamwidth (VBW), degrees ¹	7.5
Vertical beamwidth tolerance, degrees	±0.3
First upper side lobe (USLS) suppression, dB ¹	<-16

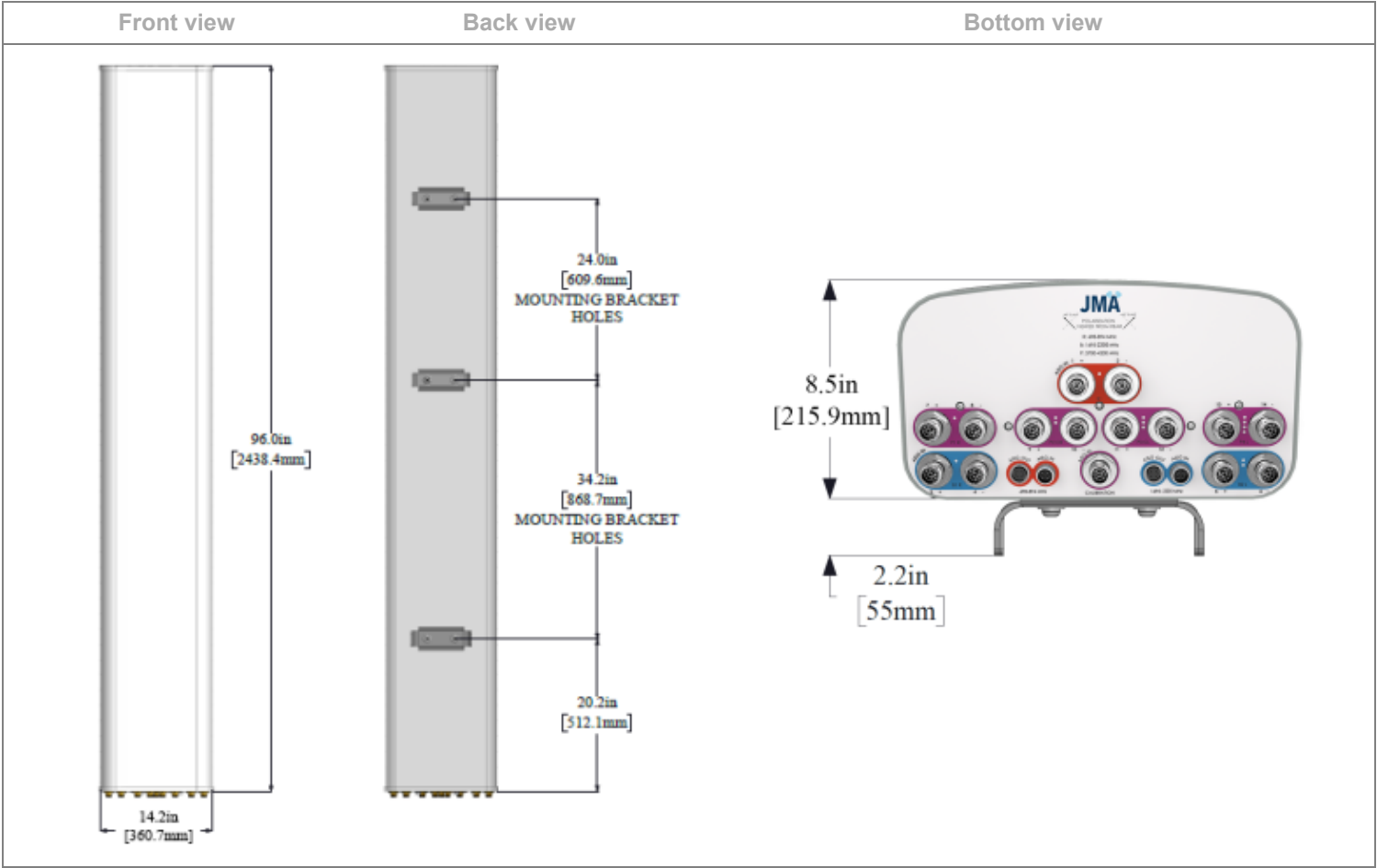
Electrical specification, Service Beam	Ports 7, 8, 9, 10, 11, 12, 13, 14
Frequency bands, MHz	3700-4200
Steered 0° gain, dBi	21.6

Electrical specification, Service Beam	Received 4.1.2024	Ports 7, 8, 9, 10, 11, 12, 13, 14
Steered 0° Gain tolerance, dBi		±0.6
Steered 0° Beamwidth, Horizontal, degrees		22
Steered 0° CPR at beampeak, dB		18
Steered 0° Horizontal Sidelobe, dB		12
Steered 30° Gain, dBi (max)		21.2
Steered 30° Gain tolerance, dBi		±0.6
Steered 30° Gain, dBi		21
Steered 30° Beamwidth, Horizontal, degree		22
Steered 30° CPR at beampeak, dB		18
Steered 30° Horizontal Sidelobe, dB		10
Electrical specification, Soft Split		Ports 7, 8, 9, 10, 11, 12, 13, 14
Frequency bands, MHz		3700-4200
Gain over all tilts, dBi		20.2
Horizontal beamwidth (HBW), degrees ¹		32
First upper side lobe (USLS) suppression, dB ¹		15

Beamforming weighting table available upon request

Ordering information	
Antenna model	Description
MX14FIT865-01	8F X- Pol 14 Port FIT 65° 2-12°/ 0-9°/ 2-12° RET, 4.3-10 & SBT
Optional accessories	
AISG cables	M/F cables for AISG connections
PCU-1000 RET controller	Stand-alone controller for RET control and configurations
91900314-03	Dual Mount Bracket (see 91900314 bracket document for details)
Mechanical specifications	
Dimensions height/width/depth, inches (mm)	96.0/ 14.2/ 8.5 (2438.4/ 360.7/ 215.9)
Shipping dimensions length/width/height, inches (mm)	106/ 20/ 15 (2692.4/ 508/ 381)
No. of RF input ports, connector type, and location	14 x 4.3-10 female, bottom
Calibration interface port, connector type, and location	1 x 4.3-10 female, bottom
RF connector torque	96 lbf·in (10.85 N·m or 8 lbf·ft)
Net antenna weight, lb (kg)	77.1 (34.97)
Shipping weight, lb (kg)	126.1 (57.19)
Antenna mounting and downtilt kit included with antenna	91900318, 91900319 (middle bracket)
Net weight of the mounting and downtilt kit, lb (kg)	26 (11.82)
Range of mechanical up/down tilt	-2° to 12°
Rated wind survival speed, mph (km/h)	150 (241)
Frontal and lateral wind loading @ 150 km/h, lbf (N)	89.4 (397.7), 37.5 (166.8)

EPA frontal and lateral, ft ² , (m ²)	4.0 (0.37), 1.7 (0.16)
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Remote electrical tilt (RET 1000) information

RET location	Integrated into antenna
RET interface connector type	8-pin AISG connector per IEC 60130-9 or RF port bias-t
RET connector torque	Min 0.5 N·m to max 1.0 N·m (hand pressure & finger tight)
RET interface connector quantity	2 pairs of AISG male/female connectors and 3 RF port bias-ts
RET interface connector location	Bottom of the antenna
Total no. of internal RETs 698-894 MHz	1
Total no. of internal RETs 1695-2200 MHz	1
Total no. of internal RETs 3700-4200 MHz	1
RET input operating voltage, vdc	10-30
RET max power consumption, idle state, W	≤ 2.0
RET max power consumption, normal operating conditions, W	≤ 13.0
RET communication protocol	AISG 2.0 / 3GPP

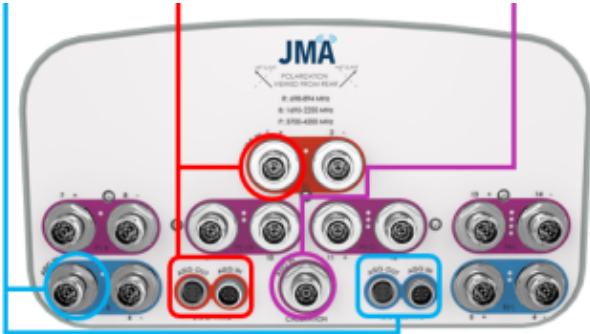
RET and RF connector topology

The R1 and B1/B2 RET devices can be controlled via either the designated external AISG connectors or the RF smart bias-t ports. The P1 RET devices can be controlled via the RF smart bias-t port only as shown below:

RET and RF connector topology

Received 4.1.2024

Band	RF port	Band	RF port	Band	RF port
1695-2200	3-6	698-894	1-2	3700-4200	7-14

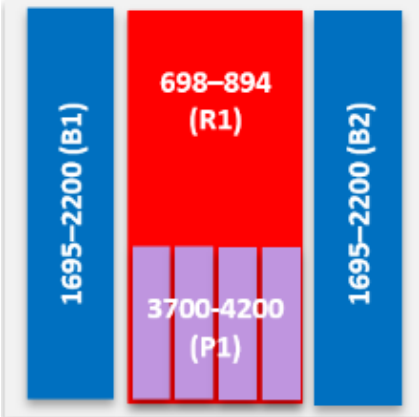


Array topology

4 sets of radiating arrays

R1: 698-894 MHz
B1: 1695-2200 MHz
B2: 1695-2200 MHz
P1: 3700-4200 MHz

Band	RF port
698-894	1-2
1695-2200	3-4
1695-2200	5-6
3700-4200	7-14

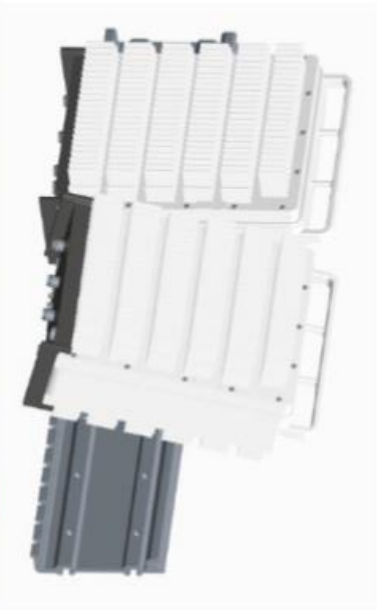


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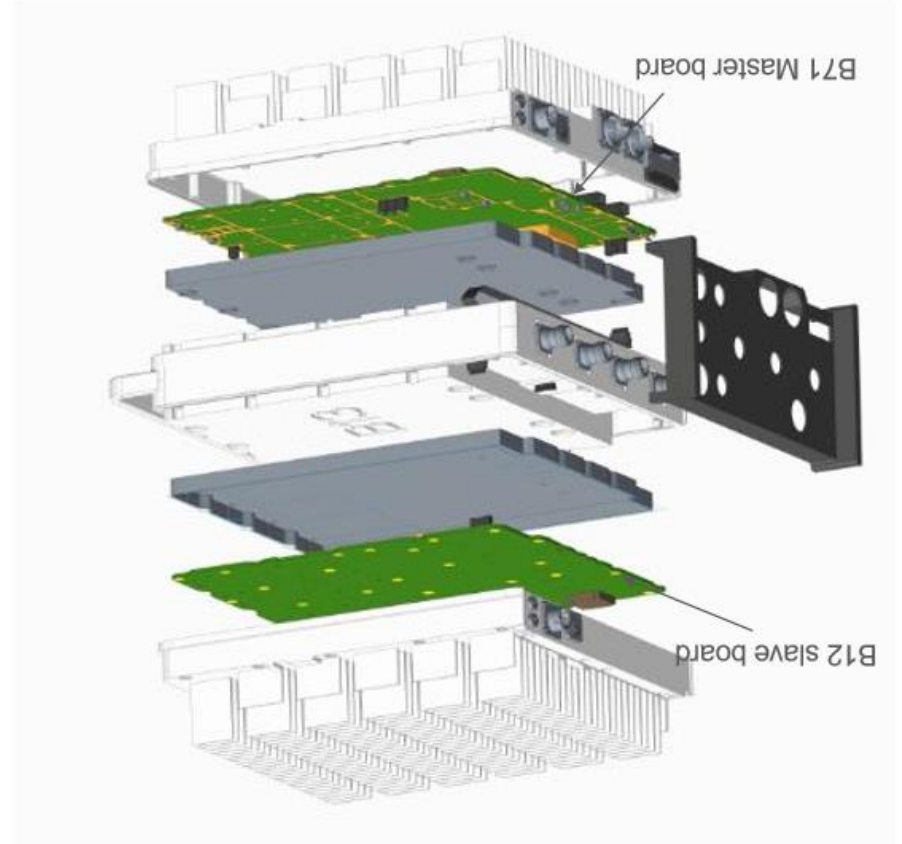
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DUAL BAND 4449





- Filter double-sided chassis in-between B12 and B71 Radio boards



RADIO 8843 – B2 + B66A

4TX 4RX PER BAND

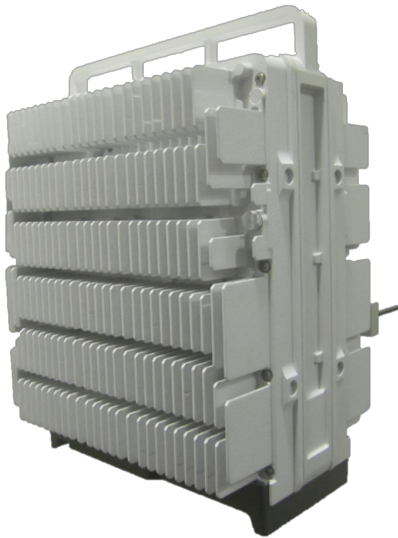


- › 8 antenna ports, 4TX/4RX for 2 bands with separate RF ports
- › Up to 320W RF Power shared between 2 bands
 - › Examples:
 - › 4x40W on each band or
 - › 4x20W on B2 and 4x60W on Band 66A
 - › 2x60W on Band 2 and 2x80W on Band 66A
- › **Carrier Capacity:**
 - › Up to 24 carrier and up to 60+70 MHZ OBW for LTE
- › 2x 10Gbps CPRI
- › **Size and Weight:**

Radio 8843 - B2 & B66A	Height	Width	Depth	Weight
wo protruding items	15 In (380 mm)	13.2 In (335 mm)	11.1 In (282 mm)	75 lbs (34.02 Kg)
w protruding items	18 In (455 mm)	13.2 In (335 mm)	11.3 In (287 mm)	

- › -48 VDC
- › 2x26A fuse (2 power connectors, 2 or 3 wire) (26A for 4x60W)
- › AISG TMA & RET support (2 Bias-T, 1 ALD port)
- › Type 4.3-10 RF connectors
- › 2 external alarms
- › IP 65, -40 to +55 °C

Now confirmed max measurements/ will not exceed



Portrait Mount Only



3 Technical Data

Table 1 Radio 8863 Technical Data

Description	Value
Maximum nominal output power ⁽¹⁾⁽²⁾	8 × 40 W for B41, B41K, B77D, and B78K ⁽³⁾ 8 × 50 W for B40 and B42 (License key is required for total output power over 20 W.)
Minimum configurable output power on an RF port	2.5 W
Number of carriers	For information about number of carriers, see Supported Radio Capabilities.
Frequency ⁽⁴⁾⁽⁵⁾	B40 for NR and LTE 2300–2400 MHz
	B41 for NR and LTE 2496–2690 MHz
	B41K for NR and LTE 2515–2675 MHz
	B42 for NR and LTE 3400–3600 MHz
	B77D for NR 3700–3980 MHz
	B78K for NR and LTE 3420–3800 MHz
Dimensions with or without Fan Unit	
Radio 8863 B41 Radio 8863 B41K Radio 8863 B78K	H×W×D: 478 × 375 × 145 mm
Radio 8863 B40 Radio 8863 B42	H×W×D: 478 × 375 × 155 mm
Radio 8863 B77D	H×W×D: 410 × 367 × 153 mm
Weight without Fan Unit	
Radio 8863 B40	23.6 kg
Radio 8863 B41	22.6 kg
Radio 8863 B41K	22.4 kg
Radio 8863 B42	23.6 kg
Radio 8863 B77D	25.4 kg
Radio 8863 B78K	23.1 kg (R-state < R1F) 24.5 kg (R-state ≥ R1F)
Weight with Fan Unit	
Radio 8863 B40	24.1 kg
Radio 8863 B41	23.1 kg
Radio 8863 B41K	22.9 kg
Radio 8863 B42	24.1 kg
Radio 8863 B77D	25.9 kg
Radio 8863 B78K	23.6 kg (R-state < R1F) 25.1 kg (R-state ≥ R1F)
Color	
Body	NCS S 1002-B



Description	Value
Front	NCS S 6502-B

- (1) For detailed information about licenses and HWAC, see:
NR: Manage Licenses and Hardware Activation Codes in the NR RAN library.
LTE: Manage Licenses and Hardware Activation Codes in the LTE RAN library.
- (2) For detailed information about output power, see:
NR: Hardware-Related Capabilities in the NR RAN library.
LTE: Hardware-Related Capabilities in the LTE RAN library.
- (3) For B78K, it is dimensioned with a configuration targeting for maximum output power level. The COVERAGE mode prioritizes output power but causes penalty in 256 QAM EVM depending on carrier configurations such as wider carrier separation (over 120 MHz), number of deployed carriers, carrier positions, and RATs combination.
- (4) For information about IBW, see Radio Node Configurations.
- (5) For supported mixed mode configurations and supported carrier bandwidths, see Radio Node Configurations.

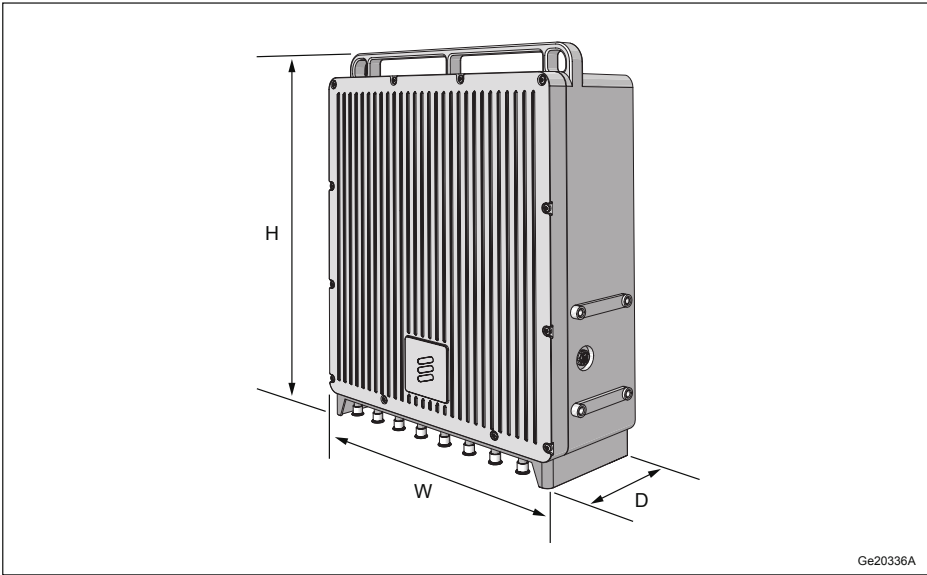


Figure 2 Radio 8863 Height, Width, and Depth

Charles Universal Broadband Enclosures (CUBE)

CUBE BBU Series Battery Backup Cabinets

CUBE BBU cabinets are ideally suited for cell sites and other outdoor environments when a large amount of battery backup is required. Multiple BBU cabinets can be combined to achieve an even greater amount of battery backup time. BBU cabinets can be installed adjacent to or remotely from other CUBE Macro Cell cabinet solutions (such as CUBE-PM639 Series or CUBE-SS Series models) to form a complete Macro Cell or CRAN Node solution.



Specifications

Construction 0.125" Aluminum Welded Construction Outer Enclosure, Powder Coated Off White Finish, 10 Gauge Steel Battery Racks
Mounting Style Pad Mount Enclosure
Thermal Management Direct Air Cooling, Solar Shield for Ni-Cd TEC, Heating/Cooling, Solar Shield for VRLA
Door Latching 3-Point Latching with Pad Lockable Handle in Front, Removable Panel in Rear
Battery Types / Termination Ni-CD or VRLA, Anderson Disconnects for Each String
Bus Bars Two (2) 2x14 Position Bus Bars
Cable Entrance Seven (7) Knockouts for 1.5"/2.0" Conduit on RHS, One (1) Knockout for 1.5"/2.0" Conduit on LHS, Seven (7) Knockouts for 1.5"/2.0" Conduit on Rear
Alarms Two (2) 2.0" for 3.0" Conduit on Rear
Certifications Door Intrusion, High Temperature Telcordia GR-487 and UL 50



Supported Battery Types

Manufacturer	Battery Model #	Ah	Manufacturer	Battery Model #	Ah
Northstar	NSB170FT	170	GNB Marathon	M12V180FT	180
Energys	SBS170F	170	Saft	Tel.X 180	180
Energys	SBS190F	190	East Penn Deka	12AVR-150ET	150
C&D	TEL12-170F	170	East Penn Deka	12AVR-170ET	170
C&D	TEL12-190F	190	Flamm	12UMTX170	170
C&D	TEL12-210F	210			

PART NUMBER	STANDARD MOUNTING	OVERALL DIM. (in.)	THERMAL SYSTEM	BATTERY TRAYS	BATTERY SUPPORT	INDEPENDENT BUSES	WEIGHT EMPTY (lbs.)	WEIGHT w/Ni-Cd BTY
CUBE-BB24F1HN1	Pad Mount	46x32x32	DAC	3	6 Strings Saft Tel.X 180, 24V	1	585	1656
CUBE-BB24J1HN1	Pad Mount	74x32x32	DAC	5	10 Strings Saft Tel.X 180, 24V	1	900	2685
CUBE-BB24J2XV1	Pad Mount	74x32x32	TEC	5	10 Strings VRLA Batteries, 24V	1	1000	2785
CUBE-BB48A1GV1	Pad Mount	15x32x32	DAC	1	1 String Saft Tel.X180, 48V	1	100	450
CUBE-BB48C1HN1	Pad Mount	46x32x32	DAC	3	3 Strings Saft Tel.X 180, 48V	1	585	1656
CUBE-BB48C2XV1	Pad Mount	46x32x32	TEC	3	3 Strings VRLA Batteries, 48V	1	635	1706
CUBE-BB48E1HN1	Pad Mount	74x32x32	DAC	5	5 Strings Saft Tel.X 180, 48V	1	900	2685
CUBE-BB48E2XV1	Pad Mount	74x32x32	TEC	5	5 Strings VRLA Batteries, 48V	1	1000	2785
CUBE-BBDF2HN1	Pad Mount	46x32x32	DAC	3	Mix of 24V/48V Saft Tel.X 180	3	585	1656
CUBE-BBDF2HN1	Pad Mount	74x32x32	DAC	5	Mix of 24V/48V Saft Tel.X 180	3	900	2685

OG-OSP048-K16

INNOVATIVE ENCLOSED SOLUTIONS™

Charles Industries, Ltd.

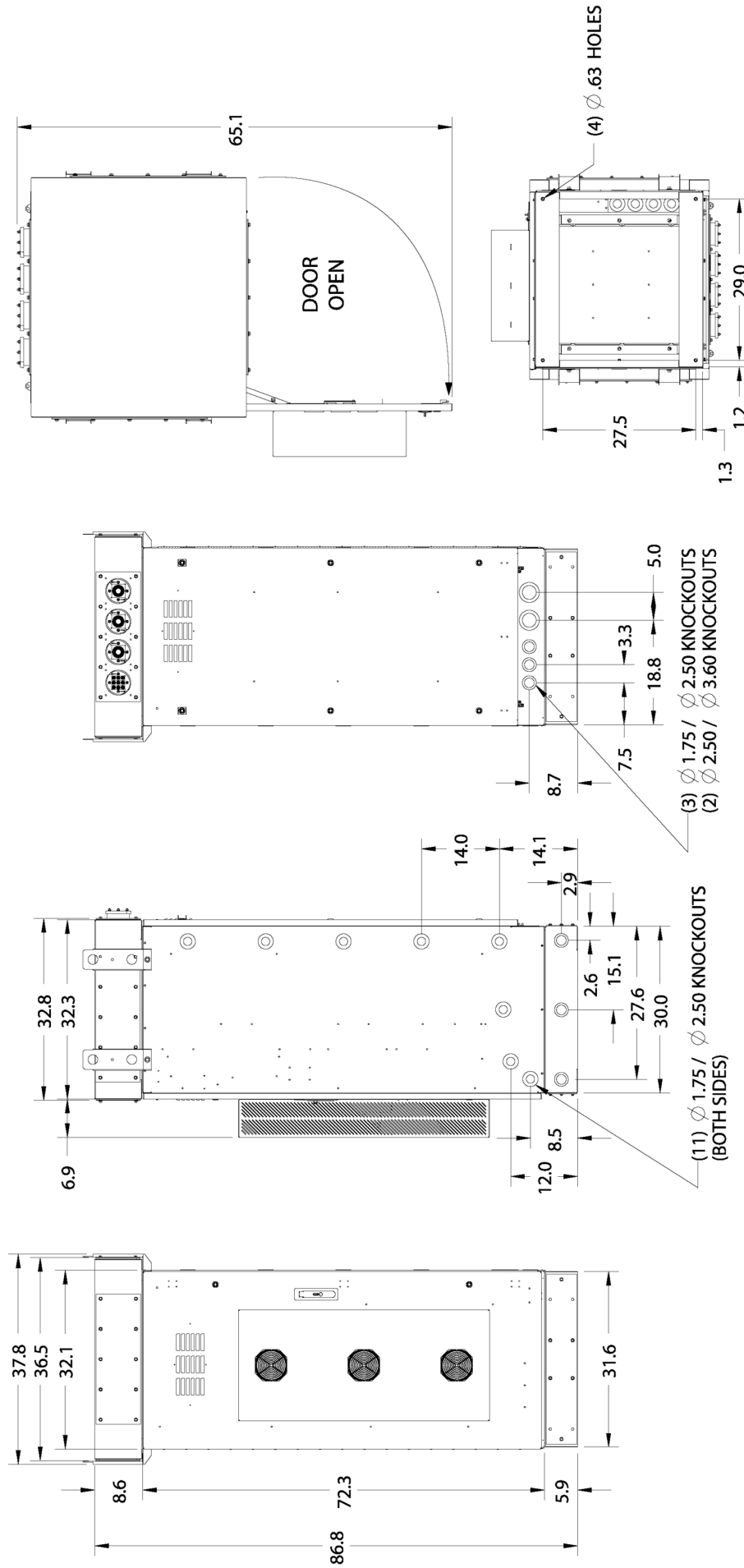
Phone: (847) 806-6300

Fax: (847) 806-6231

Web: www.charlesindustries.com



CUBE BBU Series Battery Backup Cabinets



ACCESSORY ITEMS

PART NUMBER	DESCRIPTION
07-002067-0	216 Tool (7/16" Nut Wrench) for Entering Cabinets
97-002145-A	Temporary Shelf for Saft Ni-Cd Battery Installation
97-002196-A	3 Pair 2/0 Cable and Conduit Kit for SS & BBU Cabinet Lineup
97-002240-A	Thermal Probe Kit for Battery Cabinet, VRLA Configurations, Eltek Power Plants
97-002241-A	Thermal Probe Kit for Battery Cabinet, VRLA Configurations, GE Infinity Power Plants
97-002567-A	(4) 2" Diameter, Rigid Conduit and Connectors, 6" Long
97-002570-A	4/0 Power Cable Kit, 16'
97-002287-A	Ni-Cd to VRLA Retainer Bracket Conversion Kit for Battery Tray

FACTORY INSTALLED OPTIONS

96-002162-A	Factory Installed 6" Plinth
97-002230-A	8" Top Hat Cable Entry Kit
96-000003-A	Retractable Overhang

MADE IN THE
USA

OG-OSP048-K16

INNOVATIVE ENCLOSED SOLUTIONS™

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Charles

Charles Universal Broadband Enclosures (CUBE) CUBE SS Series Large Site Support Cabinets

Charles site support cabinets allow providers to install highly efficient rectifiers and the latest in battery technologies in durable, robust and GR-487 compliant enclosures. With support for VRLA or Ni-Cd batteries, various rectifier and power distribution options, and thermal management options; Charles' site support cabinets protect network integrity with an environmentally friendly, energy efficient solution. Charles can also create custom designs that integrate specific power solutions, call for details.



Specifications

Construction	0.125" Aluminum Welded Construction Outer Enclosure, Powder Coated Off White Finish, 10 Gauge Welded Steel Battery Racks
Mounting Style	Pad Mount Enclosure
Thermal Management	750W/1880W/3000W HX or 4000 BTU Air Conditioner for Equipment Compartment, Direct Air or TEC for Battery Compartment
Rack Mounting	23", 7, 15, 23, 28, 31 or 35 RU
Door Latching	3-Point Latching with Pad Lockable Handle
Battery Types	Ni-CD or VRLA
Battery Termination	Anderson Disconnects for Each String or 250A Circuit Breaker*
AC Termination	12, 16 or 20 Position Load Center (left-hand side), or None
Bus Bars	Two (2) 2x14 Position Bus Bars
Cable Entrance	Eleven (11) Knockouts for 1.5"/2.0" Conduit on RHS, Eleven (11) Knockouts for 1.5"/2.0" Conduit on LHS, Six (6) Knockouts for 1.5"/2.0" Conduit on Rear
Alarms	Two (2) 2.0" for 3.0" Conduit on Rear
Certifications	Door Intrusion (2), High Temperature, Thermal System Telcordia GR-487 and UL 60950

Supported Battery Types

Manufacturer	Battery Model #	Ah	Manufacturer	Battery Model #	Ah
Northstar	NSB170FT	170	GNB Marathon	M12V180FT	180
Energysys	SBS170F	170	Saft	Tel.X 150	150
C&D	TEL12-170F	170	Saft	Tel.X 180	180
C&D	TEL12-190F	190	East Penn Deka	12AVR-170ET	170
C&D	TEL12-210F	210	East Penn Deka	12AVR-200HT	200*
			Fiamm	12UMTX170	170

ACCESSORY ITEMS

CHARLES PART #	DESCRIPTION
07-002067-0	216 Tool (7/16" Nut Wrench) for Entering Cabinets
97-002145-A	Temporary Shelf for Saft Ni-Cd Battery Installation
97-002555-A	4 Pair 2/0 Cable and Conduit Kit for SS & BBU Cabinet Lineup
97-SSLGSHRD-A	AC Load Center Shroud for Large Site Support Cabinets
97-002265-A	Replacement Door for 15RU Site Support Cabinet. Contains (2) 2K BTU HVAC Units
97-002162-A	Field Installed 6" Plinth for CUBE-PM/BB/SS Series
97-002287-A	Ni-Cd to VRLA Retainer Bracket Conv. Kit for SS/BBU Battery Tray
97-002567-A	(4) 2" Diameter, Rigid Conduit and Connectors, 6" Long
97-002570-A	4/0 Power Cable Kit, 16'

*Only supported in SS4B228xxx Models

OG-OSP052-A20

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CUBE SS Series Large Site Support Cabinets

PART NUMBER	STANDARD MOUNTING	OVERALL DIM. (in.)	RU	LOAD CENTER	THERMAL (POWER)	THERMAL (BATTERY)	BATTERY SUPPORT	WEIGHT EMPTY (lbs.)	WEIGHT w/Ni-Cd BTY
CUBE-SS4B223IC1	Pad Mount	74x32x32	23	16 Position	1880W, 48VDC HX	DAC	2 Strings Saft Tel.X 180, 48V	600	1314
CUBE-SS4B223KJ2	Pad Mount	74x32x32	23	20 Position	48VDC 4K BTU AC	DAC	2 Strings Saft Tel.X 180, 48V	650	1364
CUBE-SS4B223MC2	Pad Mount	74x32x32	23	16 Position	1880W, 48VDC HX	DAC	2 Strings Saft Tel.X 180, 48V	600	1314
CUBE-SS4B223MC3	Pad Mount	74x32x32	23	12 Position	1880W, 48VDC HX	DAC	2 Strings Saft Tel.X 180, 48V	600	1314
CUBE-SS4B223MN3	Pad Mount	74x32x32	23	—	1880W, 48VDC HX	DAC	2 Strings Saft Tel.X 180, 48V	600	1314
CUBE-SS4B223MN4	Pad Mount	74x32x32	23	—	1880W, 48VDC HX	DAC	2 Strings Saft Tel.X 180, 48V	620	1334
CUBE-SS4B223XC3	Pad Mount	74x32x32	23	16 Position	1880W, 48VDC HX	(2) 200W TEC	2 Strings VRLA, 48V	650	1364
CUBE-SS4B223XN2	Pad Mount	74x32x32	23	—	1880W, 48VDC HX	(2) 200W TEC	2 Strings VRLA, 48V	640	1354
CUBE-SS4B228LN1	Pad Mount	84x32x32	35	—	10K BTU DC HVAC	(2) 200W TEC	2 Strings Saft Tel.X 180, 48V	685	1585
CUBE-SS4B228LX1	Pad Mount	84x32x32	35	—	10K BTU DC HVAC	(2) 200W TEC	2 Strings 200AH VRLA, 48V	715	1915
CUBE-SS4B228PN1	Pad Mount	84x32x32	35	—	3800W, 48VDC TS	(2) 200W TEC	2 Strings Saft Tel.X 180, 48V	670	1570
CUBE-SS4B228PX1	Pad Mount	84x32x32	35	—	3800W, 48VDC TS	(2) 200W TEC	2 Strings 200AH VRLA, 48V	700	1900
CUBE-SS4B231KJ2	Pad Mount	90x32x32	31	20 Position	48VDC 4K BTU AC	DAC	2 Strings Saft Tel.X 180, 48V	750	1414
CUBE-SS4B231KN1	Pad Mount	90x32x32	31	—	48VDC 4K BTU AC	DAC	2 Strings Saft Tel.X 180, 48V	700	1364
CUBE-SS4B231LN1	Pad Mount	90x32x32	31	—	(2) 10K BTU DC HVAC	DAC	2 Strings Saft Tel.X 180, 48V	810	1524
CUBE-SS4B231LX2	Pad Mount	90x32x32	31	—	(2) 10K BTU DC HVAC	DAC	2 Strings Saft Tel.X 180, 48V	747	1411
CUBE-SS4B231NX1	Pad Mount	90x32x32	31	—	None	(2) 200W TEC	2 Strings VRLA, 48V	707	1919
CUBE-SS4B231PN2	Pad Mount	90x32x32	31	—	3800W, 48VDC TS	DAC	2 Strings Saft Tel.X 180, 48V	732	1396
CUBE-SS4B231PX2	Pad Mount	90x32x32	31	—	3800W, 48VDC TS	(2) 200W TEC	2 Strings VRLA, 48V	782	1982
CUBE-SS4B231VX1	Pad Mount	90x32x32	31	—	(2) 10K BTU DC HVAC	(2) 200W TEC	2 Strings VRLA, 48V	800	2000
CUBE-SS4C215DB1	Pad Mount	74x32x32	15	12 Position	750W, 48VDC HX	DAC	3 Strings Saft Tel.X 180, 48V	700	1771
CUBE-SS4C215DB3	Pad Mount	74x32x32	15	12 Position	750W, 48VDC HX	DAC	3 Strings Saft Tel.X 180, 48V	740	1811
CUBE-SS4C215DN3	Pad Mount	74x32x32	15	—	750W, 48VDC HX	DAC	3 Strings Saft Tel.X 180, 48V	730	1801
CUBE-SS4C215DN4	Pad Mount	74x32x32	15	—	(2) 750W, 48VDC HX	DAC	3 Strings Saft Tel.X 180, 48V	775	1846
CUBE-SS4C215DN5	Pad Mount	74x32x32	15	—	(2) 750W, 48VDC HX	DAC	3 Strings Saft Tel.X 180, 48V	775	1846
CUBE-SS4C215XC1	Pad Mount	74x32x32	15	—	750W, 48VDC HX	(2) 200W TEC	3 Strings VRLA, 48V	740	1811
CUBE-SS4C215XC2	Pad Mount	74x32x32	15	12 Position	750W, 48VDC HX	(2) 200W TEC	3 Strings VRLA, 48V	740	1811
CUBE-SS4C215XN1	Pad Mount	74x32x32	15	—	750W, 48VDC HX	(2) 200W TEC	3 Strings VRLA, 48V	740	1811
CUBE-SS4C215XN2	Pad Mount	74x32x32	15	—	(2) 750W, 48VDC HX	(2) 200W TEC	3 Strings VRLA, 48V	800	1871
CUBE-SS4C218DB2	Pad Mount	74x34x38	18	8 Position	750W, 48VDC HX	DAC	3 Strings Saft Tel.X 180, 48V	855	1926
CUBE-SS4C218DR2	Pad Mount	74x34x38	18	8 Position	750W, 48VDC HX	DAC	3 Strings Saft Tel.X 180, 48V	855	1926
CUBE-SS4C218KN1	Pad Mount	74x34x38	18	—	48VDC 4K BTU AC	DAC	3 Strings Saft Tel.X 180, 48V	855	1926
CUBE-SS4D207DB1	Pad Mount	74x32x32	7	12 Position	750W, 48VDC HX	DAC	4 Strings Saft Tel.X 180, 48V	740	1971
CUBE-SS4D207DN2	Pad Mount	74x32x32	7	—	750W, 48VDC HX	DAC	4 Strings Saft Tel.X 180, 48V	730	1801
CUBE-SS4D207XN2	Pad Mount	74x32x32	7	—	750W, 48VDC HX	(3) 200W TEC	4 Strings VRLA, 48V	880	2111
CUBE-SS4D215DN2	Pad Mount	90x32x32	15	—	750W, 48VDC HX	DAC	4 Strings Saft Tel.X 180, 48V	750	1821
CUBE-SS4D215XN2	Pad Mount	90x32x32	15	—	750W, 48VDC HX	(2) 200W TEC	4 Strings VRLA, 48V	900	2131

OG-OSP052-K16

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CUBE SS Series Large Site Support Cabinets

Received 4.1.2024

Integrated Power Configuration Detail

Charles Part #	Integrated Power System	DC DISTRIBUTION				AC INPUT WIRING					# Open Positions
		Rectifier Slots	Rectifiers in Config.	Circuit Breaker Positions	DC Breakers in Config.	GMT Positions	AC Input Voltage	Load Center	Main Breaker	AC Load Breakers	
SS4B223IC1	None	None	None	None	None	None	220	16 Pos.	125A 2P	(1) 15A for GFCI (1) 2P 30A Surge	13
SS4B223KJ2	GE Infinity S, 48/24V, 600A NES4824-23-AC5H-PS8-DC1E	8	None	26	(1) 5A DAC (1) 15A for AC	None	220	20 Pos.	200A 2P	(1) 15A for GFCI (8) 20A 2P for Rectifiers (1) 2P 30A Surge	1
SS4B223MC2	GE Infinity S, 48/24V, 400A NES4824-23-AC1-PS8-DC1E	8	None	26	(1) 10A for HX (1) 3A DAC (1) 30A Surge	None	220	16 Pos.	125A 2P	(1) 15A for GFCI (4) 40A 2P for Rectifiers (1) 30A 2P Surge	5
SS4B223MC3	GE Infinity S, 48/24V, 400A NES4824-23-AC1-PS8-DC2E	8	None	52	(1) 10A for HX (1) 3A DAC (1) 30A Surge	None	220	12 Pos.	125A 2P	(1) 15A for GFCI (4) 40A 2P for Rectifiers (1) 30A 2P Surge	1
SS4B223MN3	GE Infinity S, 48/24V, 600A NES4824-23-AC5H-PS8-DC1E	8	None	26	(1) 10A for HX (1) 3A DAC	None	220	None	None	None	None
SS4B223MN4	GE Infinity S, 48/24V, 600A NES4824-23-AC5H-PS8-DC2E	16	None	26	(1) 10A for HX (1) 3A DAC	None	220	None	None	None	None
SS4B223XC3	GE Infinity S, 48/24V, 800A NES4824-23-AC1-PS16-DC2E	16	None	26	(1) 10A HX (1) 20A TEC	None	220	16 Pos.	125A 2P	(1) 15A for GFCI (6) 40A 2P for Rectifiers (1) 30A 2P Surge	1
SS4B223XN2	GE Infinity S, 48/24V, 600A NES4824-23-AC5H-PS8-DC1E	8	None	26	(1) 3 A Lights (1) 10A HX (1) 20A TEC	None	None	None	None	None	None
SS4B228LN1	None	None	None	None	None	None	None	None	None	None	None
SS4B228LX1	None	None	None	None	None	None	None	None	None	None	None
SS4B228PN1	None	None	None	None	None	None	None	None	None	None	None
SS4B228PX1	None	None	None	None	None	None	None	None	None	None	None
SS4B231KJ2	GE Infinity S, 48/24V, 600A NES4824-23-AC5H-PS8-DC1E	8	None	26	(1) 5A DAC (1) 15A for AC	None	220	20 Pos.	200A 2P	(1) 15A for GFCI (8) 20A 2P for Rectifiers (1) 2P 30A Surge	1
SS4B231KN1	None	None	None	None	None	None	None	None	None	None	None
SS4B231LN1	None	None	None	None	None	None	None	None	None	None	None
SS4B231LX2	GE Infinity S, 48/24V, 600A NES4824-23-AC5H-PS8-DC1E	8	None	26	(1) 3A Lights (1) 30A for AC (1) 20A TEC	None	220	None	None	None	None
SS4B231NX1	None	None	None	None	None	None	220	None	None	None	None
SS4B231PN2	GE Infinity S, 48/24V, 600A NES4824-23-AC5H-PS8-DC1E	8	None	26	(1) 3A Lights (1) 10A for TS (1) 3A DAC	None	220	None	None	None	None
SS4B231PX2	GE Infinity S, 48/24V, 600A NES4824-23-AC5H-PS8-DC1E	8	None	26	(1) 3A Lights (1) 10A for TS (1) 20A TEC	None	220	None	None	None	None
SS4B231VX1	None	None	None	None	None	None	220	None	None	None	None

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CUBE SS Series Large Site Support Cabinets

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Integrated Power Configuration Detail

		DC DISTRIBUTION					AC INPUT WIRING				
Charles Part #	Integrated Power System	Rectifier Slots	Rectifiers in Config.	Circuit Breaker Positions	DC Breakers in Config.	GMT Positions	AC Input Voltage	Load Center	Main Breaker	AC Load Breakers	# Open Positions
SS4C215DB1	None	None	None	None	None	None	220	12 Pos.	125A 2P	(1) 15A - GFCI	11
SS4C215DB3	GE Infinity S, 48/24V, 400A NES4824-23-AC1-PS8-DC1E	8	(4) 50A, 48V	26	(1) 3A DAC (1) 5A for HX (2) 10A (12) 30A	None	220	12 Pos.	125A 2P	(1) 15A for GFCI (4) 40A 2P for Rectifiers (1) 2P 30A Surge	1
SS4C215DN3	GE Infinity S, 48/24V, 600A NES4824-23-AC5H-PS8-DC1E	8	None	26	(1) 3A DAC (1) 5A for HX	None	220	None	None	None	None
SS4C215DN4	GE Infinity S, 48/24V, 800A NES4824-23-AC5-PS16-DC2E	16	None	52	(2) 5A for HX (1) 3A for DAC	None	220	None	None	None	None
SS4C215DN5	Emerson Netisure 502 (ZZ061) 582136800	8	None	52	(1) 3A Lights (1) 5A for HX (1) 3A for DAC	None	220	None	None	None	None
SS4C218DR2	GE Infinity S, 48V, 300A NES48-19-AC5-PS6-DC1E	6	None	20	(1) 5A for HX (12) 25A (1) 250A	6 Positions	220	8 Position	100A 2P	(6) 20A Tandem for Rectifiers (1) 15A for GFCI (1) 15A for Surge	None
SS4C215XC1	GE Infinity S, 48/24V, 600A NES4824-23-AC5H-PS8-DC2E	8	None	52	(1) 5A for HX (1) 20A for TEC	None	220	None	None	None	None
SS4C215XC2	GE Infinity S, 48/24V, 600A NES4824-23-AC5H-PS8-DC1E	8	None	26	(1) 5A for HX (1) 20A TEC (2) 10A (2) 30A	None	220	16 Pos.	200A 2P	(1) 15A for GFCI (8) 40A 2P for Rectifiers (1) 2P 30 A Surge	1
SS4C215XN1	None	None	None	None	None	None	220	None	None	None	None
SS4C215XN2	GE Infinity S, 48/24V, 800A NES4824-23-AC5-PS16-DC2E	16	None	52	(2) 5A for HX (1) 20A for TEC	None	220	None	None	None	None
SS4C218DB2	GE Infinity S, 48V, 300A NES48-19-AC5-PS6-DC1E	6	None	20	(1) 5A for HX (12) 25A (1) 250A	6 Positions	220	8 Position	100A 2P	(6) 20A Tandem for Rectifiers (1) 15A for GFCI (1) 15A for Surge	None
SS4C218KN1	None	None	None	None	None	None	220	None	None	None	None
SS4D207DB1	None	None	None	None	None	None	None	12 Pos.	125A 2P	(1) 15A - GFCI (1) 2P 30A Surge	9
SS4D207DN2	GE Infinity S, 48/24V, 600A NES4824-23-AC5H-PS8-DC1E	8	None	26	(1) 3A DAC (1) 5A for HX	None	220	None	None	None	None
SS4D207XN2	GE Infinity S, 48/24V, 600A NES4824-23-AC5H-PS8-DC1E	8	None	26	(1) 5A for HX (1) 20A for TEC	None	220	None	None	None	None
SS4D215DN2	GE Infinity S, 48/24V, 600A NES4824-23-AC5H-PS8-DC2E	8	None	52	(1) 3A DAC (1) 5A for HX	None	220	None	None	None	None
SS4D215XN2	GE Infinity S, 48/24V, 600A NES4824-23-AC5H-PS8-DC2E	8	None	52	(1) 5A for HX (1) 20A for TEC	None	220	None	None	None	None

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Technical drawing of a 19-inch rack-mountable equipment, showing front, side, and top views with dimensions in inches.

Front View Dimensions:

- Overall Width: 32.1
- Overall Height: 74.1
- Top Mounting Flange Width: 5.4
- Top Mounting Flange Height: 28.0
- Bottom Mounting Flange Width: 44.3
- Bottom Mounting Flange Height: 72.3

Side View Dimensions:

- Overall Depth: 63.1
- Door Open Height: 63.1

Top View Dimensions:

- Overall Width: 32.3
- Overall Depth: 27.5
- Mounting Flange Width: 6.9
- Mounting Flange Height: 6.1
- Mounting Flange Spacing: 2.6
- Mounting Flange Diameter: $\phi 1.75$
- Mounting Flange Hole Diameter: $\phi 2.50$
- Mounting Flange Hole Spacing: 14.0
- Mounting Flange Hole Diameter: $\phi 1.75$
- Mounting Flange Hole Spacing: 7.4
- Mounting Flange Hole Diameter: $\phi 2.50$
- Mounting Flange Hole Spacing: 8.1
- Mounting Flange Hole Diameter: $\phi 1.75$
- Mounting Flange Hole Spacing: 2.7
- Mounting Flange Hole Diameter: $\phi 2.50$
- Mounting Flange Hole Spacing: 15.0
- Mounting Flange Hole Diameter: $\phi 1.75$
- Mounting Flange Hole Spacing: 24.3
- Mounting Flange Hole Diameter: $\phi 2.50$
- Mounting Flange Hole Spacing: 27.5
- Mounting Flange Hole Diameter: $\phi 1.75$
- Mounting Flange Hole Spacing: 6.0
- Mounting Flange Hole Diameter: $\phi 2.50$
- Mounting Flange Hole Spacing: 15.8
- Mounting Flange Hole Diameter: $\phi 1.75$
- Mounting Flange Hole Spacing: 2.8
- Mounting Flange Hole Diameter: $\phi 2.50$
- Mounting Flange Hole Spacing: 2.9
- Mounting Flange Hole Diameter: $\phi 1.75$
- Mounting Flange Hole Spacing: 3.5
- Mounting Flange Hole Diameter: $\phi 2.50$

Callouts:

- (4) $\phi 1.75$ / $\phi 2.50$ KNOCKOUTS
- (8) $\phi 1.75$ / $\phi 2.50$ KNOCKOUTS (BOTH SIDES)
- (6) $\phi .63$ HOLES

OG-OSP052-A20

**MADE IN THE
USA**

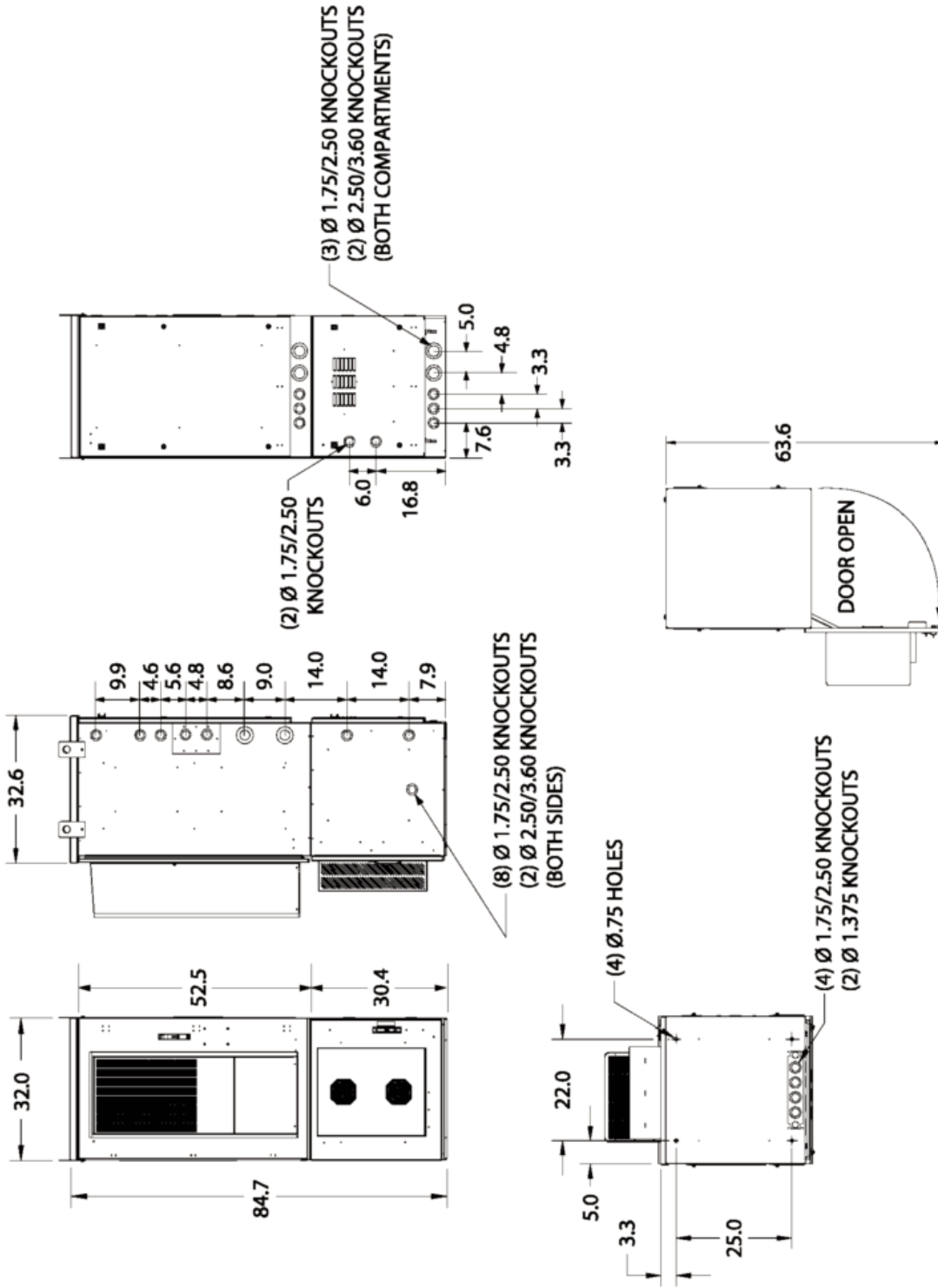
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CUBE SS Series Large Site Support Cabinets



CUBE-SS4x228xxx Dimensions

**FACTORY INSTALLED
OPTIONS**

- 96-000003-A
Retractable Overhang
- 97-002230-A
8" Top Hat Cable Entry
Compartment
- 96-002162-A
Factory Installed 6" Plinth



OG-OSP052-A20

All units in inches

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CUBE-SS4x231xxx Dimensions

FACTORY INSTALLED OPTIONS

96-000003-A

Retractable Overhang

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8" Top Hat Cable Entry
Compartment

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Factory Installed 6" Plinth

**MADE IN THE
USA**

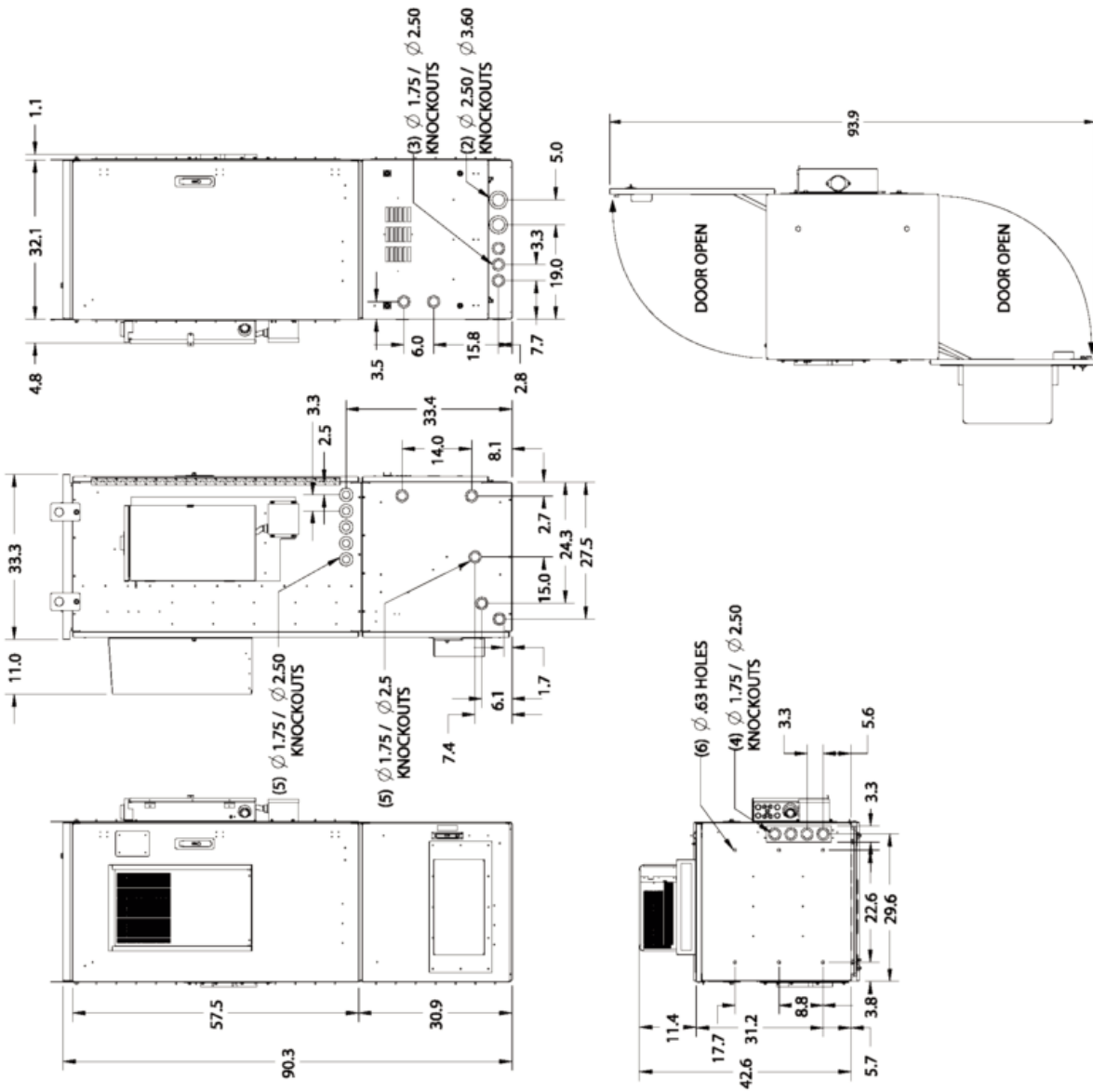
OG-OSP052-A20

All units in inches

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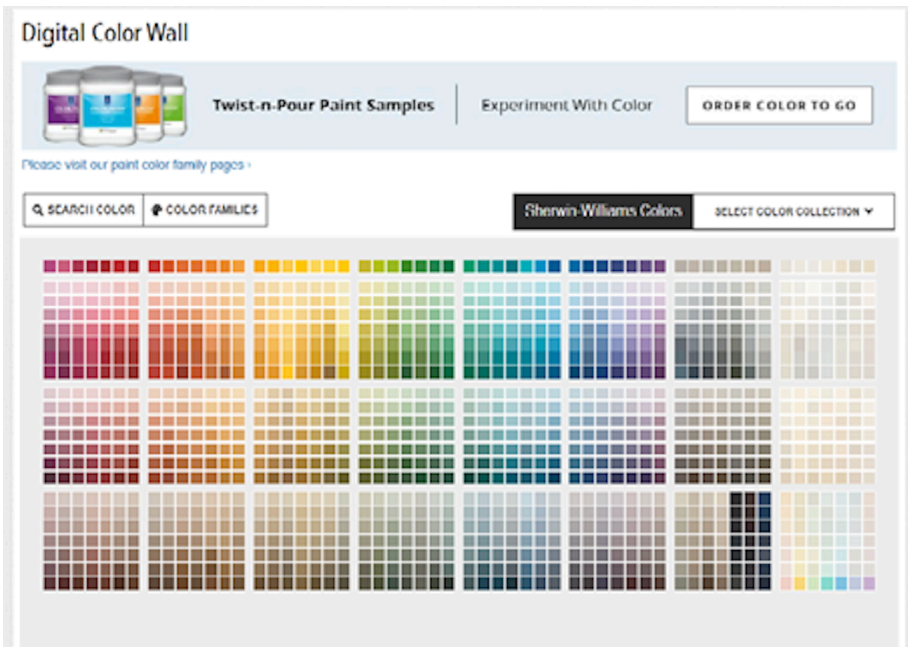
The logo for Charles of the Mountains, featuring a stylized mountain peak graphic above the brand name "Charles of the Mountains" in a serif font.

Screen Wall Paint

The proposed screen wall will be painted to match the existing partial screen wall on the rooftop.



Sherman Williams paint will be used to match the color.



BUILDING AND ROOFTOP LEASE AGREEMENT

This Building and Rooftop Lease Agreement (the "Agreement") made this 31 day of January, 2018, between Southern Oregon University, a public university with a Governing Board, with its principal offices located at 1250 Siskiyou Boulevard, Ashland, Oregon 97520, hereinafter designated LESSOR and Verizon Wireless (VAW) LLC d/b/a Verizon Wireless with its principal offices at One Verizon Way, Mail Stop 4AW100, Basking Ridge, New Jersey 07920 (telephone number 866-862-4404), hereinafter designated LESSEE. LESSOR and LESSEE are at times collectively referred to hereinafter as the "Parties" or individually as the "Party."

WITNESSETH

In consideration of the mutual covenants contained herein and intending to be legally bound hereby, the Parties hereto agree as follows:

1. **GRANT.** In accordance with this Agreement, LESSOR hereby grants to LESSEE the right to install, maintain and operate communications equipment ("Use") in and/or upon that certain building or facility owned, leased or controlled by LESSOR at 1250 Siskiyou Boulevard, Ashland, County of Jackson, State of Oregon (the "Property"). The Property is legally described on Exhibit "A" attached hereto and made a part hereof. LESSEE's communications equipment will be installed on a portion of the Property consisting of approximately 252 square feet of rooftop space on the building (the "Premises"). The Premises are shown in detail on Exhibit "B" attached hereto and made a part hereof.

2. **INITIAL TERM.** This Agreement shall be effective as of the date of execution by both Parties ("Effective Date"). The initial term of the Agreement shall be for 5 years beginning on the Commencement Date (as hereinafter defined). The "Commencement Date" shall be the first day of the month after LESSEE begins installation of LESSEE's communications equipment.

3. **EXTENSIONS.** This Agreement shall automatically be extended for 4 additional 5 year terms unless LESSEE terminates it at the end of the then current term by giving LESSOR written notice of the intent to terminate at least 3 months prior to the end of the then current term. The initial term and all extensions shall be collectively referred to herein as the "Term".

4. **RENTAL; EXTENSION RENTALS.**

(a). Rental payments shall begin on the Commencement Date and be due at a total annual rental of [REDACTED] to be paid in equal monthly installments on the first day of the month, in advance, to Southern Oregon University, 1250 Siskiyou Boulevard, Ashland, Oregon 97520 or to such other person, firm, or place as LESSOR may, from time to time, designate in writing at least 30 days in advance of any rental payment date by notice given in accordance with Paragraph 22 below. LESSOR and LESSEE acknowledge and agree that the initial rental payment shall not be delivered by LESSEE until 60 days after the Commencement Date. Upon agreement of the Parties, LESSEE may pay rent by electronic funds transfer and in such event, LESSOR agrees to provide to LESSEE bank routing information for such purpose upon request of LESSEE.

(b). For any party to whom rental payments are to be made, LESSOR or any successor in interest of LESSOR hereby agrees to provide to LESSEE (i) a completed, current version of Internal Revenue Service Form W-9, or equivalent; (ii) complete and fully executed state and local withholding forms if required; and (iii) other documentation to verify LESSOR's or such other party's right to receive rental as is reasonably requested by LESSEE. Rental shall accrue in accordance with this Agreement, but LESSEE shall have no obligation to deliver rental payments until the requested documentation has been received by LESSEE. Upon receipt of the requested documentation, LESSEE shall deliver the accrued rental payments as directed by LESSOR.

(c). The annual rental for the second (2nd) year of the initial term and for each year thereafter including any and all extension terms shall be equal [REDACTED] of the annual rental payable with respect to the immediately preceding year.

5. ACCESS. LESSEE shall have the non-exclusive right of ingress and egress from a public right-of-way, 7 days a week, 24 hours a day, over the Property to and from the Premises for the purpose of installation, operation and maintenance of LESSEE's communications equipment. Without limitation, the Premises may include certain space within the building, on the roof of the building or elsewhere on the building sufficient for the installation, operation and maintenance of communications equipment. Notwithstanding anything to the contrary, the Premises shall include (1) such additional space necessary for the installation, operation and maintenance of wires, cables, conduits and pipes running between and among the various portion of the Premises and to all necessary electrical, telephone, fiber and other similar support services located within the Property or the nearest public right of way, and (2) such additional space sufficient for LESSEE's radio frequency signage and/or barricades as are necessary to LESSEE's compliance with Laws (as defined in Paragraph 29). In the event it is necessary, LESSOR agrees to grant LESSEE or the provider the right to install such services on, through, over and/or under the Property, provided the location of such services shall be reasonably approved by LESSOR.

6. CONDITION OF PROPERTY. LESSOR shall deliver the Premises to LESSEE in a condition ready for LESSEE's Use and clean and free of debris. LESSOR represents and warrants to LESSEE that as of the Effective Date, the structure of the building (including without limitation the roof, foundations, exterior walls), the common areas and all building systems (including, without limitation, the plumbing, electrical, ventilating, air conditioning, heating, and loading doors, if any) are (a) in good operating condition and free of any leakage; (b) in compliance with all Laws; and (c) in compliance with all EH&S Laws (as defined in Paragraph 26).

7. ELECTRICAL.

(a). If permitted by the local utility company serving the Premises, LESSEE shall furnish and install an electrical meter at the Premises for the measurement of electrical power used by LESSEE at the Premises and LESSEE shall pay the utility company directly.

(b). If an electrical meter is not permitted, then LESSEE may furnish and install an electrical sub-meter at the Premises for the measurement of electrical power used by LESSEE at the Premises and shall pay the utility company directly if permitted by the utility company.

(c). In the event a sub-meter is installed and the utility company will not permit LESSEE to pay the utility company directly, then the LESSOR shall read LESSEE's sub-meter on a monthly basis and provide LESSEE with an invoice for LESSEE's power consumption on an annual basis. Each invoice

shall reflect charges only for LESSEE's power consumption based on the average kilowatt hour rate actually paid by LESSOR to the utility, without mark up or profit.

(d). All invoices for power consumption shall be sent by LESSOR to LESSEE at Verizon Wireless, M/S 3846, P.O. Box 2375, Spokane, WA 99210-2375, and shall be provided to LESSEE within 90 days following the conclusion of each calendar year (otherwise, LESSOR waives the right to collect applicable electrical charges). Upon written request from LESSEE, LESSOR shall provide copies of electricity bills received by LESSOR during any period that LESSOR submits invoices to LESSEE for reimbursement and for that same period LESSOR shall provide documentation of the sub-meter readings applicable to such periods. LESSEE shall pay each invoice within 45 calendar days after receipt of the invoice from LESSOR.

(e). LESSEE shall be permitted to install, maintain and/or provide access to and use of, as necessary (during any power interruption at the Premises), a temporary power source, and all related equipment and appurtenances within the Premises, or elsewhere on the Property in such locations as reasonably approved by LESSOR. LESSEE shall have the right to install conduits connecting the temporary power source and related appurtenances to the Premises.

8. IMPROVEMENTS. The communications equipment including, without limitation, antennas, conduits, and other improvements shall be at LESSEE's expense and installation shall be at the discretion and option of LESSEE. LESSEE shall have the right to replace, repair, add or otherwise modify its communications equipment, antennas, conduit or other improvements or any portion thereof and the frequencies over which the communications equipment operates, whether or not any of the communications equipment, antennas, conduits or other improvements are listed on any exhibit.

9. GOVERNMENT APPROVALS. LESSEE's Use is contingent upon LESSEE obtaining all of the certificates, permits and other approvals (collectively the "Government Approvals") that may be required by any Federal, State or Local authorities (collectively, the "Governmental Entities") as well as a satisfactory structural analysis of the building or other structure that will permit LESSEE's Use. LESSOR shall cooperate with LESSEE in its effort to obtain such approvals and shall take no action which would adversely affect the status of the Property with respect to LESSEE's Use.

10. TERMINATION. LESSEE may, unless otherwise stated, immediately terminate this Agreement upon written notice to LESSOR in the event that (i) any applications for such Governmental Approvals should be finally rejected; (ii) any Governmental Approval issued to LESSEE is canceled, expires, lapses or is otherwise withdrawn or terminated by any Government Entity; (iii) LESSEE determines that such Governmental Approvals may not be obtained in a timely manner; (iv) LESSEE determines any structural analysis is unsatisfactory; (v) LESSEE, in its sole discretion, determines the Use of the Premises is obsolete or unnecessary; (vi) with 3 months prior notice to LESSOR, upon the annual anniversary of the Commencement Date; or (vii) at any time before the Commencement Date for any reason or no reason in LESSEE's sole discretion.

11. MAINTENANCE. LESSEE will maintain LESSEE's communication equipment within the Premises in good condition, reasonable wear and tear and casualty damage excepted. LESSOR shall maintain, in good operating condition and repair, the structural elements of the building and the Premises, and all building systems (including, but not limited to, the foundations, exterior walls, structural condition of interior bearing walls, exterior roof fire sprinkler and/or standpipe and hose or

other automatic fire extinguishing system, fire hydrants, parking lots, walkways, parkways, driveways, landscaping, fences, signs and utility systems serving the common areas) and the common areas.

12. INDEMNIFICATION. Subject to Paragraph 13, each Party shall indemnify and hold the other harmless against any claim of liability or loss from personal injury or property damage resulting from or arising out of the negligence or willful misconduct of the indemnifying Party, its employees, contractors or agents, except to the extent such claims or damages may be due to or caused by the negligence or willful misconduct of the other Party, or its employees, contractors or agents. The indemnified Party will provide the indemnifying Party with prompt, written notice of any claim covered by this indemnification; provided that any failure of the indemnified Party to provide any such notice, or to provide it promptly, shall not relieve the indemnifying Party from its indemnification obligation in respect of such claim, except to the extent the indemnifying Party can establish actual prejudice and direct damages as a result thereof. The indemnified Party will cooperate appropriately with the indemnifying Party in connection with the indemnifying Party's defense of such claim. The indemnifying Party shall defend any indemnified Party, at the indemnified Party's request, against any claim with counsel reasonably satisfactory to the indemnified Party. The indemnifying Party shall not settle or compromise any such claim or consent to the entry of any judgment without the prior written consent of each indemnified Party and without an unconditional release of all claims by each claimant or plaintiff in favor of each indemnified Party. LESSOR's indemnification obligations under this Agreement shall be limited to the extent such indemnification is permitted by Article XI, Section 7 of the Oregon Constitution and the Oregon Tort Claims Act (ORS 30.260 to ORS 30.300).

13. INSURANCE.

(a). The Parties agree that at their own cost and expense, each will maintain commercial general liability insurance with limits not less than \$[REDACTED] for injury to or death of one or more persons in any one occurrence and \$[REDACTED] for damage or destruction to the building in any one occurrence. The Parties agree to include the other Party as an additional insured. The Parties hereby waive and release any and all rights of action for negligence against the other which may hereafter arise on account of damage to the Premises or the Property, resulting from any fire, or other casualty which is insurable under "Causes of Loss – Special Form" property damage insurance or for the kind covered by standard fire insurance policies with extended coverage, regardless of whether or not, or in what amounts, such insurance is now or hereafter carried by the Parties, even if any such fire or other casualty shall have been caused by the fault or negligence of the other Party. These waivers and releases shall apply between the Parties and they shall also apply to any claims under or through either Party as a result of any asserted right of subrogation. All such policies of insurance obtained by either Party concerning the Premises or the Property shall waive the insurer's right of subrogation against the other Party.

(b). LESSOR shall obtain and keep in force during the Term a policy or policies insuring against loss or damage to the building with a commercially reasonable valuation, as the same shall exist from time to time without a coinsurance feature. LESSOR's policy or policies shall insure against all risks of direct physical loss or damage (except the perils of flood and earthquake unless required by a lender or included in the base premium), including coverage for any additional costs resulting from debris removal and reasonable amounts of coverage for the enforcement of any ordinance or law regulating the reconstruction or replacement of any undamaged sections of the building required to be demolished or removed by reason of the enforcement of any building, zoning, safety or land use laws as the result of a covered loss, but not including plate glass insurance.

14. LIMITATION OF LIABILITY. Except for indemnification pursuant to Paragraphs 12 and 26, a violation of Paragraph 31, or a violation of law, neither Party shall be liable to the other, or any of their respective agents, representatives, employees for any lost revenue, lost profits, loss of technology, rights or services, incidental, punitive, indirect, special or consequential damages, loss of data, or interruption or loss of use of service, even if advised of the possibility of such damages, whether under theory of contract, tort (including negligence), strict liability or otherwise.

15. INTERFERENCE.

(a). LESSEE agrees that LESSEE will not cause interference that is measurable in accordance with industry standards to LESSOR's equipment. LESSOR agrees that LESSOR and other occupants of the Property will not cause interference that is measurable in accordance with industry standards to the then existing equipment of LESSEE.

(b). Without limiting any other rights or remedies, if interference occurs and continues for a period in excess of 48 hours following notice to the interfering party via telephone to LESSEE's [REDACTED] the interfering party shall or shall require any other user to reduce power or cease operations of the interfering equipment until the interference is cured.

(c). The Parties acknowledge that there will not be an adequate remedy at law for noncompliance with the provisions of this Paragraph and therefore the Parties shall have the right to equitable remedies such as, without limitation, injunctive relief and specific performance.

16. REMOVAL AT END OF TERM. Upon expiration or within 90 days of earlier termination, LESSEE shall remove LESSEE's Communications Equipment and restore the Premises to its original condition, reasonable wear and tear and casualty damage excepted. LESSOR agrees and acknowledges that the communications equipment shall remain the personal property of LESSEE and LESSEE shall have the right to remove the same at any time during the Term, whether or not said items are considered fixtures and attachments to real property under applicable laws. If such time for removal causes LESSEE to remain on the Premises after termination of the Supplement, LESSEE shall pay rent at the then existing monthly rate or on the existing monthly pro-rata basis if based upon a longer payment term, until the removal of the communications equipment is completed.

17. HOLDOVER. If upon expiration of the Term the Parties are negotiating a new lease or a lease extension, then this Agreement shall continue during such negotiations on a month to month basis at the rental in effect as of the date of the expiration of the Term. In the event that the Parties are not in the process of negotiating a new lease or lease extension and LESSEE holds over after the expiration or earlier termination of the Term, then LESSEE shall pay rent at the then existing monthly rate or on the existing monthly pro-rata basis if based upon a longer payment term, until the removal of the communications equipment is completed.

18. RIGHT OF FIRST REFUSAL. If at any time after this Agreement is fully executed, LESSOR receives an offer or letter of intent from any person or entity that is in the business of owning, managing or operating communications facilities or is in the business of acquiring landlord interests in agreements relating to communications facilities, to purchase fee title, an easement, a lease, a license, or any other interest in the Premises or any portion thereof or to acquire any interest in this Agreement, or an option for any of the foregoing, LESSOR shall provide written notice to LESSEE of said offer ("LESSOR's Notice").

LESSOR's Notice shall include the prospective buyer's name, the purchase price being offered, any other consideration being offered, the other terms and conditions of the offer, a description of the portion of and interest in the Premises and/or this Agreement which will be conveyed in the proposed transaction, and a copy of any letters of intent or form agreements presented to LESSOR by the third party offeror. LESSEE shall have the right of first refusal to meet any bona fide offer of sale or transfer on the terms and conditions of such offer or by effectuating a transaction with substantially equivalent financial terms. If LESSEE fails to provide written notice to LESSOR that LESSEE intends to meet such bona fide offer within thirty (30) days after receipt of LESSOR's Notice, LESSOR may proceed with the proposed transaction in accordance with the terms and conditions of such third party offer, in which event this Agreement shall continue in full force and effect and the right of first refusal described in this paragraph shall survive any such conveyance to a third party. If LESSEE provides LESSOR with notice of LESSEE's intention to meet the third party offer within thirty (30) days after receipt of LESSOR's Notice, then if LESSOR's Notice describes a transaction involving greater space than the Premises, LESSEE may elect to proceed with a transaction covering only the Premises and the purchase price shall be pro-rated on a square footage basis. Further, LESSOR acknowledges and agrees that if LESSEE exercises this right of first refusal, LESSEE may require a reasonable period of time to conduct due diligence and effectuate the closing of a transaction on substantially equivalent financial terms of the third party offer. LESSEE may elect to amend this Agreement to effectuate the proposed financial terms of the third party offer rather than acquiring fee simple title or an easement interest in the Premises. For purposes of this Paragraph, any transfer, bequest or devise of LESSOR's interest in the Property as a result of the death of LESSOR, whether by will or intestate succession, or any conveyance to LESSOR's family members by direct conveyance or by conveyance to a trust for the benefit of family members shall not be considered a sale for which LESSEE has any right of first refusal.

19. RIGHTS UPON SALE. Should LESSOR, at any time during the Term decide (i) to sell or otherwise transfer all or any part of the Property, or (ii) to grant to a third party by easement or other legal instrument an interest in and to any portion of the Premises, such sale, transfer, or grant of an easement or interest therein shall be under and subject to this Agreement and any such purchaser or transferee shall recognize LESSEE's rights hereunder. In the event that LESSOR completes any such sale, transfer, or grant described in this paragraph without executing an assignment of the Agreement whereby the third party agrees in writing to assume all obligations of LESSOR under this Agreement, then LESSOR shall not be released from its obligations to LESSEE under this Agreement, and LESSEE shall have the right to look to LESSOR and the third party for the full performance of the Agreement.

20. LESSOR'S TITLE. LESSOR covenants that LESSEE, on paying the rent and performing the covenants herein, shall peaceably and quietly have, hold and enjoy the Premises. LESSOR represents and warrants to LESSEE as of the Effective Date and covenants during the Term that LESSOR has full authority to enter into and execute this Agreement and that there are no liens, judgments, covenants, easement, restrictions or other impediments of title that will adversely affect LESSEE's Use.

21. ASSIGNMENT. Without any approval or consent of the other Party, this Agreement may be sold, assigned or transferred by either Party to (i) any entity in which the Party directly or indirectly holds an equity or similar interest; (ii) any entity which directly or indirectly holds an equity or similar interest in the Party; or (iii) any entity directly or indirectly under common control with the Party. LESSEE may assign this Agreement to any entity which acquires all or substantially all of LESSEE's assets in the market defined by the FCC in which the Property is located by reason of a merger, acquisition or other business reorganization without approval or consent of LESSOR. As to other parties, this Agreement may not be sold, assigned or transferred without the written consent of the other Party, which such consent

will not be unreasonably withheld, delayed or conditioned. No change of stock ownership, partnership interest or control of LESSEE or transfer upon partnership or corporate dissolution of either Party shall constitute an assignment hereunder.

22. NOTICES. Except for notices permitted via telephone in accordance with Paragraph 15, all notices hereunder must be in writing and shall be deemed validly given if sent by certified mail, return receipt requested or by commercial courier, provided the courier's regular business is delivery service and provided further that it guarantees delivery to the addressee by the end of the next business day following the courier's receipt from the sender, addressed as follows (or any other address that the Party to be notified may have designated to the sender by like notice):

LESSOR: Southern Oregon University
1250 Siskiyou Boulevard
Ashland, Oregon 97520
[REDACTED]

LESSEE: Verizon Wireless (VAW) LLC
d/b/a Verizon Wireless
180 Washington Valley Road
Bedminster, New Jersey 07921
Attention: Network Real Estate

Notice shall be effective upon actual receipt or refusal as shown on the receipt obtained pursuant to the foregoing.

23. SUBORDINATION AND NON-DISTURBANCE. Within 15 days of the Effective Date, LESSOR shall obtain a Non-Disturbance Agreement, as defined below, from its existing mortgagee(s), ground lessors and master lessors, if any, of the Property. At LESSOR's option, this Agreement shall be subordinate to any future master lease, ground lease, mortgage, deed of trust or other security interest (a "Mortgage") by LESSOR which from time to time may encumber all or part of the Property; provided, however, as a condition precedent to LESSEE being required to subordinate its interest in this Agreement to any future Mortgage covering the building, LESSOR shall obtain for LESSEE's benefit a non-disturbance and attornment agreement for LESSEE's benefit in the form reasonably satisfactory to LESSEE, and containing the terms described below (the "Non-Disturbance Agreement"), and shall recognize LESSEE's rights under this Agreement. The Non-Disturbance Agreement shall include the encumbering party's ("Lender's") agreement that, if Lender or its successor-in-interest or any purchaser of Lender's or its successor's interest (a "Purchaser") acquires an ownership interest in the building, Lender or such successor-in-interest or Purchaser will honor all of the terms of the Agreement. Such Non-Disturbance Agreement must be binding on all of Lender's participants in the subject loan (if any) and on all successors and assigns of Lender and/or its participants and on all Purchasers. In return for such Non-Disturbance Agreement, LESSEE will execute an agreement for Lender's benefit in which LESSEE (1) confirms that the Agreement is subordinate to the Mortgage or other real property interest in favor of Lender, (2) agrees to attorn to Lender if Lender becomes the owner of the building and (3) agrees to accept a cure by Lender of any of LESSOR's defaults, provided such cure is completed within the deadline applicable to LESSOR. In the event LESSOR defaults in the payment and/or other performance of any mortgage or other real property interest encumbering the Property, LESSEE, may, at its sole option and without obligation, cure or correct LESSOR's default and upon doing so, LESSEE shall be subrogated to any and all rights, titles, liens and equities of the holders of such mortgage or other

real property interest and LESSEE shall be entitled to deduct and setoff against all rents that may otherwise become due under this Agreement the sums paid by LESSEE to cure or correct such defaults.

24. DEFAULT. It is a "Default" if (i) either Party fails to comply with this Agreement and does not remedy the failure within 30 days after written notice by the other Party or, if the failure cannot reasonably be remedied in such time, if the failing Party does not commence a remedy within the allotted 30 days and diligently pursue the cure to completion within 90 days after the initial written notice, or (ii) LESSOR fails to comply with this Agreement and the failure interferes with LESSEE's Use and LESSOR does not remedy the failure within 5 days after written notice from LESSEE or, if the failure cannot reasonably be remedied in such time, if LESSOR does not commence a remedy within the allotted 5 days and diligently pursue the cure to completion within 15 days after the initial written notice. The cure periods set forth in this Paragraph 24 do not extend the period of time in which either Party has to cure interference pursuant to Paragraph 15 of this Agreement.

25. REMEDIES. In the event of a Default, without limiting the non-defaulting Party in the exercise of any right or remedy which the non-defaulting Party may have by reason of such default, the non-defaulting Party may terminate this Agreement and/or pursue any remedy now or hereafter available to the non-defaulting Party under the Laws or judicial decisions of the state in which the Property is located. Further, upon a Default, the non-defaulting Party may at its option (but without obligation to do so), perform the defaulting Party's duty or obligation. The costs and expenses of any such performance by the non-defaulting Party shall be due and payable by the defaulting Party upon invoice therefor. If LESSEE undertakes any such performance on LESSOR's behalf and LESSOR does not pay LESSEE the full undisputed amount within 30 days of its receipt of an invoice setting forth the amount due, LESSEE may offset the full undisputed amount due against all fees due and owing to LESSOR under this Agreement until the full undisputed amount is fully reimbursed to LESSEE.

26. ENVIRONMENTAL. LESSEE shall conduct its business in compliance with all applicable laws governing the protection of the environment or employee health and safety ("EH&S Laws"). LESSEE shall indemnify and hold harmless the LESSOR from claims to the extent resulting from LESSEE's violation of any applicable EH&S Laws or to the extent that LESSEE causes a release of any regulated substance to the environment. LESSOR shall indemnify and hold harmless LESSEE from all claims resulting from the violation of any applicable EH&S Laws or a release of any regulated substance to the environment except to the extent resulting from the activities of LESSEE. The Parties recognize that LESSEE is only licensing a small portion of LESSOR's property and that LESSEE shall not be responsible for any environmental condition or issue except to the extent resulting from LESSEE's specific activities and responsibilities. In the event that LESSEE encounters any hazardous substances that do not result from its activities, LESSEE may relocate its facilities to avoid such hazardous substances to a mutually agreeable location or, if LESSEE desires to remove at its own cost all or some of the hazardous substances or materials (such as soil) containing those hazardous substances, LESSOR agrees to sign any necessary waste manifest associated with the removal, transportation and/or disposal of such substances.

27. CASUALTY. If a fire or other casualty damages the Property or the Premises and impairs LESSEE's Use, rent shall abate until LESSEE's Use is restored. If LESSEE's Use is not restored within 45 days, LESSEE may terminate this Agreement.

28. CONDEMNATION. If a condemnation of any portion of the Property or Premises impairs LESSEE's Use, LESSEE may terminate this Agreement. LESSEE may on its own behalf make a claim in any

condemnation proceeding involving the Premises for losses related to LESSEE's communications equipment, relocation costs and, specifically excluding loss of LESSEE's leasehold interest, any other damages LESSEE may incur as a result of any such condemnation.

29. APPLICABLE LAWS. During the Term, LESSOR shall maintain the Property in compliance with all applicable laws, EH&S Laws, rules, regulations, ordinances, directives, covenants, easements, consent decrees, zoning and land use regulations, and restrictions of record, permits, building codes, and the requirements of any applicable fire insurance underwriter or rating bureau, now in effect or which may hereafter come into effect (including, without limitation, the Americans with Disabilities Act and laws regulating hazardous substances) (collectively "Laws"). LESSEE shall, in respect to the condition of the Premises and at LESSEE's sole cost and expense, comply with (i) all Laws relating solely to LESSEE's specific and unique nature of use of the Premises; and (ii) all building codes requiring modifications to the Premises due to the improvements being made by LESSEE in the Premises. It shall be LESSOR's obligation to comply with all Laws relating to the Property, without regard to specific use (including, without limitation, modifications required to enable LESSEE to obtain all necessary building permits).

30. TAXES.

(a). LESSOR shall invoice and LESSEE shall pay any applicable transaction tax (including sales, use, gross receipts, or excise tax) imposed on the LESSEE and required to be collected by the LESSOR based on any service, rental space, or equipment provided by the LESSOR to the LESSEE. LESSEE shall pay all personal property taxes, fees, assessments, or other taxes and charges imposed by any Government Entity that are imposed on the LESSEE and required to be paid by the LESSEE that are directly attributable to the LESSEE's equipment or LESSEE's use and occupancy of the Premises. Payment shall be made by LESSEE within 60 days after presentation of a receipted bill and/or assessment notice which is the basis for such taxes or charges. LESSOR shall pay all ad valorem, personal property, real estate, sales and use taxes, fees, assessments or other taxes or charges that are attributable to LESSOR's Property or any portion thereof imposed by any Government Entity.

(b). LESSEE shall have the right, at its sole option and at its sole cost and expense, to appeal, challenge or seek modification of any tax assessment or billing for which LESSEE is wholly or partly responsible for payment. LESSOR shall reasonably cooperate with LESSEE at LESSEE's expense in filing, prosecuting and perfecting any appeal or challenge to taxes as set forth in the preceding sentence, including but not limited to, executing any consent, appeal or other similar document. In the event that as a result of any appeal or challenge by LESSEE, there is a reduction, credit or repayment received by the LESSOR for any taxes previously paid by LESSEE, LESSOR agrees to promptly reimburse to LESSEE the amount of said reduction, credit or repayment. In the event that LESSEE does not have the standing rights to pursue a good faith and reasonable dispute of any taxes under this paragraph, LESSOR will pursue such dispute at LESSEE's sole cost and expense upon written request of LESSEE.

31. NON-DISCLOSURE. The Parties agree this Agreement and any information exchanged between the Parties regarding the Agreement are confidential. The Parties agree not to provide copies of this Agreement or any other confidential information to any third party without the prior written consent of the other or as required by law. If a disclosure is required by law, including but not limited to the Oregon Public Records Act, prior to disclosure, the Party shall notify the other Party and cooperate to take lawful steps to resist, narrow, or eliminate the need for that disclosure. Each Party may, without

obtaining the other's consent, provide such copies or make such disclosures to Authorized Entities if such information pertains to that Authorized Entity.

32. [INTENTIONALLY DELETED].

33. MISCELLANEOUS. This Agreement contains all agreements, promises and understandings between the LESSOR and the LESSEE regarding this transaction, and no oral agreement, promises or understandings shall be binding upon either the LESSOR or the LESSEE in any dispute, controversy or proceeding. This Agreement may not be amended or varied except in a writing signed by all Parties. This Agreement shall extend to and bind the heirs, personal representatives, successors and assigns hereto. The failure of either party to insist upon strict performance of any of the terms or conditions of this Agreement or to exercise any of its rights hereunder shall not waive such rights and such party shall have the right to enforce such rights at any time. The performance of this Agreement shall be governed, interpreted, construed and regulated by the laws of the state in which the Premises is located without reference to its choice of law rules. Any Claim between LESSOR and LESSEE that arises from or relates to this Agreement shall be brought and conducted solely and exclusively within the Circuit Court of Jackson County for the State of Oregon; however, if a Claim must be brought in a federal forum, then it shall be brought and conducted solely and exclusively within the United States District Court for the District of Oregon. Except as expressly set forth in this Agreement, nothing in this Agreement shall grant, suggest or imply any authority for one Party to use the name, trademarks, service marks or trade names of the other for any purpose whatsoever. LESSOR agrees to execute a Memorandum of this Agreement, which LESSEE may record with the appropriate recording officer. The provisions of the Agreement relating to indemnification from one Party to the other Party shall survive any termination or expiration of this Agreement.

[Signature page follows. The remainder of this page is intentionally blank.]

IN WITNESS WHEREOF, the Parties hereto have set their hands and affixed their respective seals
the day and year first above written.

LESSOR: Southern Oregon University,
a public university with a Governing Board

By: 
Name: STEVE LARVICK
Title: DIR. of BUSINESS SERVICES & CONTROLLER
Date: 10-2-17

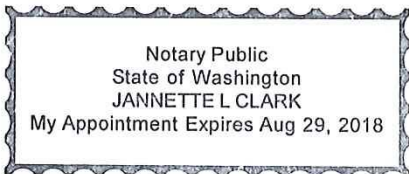
LESSEE: Verizon Wireless (VAW) LLC
d/b/a Verizon Wireless

By: 
Name: Gordon Cook
Title: Director - Network Field Engineering
Date: 1-31-18

STATE OF WASHINGTON)
) ss.
COUNTY OF KING)

On this 31st day of January, 2018, before me, a Notary Public in and for the State of Washington, personally appeared Gordon Cook, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person who executed this instrument, on oath stated that he was authorized to execute the instrument, and acknowledged it as the Director - Network Field Engineering for Verizon Wireless (VAW) LLC d/b/a Verizon Wireless, to be the free and voluntary act and deed of said party for the uses and purposes mentioned in the instrument.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal the day and year first above written.




NOTARY PUBLIC in and for the State of WA,
residing at Kirkland
My appointment expires 8/29/2018
Print Name Jannette L. Clark

EXHIBIT "A" (Page 1 of 4)
DESCRIPTION OF PROPERTY

From the quarter corner common to Sections 10 and 15 in Township 39 South, Range 1 East of the Willamette Meridian, in Jackson County, Oregon, run North 59°03' East 112.0 feet to a point on the West side-line of Walker Avenue in the City of Ashland, Oregon, thence North along said street line 1028.0 feet, and thence West 410.0 feet to the true point of beginning; thence West 300.1 feet to the West line of tract described in Volume 175 page 235 of the Deed Records of Jackson County, Oregon; thence North along said line 306.6 feet; thence East 300.1 feet to a point due North of the true point of beginning; thence South 306.6 feet to the true point of beginning.

From the quarter corner common to Sections 10 and 15 in Township 39, South, Range 1 East of the Willamette Meridian, in Jackson County, Oregon, run thence North 59°03' East 112.0 feet to a point on the West side-line of Walker Avenue in the City of Ashland, Jackson County, Oregon, thence North along said Street line 1028.0 feet, and thence West 410.0 feet to the true point of beginning; thence West 300.1 feet to the Northwest corner of tract described in Volume 162 page 587 of the Deed Records of Jackson County, Oregon; thence South 306.6 feet to the Southwest corner of said tract; thence East along the South line thereof 300.1 feet to a point due South of the true point of beginning; thence North 306.6 feet to the true point of beginning.

TRACT A: Beginning at a point 969.0 feet South and 270.0 feet East of the Southeast corner of Donation Land Claim No. 39 in Township 39 South, of Range 1 East of the Willamette Meridian in Jackson County, Oregon; thence East 225.0 feet to the East line of tract described in Volume 12 page 459 of the Deed Records of Jackson County, Oregon; thence South 93.75 feet; thence West 225.0 feet to a point South of the point of beginning; thence North 93.75 feet to the point of beginning.

TRACT B: Beginning at a point 1062.75 feet South and 270.0 feet East of the Southeast corner of Donation Land Claim No. 39 in Township 39 South, of Range 1 East of the Willamette Meridian in Jackson County, Oregon; thence East 225.0 feet to the East line of tract described in Volume 12 page 459 of the Deed Records of Jackson County, Oregon; thence South 93.75 feet; thence West 225.0 feet to a point South of the point of beginning; thence North 93.75 feet to the point of beginning.

Beginning at a point 594.0 feet South and 349.0 feet East of the Southeast corner of Donation Land Claim No. 39 in Township 39 South, Range 1 East of the Willamette Meridian in Jackson County, Oregon; thence South 0°37' West 187.51 feet to the South line of tract described in Volume 274 page 556 of the Deed Records of Jackson County, Oregon; thence East 150.0 feet to the West line of tract described in Volume 175 page 235, said Deed Records; thence North along said line 187.50 feet to a point East of the point of beginning; thence West 148.0 feet to the point of beginning.

Beginning at a point 781.50 feet South and 345.0 feet East of the Southeast corner of Donation Land Claim No. 39 in Township 39 South, Range 1 East of the Willamette Meridian in Jackson County, Oregon; thence South 187.50 feet; thence East 150.0 feet to West line of tract described in Volume 162 page 587 of the Deed Records of Jackson County, Oregon; thence North 187.50 feet; thence West 150.0 feet to the point of beginning.

EXHIBIT "A" (Page 2 of 4)

Lots 1, 2, the West 26.1 feet of Lot 3, the East 16.9 feet of Lot 4, and all of Lot 5 of Pounds Tracts in Jackson County, Oregon, according to the official plat thereof, now of record.

From the quarter corner common to Sections 10 and 15 in Township 39 South, of Range 1 East of the Willamette Meridian in Jackson County, Oregon, run thence North 59°03' East 112.0 feet to a point on the West side-line of Walker Avenue in the City of Ashland, Oregon; thence North along said street line 1028.0 feet, for the true point of beginning; thence West 410.0 feet; thence North parallel with the West side-line of Walker Avenue 306.6 feet; thence East 410.0 feet to the West line of Walker Avenue; thence South, along said West line, a distance of 306.6 feet to the true point of beginning.

Beginning at a point 1062.75 feet South and 192.0 feet East of the Southeast corner of Donation Land Claim No. 39 in Township 39 South, of Range 1 East of the Willamette Meridian in Jackson County, Oregon, thence East 78.0 feet; thence South 93.75 feet to the North line of Webster Street; thence West along the North line of Webster Street 106.0 feet; thence North 63.0 feet; thence East 28.0 feet to a point South of the point of beginning; thence North 30.75 feet to the point of beginning.

From the quarter corner common to Sections 10 and 15 in Township 39 South, Range 1 East of the Willamette Meridian in Jackson County, Oregon, run thence North 59°03' East 112.0 feet to the West side-line of Walker Avenue, thence along said side-line, North 0°15' West 588.1 feet, and thence West 576.0 feet to the true point of beginning; thence North 0°15' West 133.3 feet; thence East 65.0 feet; thence South 0°15' East 133.3 feet; and thence West 65.00 feet to the true point of beginning, being the Easterly 27.9 feet of Lot Three (3), and the Westerly 37.1 feet of

Lot Four (4) of Pounds Tracts in Jackson County, Oregon, according to the official plat thereof, now of record.

Beginning at a point on the East line of Wightman Street (also called Weightman Street) which bears South 969.0 feet and East 30.00 feet from the Southeast corner of Donation Land Claim No. 39 in Township 39 South, Range 1 East of the Willamette Meridian in Jackson County, Oregon; thence East 240.00 feet; thence South 93.75 feet; thence West 116.00 feet; thence North 80.00 feet; thence West 124.00 feet to the East line of said Wightman Street; thence North along said street line 13.75 feet to the point of beginning.

Beginning at a point 1062.75 feet South and 30.0 feet East of the Southeast corner of Donation Land Claim No. 39 in Township 39 South, of Range 1 East of the Willamette Meridian in Jackson County, Oregon, thence East 162 feet; thence South 30.75 feet; thence West 28.0 feet; thence South 63.0 feet to the North line of Webster Street; thence West along the North line of Webster Street 134.0 feet; thence North 93.75 feet to the point of beginning.

Beginning at a point on the East line of Wightman Street in the City of Ashland, Jackson County, Oregon, said point being 30.0 feet East and 781.50 feet South of the Southeast corner of Donation Land Claim No. 39 in Township 39 South, Range 1 East of the Willamette Meridian in Oregon; thence East 315.0 feet; thence South 187.50 feet; thence West 315.0 feet to the East line of Wightman Street; thence North 187.50 feet to the point of beginning.

Commencing at a point on the East line of Wightman Street (also called Weightman Street) which bears South 969.0 feet, and East 30.0 feet from the Southeast corner of Donation Land Claim No. 39 in Township 39 South, Range 1 East of the Willamette Meridian in Jackson County, Oregon, thence South 13.75 feet to the true point of beginning; thence East 124.00 feet; thence South 80.00 feet; thence West 124.00 feet, to the East line of said Wightman Street; thence North along said street line, 80.00 feet to the true point of beginning.

Lot Eleven (11) of Pounds Tracts in Jackson County, Oregon, according to the official plat thereof, now of record.

Lot 6, Pounds Tract, in the City of Ashland, Jackson County, Oregon.

EXHIBIT "A" (Page 3 of 4)

From the quarter corner common to Sections 10 and 15 in Township 39 South, Range 1 East of the Willamette Meridian in Jackson County, Oregon, run thence North 59°03' East 112.0 feet to a point on the West line of Walker Avenue in the City of Ashland, Jackson County, Oregon, thence North along said street line 874.7 feet to the most Easterly Southeast corner of tract described in Volume 298 page 59 of the Deed Records of Jackson County, Oregon, for the true point of beginning; thence West along the South line of said tract, 142.0 feet; thence North parallel with the West line of Walker Avenue, 76.0 feet; thence East 142.0 feet to the West line of Walker Avenue; thence South, along said line, 76.0 feet to the true point of beginning.

From the quarter corner common to Sections 10 and 15 in Township 39 South of Range 1 East of the Willamette Meridian in Jackson County, Oregon, run thence North 59°03' East 112 feet to a point on the West side line of Walker Avenue in the City of Ashland, Jackson County, Oregon; thence North along said street line 721.4 feet to the Southeast corner of tract described in Volume 162 page 587 of the Deed Records of Jackson County, Oregon; thence West along the South line of said tract 142.0 feet to the Southwest corner thereof; thence North along the West line thereof, 101.3 feet to the true point of beginning; thence continue North along said line 52 feet to the Northwest corner of said tract; thence West 258 feet to the East side line of Stadium Street; thence South along said street line 52 feet; thence East 258 feet to the true point of beginning.

From the quarter corner common to Sections 10 and 15 in Township 39 South of Range 1 East of the Willamette Meridian in Jackson County, Oregon, run thence North 59°03' East 112.0 feet to a point on the West side-line of Walker Avenue in the City of Ashland, Jackson County, Oregon, thence North 0°15' West along the West side-line of Walker Avenue, 874.7 feet, and thence West 142.0 feet to the true point of beginning; thence North 0°15' West parallel with the West line of Walker Avenue, 83.3 feet to the Southeast corner of tract described in Volume 336 page 144 of the Deed Records of Jackson County, Oregon; thence West, along the south line of said tract, 258.0 feet to the East line of Stadium Street in said City; thence along said street line, South 0°15' East 83.3 feet to a point West of the point of beginning; thence East 258.0 feet to the true point of beginning.

Lot Ten (10) of Pounds Tracts in Jackson County, Oregon, according to the official plat thereof, now of record.

From the quarter corner common to Sections 10 and 15 in Township 39 South, Range 1 East of the Willamette Meridian in Jackson County, Oregon; run thence North 59°03' East 112.0 feet to a point on the West sideline of Walker Avenue in the City of Ashland, Jackson County, Oregon; and thence North 0°15' West, along the West sideline of Walker Avenue, a distance of 721.4 feet to the Southeast corner of tract described in Volume 162, page 587, of the Deed Records of Jackson County, Oregon; thence West, along the South line of said tract, a distance of 142.0 feet to the most Southerly Southeast corner of tract described in Volume 298, page 59, said Deed Records; and thence North at right angles, a distance of 50.0 feet for the true point of beginning; thence West, parallel with the South line of said last described tract, 258.0 feet; thence North at right angles, a distance of 51.3 feet; thence East, parallel with the said South line of last described tract, 258.0 feet to a point North of the true point of beginning; thence South 51.3 feet to the true point of beginning.

Lot Seven (7) in Pounds Tracts in Jackson County, Oregon, according to the official plat thereof, now of record.

From the quarter corner common to Sections 10 and 15 in Township 39 South, Range 1 East of the Willamette Meridian in Jackson County, Oregon, thence North 59°03' East 112.0 feet to a point on the West side-line of Walker Avenue in the City of Ashland, Jackson County, Oregon, and thence North 0°15' West along the West side-line of Walker Avenue, a distance of 950.7 feet to the true point of beginning; thence West 142.0 feet; thence North 77.3 feet to the North line of tract described in Volume 162 page 587 of the Deed Records of Jackson County, Oregon; thence East, along the said North line, a distance of 142.0 feet to the West side-line of Walker Avenue; thence South along said West side-line, a distance of 77.3 feet to the true point of beginning.

From the Quarter corner common to Sections 10 and 15 in Township 39 South, Range 1 East of the Willamette Meridian in Jackson County, Oregon, run thence North 59°03' East 112.0 feet to a point on the West side-line of Walker Avenue in the City of Ashland, Jackson County, Oregon, and thence North 0°15' West along the West side-line of Walker Avenue, a distance of 721.4 feet to the Southeast corner of tract described in Volume 162, Page 587, of the Deed Records of Jackson County, Oregon; and thence West along the South line of said tract, a

EXHIBIT "A" (Page 4 of 4)

distance of 142.0 feet to the most Southerly Southeast corner of tract described in Volume 298, Page 59, said Deed Records, for the true point of beginning; thence continue West along the South line of said last described tract, a distance of 258.0 feet; thence North at right angles, a distance of 50.0 feet; thence East parallel with said South line, a distance of 258.0 feet to a point North of the true point of beginning; thence South 50.0 feet to the true point of beginning.

Lot 9, Pounds Tracts, in the City of Ashland, Jackson County, Oregon.

Commencing at the Quarter corner common to Sections 10 and 15 in Township 39 South, Range 1 East of the Willamette Meridian in Jackson County, Oregon; thence North 59°03' East, 112.0 feet to the West side line of Walker Avenue in the City of Ashland, Jackson County, Oregon; thence North 0°15' West along said side line, 958.0 feet; thence West, 142.0 feet to the true point of beginning; thence North 0°15' West, 70.0 feet to a point on the North line of property described in Volume 162, Page 587, of the Deed Records of Jackson County, Oregon; thence West, 258.0 feet to the East line of Stadium Street; thence South 0°15' East along said line, 70.0 feet; thence East, 258.0 feet to the true point of beginning;

Lot Eight (8) of Pounds Tract to the City of Ashland, Jackson County, Oregon, according to the official plat thereof, now of record.

Beginning at a point on the West line of Walker Avenue in the City of Ashland, Jackson County, Oregon, which point is located as follows: From the quarter section corner between Sections 10 and 15 in Township 39 South, Range 1 East of the Willamette Meridian, said County and State, run thence North 59°03' East, 112.0 feet to said point on the Walker Avenue; thence along said West line of Walker Avenue, North 0°15' West, 721.4 feet to the Northeast corner of Pounds Tracts, said City, County and State, for the true point of beginning; continuing thence North along said West line of Walker Avenue, 96.3 feet to the Southeast corner of premises described in Volume 366, Page 150, Jackson County Deed Records; thence West along the South line thereof, 142.0 feet to a point on the East line of the South "ell" of premises described in Volume 298, page 59 of said Deed Records; thence South along said East line, 96.3 feet to a point on the North line of said Pounds Tracts; thence East along said North line, 142.0 feet to the true point of beginning.

From the Quarter corner of Sections 10 and 15 in Township 39 South, Range 1 East of the Willamette Meridian in Jackson County, Oregon, run North 59°03' East, 112.0 feet to a point on the West side-line of Walker Avenue, in the City of Ashland, Oregon; thence North 0°15' West along the West side-line of Walker Avenue, 817.70 feet to the true point of beginning; thence continue North 0°15' West along the West side-line of Walker Avenue, 57.0 feet to the Southeast corner of tract described in Volume 310, Page 306 of the Deed Records of Jackson County, Oregon; thence West along the South line of said tract, 142.0 feet; thence South, parallel with the West side-line of Walker Avenue, 57.0 feet; thence East at right angles, 142.0 feet to the true point of beginning.

From the Quarter corner of Sections 10 and 15 in Township 39 South, Range 1 East of the Willamette Meridian in Jackson County, Oregon, run North 59°03' East, 112.0 feet to a point on the West side-line of Walker Avenue, in the City of Ashland, Oregon; thence North 0°15' West along the West side-line of Walker Avenue, 817.70 feet to the true point of beginning; thence continue North 0°15' West along the West side-line of Walker Avenue, 57.0 feet to the Southeast corner of tract described in Volume 310, Page 306 of the Deed Records of Jackson County, Oregon; thence West along the South line of said tract, 142.0 feet; thence South parallel with the West side-line of Walker Avenue, 57.0 feet; thence East at right angles, 142.0 feet to the true point of beginning.

A strip of land 10 feet in width and 306.60 feet in length and more particularly described as follows:

Beginning at the Quarter corner common to Sections 10 and 15 in T39S., R1E., W.M., Jackson County, Oregon; thence, N 59°03'E 1012.00 feet to a point on the West line of Walker Avenue in the City of Ashland, Jackson County, Oregon; thence, North along said street line 1028.0 feet; thence, West 400.00 feet to the true point of beginning; thence, South and parallel to said Walker Avenue 306.60 feet to the North line of the Pounds Tract in the City of Ashland, Jackson County, Oregon; thence, West along said line 10 feet; thence, North 306.60 feet; thence, East 10 feet to the true point of beginning.

TOGETHER WITH that portion of vacated Webster Street that would attached per operation of law as vacated by Ordinance No. 2378 and recorded January 13, 1986 as Document No. 86-00658, Deed Records of Jackson County, Oregon.

SITE PLAN OF ROOFTOP SPACE, ANTENNA SPACE AND CABLING SPACE

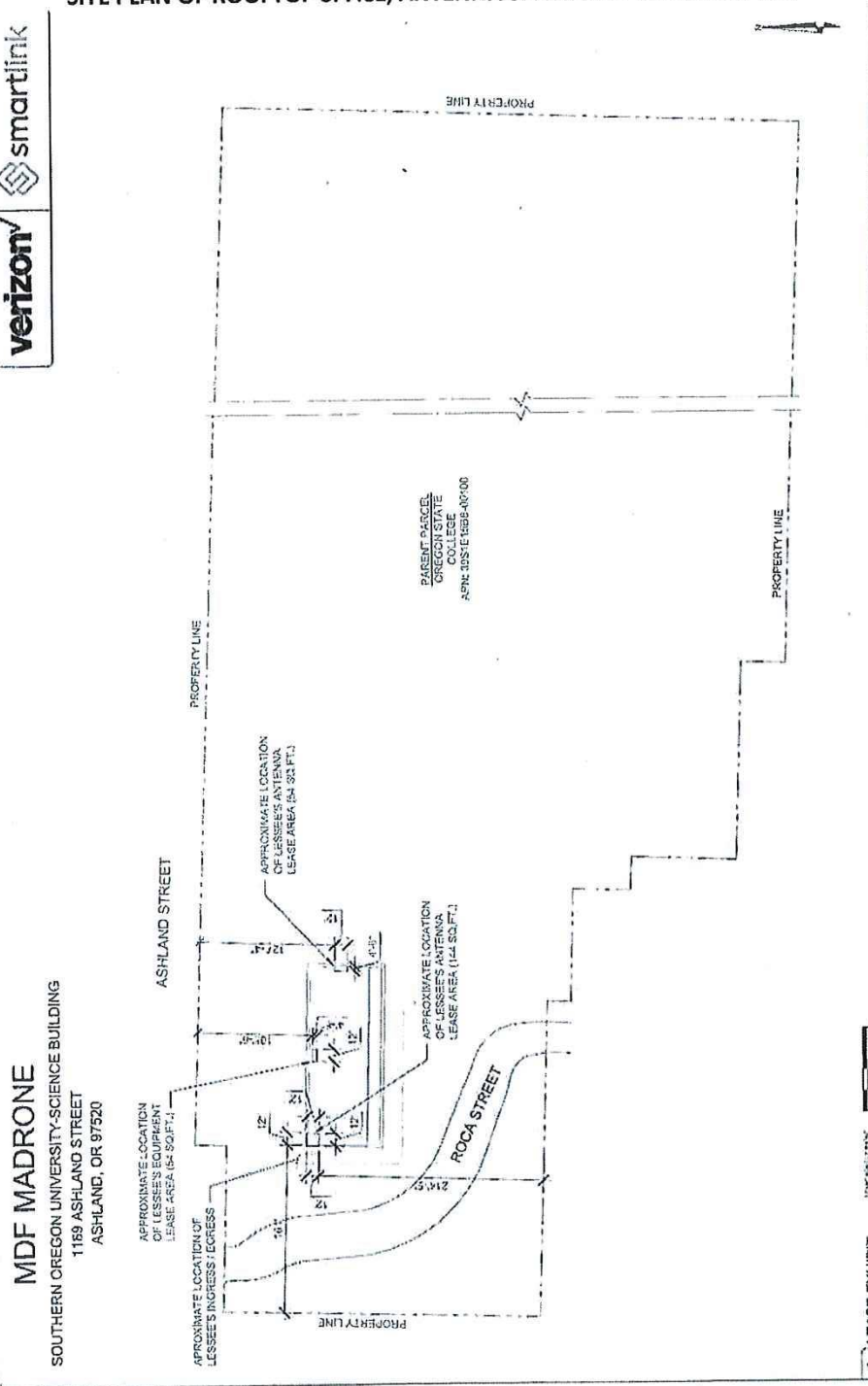
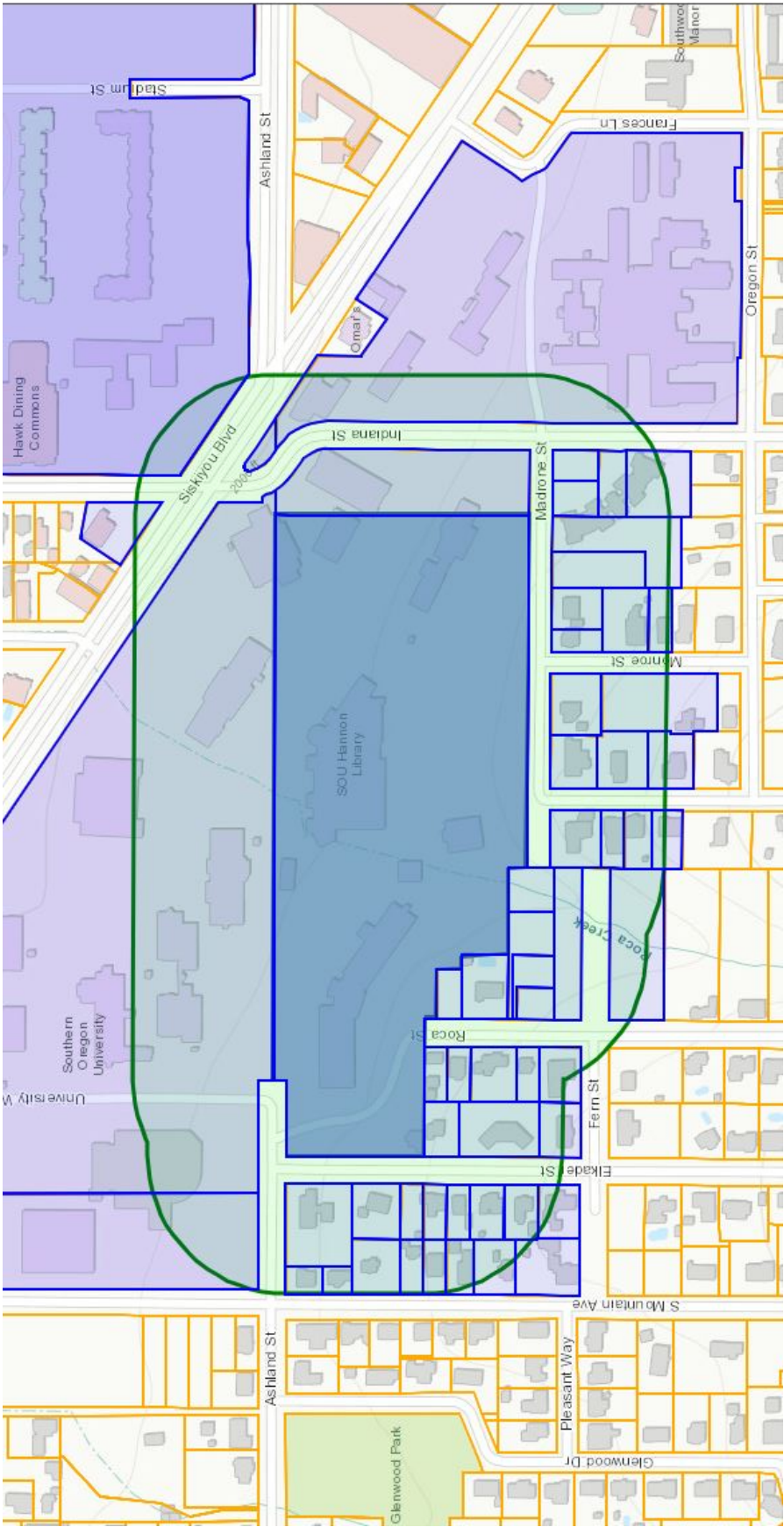


Exhibit 6

Neighborhood Meeting Materials

- Mailing List - Properties within 300' of the site (Mailed March 18, 2024)
- Notice Form
- Newspaper (Published March 20 and 21, 2024)
- Summary of issues raised at the meeting

Map Lot	Fee Owner	In Care Of	Address 1	Custom
391E10CD5000	7 ELEVEN INC	AD VALOREM TAX DEPT (LOCATI	1722 ROUTH ST STE 10	DALLAS, TX 75201
391E16AA8800	BADEN ARTHUR TRUSTEE ET AL		1120 FERN ST	ASHLAND, OR 97520
391E16AA8700	BELSKY STEVEN P TRUSTEE ET AL		609 ELKADER ST	ASHLAND, OR 97520
391E15BA900	BOARD/REGENTS/NORMAL SCHOO S	OREGON STATE COLLEGE	1250 SISKIYOU BLVD	ASHLAND, OR 97520
391E15BB100	BOARD/REGENTS/NORMAL SCHOO S	OREGON STATE COLLEGE	1250 SISKIYOU BLVD	ASHLAND, OR 97520
391E15BB7700	BRINNAND JOHN/WARDEN SUZANNE		3601 HIGHWAY 66	ASHLAND, OR 97520
391E10CD4200	CHF-ASHLAND LLC		409 JOHNSON AVE	FAIRHOPE, AL 36532
391E16AA8600	CLEARY HELEN EILEEN		605 ELKADER ST	ASHLAND, OR 97520
391E15BB1200	DALLAS AMANDA P/JONATHON C		592 ROCA ST	ASHLAND, OR 97520
391E16AA7500	DAVIS DANIEL B/SARAH J		540 S MOUNTAIN AVE	ASHLAND, OR 97520
391E15BB9300	DE LORENZO C/SUSAN		650 MONROE ST	ASHLAND, OR 97520
391E15BB1900	EMLEY MARGOT ET AL		619 ROCA ST	ASHLAND, OR 97520
391E15BB7900	FINE WENDY		643 LEONARD ST	ASHLAND, OR 97520
391E15BB2101	FOERDER ALAN H		1467 SISKIYOU BLVD 25	ASHLAND, OR 97520
391E15BB7800	FREEDMAN JOSEPH		655 LEONARD ST	ASHLAND, OR 97520
391E15BB3100	GRAF JOSEPH JR/S J COYNER		1160 FERN ST	ASHLAND, OR 97520
391E15BB2000	JONES THOMAS E TRUSTEE ET AL		605 ROCA ST	ASHLAND, OR 97520
391E16AA8500	KEEVIL JEAN ANN/THOMAS ALAN		600 FOREST ST	ASHLAND, OR 97520
391E16AA8900	KERR ALISON		1116 FERN ST	ASHLAND, OR 97520
391E15BB2100	KNOPPOW LISA		446 BRISCOE PL	ASHLAND, OR 97520
391E15BB9400	KRIESMAN JAMES B ET AL		1144 IOWA AVE W	SAINT PAUL, MN 55108
391E15BB9000	LEPLEY CARIM ALAN/DAMSTRA-LEP		9930 E GOLDSMITH PL	TUCSON, AZ 85749
391E15BB8900	LEPLEY SACHA LYNDIA/WILDGUST J		935 HUNTER LN	SANTA ROSA, CA 95404
391E15BB8200	MAHAN JOHN/FRIEND ANNA		668 LEONARD ST	ASHLAND, OR 97520
391E16AA7700	MARTIN SUSAN L TRUSTEE ET AL		564 S MOUNTAIN AVE	ASHLAND, OR 97520
391E16AA8400	MCCUBBIN KELLY L		225 STEFFAN ST	VALLEJO, CA 94591
391E15BB9100	NUTTER JERRY SCOTT TRUSTEE ET		1336 MADRONE ST	ASHLAND, OR 97520
391E16AA8100	ODOUGHERTY HENRY F ET AL		588 S MOUNTAIN AVE	ASHLAND, OR 97520
391E15BA1300	ORE STATE/BOARD HIGHER ED/	ATTN: BETH BARNES	1250 SISKIYOU BLVD	ASHLAND, OR 97520
391E09DD7900	OREGON STATE OF			, 0
391E10CC5700	OREGON STATE OF			, 0
391E10CD4200	OREGON STATE OF		1250 SISKIYOU BLVD	ASHLAND, OR 97520
391E10CD4900	OREGON STATE OF			, 0
391E15BA1100	OREGON STATE OF		UNIVERSITY OF OREGON	EUGENE, OR 97401
391E15BA1400	OREGON STATE OF			, 0
391E15BA3100	OREGON STATE OF		NO ADDRESS SUPPLIE	UNKNOWN, 0
391E15BB1600	OREGON STATE OF			, 0
391E15BB3000	OREGON STATE OF			, 0
391E15BB6800	OREGON STATE OF	S O S C BUSINESS MGR	1250 SISKIYOU BLVD	ASHLAND, OR 97520
391E15BB9200	OREGON STATE OF			, 0
391E15BA1000	OREGON STATE OF/ STATE		1250 SISKIYOU BLVD	ASHLAND, OR 97520
391E15BB1503	OREGON STATE OF/STATE		1250 SISKIYOU BLVD	ASHLAND, OR 97520
391E15BB1500	OREGON STATE OF/STATE BOARD		1250 SISKIYOU BLVD	ASHLAND, OR 97520
391E15BB1501	OREGON STATE OF/STATE BOARD		1250 SISKIYOU BLVD	ASHLAND, OR 97520
391E15BB1502	OREGON STATE OF/STATE BOARD		1250 SISKIYOU BLVD	ASHLAND, OR 97520
391E15BB7901	PARKER MICHAEL GEORGE TRUSTEE		1280 MADRONE ST	ASHLAND, OR 97520
391E15BB8000	PIKE ROBIN C		630 LEONARD ST	ASHLAND, OR 97520
391E16AA7900	POPE JONATHAN LIVING TRUST ET		591 ELKADER ST	ASHLAND, OR 97520
391E16AA8200	POPE JONATHAN LIVING TRUST ET		591 ELKADER ST	ASHLAND, OR 97520
391E16AA7600	RICHMOND TONI TRUSTEE ET AL		562 S MOUNTAIN AVE	ASHLAND, OR 97520
391E15BB1300	ROST GLENNA		600 ROCA ST	ASHLAND, OR 97520
391E16AA7400	SCHUBERT KOLYA ET AL		1150 ASHLAND ST	ASHLAND, OR 97520
391E16AA7800	SEMINGSON THOMAS RAY/JUDY PAT		PO BOX 210	COTTONWOOD, CA 96022
391E15BB8100	SHEPHERD DANIEL P/AUSHNA A		650 LEONARD ST	ASHLAND, OR 97520
391E15BA1500	STATE BOARD/HIGHER ED		PO BOX 3175	EUGENE, OR 97403
391E15BA1600	STATE OF OREGON/BOARD OF HIGI	OFFICE OF THE CHANCELLOR	PO BOX 3175	EUGENE, OR 97403
391E15BB2900	STONE JEWELL V		588 ELKADER ST	ASHLAND, OR 97520
391E15BB1700	UHTOFF KATHERINE J TRUSTEE ET		633 ROCA ST	ASHLAND, OR 97520
391E16AA8000	VISCHER KARL		580 S MOUNTAIN AVE	ASHLAND, OR 97520
391E16AA8300	ZUBER ALISON CC TRUSTEE ET AL		687 GROVE LN	SANTA BARBARA, CA 93105





Neighborhood Meeting Notice

Proposal:

Verizon Wireless is proposing to locate a wireless communication facility on the roof of the Southern Oregon University Science Building, 1250 Ashland Street, Ashland, OR. Verizon's facility will be behind a rooftop screen wall.

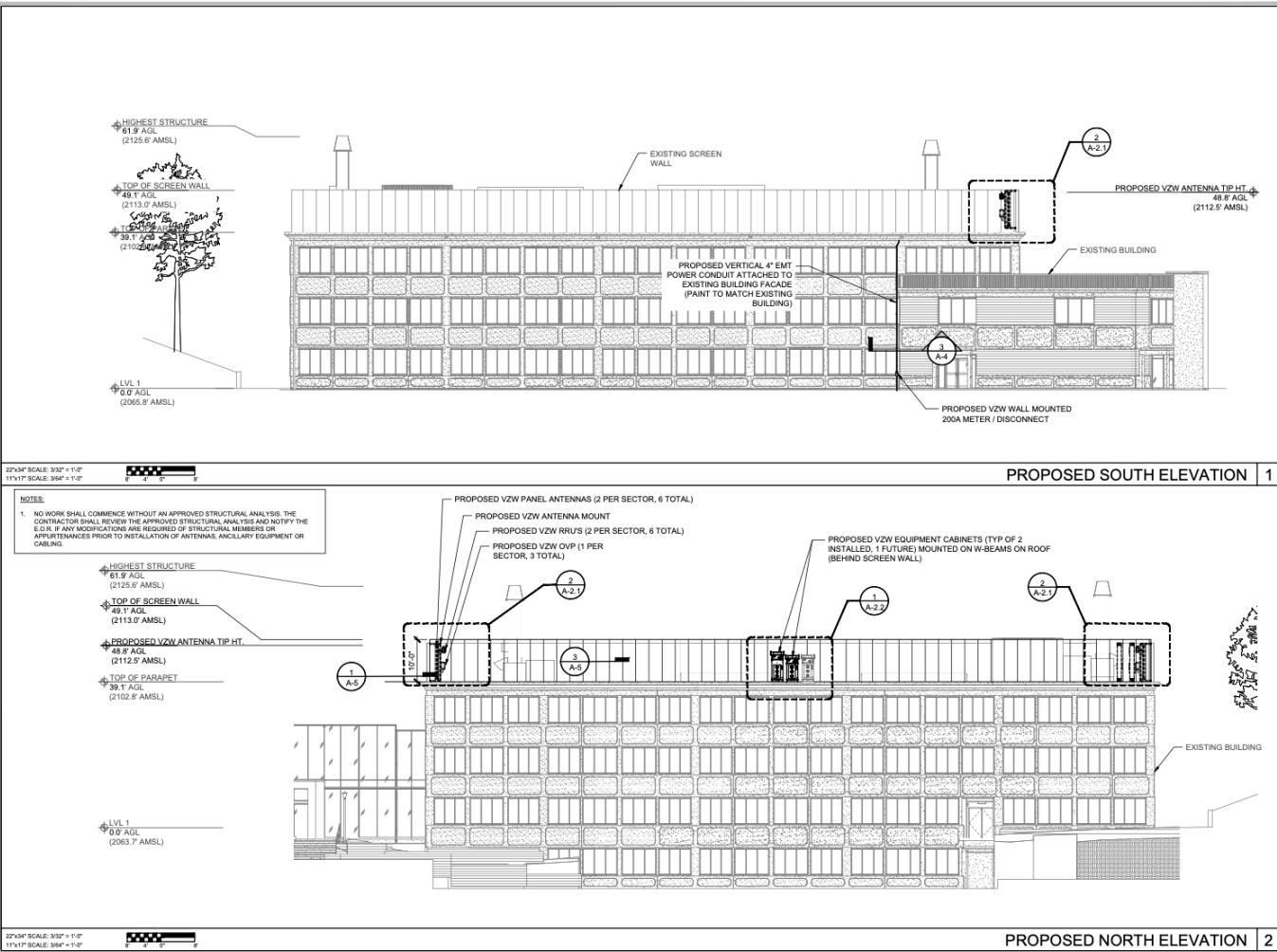
The public is invited to learn more about the proposal and ask questions.

Meeting Time and Location:

March 28, 2024

7:00 PM – 8:00 PM

Rogue River Room
Stevenson Union
1118 Siskiyou Blvd
Southern Oregon University



Before - Looking South



After - Looking South

[Go to](#) [Home](#) » [Public Not](#)

Public Notice: Neighborhood Meeting Notice



March 20, 2024

Proposal:

Verizon Wireless is proposing to locate a wireless communication facility on the roof of the Southern Oregon University Science Building, 1250 Ashland Street, Ashland, OR. Verizon's facility will be behind a rooftop screen wall.

The public is invited to learn more about the proposal and ask questions.

Meeting Time and Location:

March 28, 2024

7:00 PM – 8:00 PM

Rogue River Room
Stevenson Union
1118 Siskiyou Blvd
Southern Oregon University

Verizon Wireless MDF Madrone
 Neighborhood Meeting Attendance
 March 28, 2024 7pm
 Rogue River Room Stevenson Union
 1118 Siskiyou Blvd Southern Oregon University

Name	Address	City, State	Zip Code	Phone #
Hedga Motley	124 Lantibay	Talent, OR	97540	541 488-0155
Karen Roth	315 Avery st	Ashland, Or.	97520	541 482-1819
Marta Leipz	680 Elkader St	Ashland OR	97520	361 828 8112
Jensen Pietto	125 Fir St	Medford OR	97501	541-821- 1448
John Manner	1085 Elkader Ashland		97520	541 941 9025
LARRY GRAVES	1336 PERSPECT ASHLAND 97520	ASHLAND	97520	541-660-2169

Verizon Wireless MDF Madrone
 Neighborhood Meeting Attendance
 March 28, 2024 7pm
 Rogue River Room Stevenson Union
 1118 Siskiyou Blvd Southern Oregon University

Name	Address	City, State	Zip Code	Phone #
David Subida	mail: GENERAL DELIVERY PHOENIX JAZZ 2533			(458) 226 0596
Don Melure		Ashland		
Karl Vischer	580 S. Mountain Ave	Ashland		503-206-9592
Paul Morinda	767 Roca ST.	Ashland		
Paul Morinda	508 Liberty St. Ashland OR, 97520	Ash. OR.		541-708- 0103
John Patton	245 Piedmont Ave.	Ashland		418 25279

Verizon Wireless MDF Madrone
Neighborhood Meeting Attendance
March 28, 2024 7pm
Rogue River Room Stevenson Union
1118 Siskiyou Blvd Southern Oregon University

Name	Address	City, State	Zip Code	Phone #
Alan Rathsam	2395 Green Meadows Wy	Ashland, OR	97520	
Simon J. Arslan		Ashland	97520	
Rick Nand	1467 Siskiyou Blvd	Ashland	97520	
Jesse Dault		Ashland	97520	

Neighborhood Meeting Notes
March 28, 2024
7:00 PM – 8:00 PM
Rogue River Room
Stevenson Union
1118 Siskiyou Blvd
Southern Oregon University

Approximately 40 people attend. 16 people signed the sign in sheet, the rest declined to sign in.

We provided two stations for attendees to review site drawings and photosims for a one on one more personal discussion. Some of the folks were upset because there was not a more formal presentation.

The comments and questions were centered on RF safety. One person was worried about an increased threat of wildfires.

It was requested that Verizon provide a before reading of the ambient RF levels as a part of the submittal. As an alternative to this proposal, it was suggested that the University install wifi hot spots on campus.



March 22, 2024

Melinda Allhands
Acom Consulting
5200 SW Meadows Road, Suite 150
Lake Oswego, OR 97035

Re: Acoustical Report – Verizon MDF Madrone
Site: 1189 Ashland Street, Ashland, OR 97520

Dear Melinda,

This report presents a noise survey performed in the immediate vicinity of the proposed Verizon telecommunications facility at 1189 Ashland Street in Ashland, Oregon. This noise survey extends from the proposed equipment to the nearest properties. The purpose of this report is to document the existing conditions and the impacts of the acoustical changes due to the proposed equipment. This report contains data on the existing and predicted noise environments, impact criteria and an evaluation of the predicted sound levels as they relate to the criteria.

Code Requirements

The site is located within the City of Ashland Zoning jurisdiction on property with a SO zoning. The receiving properties to the west and south are zoned R-1-7.5, which Ashland Municipal Code Section 9.08.170 defines as residential properties.

The proposed new equipment includes equipment support cabinets which are expected to run 24 hours a day.

Under Ashland Municipal Code 9.08.170.E.3.a, noise from mechanical equipment to a residential receiving property is limited to 45 dBA:

3. Heat Pumps or Mechanical Devices.

- a. No person shall operate a commercial or residential heat pump, air-conditioning unit, or similar mechanical device if noise levels from its operation exceed forty-five (45) dBA from the closest property line of a residential property on an adjacent parcel of land characterized as a noise sensitive area.

Therefore, the equipment support cabinets cannot exceed 45 dBA at the residential properties.

Ambient Conditions

Existing ambient noise levels were measured on site with a Svantek 971 sound level meter on March 14, 2024. Measurements were conducted in accordance with Oregon Administrative Rules (OAR) 340-35-035 subsection (3)(b). The average ambient noise level was 53 dBA.

Predicted Equipment Sound Levels**24-Hour Operation Equipment**

The following table presents a summary of the equipment and their associated noise levels:

Table 1: Equipment Noise Levels

Equipment	dBA (each)	Quantity	Combined dBA @ 5 ft
Charles CUBE-SS4B228LX1 Cabinet	65 dBA @ 5ft	1	65
Charles CUBE-BB48E2XV1 Cabinet	65 dBA @ 5ft	1	65
Total dBA (All cabinets combined)			68

Methods established by AHRI Standard 275-2010 and ASHRAE were used in predicting equipment noise levels to the receiving properties. Application factors such as location, height, and reflective surfaces are accounted for in the calculations.

The equipment will be located on the building rooftop approximately 39'-0" above grade surrounded by a 10'-0" FRP screen wall. The nearest residential receiving properties are approximately 212 feet south and 312 feet west of the equipment. The following table presents the predicted sound levels at the nearest residential receiving properties:

Table 2: Predicted Noise Levels: Proposed Equipment Cabinets

Line	Application Factor	S	W
1	Sound Pressure Level at 5 ft (dBA), Lp1	68	68
2	Noise Reduction – Screen Wall / Parapet Reduction	-10	-10
3	Distance Factor (DF) Inverse-Square Law (Free Field): $DF = 20 \cdot \log(d1/d2)$	-33 (212 ft)	-36 (312 ft)
4	New Equipment Sound Pressure Level at Receiver, Lpr (Add lines 1 through 3)	25	22

As shown in Table 2, the predicted sound level from the proposed equipment is 25 dBA at the nearest residential receiving property to the south, and 22 dBA at the residential receiving property to the west, which meets the 45 dBA code limit.

Noise levels at other residential receiving properties, which are further away, will be lower and within code limits.

Please contact us if you have any questions or need additional information.

Sincerely,
SSA Acoustics, LLP



Alan Burt, P.E.
MANAGING PARTNER
SENIOR ACOUSTICAL CONSULTANT



This report has been prepared for the titled project or named part thereof and should not be used in whole or part and relied upon for any other project without the written authorization of SSA Acoustics, LLP. SSA Acoustics, LLP accepts no responsibility or liability for the consequences of this document if it is used for a purpose other than that for which it was commissioned. Persons wishing to use or rely upon this report for other purposes must seek written authority to do so from the owner of this report and/or SSA Acoustics, LLP and agree to indemnify SSA Acoustics, LLP for any and all resulting loss or damage. SSA Acoustics, LLP accepts no responsibility or liability for this document to any other party other than the person by whom it was commissioned. The findings and opinions expressed are relevant to the dates of the works and should not be relied upon to represent conditions at substantially later dates. Opinions included therein are based on information gathered during the study and from our experience. If additional information becomes available which may affect our comments, conclusions or recommendations SSA Acoustics, LLP reserves the right to review the information, reassess any new potential concerns and modify our opinions accordingly.



Radio Frequency Exposure

RF Safety and NIER Analysis Report

02/27/2024

Site: MADRONE - C

Ashland, OR

Prepared for: Verizon

Table of Contents

1 Certification 3

2 Executive Summary 4

2.1 Conclusion and Recommendations 5

3 Introduction 6

3.1 Site Description: 6

3.2 Site Configuration Being Modeled 7

4 Predictive Analysis Details 8

4.1 Analysis Locations: 8

4.2 Antenna Inventory 9

4.3 RF Emissions Diagram(s) - All Transmitters 10

4.4 RF Emissions Diagram(s) - Verizon Transmitters Only 13

5 Signage/ Mitigation 14

5.1 Signage/ Barrier Detail 17

5.2 Signage/ Barrier Diagram 18

6 Conclusions and Recommendations 19

7 Appendix A: FCC Compliance and RF Safety Policies 20

8 Appendix B: Overview of RoofMaster® Functions and Assumptions 22

9 References 25

10 Limited Warranty 26

1 Certification

This report, prepared by Pramira, Inc. for **Verizon**, is intended to document compliance and evaluate power density levels as outlined in the report. The computations, analysis, and resulting report and conclusions were based on applicable FCC guidelines and regulations for maximum permissible exposure to humans consistent with FCC OET Bulletin 65, Edition 97-01.

Additionally, Pramira, Inc. certifies that the assumptions are valid and that the data used within Pramira control are accurate, including information collected as part of Pramira field surveys. Pramira, Inc. does not however certify the accuracy or correctness of any data provided to Pramira, Inc. for this analysis and report by Verizon or other third parties working on behalf of Verizon.

I certify that the attached RF exposure analysis and report is correct to the best of my knowledge, and all calculations, assumptions and conclusions are based on generally acceptable engineering practices:

Tim Alexander, P.E.

Report Prepared By: Abdelsalam Masoud, 02/27/2024

Report Reviewed By: Mike Arnold, 02/27/2024

2 Executive Summary

This report provides the results of an RF power density analysis performed for **Verizon** at site **MADRONE - C** in accordance with the Federal Communications Commission (FCC) rules and regulations for RF emissions described in OET Bulletin 65, Edition 97-01.

This report addresses RF safety for two classified groups defined by OET Bulletin 65: Occupational/ Controlled and General Population/ Uncontrolled. Based on the analysis, this site will be **Compliant** with FCC rules and regulations and Verizon's Signage and Barrier Policy if the mitigation details provided in Table 1 are implemented.

Final Compliant Configuration						
	GUIDELINES	NOTICE	CAUTION	WARNING	NOC INFO	BARRIER/MARKER
Access Point(s)	☒ [TBD] *	☐ []	☐ []	☐ []	☒ [TBD] *	☐ []
Alpha	☐ []	☐ []	☒ [1] *	☐ []	☐ []	☐ []
Beta	☐ []	☐ []	☒ [1] *	☐ []	☐ []	☐ []
Gamma	☐ []	☐ []	☒ [1] *	☐ []	☐ []	☐ []

NOTE: The table represents either the signage/barriers installed / removed OR items required by the market (if mitigation is not installed by consultant/vendor).

* These RF signs should be posted at any Access point to the Main Roof. (See drawing in Section 5.2)

** These RF signs should be posted at the Back of all sectors. (See drawing in Section 5.2)

Specialty Sign Detail

Location	N/A
Access Point	N/A
Alpha	N/A
Beta	N/A
Gamma	N/A

NOTE: The tables above represent EXISTING compliance items implemented at this location.

Notes/ Additional Compliance Requirements(s):
Mitigation is required per the Signage/ Barrier Diagram.

Table 1: Mitigation Requirements for Compliance

2.1 Conclusion and Recommendations

- The results of the analysis indicate that the power density levels in the generally accessible areas on **the Antenna** Level will not exceed the FCC's MPE limit for General Population.
- The results of the analysis indicate that the power density levels in the generally accessible areas on the **Main Roof** Level will not exceed the FCC's MPE limit for General Population.
- The results of the analysis indicate that the power density levels in the generally accessible areas on the **Lower Roof** Level will not exceed the FCC's MPE limit for General Population.
- The results of the analysis indicate that power density levels in the generally accessible areas on the **Rooftop Elevation** will not exceed the FCC's MPE limit for General Population environments. Notice that the power density levels will exceed the FCC's MPE limit in front of the antennas which are not generally accessible areas. This area might be accessed in case of maintenance; therefore, mitigation is required per the Signage/ Barrier Diagram.
- The max theoretical % MPE is **2730.46%** directly in front of the antennas beams at the **Rooftop Elevation** Level.
- NOC and Guidelines signs need to be posted at any Access point to the Main Roof.

Note: Modifications to the site; and/or increases in channel counts or power levels exceeding those listed in this report will require additional evaluation to determine compliance.

3 Introduction

The purpose of this analysis and report is to evaluate the cumulative power density levels of all non-excluded antennas located on the site and identify any areas of concern that require mitigation. This report also assesses the site's compliance with FCC OET Bulletin 65; "Guidelines for Human Exposure to Radio-frequency Electromagnetic Fields".

The power density simulation performed for this site utilized RoofMaster® analysis software. All antennas were assigned an operating frequency and transmit power and were deemed to be operating at 100% of their rated output power.

3.1 *Site Description:*

- **Site Name:** MADRONE - C
- **Street Address:** Southern Oregon University- Science Building.
Ashland, OR 97520
- **Latitude:** 42° 11' 6.6" N
- **Longitude:** 122° 41' 50.6" W
- **Structure Type:** Rooftop
- **Structure Height:** ± 49.1' AGL
- **Co-Locators/ Other Antennas:** N/A
- **BTS Equipment Location:** The Verizon equipment is located on the Main Roof.

3.2 Site Configuration Being Modeled

- This is a Three-Sector site supporting LTE at 700, 1900, and 2100 MHz, CBRS at 3600, and C-Band at 3700 MHz for all sectors. All LTE assumes 4x4 MIMO.
- The antennas rad center for all sectors (44.2'), Main Roof Height (36'), Lower Roof (28'), and Utility Pole Height (32') are based on the CDs and RFDS. These values must be verified on the site audit for the post study.
All technologies were evaluated assuming the max number of channels and were running at max power 100% of the time.

4 Predictive Analysis Details

For purposes of this analysis, RoofMaster® was configured to provide an output based on the appropriate MPE limit(s) published in the FCC's guidelines. The antenna information was loaded into RoofMaster®, an MPE predictive analysis tool by Waterford Consultants, LLC.

4.1 *Analysis Locations:*

Number of Elevations Analyzed: 4

- Elevation
- Antenna Level
- Main Roof Level
- Lower Roof Level

A study at the Utility Pole Level and Ground was not required as the study at Antenna Level shows the MPE limit is below the General Population MPE limit on the Utility Pole Level and Ground.

4.2 Antenna Inventory

The following table contains the technical data used to simulate the power density that may be encountered with all antennas simultaneously operating at full rated power with the exception of any excluded antennas cited in this document. If co-locator's antennas exist and specific antenna details could not be secured, generic antennas, frequencies, and transmit powers were used for modeling. The assumptions used are based on past experience with communications carriers.

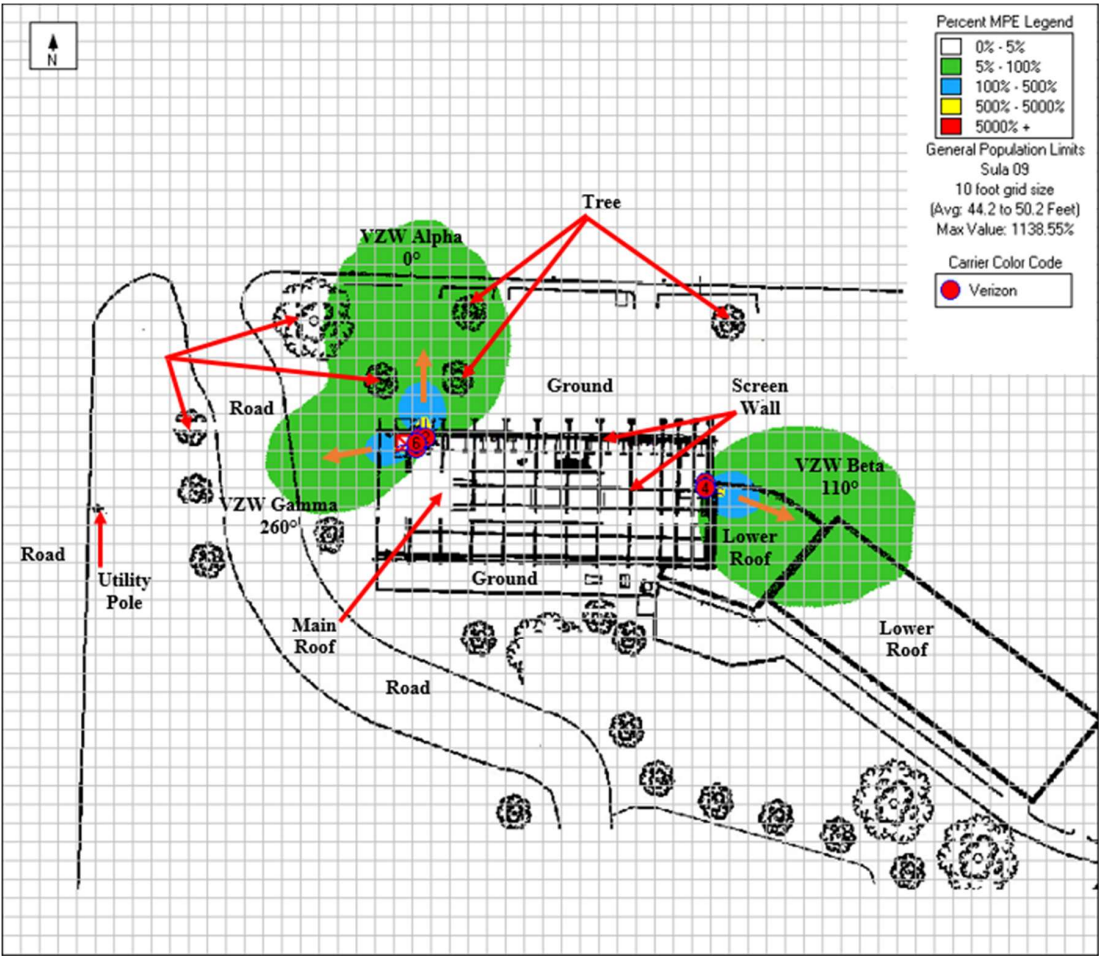
ID	Name	(MHz) Freq	Trans Power	Trans Count	Other Loss	Calc Power	Power EIRP	MD-Tilt (Deg)	Mfg	Model	Elevation Z (ft)	Antenna Z (ft)	Main Roof Z (ft)	Lower Roof Z (ft)	Type	Aper (ft)	dBd Gain	Bandwidth	Orientation
VZ Alpha_Ant1	L700	700	40.0	2	0.5	71.3	2588.85	0.0	JMA	SON MX10FIT865	Various	0.0	8.2	16.2	Panel	8.0	13.45	67	0
VZ Alpha_Ant1	L2100	2110	60.0	4	0.5	213.9	12884	0.0	JMA	SON MX10FIT865	Various	0.0	8.2	16.2	Panel	8.0	15.65	57	0
VZ Alpha_Ant1	CBRS	3600	5.0	4	0.0	20.0	833	0.0	JMA	SON MX10FIT865	Various	0.0	8.2	16.2	Panel	8.0	14.05	56	0
VZ Alpha_Ant2	L700	700	40.0	2	0.5	71.3	2472.36	0.0	JMA	SON MX14FIT865-01	Various	0.0	8.2	16.2	Panel	8.0	13.25	68	0
VZ Alpha_Ant2	L1900	1900	40.0	4	0.5	142.6	8203	0.0	JMA	SON MX14FIT865-01	Various	0.0	8.2	16.2	Panel	8.0	15.45	56	0
VZ Alpha_Ant2	C-Band	3700	40.0	8	0.0	320.0	13031	0.0	JMA	SON MX14FIT865-01	Various	0.0	8.2	16.2	Panel	8.0	13.95	58	0
VZ Beta_Ant1	L700	700	40.0	2	0.5	71.3	2588.85	0.0	JMA	SON MX10FIT865	Various	0.0	8.2	16.2	Panel	8.0	13.45	67	110
VZ Beta_Ant1	L2100	2110	60.0	4	0.5	213.9	12884	0.0	JMA	SON MX10FIT865	Various	0.0	8.2	16.2	Panel	8.0	15.65	57	110
VZ Beta_Ant1	CBRS	3600	5.0	4	0.0	20.0	833	0.0	JMA	SON MX10FIT865	Various	0.0	8.2	16.2	Panel	8.0	14.05	56	110
VZ Beta_Ant2	L700	700	40.0	2	0.5	71.3	2472.36	0.0	JMA	SON MX14FIT865-01	Various	0.0	8.2	16.2	Panel	8.0	13.25	68	110
VZ Beta_Ant2	L1900	1900	40.0	4	0.5	142.6	8203	0.0	JMA	SON MX14FIT865-01	Various	0.0	8.2	16.2	Panel	8.0	15.45	56	110
VZ Beta_Ant2	C-Band	3700	40.0	8	0.0	320.0	13031	0.0	JMA	SON MX14FIT865-01	Various	0.0	8.2	16.2	Panel	8.0	13.95	58	110
VZ Gamma_Ant1	L700	700	40.0	2	0.5	71.3	3184.38	0.0	JMA	SON MX10FIT845	Various	0.0	8.2	16.2	Panel	8.0	18.35	37	260
VZ Gamma_Ant1	L2100	2110	60.0	4	0.5	213.9	2718.45	0.0	JMA	SON MX10FIT845	Various	0.0	8.2	16.2	Panel	8.0	18.35	37	260
VZ Gamma_Ant1	CBRS	3600	5.0	4	0.0	20.0	743	0.0	JMA	SON MX10FIT845	Various	0.0	8.2	16.2	Panel	8.0	13.55	42	260
VZ Gamma_Ant2	L700	700	40.0	2	0.5	71.3	7999.51	0.0	JMA	SON MX14FRO845	Various	0.0	8.2	16.2	Panel	8.0	15.25	46	260
VZ Gamma_Ant2	L1900	1900	40.0	4	0.5	142.6	13304	0.0	JMA	SON MX14FRO845	Various	0.0	8.2	16.2	Panel	8.0	17.95	40	260
VZ Gamma_Ant2	C-Band	3700	40.0	8	0.0	320.0	8413	0.0	JMA	SON MX14FRO845	Various	0.0	8.2	16.2	Panel	8.0	13.85	38	260

The antenna Z-heights listed above are referenced to the Elevation, Antenna Level, Main Roof, and Lower Roof Levels.

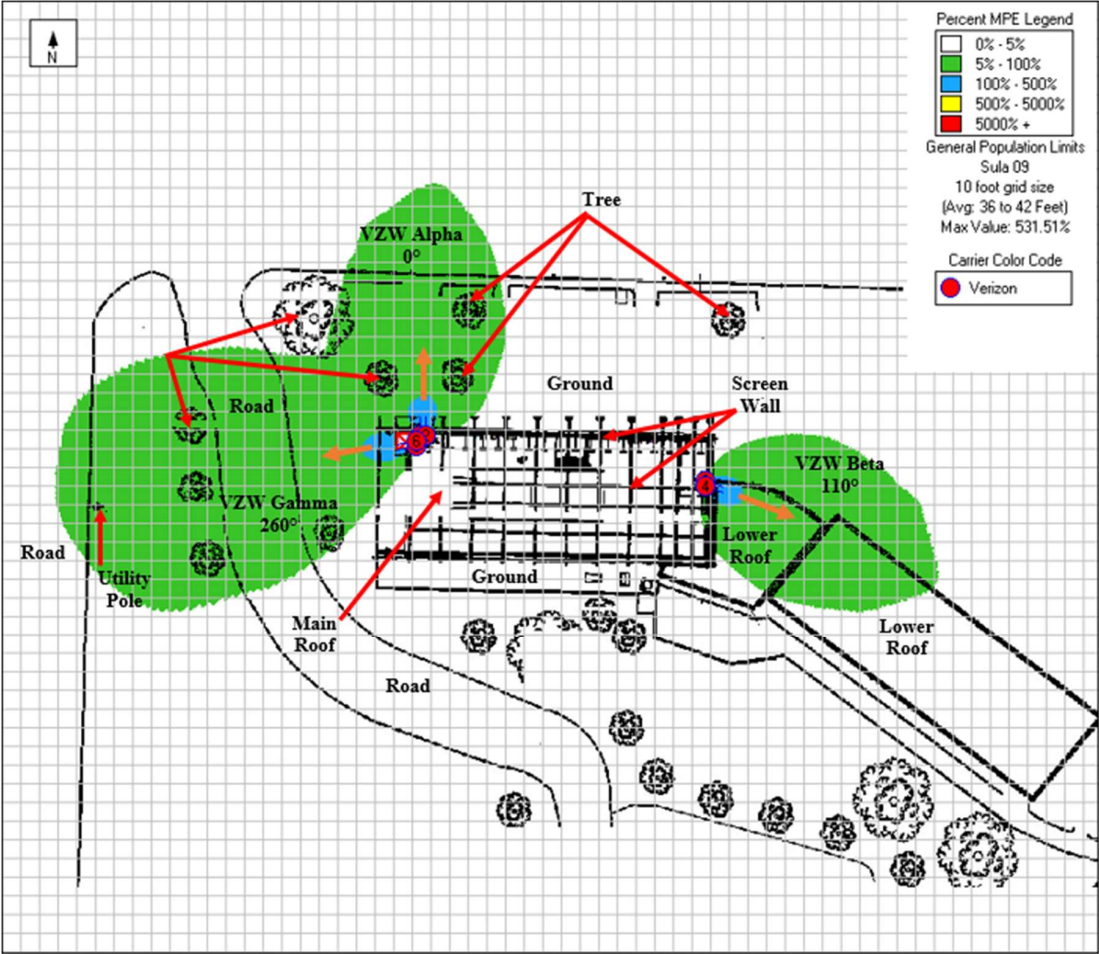
4.3 RF Emissions Diagram(s) - All Transmitters

The following Diagram(s) represent the theoretical spatially averaged Maximum Permissible Exposure (MPE) percentages that are expected for each study's elevation. An additional 1% Occupational MPE Limit (5% General Population MPE limit) is included to demonstrate where Verizon is a significant contributor to the accessible areas where multiple carriers' transmitters may be present.

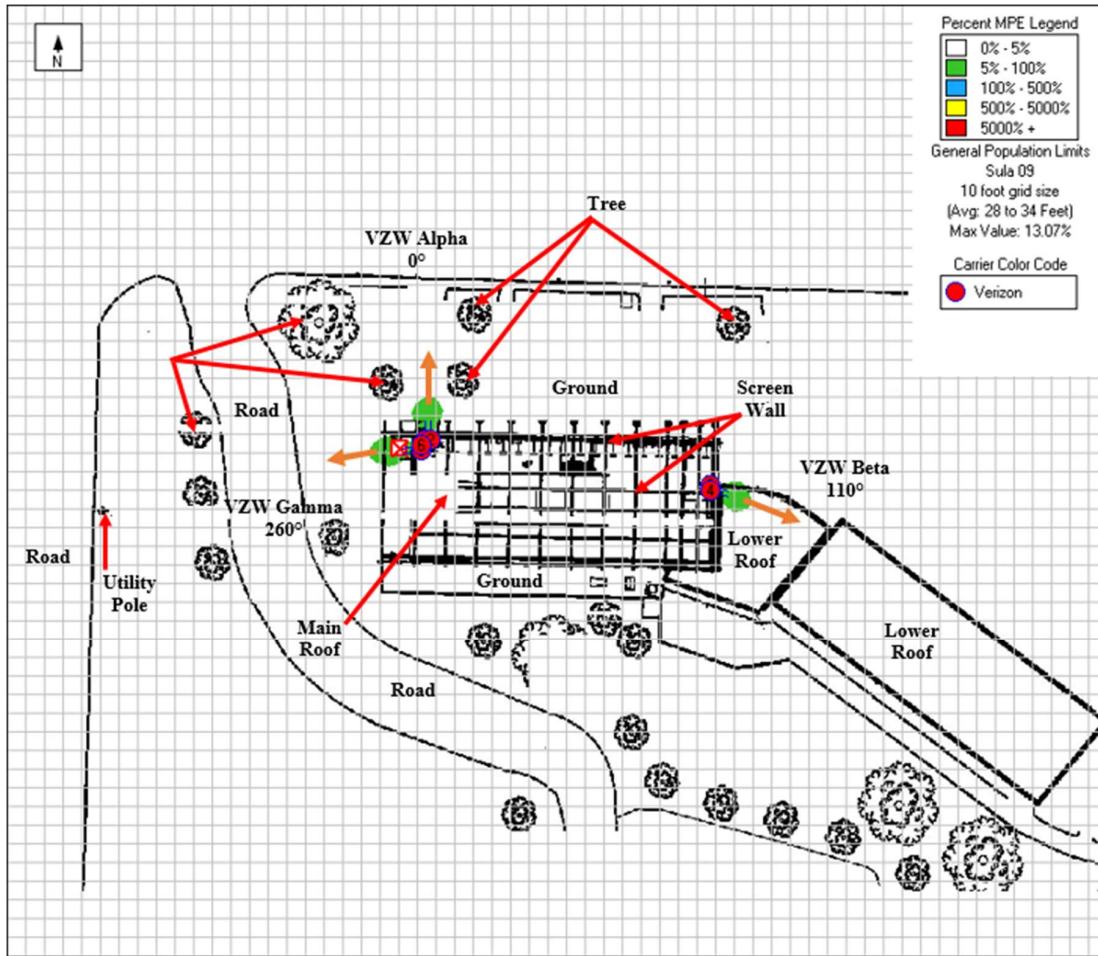
Reference Plane: Antenna Level



Reference Plane: Main Roof Level



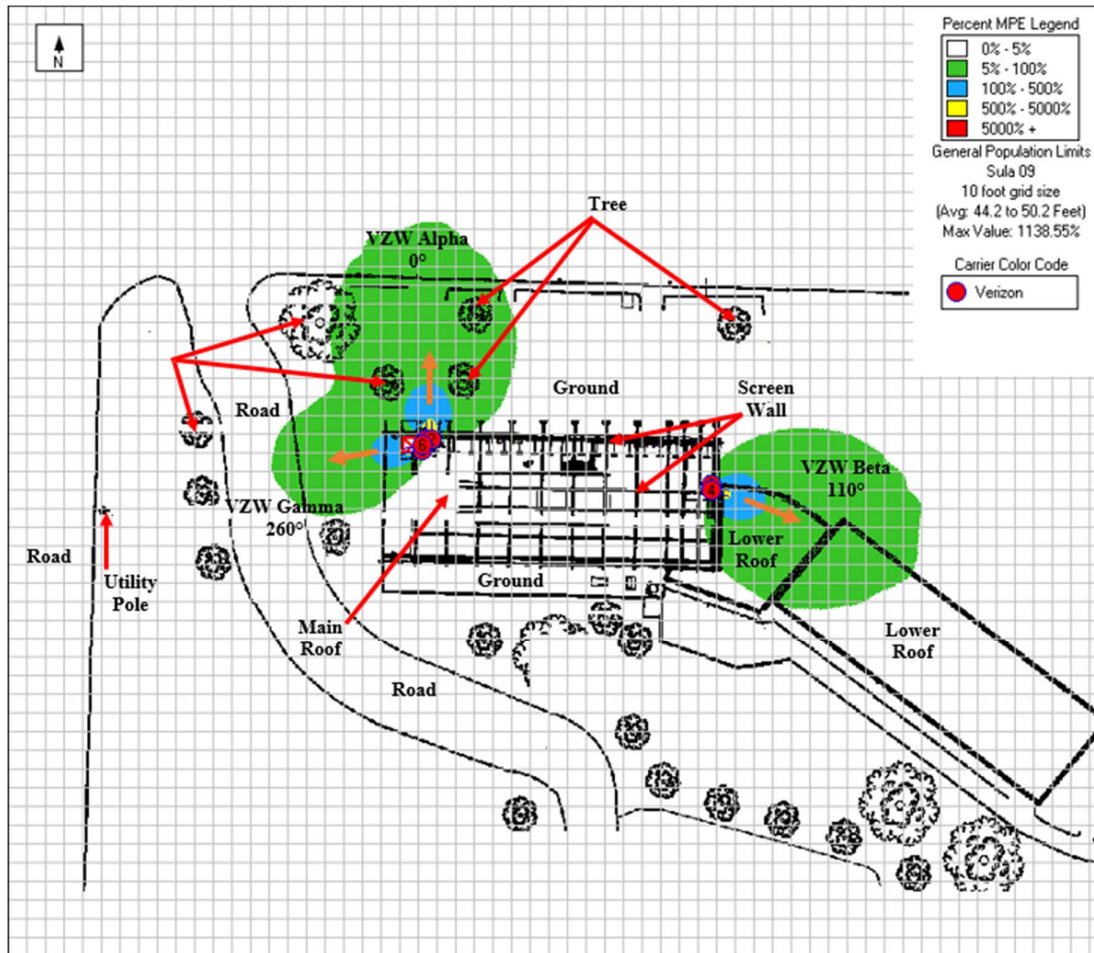
Reference Plane: Lower Roof Level



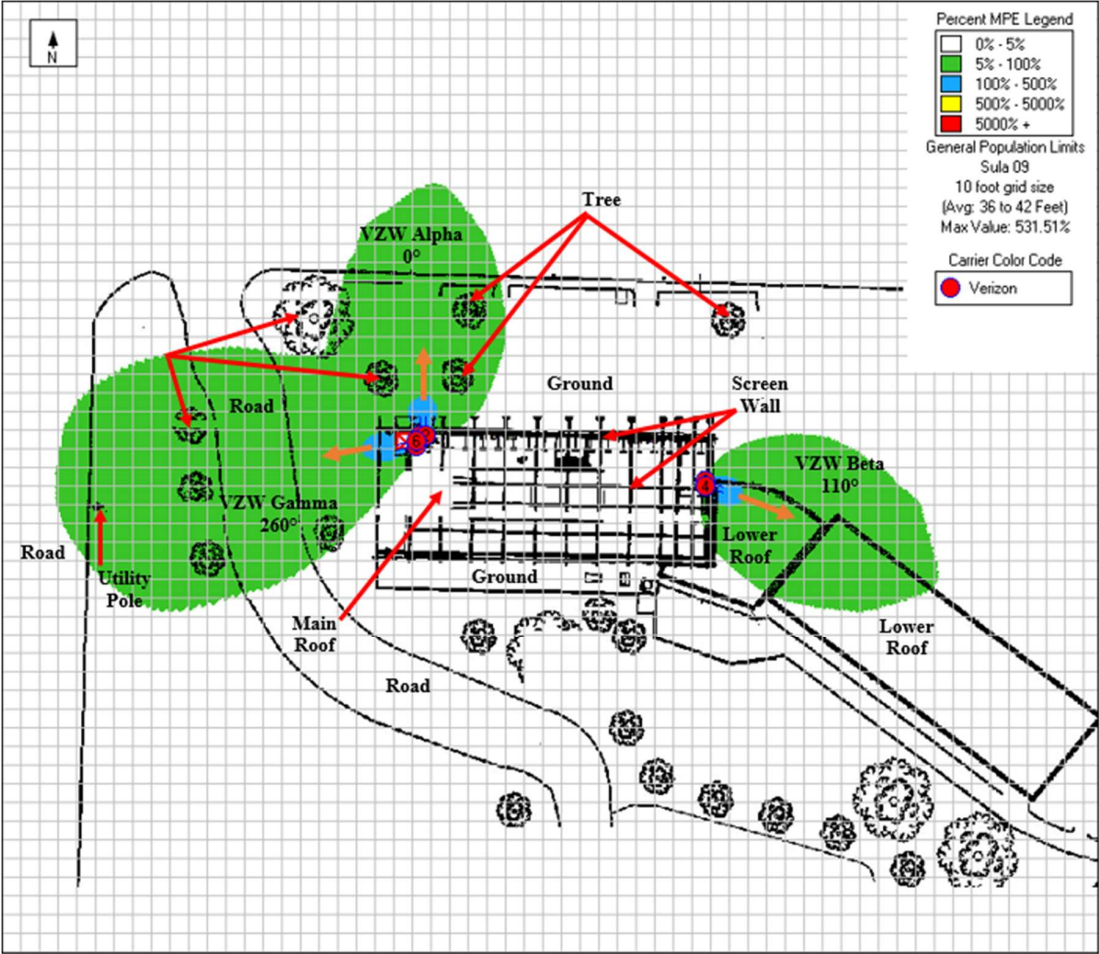
4.4 RF Emissions Diagram(s) - Verizon Transmitters *Only*

The following Diagram(s) represent the theoretical spatially averaged Maximum Permissible Exposure (MPE) percentages that are expected for each study's elevation. An additional 1% Occupational MPE Limit (5% General Population MPE limit) is included to demonstrate where Verizon is a significant contributor to the accessible areas where multiple carriers' transmitters may be present.

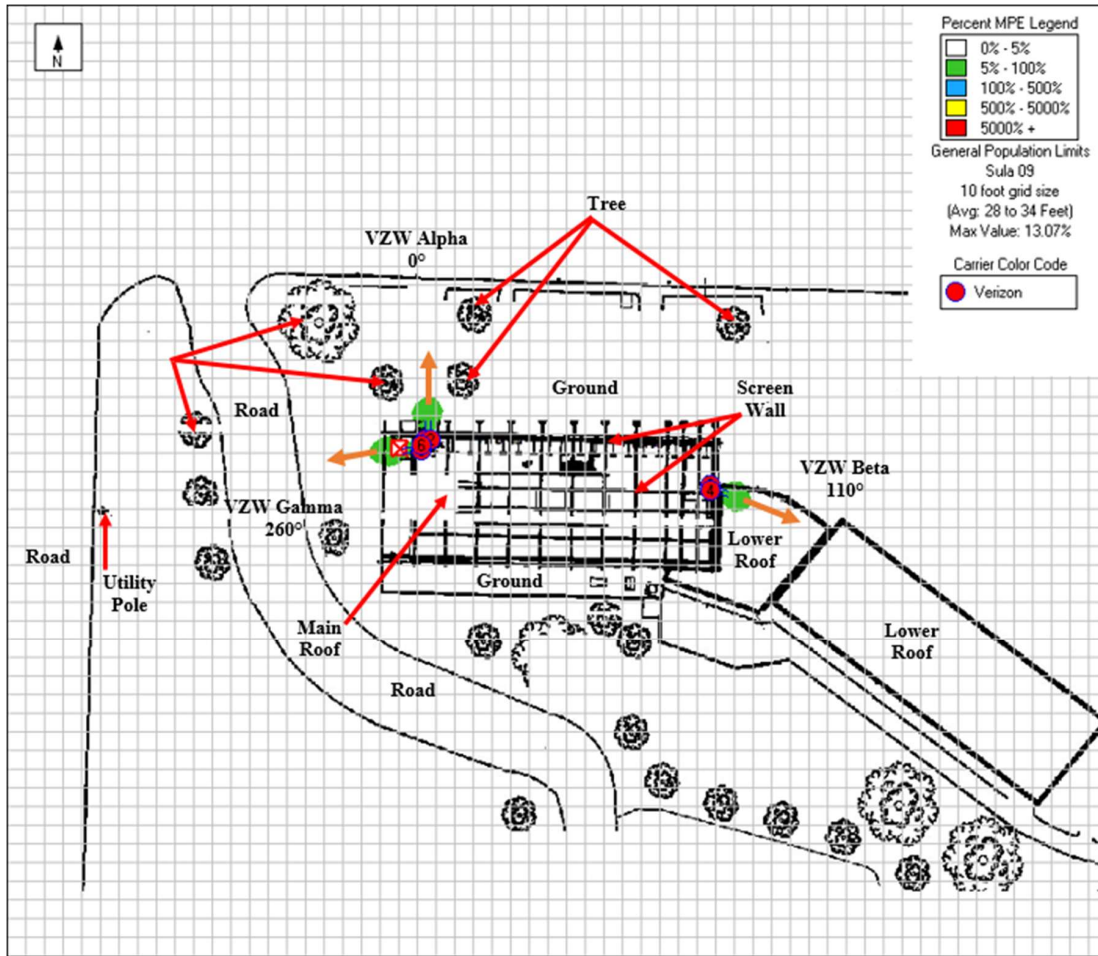
Reference Plane: Antenna Level



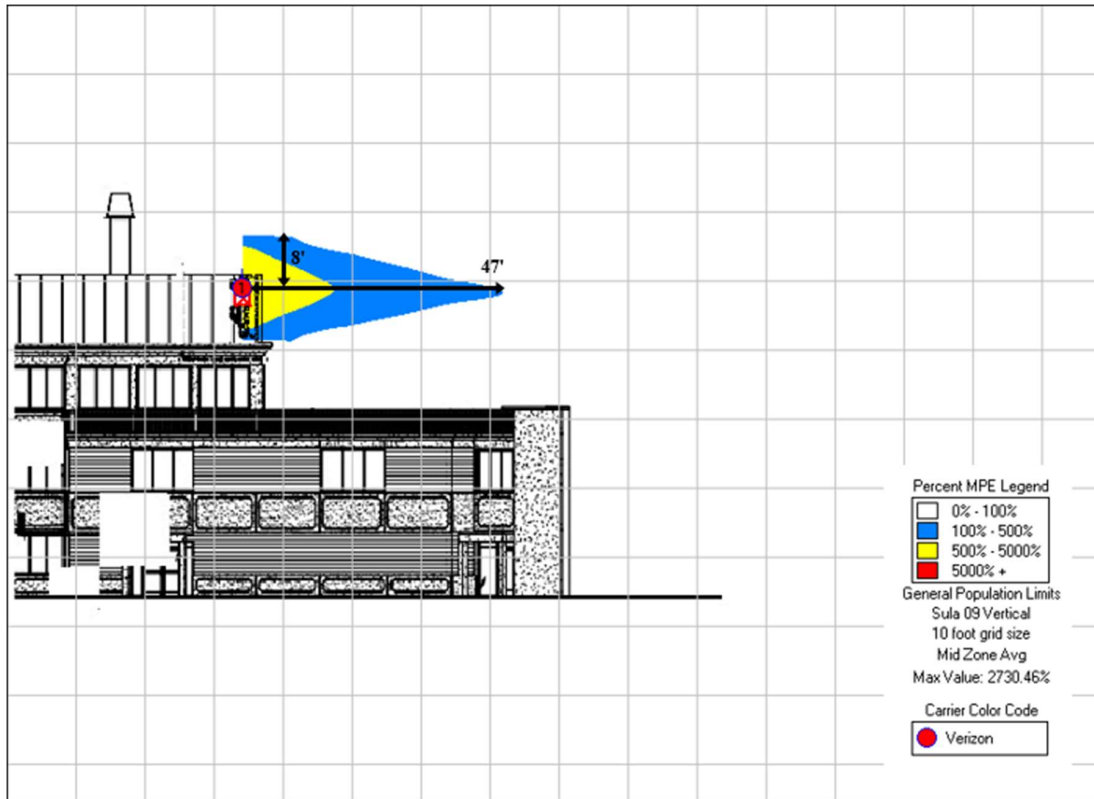
Reference Plane: Main Roof Level



Reference Plane: Lower Roof Level



Reference Plane: Rooftop Elevation Level



5 Signage/ Mitigation

5.1 Signage/ Barrier Detail

Final Compliant Configuration						
	GUIDELINES	NOTICE	CAUTION	WARNING	NOC INFO	BARRIER/MARKER
Access Point(s)	☒ [TBD] *	☐ []	☐ []	☐ []	☒ [TBD] *	☐ []
Alpha	☐ []	☐ []	☒ [1] *	☐ []	☐ []	☐ []
Beta	☐ []	☐ []	☒ [1] *	☐ []	☐ []	☐ []
Gamma	☐ []	☐ []	☒ [1] *	☐ []	☐ []	☐ []

NOTE: The table represents either the signage/barriers installed / removed OR items required by the market (if mitigation is not installed by consultant/vendor).

* These RF signs should be posted at any Access point to the Main Roof. (See drawing in Section 5.2)

** These RF signs should be posted at the Back of all sectors. (See drawing in Section 5.2)

Specialty Sign Detail

Location	N/A
Access Point	N/A
Alpha	N/A
Beta	N/A
Gamma	N/A

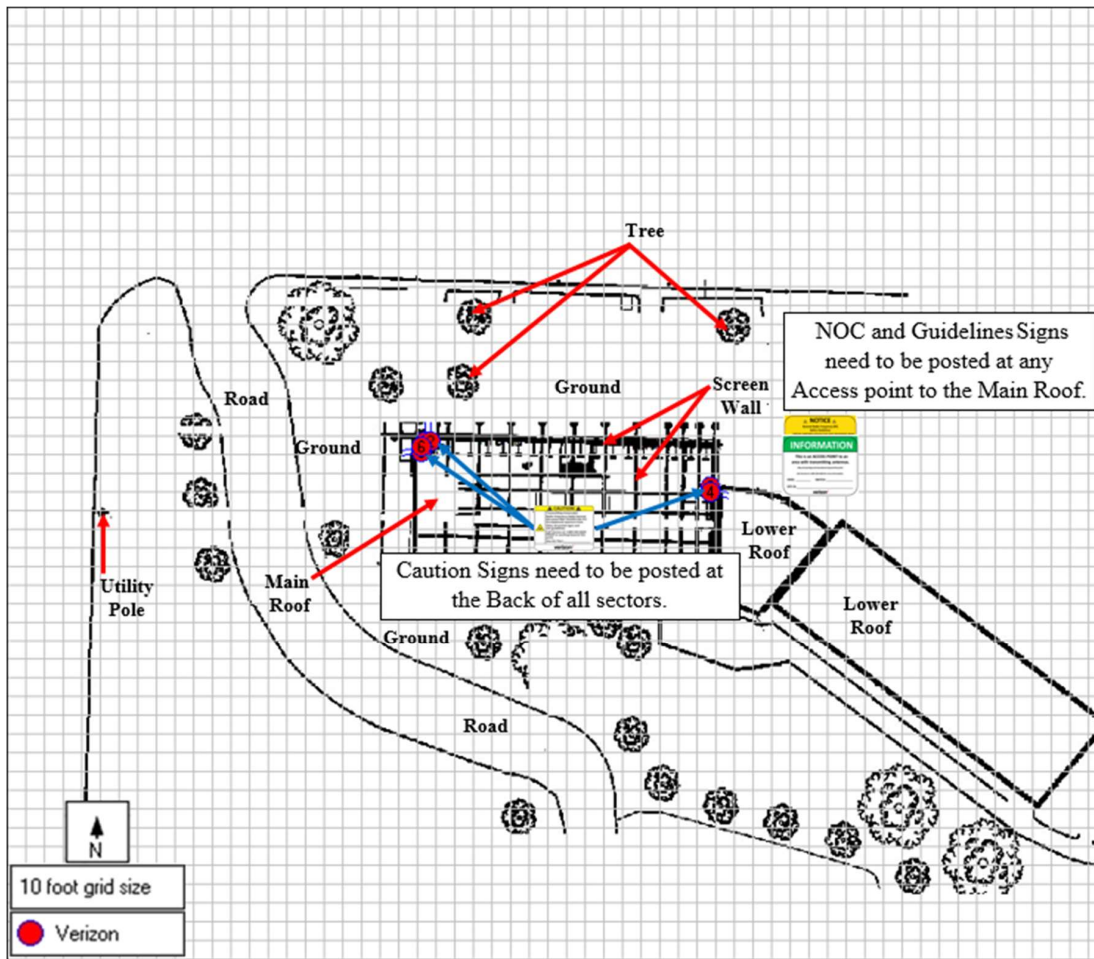
NOTE: The tables above represent EXISTING compliance items implemented at this location.

Notes/ Additional Compliance Requirements(s):

Mitigation is required per the Signage/ Barrier Diagram.

Table 2: Mitigation Requirements for Compliance

5.2 Signage/ Barrier Diagram



6 Conclusions and Recommendations

- The results of the analysis indicate that the power density levels in the generally accessible areas on **the Antenna** Level will not exceed the FCC's MPE limit for General Population.
- The results of the analysis indicate that the power density levels in the generally accessible areas on the **Main Roof** Level will not exceed the FCC's MPE limit for General Population.
- The results of the analysis indicate that the power density levels in the generally accessible areas on the **Lower Roof** Level will not exceed the FCC's MPE limit for General Population.
- The results of the analysis indicate that power density levels in the generally accessible areas on the **Rooftop Elevation** will not exceed the FCC's MPE limit for General Population environments. Notice that the power density levels will exceed the FCC's MPE limit in front of the antennas which are not generally accessible areas. This area might be accessed in case of maintenance; therefore, mitigation is required per the Signage/ Barrier Diagram.
- The max theoretical % MPE is **2730.46%** directly in front of the antennas beams at the **Rooftop Elevation** Level.
- NOC and Guidelines signs need to be posted at any Access point to the Main Roof.

Note: Modifications to the site; and/or increases in channel counts or power levels exceeding those listed in this report will require additional evaluation to determine compliance.

7 Appendix A: FCC Compliance and RF Safety Policies

In August of 1997, the FCC published OET Bulletin 65 Edition 97-01 to regulate methods for evaluating compliance with FCC guidelines for human exposure to radiofrequency (RF) electromagnetic fields. The FCC guidelines for human exposure to RF electromagnetic fields incorporate two categories of limits; namely “Controlled” (a.k.a. Occupational) and “Uncontrolled” (a.k.a. General Public). The guidelines offer suggested methods for evaluating fixed RF transmitters to ensure that the controlled and uncontrolled limits deemed safe by the FC for human exposure are not exceeded.

OET Bulletin 65 recommended guidelines are intended to allow an applicant to “make a reasonably quick determination as to whether a proposed facility is in compliance with the limits.” In addition, the guidelines offer alternate supplementary considerations and procedures such as field measurements and more detailed analysis that should be used for multiple emitter situations.

These guidelines define RF as emissions in the frequency range of 300 kHz to 100 GHz. The FCC define Maximum Permissible Exposure (MPE) limits within this frequency range based on limits recommended by the National Council on Radiation Protection and Measurement, the Institute of Electrical and Electronics Engineers (IEEE), and by the American National Standards Institute (ANSI).

The specific MPE limits defined by the FCC are as follows:

Limits for Occupational/Controlled Exposure				
Frequency Range [MHz]	Electric Field Strength (E) [V/m]	Magnetic Field Strength (H) [A/m]	Power Density (S) [mW/Cm ²]	Averaging Time E ^2, H ^2 or S [minutes]
0.3 - 3.0	614	1.63	100*	6
3.0 - 30	1842/f	4.89/f	900/f ² *	6
30 - 300	61.4	0.163	1	6
300 - 1,500	-	-	f/300	6
1,500 - 100,000	-	-	5	6

Limits for General Population/Uncontrolled Exposure				
Frequency Range [MHz]	Electric Field Strength (E) [V/m]	Magnetic Field Strength (H) [A/m]	Power Density (S) [mW/Cm ²]	Averaging Time E ^2, H ^2 or S [minutes]
0.3 - 3.0	614	1.63	100*	30
3.0 - 30	842/f	2.19/f	180/f ² *	30
30 - 300	27.5	0.073	0.2	30
300 - 1,500	-	-	f/1500	30
1,500 - 100,000	-	-	1	30

f = frequency

*Plane-wave equivalent power density

The FCC states that “Occupational/ Controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for Occupational/ Controlled exposure also apply in situations when an individual is transient through a location where Occupational/ Controlled limits apply provided he or she is made aware of the potential for exposure.”

For General Population/ Uncontrolled limits, the FCC states that “General Population/ Uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not fully be aware of the potential for exposure or cannot exercise control over their exposure.”

For purposes of this analysis, all limits are evaluated against the Power Density limits.

Typical guidelines for determining whether Occupational/ Controlled limits can be applied include ensuring the environment (such as a rooftop) as limited/controlled access via locked doors or physical barrier that are preferably controlled by a landlord that is aware of the situation and can inform anyone going through the locked door of the existence of the RF emissions. Such notification/awareness is typically accomplished by means of signage on the door, or other access to the area of concern, as well as signage on or near the antennas. Examples of such signs include the following:

GUIDELINES	NOTICE	CAUTION	WARNING
This sign will inform anyone of the basic precautions to follow when entering an area with transmitting radiofrequency equipment.	This sign indicates that RF emissions may exceed the FCC General Population MPE limit.	This sign indicates that RF emissions may exceed the FCC Occupational MPE limit.	This sign indicates that RF emissions may exceed at least 10x the FCC Occupational MPE limit.
			

NOC INFORMATION	
Information signs are used as a means to provide contact information for any questions or concerns. They will include specific cell site identification information and the Verizon Wireless Network Operations Center phone number.	

Standards for when to use each of the above signs for Occupational situations are as follows:

No sign required: <20% of Occupational MPE
Blue Sign, Notice: 20% to <100% of MPE
Yellow Sign, Caution: 100% to <1000% of MPE
Red Sign, Warning: ≥1000% of MPE

All MPE references are to the FCC Occupational limits.

8 Appendix B: Overview of RoofMaster® Functions and Assumptions

RoofMaster® is a RF Compliance software package designed to enable the analysis, assessment and mitigation of communications sites with respect to human exposure to radiofrequency electromagnetic fields.

RoofMaster® was developed in 2008 by Waterford Consultants to support compliance assessments performed at single and multi-operator wireless locations throughout North America and has been in service since 2008. Real-world experience in evaluating thousands of base station installations is reflected in the RoofMaster® design approach. This document provides a guide for creating simulations of RF hazard conditions through the characterization of antenna systems and site features and through FCC-specified computational analysis.

On any structure, one may encounter antennas installed by wireless service providers, public safety and other FCC-licensed and unlicensed operators. Siting constraints have resulted in diverse and complex environments accessible to people performing a variety of activities around these antennas. RoofMaster® supports the characterization of these locations to convey important information regarding RF sources and accessible areas necessary to evaluate the potential for human exposure to hazardous levels of RF energy.

RoofMaster® supports the depiction of communications sites through the display of construction drawing or aerial photography image files as well as providing line drawing tools. These representations are scalable to enable the modeling of any location.

RoofMaster® utilizes a three-dimensional spatial framework consisting of a 1000 x 1000 grid with unlimited vertical dimensions necessary for the positioning of antennas and modeling of RF conditions at each grid point throughout the space. Predictive analysis is performed on a study plane at a specified elevation. The subsequent sections of this guide provide the steps necessary to create a site representation and conduct these studies.

RoofMaster® employs several power density prediction models based on the computational approaches set forth in the Federal Communications Commission's Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields, OET Bulletin 65. This guideline utilizes several antenna and operational parameters in calculating the power density contributions from each emitter at specified points throughout the study space. RoofMaster® enables antennas to be fully defined in site specific aspects as well as through the use of a library of manufacturer data. The parameters include:

- § Antenna model
- § Radiation patterns
- § Aperture length
- § Gain
- § Beamwidth
- § Antenna radiation center
- § Azimuth
- § Mechanical downtilt
- § Location
- § Frequency
- § Power into antenna

In OET-65, the Cylindrical Model is presented as an approach to determine the spatially averaged power density in the near field directly in front of an antenna. In order to implement this model in all directions, RoofMaster® utilizes the antenna manufacturer horizontal pattern data. Additionally, RoofMaster® incorporates factors that reduce the power density by the inverse square of horizontal and vertical distance beyond the near field region.

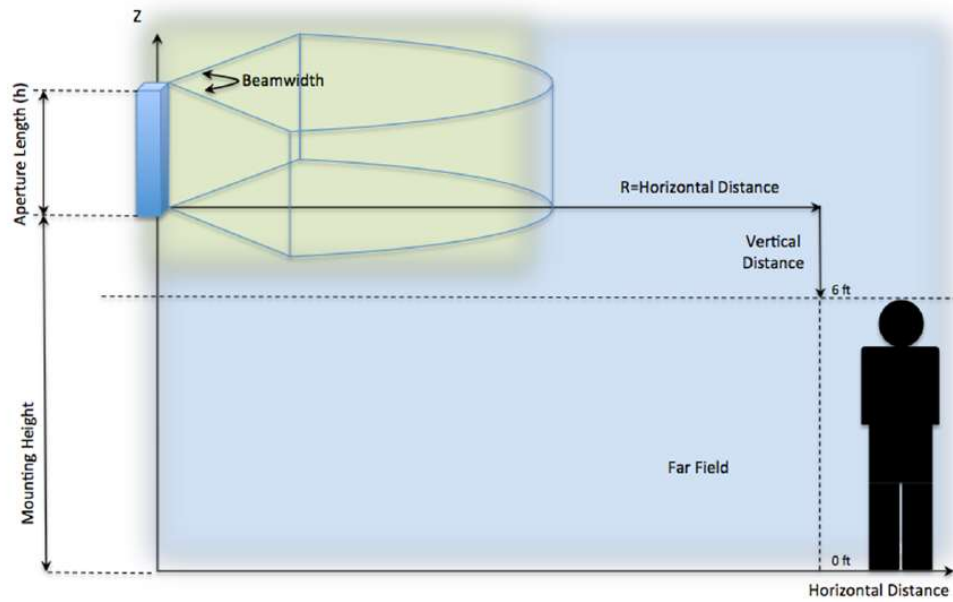
Power density is calculated as follows:

$$S = \left(\left(\frac{360}{\text{Beamwidth}} \right) \frac{P_{in} G_H H_r V_r}{2 \pi R h} \right) \frac{\mu W}{cm^2}$$

- S is the spatially averaged power density value
- R is the horizontal distance meters to the study point
- h is the aperture length in meters
- P_{in} is power into the antenna input port in Watts

RoofMaster® Implementation:

- G_H is gain offset to study point as specified in manufacturer horizontal pattern
- P_{in} is adjusted by the portion of the antenna aperture in the 0-6 ft. vertical study zone
- H_r accounts for 1/R² Far Field roll off which starts at 2*h
- V_r accounts for 1/ (vertical distance)² roll off from antenna bottom to the top of the 0-6 ft. study zone (or antenna top to bottom of 0-6 ft. study zone)



9 References

FCC (1997). “Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields”; Federal Communications Commission; Office of Engineering and Technology, OET Bulletin 65, Edition 97-01, August.

Waterford Consultants, LLC (2008). RoofMaster® User Guide, Waterford Consultants, LLC.

10 Limited Warranty

Pramira, Inc. warrants that this analysis was performed in good faith using the methodologies and assumptions covered in this report and that data used for the analysis and report were obtained by Pramira, Inc. employees or representatives via site surveys or research of Verizon's available information. In the event that specific third-party details were not available, best efforts were made to use assumptions that are based on industry experience of various carriers' standards without violating any confidential information obtained under non-disclosure terms.

Pramira, Inc. also warrants that this analysis was performed in accordance with industry acceptable standards and methods.

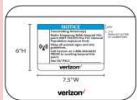
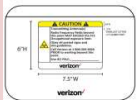
There are no other warranties, express or implied, including but not limited to, the implied warranties of merchantability and fitness for a particular purpose, relating to this agreement or to the services rendered by Pramira hereunder. In no event shall Pramira be held liable to Verizon, or to any third party, for any indirect, special, incidental, or consequential damages, including but not limited to loss of profits, loss of data, loss of good will, and increased expenses. In no event shall Pramira be liable to Verizon for damages, whether based in contract, tort, negligence, strict liability, or otherwise, exceeding the amount payable hereunder for the services giving rise to such liability.



Radio Frequency Exposure FCC Compliance Assessment

☒ Pre-Activation ☐ Post-Activation

SITE-SPECIFIC INFORMATION			
Site Name	MADRONE - C	Multi-Licensee Facility	☐ YES ☒ NO
Street Address	Southern Oregon University- Science Building.	Is Verizon a Significant Contributor to <u>Co-Locator</u> Areas Requiring Mitigation?	☐ YES ☐ NO
City, State, Zip	Ashland, OR 97520		☒ N/A
Verizon's Max % MPE (Measured - General Public)		Verizon's Max % MPE (Predictive - General Public)	2730.46%
Structure Type	Rooftop	Assessment Date	
Broadcast (AM/FM/TV) Co-Locators	☐ YES ☒ NO	Assessment Purpose	
Total Access Points	TBD	Total Report Revisions	
Original Report Date	02/27/2024	Report Revision Date	
Compliance Status	☐ COMPLIANT AS DESIGNED, no mitigation required ☒ MITIGATION IS REQUIRED (Barriers, Signs, RF Safety Plan, etc., see below)		

VERIZON'S WORST-CASE RF EMISSIONS IN ACCESSIBLE AREAS AT THIS FACILITY							
☐	BELOW the General Population MPE limit						
☐	ABOVE the General Population MPE limit and BELOW the Occupational MPE limit						
☒	ABOVE the Occupational MPE limit and BELOW 10x the Occupational MPE limit						
☐	ABOVE 10x the Occupational MPE limit						
Final Compliant Configuration	 Safety Guidelines	 Notice	 Caution	 Warning	 Information	 Barriers/Markers	
	GUIDELINES	NOTICE	CAUTION	WARNING	NOC INFO	BARRIER/MARKER	
	Pole(s)	☒ [TBD]	☐ [#]	☐ [#]	☐ [#]	☒ [TBD]	☐
	Alpha	☐ [#]	☐ [#]	☒ [1]	☐ [#]	☐ [#]	☐
	Beta	☐ [#]	☐ [#]	☒ [1]	☐ [#]	☐ [#]	☐
Gamma	☐ [#]	☐ [#]	☒ [1]	☐ [#]	☐ [#]	☐	

NOTE: The table above represents EVERY compliance item that MUST be implemented at this location; Also, in Sec. 4 (B)

☐ RF Safety Plan required

☐ Engineering Controls required

Description of all Compliance Requirements(s):			
- <i>NOC and Guidelines signs need to be posted at any Access point to the Main Roof.</i> - <i>Caution signs need to be posted at the Back of all sectors.</i> (See drawing in Section 4b) Mitigation is required per the Signage/ Barrier Diagram.			
Consultant Legal Name	Pramira, Inc	Phone/Fax	800-678-1169
Email Contact	michael.arnold@pramira.com		
Address	404 North Berry St., Brea, CA 92821		

Contents

1. Introduction	4
2. Existing Site Characteristics	5
a. Structure	5
b. Accessibility - Site Visit Only	5
Were you required to provide any proof of identity to gain access?	5
What specific documents were required in order to gain access?	5
c. Existing Verizon Observations - based on Site Visit or Information Received	6
d. Antenna Inventory	7
3. Analysis	8
a. Field Measurements	8
b. Predictive Modeling	9
i. All Transmitters	9
ii. Predictive Model: Verizon Transmitters	12
4. Conclusion	16
a. Conclusion Narrative	16
b. Signage/Barrier Diagram	17
c. Signage/Barrier Installation Detail	18
5. Appendix A: Site Photos	19
a. Structure	19
b. Access Point(s)	19
c. Individual Sectors	19
d. Miscellaneous	19
6. Appendix B: Survey Methodology	19
a. Survey Procedures	19
b. Survey Equipment Certification	19
7. Appendix C: RF Consultant Certifications	20
a. Preparer Certification	20
b. Reviewer Certification	20
8. Appendix D: Reference Information	21

1. Introduction

Verizon Wireless has contracted with Pramira, Inc, an independent Radio Frequency consulting firm, to conduct a **Radio Frequency Exposure (RFE) FCC Compliance Assessment** of the **MADRONE - C** cell site. The following report contains a detailed summary of the Radio Frequency environment as it relates to Federal Communications Commission (FCC) and Occupational Safety & Health Administration (OSHA) Rules and Regulations for all individuals.

The **Verizon Wireless antenna data** was provided by:

Name	Camille Cope
Title	Engr III - Real Estate Specialist
Date	2/22/2024
Sub-Market	Camille Cope

This compliance assessment and report has been **prepared** and **reviewed** by:

	Preparer	Reviewer
Name	Abdelsalam Masoud	Justin Tiumalu
Title	RF Engineer	Senior RF Engineer
Date	02/27/2024	3/4/2024

This report utilizes the following **for predictive modeling of the ambient RF environment**:

MPE Modeling Program: RoofMaster 40.12.23.22

Required Modeling Assumptions: 100% Duty Cycle and Maximum Total Power Output.

Additional Modeling Assumptions:

- This is a Three-Sector site supporting LTE at 700, 1900, and 2100 MHz, CBRS at 3600, and C-Band at 3700 MHz for all sectors. All LTE assumes 4x4 MIMO.
- The antennas rad center for all sectors (44.2’), Main Roof Height (36’), Lower Roof (28’), and Utility Pole Height (32’) are based on the CDs and RFDS. These values must be verified on the site audit for the post study.
- All technologies were evaluated assuming the max number of channels and were running at max power 100% of the time.

2. Existing Site Characteristics

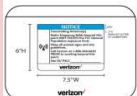
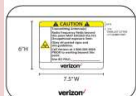
a. Structure

Physical Description	- This is Rooftop site where Verizon antennas are mounted inside FRP Screen on the Main Roof. - The VZW equipment is located on the Main Roof.
Single-Family Home	☐ YES ☒ NO
Latitude (NAD 83)	42° 11' 6.6" N
Longitude (NAD 83)	122° 41' 50.6" W
Total Analyzed Elevations (Roof Levels)	4: Elevation, Antenna Level, Main Roof, and Lower Roof levels. A study at the Utility Pole Level and Ground was not required as the study at Antenna Level shows the MPE limit is below the General Population MPE limit on the Utility Pole Level and Ground.

b. Accessibility - Site Visit Only

Did the property owner or agent of the property owner (e.g. a security guard) grant you access to the Utility Pole?	☐ YES ☐ NO
If not - were you required to be escorted by Verizon personnel in order to gain access?	☐ YES ☐ NO
Were you required to provide any proof of identity to gain access?	☐ YES ☐ NO
What specific documents were required in order to gain access?	
All access points locked at time of assessment?	☐ YES ☐ NO
All access points alarmed at time of assessment?	☐ YES ☐ NO
Were there any broken locks or inoperable alarms on any of the access points to the Utility Pole?	☐ YES ☐ NO
Were there any access issues caused by either the property owner or agent of the property owner?	☐ YES ☐ NO
Additional Notes:	

c. Existing Verizon Observations - based on Site Visit or Information Received

<u>Existing Observations</u>	 Safety Guidelines	 Notice	 Caution	 Warning	 Information	 Barriers/Markers
	GUIDELINES	NOTICE	CAUTION	WARNING	NOC INFO	BARRIER/MARKER
Pole(s)	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐
Alpha	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐
Beta	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐
Gamma	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐

NOTE: The table above represents EXISTING compliance items implemented at this location.

Are Verizon signs posted on the front, back and sides of antenna arrays where possible?	☐ YES ☐ NO
Are Verizon signs visible from all areas of approach?	☐ YES ☐ NO
Are there any broken, damaged or illegible Verizon signs?	☐ YES ☐ NO
Are there any broken or damaged Verizon physical barriers?	☐ YES ☐ NO
Are there any Verizon indicative markers in need of repair or replacement?	☐ YES ☐ NO

d. Antenna Inventory

Z-height represents the distance from the nearest walking surface to the _____ of the antenna.

☐ Bottom ☒ Centerline ☐ Top

NON-Verizon Co-locator Data

☐ Estimates ☐ Actual Data

ID	Name	(MHz) Freq	Trans Power	Trans Count	Other Loss	Calc Power	Power EIRP	MD-Tilt (Deg)	Mfg	Model	Elevation Z (ft)	Antenna Z (ft)	Main Roof Z (ft)	Lower Roof Z (ft)	Type	(ft) Aper	dBd Gain	SWdth	Orientation
VZ Alpha_Ant1	L700	700	40.0	2	0.5	71.3	2588.85	0.0	JMA	SON MX10FIT865	Various	0.0	8.2	16.2	Panel	8.0	13.45	67	0
VZ Alpha_Ant1	L2100	2110	60.0	4	0.5	213.9	12884	0.0	JMA	SON MX10FIT865	Various	0.0	8.2	16.2	Panel	8.0	15.65	57	0
VZ Alpha_Ant1	CBRS	3600	5.0	4	0.0	20.0	833	0.0	JMA	SON MX10FIT865	Various	0.0	8.2	16.2	Panel	8.0	14.05	56	0
VZ Alpha_Ant2	L700	700	40.0	2	0.5	71.3	2472.36	0.0	JMA	SON MX14FIT865-01	Various	0.0	8.2	16.2	Panel	8.0	13.25	68	0
VZ Alpha_Ant2	L1900	1900	40.0	4	0.5	142.6	8203	0.0	JMA	SON MX14FIT865-01	Various	0.0	8.2	16.2	Panel	8.0	15.45	56	0
VZ Alpha_Ant2	C-Band	3700	40.0	8	0.0	320.0	13031	0.0	JMA	SON MX14FIT865-01	Various	0.0	8.2	16.2	Panel	8.0	13.95	58	0
VZ Beta_Ant1	L700	700	40.0	2	0.5	71.3	2588.85	0.0	JMA	SON MX10FIT865	Various	0.0	8.2	16.2	Panel	8.0	13.45	67	110
VZ Beta_Ant1	L2100	2110	60.0	4	0.5	213.9	12884	0.0	JMA	SON MX10FIT865	Various	0.0	8.2	16.2	Panel	8.0	15.65	57	110
VZ Beta_Ant1	CBRS	3600	5.0	4	0.0	20.0	833	0.0	JMA	SON MX10FIT865	Various	0.0	8.2	16.2	Panel	8.0	14.05	56	110
VZ Beta_Ant2	L700	700	40.0	2	0.5	71.3	2472.36	0.0	JMA	SON MX14FIT865-01	Various	0.0	8.2	16.2	Panel	8.0	13.25	68	110
VZ Beta_Ant2	L1900	1900	40.0	4	0.5	142.6	8203	0.0	JMA	SON MX14FIT865-01	Various	0.0	8.2	16.2	Panel	8.0	15.45	56	110
VZ Beta_Ant2	C-Band	3700	40.0	8	0.0	320.0	13031	0.0	JMA	SON MX14FIT865-01	Various	0.0	8.2	16.2	Panel	8.0	13.95	58	110
VZ Gamma_Ant1	L700	700	40.0	2	0.5	71.3	3184.38	0.0	JMA	SON MX10FIT845	Various	0.0	8.2	16.2	Panel	8.0	18.35	37	260
VZ Gamma_Ant1	L2100	2110	60.0	4	0.5	213.9	2718.45	0.0	JMA	SON MX10FIT845	Various	0.0	8.2	16.2	Panel	8.0	18.35	37	260
VZ Gamma_Ant1	CBRS	3600	5.0	4	0.0	20.0	743	0.0	JMA	SON MX10FIT845	Various	0.0	8.2	16.2	Panel	8.0	13.55	42	260
VZ Gamma_Ant2	L700	700	40.0	2	0.5	71.3	7999.51	0.0	JMA	SON MX14FRO845	Various	0.0	8.2	16.2	Panel	8.0	15.25	46	260
VZ Gamma_Ant2	L1900	1900	40.0	4	0.5	142.6	13304	0.0	JMA	SON MX14FRO845	Various	0.0	8.2	16.2	Panel	8.0	17.95	40	260
VZ Gamma_Ant2	C-Band	3700	40.0	8	0.0	320.0	8413	0.0	JMA	SON MX14FRO845	Various	0.0	8.2	16.2	Panel	8.0	13.85	38	260

The antenna Z-heights listed above are referenced to the Elevation, Antenna Level, Main Roof, and Lower Roof Levels.

3. Analysis

Could field measurements be taken in areas with Verizon antennas?	☐ YES ☐ NO
Describe why measurements could not be taken - if applicable.	
Adjacent Structure(s)	☐ Touching ☐ Potential Concern ☐ No Concern
If the structure is a Single-Family Residential Home, were measurements taken inside the residence?	☐ YES ☐ NO
Field Measurement Equipment	☐ Broadband ☐ Narrowband
Field Measurement Start Time	
Field Measurement End Time	
Location Broadband Equipment Zeroed	

a. Field Measurements

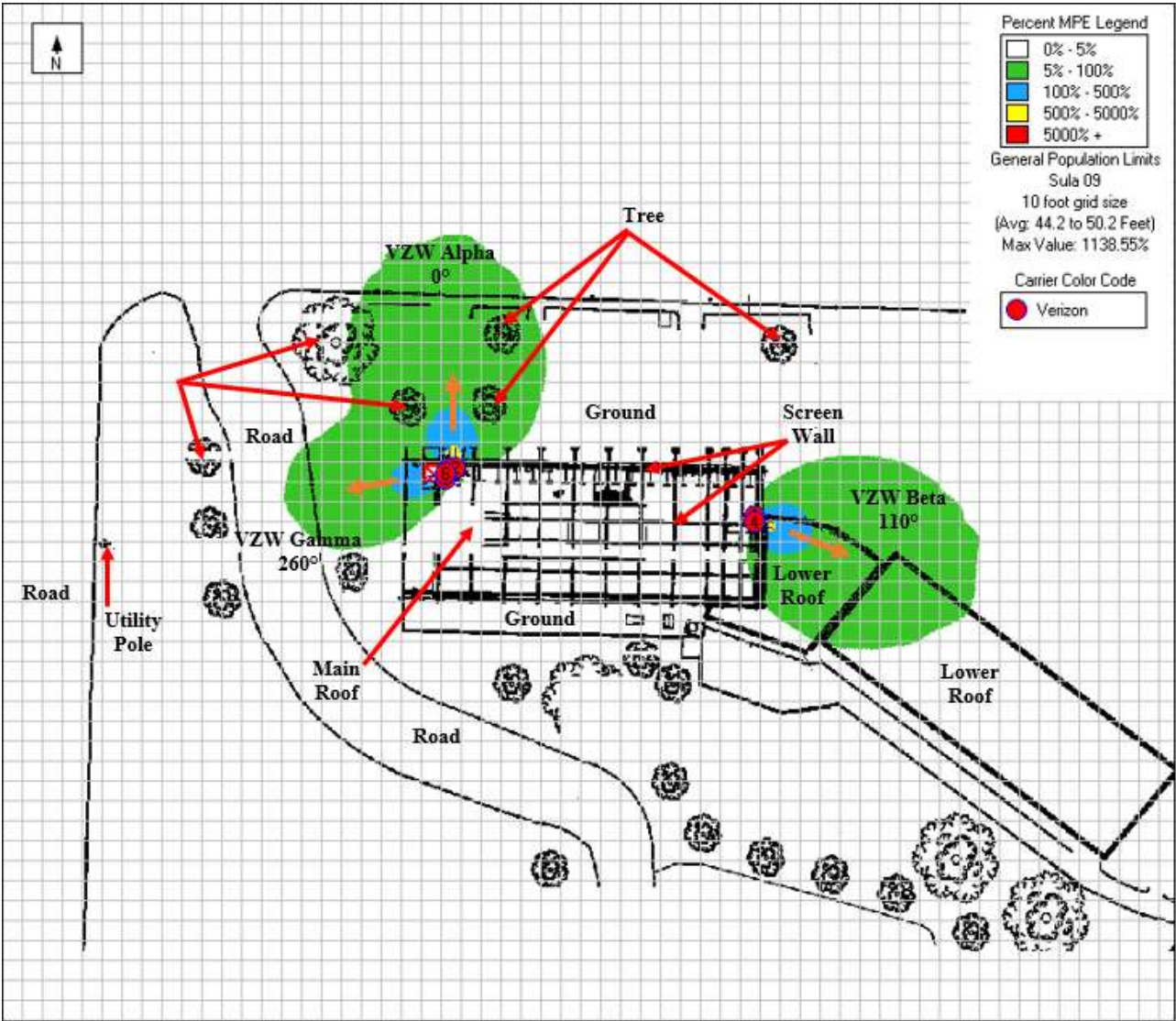
b. Predictive Modeling

i. All Transmitters

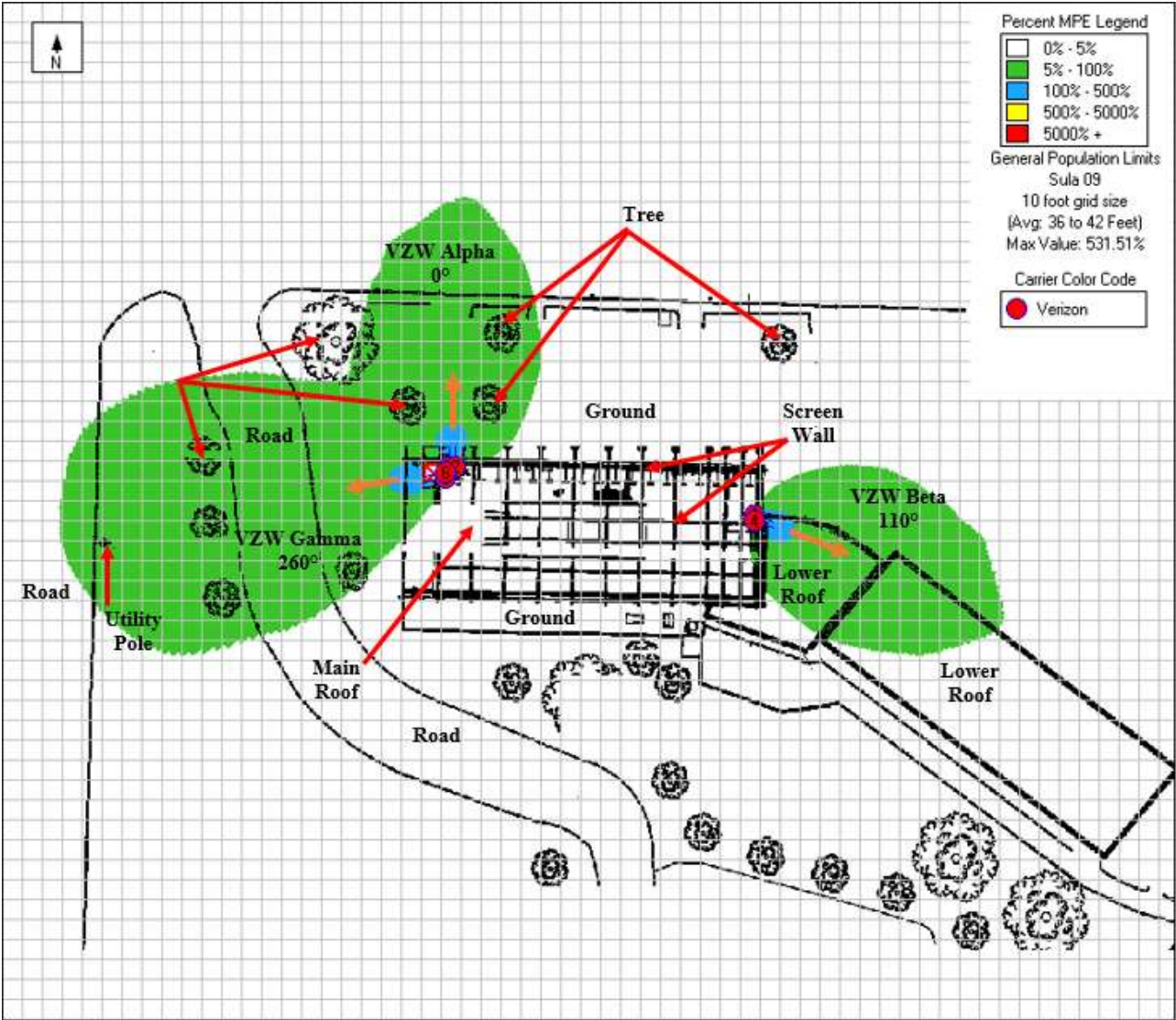
Is the area being modeled completely INACCESSIBLE to members of the general population (including untrained maintenance workers)?

☐ YES ☒ NO

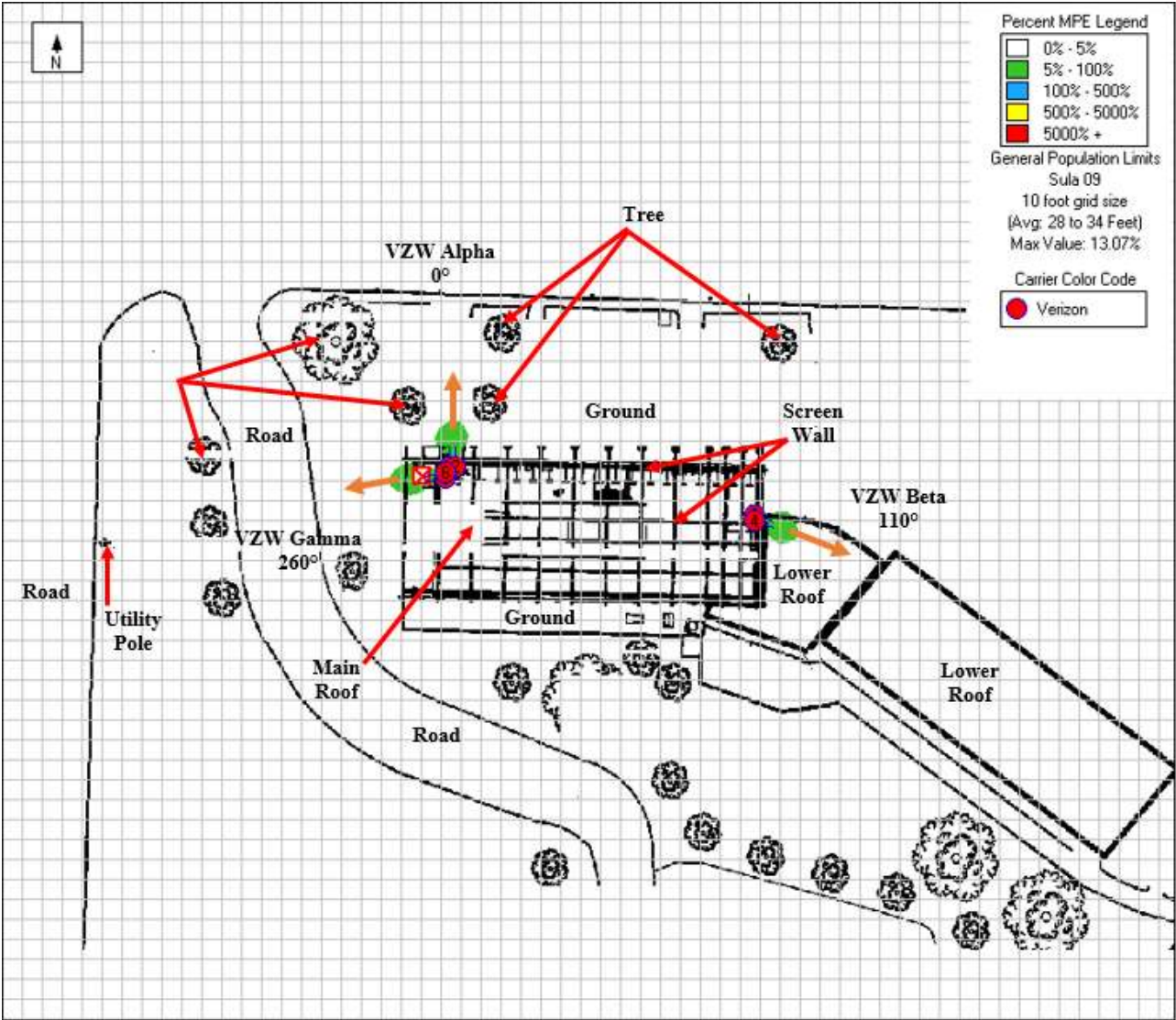
Reference Plane: Antenna Level



Reference Plane: Main Roof Level

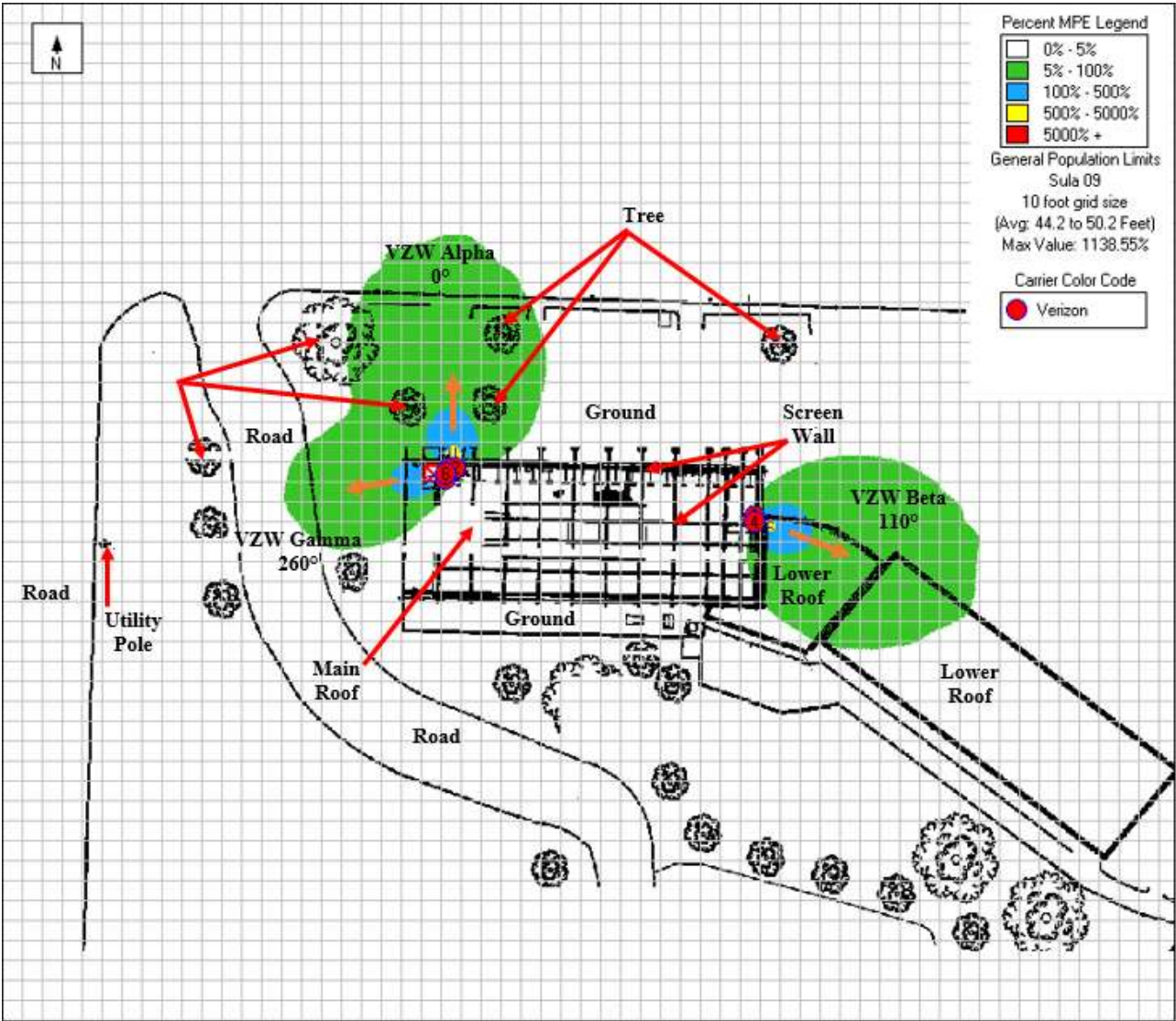


Reference Plane: Lower Roof Level

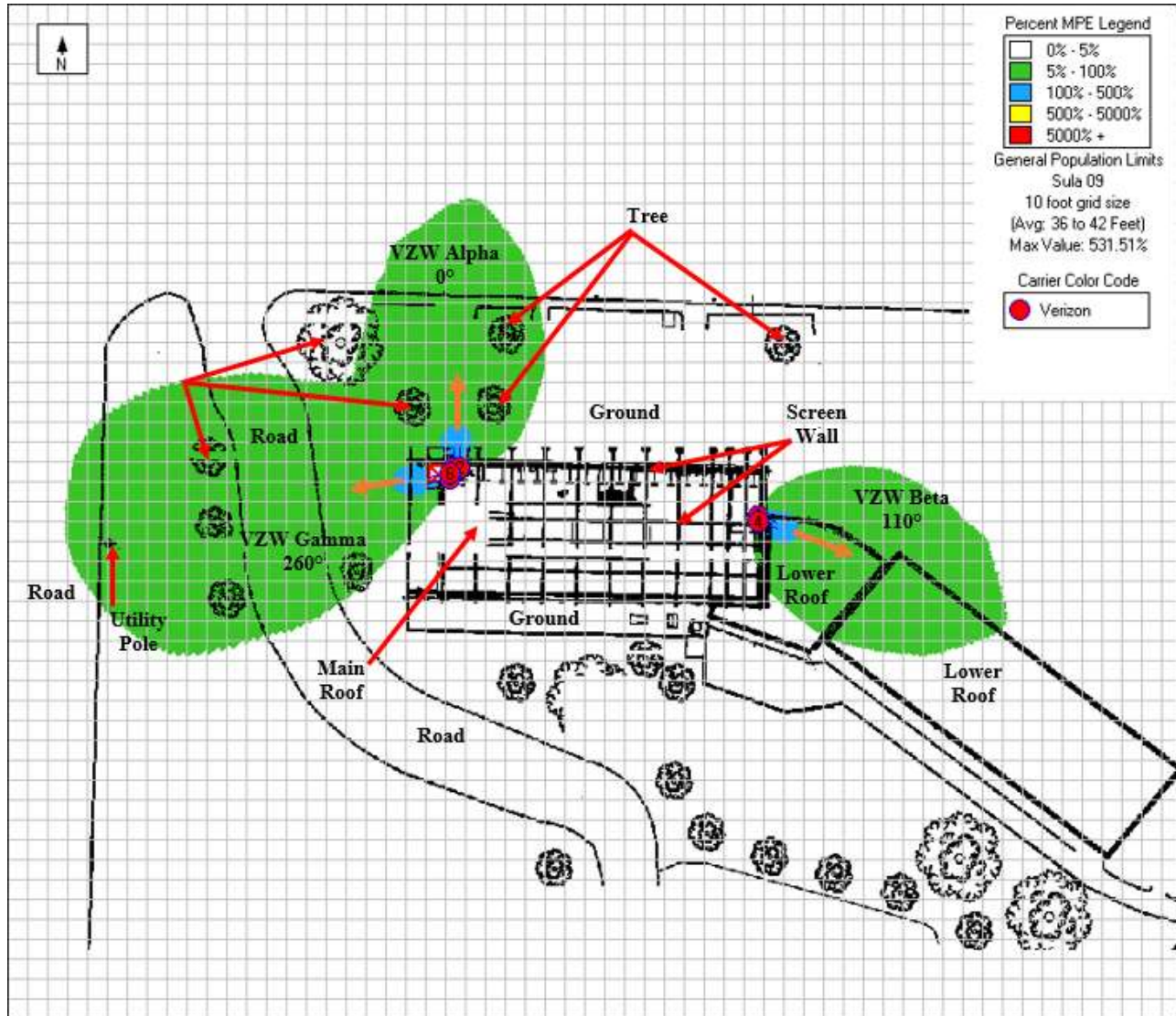


ii. Predictive Model: Verizon Transmitters

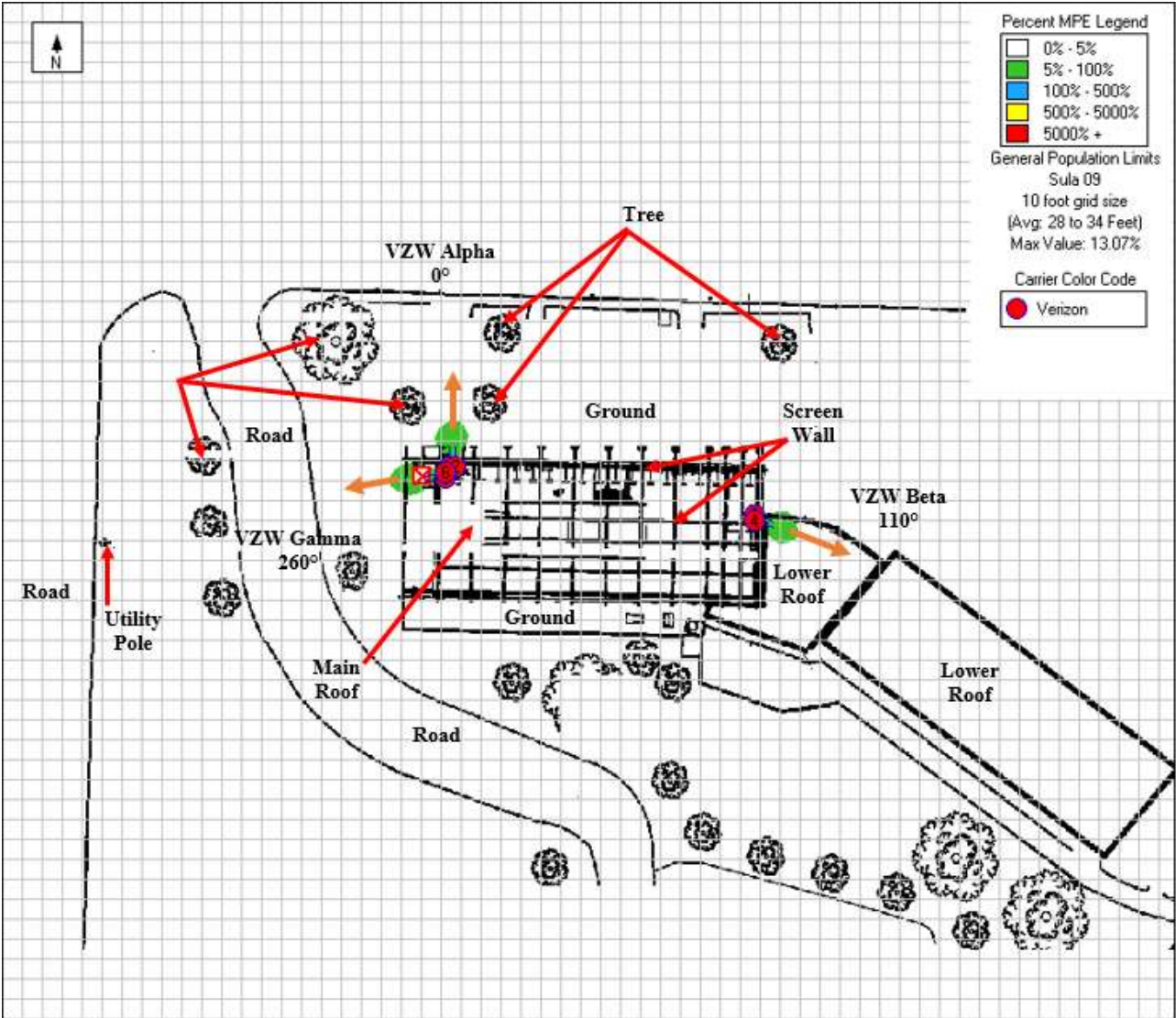
Reference Plane: Antenna Level



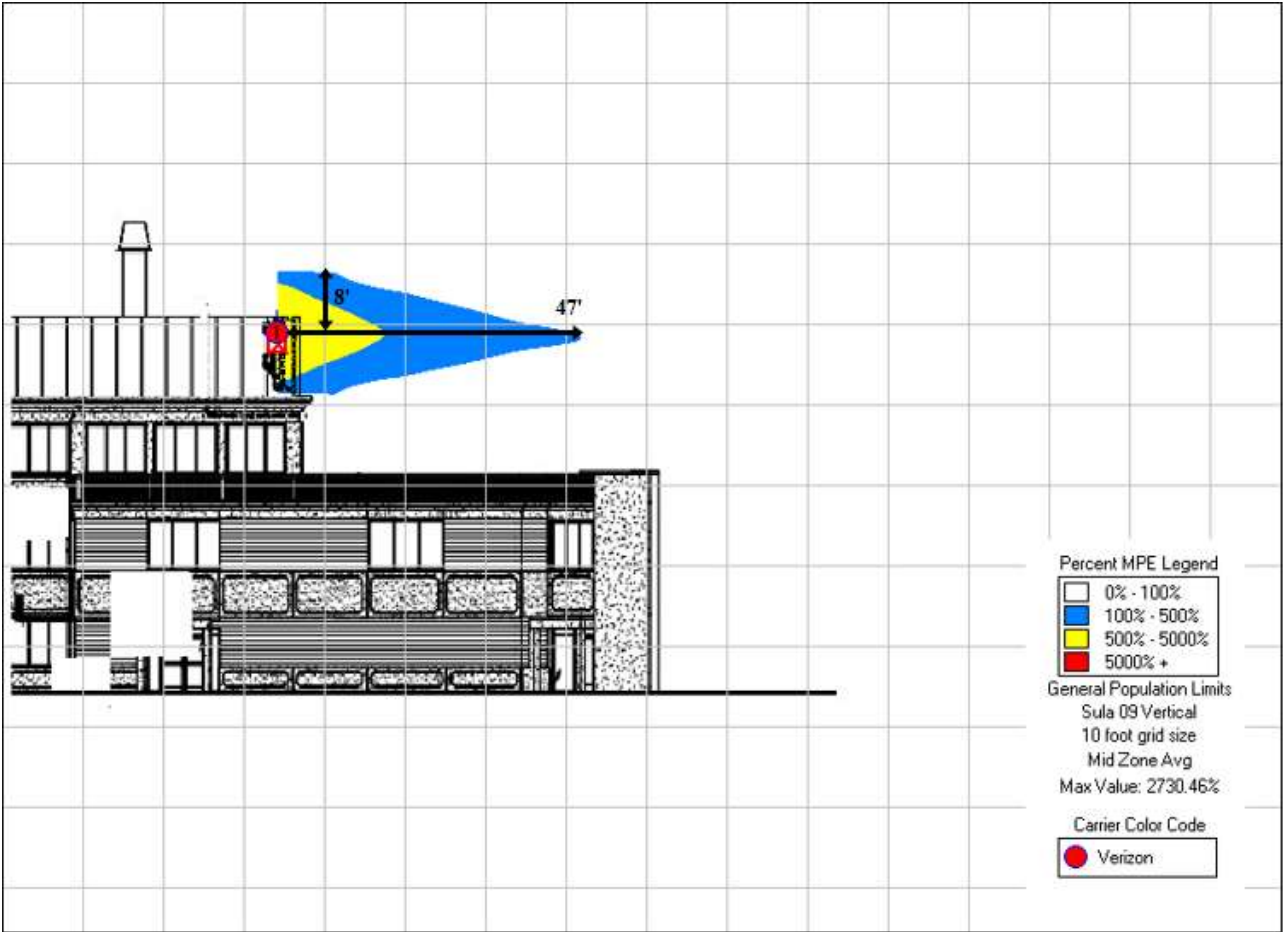
Reference Plane: Main Roof Level



Reference Plane: Lower Roof Level



Reference Plane: Rooftop Elevation Level



4. Conclusion
a. Conclusion Narrative

Description of MPE-Limit Exceeding Areas:

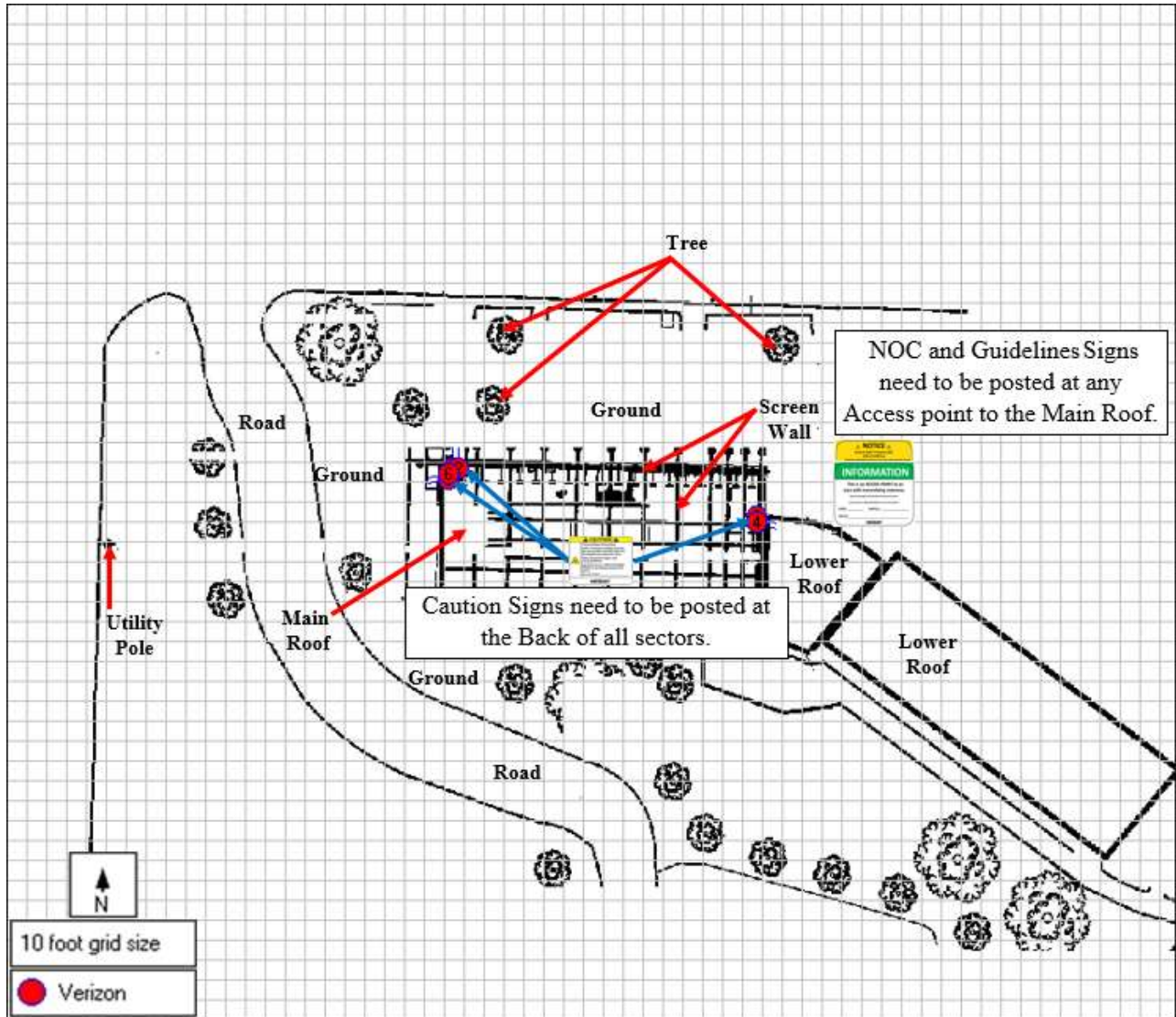
- The results of the analysis indicate that the power density levels in the generally accessible areas on Antenna Level will not exceed the FCC’s MPE limit for General Population.
- The results of the analysis indicate that the power density levels in the generally accessible areas on the Main Roof Level will not exceed the FCC’s MPE limit for General Population.
- The results of the analysis indicate that the power density levels in the generally accessible areas on the Lower Roof Level will not exceed the FCC’s MPE limit for General Population.
- The results of the analysis indicate that power density levels in the generally accessible areas on the Rooftop Elevation will not exceed the FCC’s MPE limit for General Population environments. Notice that the power density levels will exceed the FCC’s MPE limit in front of the antennas which are not generally accessible areas. This area might be accessed in case of maintenance; therefore, mitigation is required per the Signage/ Barrier Diagram.
- The max theoretical % MPE is **2730.46%** directly in front of the antennas beams at the Rooftop Elevation Level.
- NOC and Guidelines signs need to be posted at any Access point to the Main Roof.

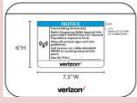
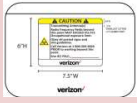
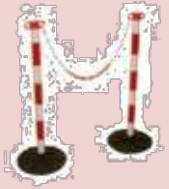
Potentially Non-Compliant Co-Locator Areas: Verizon Responsibility

The following table represents potentially non-compliant co-locators for which Verizon is a 5% General Population MPE (1% Occupational MPE) contributor.

AT&T	T-Mobile	Other (name)	Other (name)	Unknown	Other
☐	☐	☐	☐	☐	

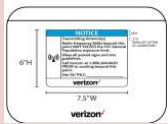
b. Signage/Barrier Diagram



<u>Final Compliant Configuration</u>	 Safety Guidelines	 Notice	 Caution	 Warning	 Information	 Barriers/Markers
	GUIDELINES	NOTICE	CAUTION	WARNING	NOC INFO	BARRIER/MARKER
Pole(s)	☒ [TBD]	☐ [#]	☐ [#]	☐ [#]	☒ [TBD]	☐
Alpha	☐ [#]	☐ [#]	☒ [1]	☐ [#]	☐ [#]	☐
Beta	☐ [#]	☐ [#]	☒ [1]	☐ [#]	☐ [#]	☐
Gamma	☐ [#]	☐ [#]	☒ [1]	☐ [#]	☐ [#]	☐

NOTE: The table above represents EVERY compliance item that MUST be implemented at this location.

c. Signage/Barrier Installation Detail

<u>Mitigation Actions Required/Taken</u>	 Safety Guidelines	 Notice	 Caution	 Warning	 Information	 Barriers/Markers
	GUIDELINES	NOTICE	CAUTION	WARNING	NOC INFO	BARRIER/MARKER
Access Point(s)	☐ [#] ☐ [#]	☐ [#] ☐ [#]	☐ [#] ☐ [#]	☐ [#] ☐ [#]	☐ [#] ☐ [#]	☐
Alpha	☐ [#] ☐ [#]	☐ [#] ☐ [#]	☐ [#] ☐ [#]	☐ [#] ☐ [#]	☐ [#] ☐ [#]	☐
Beta	☐ [#] ☐ [#]	☐ [#] ☐ [#]	☐ [#] ☐ [#]	☐ [#] ☐ [#]	☐ [#] ☐ [#]	☐
Gamma	☐ [#] ☐ [#]	☐ [#] ☐ [#]	☐ [#] ☐ [#]	☐ [#] ☐ [#]	☐ [#] ☐ [#]	☐
	ADD REM	ADD REM	ADD REM	ADD REM	ADD REM	ADD ONLY

NOTE: The table represents either the signage/barriers installed / removed OR items required by the market (if mitigation is not installed by consultant/vendor).

If signage/barriers NOT installed during visit and to be installed by Market please fill out the chart below

SPECIAL MITIGATION INSTRUCTIONS	
Items to be Installed	
Items to be Removed	
Items to be Repaired/Replaced	

5. Appendix A: Site Photos

- a. Structure**
- b. Access Point(s)**
- c. Individual Sectors**
- d. Miscellaneous**

6. Appendix B: Survey Methodology

- a. Survey Procedures**
- b. Survey Equipment Certification**

7. Appendix C: RF Consultant Certifications

a. Preparer Certification

I, **Abdelsalam Masoud**, the preparer of this report, am fully aware of and familiar with the Rules and Regulations of both the Federal Communications Commissions (FCC) and the Occupational Safety and Health Administration (OSHA) with regard to Human Exposure to Radio Frequency Radiation. I am also fully aware of and familiar with the Verizon Wireless Signage & Demarcation Policy. I have reviewed this Radio Frequency Exposure Assessment report and believe it to be both true and accurate to the best of my knowledge.



b. Reviewer Certification

I, **Justin Tiumalu**, the reviewer and approved of this report, am fully aware of and familiar with the Rules and Regulations of both the Federal Communications Commissions (FCC) and the Occupational Safety and Health Administration (OSHA) with regard to Human Exposure to Radio Frequency Radiation. I am also fully aware of and familiar with the Verizon Wireless Signage & Demarcation Policy. I have reviewed this Radio Frequency Exposure Assessment report and believe it to be both true and accurate to the best of my knowledge.



8. Appendix D: Reference Information

a. FCC Rules & Regulations

The Federal Communications Commission (FCC) has established safety guidelines relating to RF exposure from cell sites. The FCC developed those standards, known as Maximum Permissible Exposure (MPE) limits, in consultation with numerous other federal agencies, including the Environmental Protection Agency, the Food and Drug Administration, and the Occupational Safety and Health Administration. The standards were developed by expert scientists and engineers after extensive reviews of the scientific literature related to RF biological effects. The FCC explains that its standards “incorporate prudent margins of safety.” The following represents explanations of the most applicable information:

Two Classifications for Exposure Limits

<u>Occupational</u> – Applies to situations in which persons are “exposed as a consequence of their <i>employment</i> ” and are “ <i>fully aware</i> of the potential for exposure and can <i>exercise control</i> over their exposure”.	<u>General Population</u> – Applies to situations in which persons are “exposed as a consequence of their employment <i>may not be made fully aware</i> of the potential for exposure or <i>cannot exercise control</i> over their exposure”. Generally speaking, those without significant and documented RF Safety & Awareness training would be in the General Population classification.
--	--

Environment Classification

<u>Controlled</u> – Applies to environments that are restricted or “controlled” in order to prevent access from members of the General Population classification.	<u>Uncontrolled</u> – Applies to environments that are unrestricted or “uncontrolled” that allow access from members of the General Population classification.
---	--

<i>Limits for Occupational/Controlled Exposure</i>		
Frequency	Power Density	Averaging Time
Range	(S)	E ² , H ² , or S
(MHz)	(mW/cm ²)	(minutes)
300-1500	f/300	6
1500-100,000	5	6
<i>Limits for General Population/Uncontrolled Exposure</i>		
Frequency	Power Density	Averaging Time
Range	(S)	E ² , H ² , or S
(MHz)	(mW/cm ²)	(minutes)
300-1500	f/1500	30
1500-100,000	1	30
<i>f = frequency in MHz</i>		

Significant Contribution to the RF Environment

Any carrier contributing an aggregate MPE percentage of 5 or more (to the applicable RF Environment Classification) is defined as a significant contributor. This means that if any area is determined to be out of compliance with FCC rules, all significant contributors are jointly responsible for correcting any deficiencies.

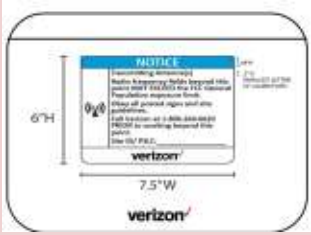
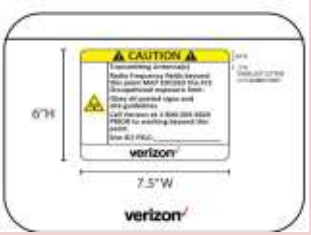
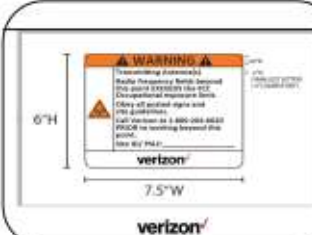
b. Occupational Safety and Health Administration (OSHA) Requirements

A formal adopter of FCC Standards, OSHA stipulates that those in the Occupational classification must complete training in the following: RF Safety, RF Awareness, and Utilization of Personal Protective Equipment. OSHA also provides options for Hazard Prevention and Control:

Hazard Prevention	Control
- Utilization of good equipment - Enact control of hazard areas - Limit exposures - Employ medical surveillance and accident response	- Employ Lockout/Tag out - Utilize personal alarms & protective clothing - Prevent access to hazardous locations - Develop or operate an administrative control program

c. RF Signage

Areas or portions of any transmitter site may be susceptible to high power densities that could cause personnel exposures in excess of the FCC guidelines. These areas must be demarcated by conspicuously posted signage that identifies the potential exposure. Signage MUST be viewable regardless of the viewer’s position.

GUIDELINES	Category Two - Notice	Category Three - Caution	Category Four - Warning
This sign will inform anyone of the basic precautions to follow when entering an area with transmitting radiofrequency equipment.	This sign indicates that RF emissions may exceed the FCC General Population MPE limit. - Sign Color Blue - Sign Signal Word “Notice”	This sign indicates that RF emissions may exceed the FCC Occupational MPE limit. - Sign Color Yellow - Sign Signal Word “Caution”	This sign indicates that RF emissions may exceed at least 10x the FCC Occupational MPE limit. - Sign Color Orange for Warning - Sign Signal Word “Warning”
			
Category One - Information			
Information signs are used as a means to provide contact information for any questions or concerns. They will include specific cell site identification information and the Verizon Wireless Network Operations Center phone number. - Sign Color Green - Sign Signal Word “Information”			
			

Signs for Category Two through Four must have the following:

- Appropriate signal word associated color {i.e., {DANGER” (red), “WARNING” (orange), “CAUTION,” (yellow) “NOTICE” (blue)}.
- RF energy advisory symbol.
- An explanation of the RF source.
- Behavior necessary to comply with the exposure limits; and
- Up-to-date contact information.

Signage Design features.

- All signs shall be furnished with rounded or blunt corners and shall be free from sharp edges, burrs, splinters, or other sharp projections. The ends or heads of bolts or other fastening devices shall be located in such a way that they do not constitute a hazard.

d. Physical Barriers

Physical barriers are control measures that require awareness and participation of personnel. Physical barriers are employed as an additional administration control to complement RF signage and physically demarcate an area in which RF exposure levels may exceed the FCC General Population limit. **Example:** chain-connected stanchions.

e. Indicative Markers

Indicative markers are visible control measures that require awareness and participation of personnel, as they cannot physically prevent someone from entering an area of potential concern. Indicative markers are employed as an additional administration control to complement RF signage and visually demarcate an area in which RF exposure levels may exceed the FCC General Population limit. **Example:** paint stripes.



13228 NE 20th St., Suite 100
Bellevue, WA 98005
Phone (425) 614-0949 Fax (425) 614-0950

STRUCTURAL CALCULATIONS FOR:



Verizon MDF Madrone

1189 Ashland Street
Ashland, OR 97520

Client:



Acom Consulting, Inc.
5200 SW Meadows Rd, Suite 150
Lake Oswego, OR 97035

By
Mitchell Beck, S.E. (WA)
Bill Armour, S.E. (WA)
Alex Habliston, S.E.



EXPIRES: 06-30-25

03/07/2024

AUE JOB #: 19377
Date: 3/7/2024

Calculation: Design Summary {1-}

Code Summary

Building Code: 2021 International Building Code
 Local Building Code: 2022 Oregon Structural Specialty Code
 Supplemental Code: 2016 ASCE 7
 Risk Category: III High-Occupancy Building

Seismic Design Parameters:

S_S : 0.593 S_{DS} : 0.524 S_{MS} : 0.786 F_a : 1.33 I_e : 1.25
 S_1 : 0.335 S_{D1} : - S_{M1} : - F_v : -

Note: 1 sec period seismic parameters require additional analysis per ASCE 7 Sect. 11.4.8

Site Class: D (Default)

Seismic Design Category: D

Structural Height ' h_n ': 38 ft

Wind Design Parameters:

Building Dimensions & Site Parameters:

Basic Windspeed ' V ': 103 mph Mean Roof Height ' h ': 38.00 ft.
 ASD Windspeed ' V_{asd} ': 80 mph (Larger) Length: 171 ft.
 Exposure Category: B Width: 69.2 ft.
 Topographic Factor, K_{zt} : 1.00 Site Elevation above Sea Level, z_g : 2000 ft.
 Gust Effect Factor ' G ': 0.85
 Enclosure Classification: Enclosed Buildings
 (GCpi): 0.18 & -0.18

Snow Design Parameters:

Ground Snow Load ' P_g ': 13 psf

Live Loads:

Mark: Live Loads: Description:

- 20 psf - -Roof
- 100 psf - -Floor

Dead Loads:

Dead Loads:

8" Reinforced Concrete Wall

Concrete Wall 100.0 psf
 Finish 5.0 psf
 Misc. 5.0 psf

Total 110 psf

Concrete Floor/Roof

3" Pan Joist Slab 37.5 psf
 Concrete Pan Joist 27.0 psf
 MEP 4.0 psf
 Ceiling 4.0 psf
 Misc. 10.0 psf

Total 83 psf



13228 NE 20th St., Suite 100, Bellevue, WA 98005 | (425) 614-0949

Project: Verizon MDF Madrone
 Address: 1189 Ashland Street, Ashland, OR 97520
 Client: Acom Consulting Inc.

Pg. No: A - 1
 Date: 3/7/2024
 Job No.: 19377

Calculation: Snow Load 7_16 {2-}

Design Criteria & Base Snow Load:

Source: ASCE 7-16 Chapter 7

Risk Category: III

Ground Snow Load, p_g : 13 psf

Surface Roughness Category: C

Exposure: Partially Exposed

Exposure Factor, C_e : 1.00

Building Thermal Condition: All Structures unless noted otherwise

Thermal Factor, C_t : 1.00

Importance Factor, I_s : 1.10

Flat Roof Snow Load, p_f : 10.01 psf

Min. Low-Slope Roof Snow Load, p_m : 14.30 psf (Do not use for determining drift loads, sliding, unbalanced, or partial loads)

Roof Slope Factor, C_s : 1.00

Sloped Roof (Balanced) Snow Load, p_s : 10.01 psf

Rain on Snow Surcharge: 5 psf

Sloped Roof Snow Load, p_s + Rain on Snow Surcharge: 15.01 psf (Do not use for determining drift loads, sliding, unbalanced, or partial loads)

Jurisdiction Min. Flat Roof Snow Load, p_m : 25.00 psf (Do not use for determining drift loads, sliding, unbalanced, or partial loads)

Design Roof Snow Load: 25.00 psf

Snow Drift Loading on Lower Roofs, Parapets, or Roof Projections:

Typical Side Elevation

Source: ASCE 7-16 Chapter 7

Horizontal Dimension of Lower Roof: 70 ft

Horizontal Dimension of Upper Roof: 0.75 ft

Roof Elevation Change: 10 ft

Drift at Parapet/Roof Projection? Yes

Snow Density, γ : 15.69 pcf

Base Snow Height, h_b : 0.638 ft

Height above Base Snow, h_c : 9.362 ft

h_c / h_b : 14.67 **Drift Must Be Considered**

Leeward Drift:

Roof Length Upwind of the Drift, l_u : 0.75 ft

Leeward Drift Height, h_d : 0.413 ft

Design Leeward Drift Height, h_d : N/A ft

Windward Drift:

Roof Length Upwind of the Drift, l_u : 70 ft

Design Windward Drift Height, h_d : 1.873 ft

Design Drift:

Design Drift Height, h_d : 1.873 ft. ($h_d \leq h_c$)

Max Intensity of Drift Surcharge, p_d : 29.38 psf

Design Drift Width, w : 7.491 ft

Sloped Roof (Balanced) Snow Load, p_s : 10.01 psf

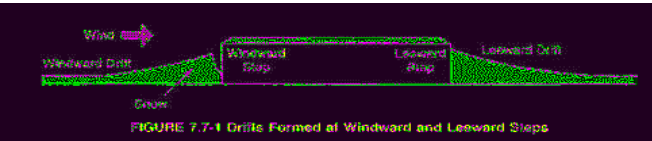


FIGURE 7.7-1 Drifts Formed at Windward and Leeward Steps

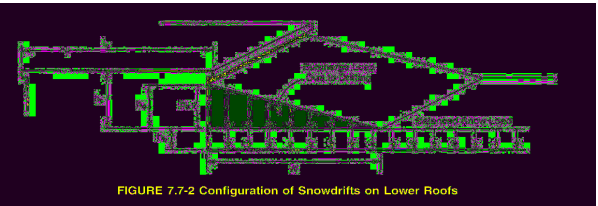


FIGURE 7.7-2 Configuration of Snowdrifts on Lower Roofs

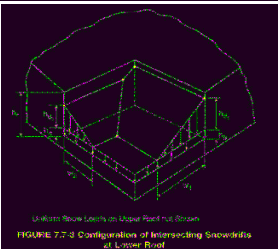


FIGURE 7.7-3 Configuration of Intersecting Snowdrifts at Lower Roof



13228 NE 20th St., Suite 100, Bellevue, WA 98005 | (425) 614-0949

Project: Verizon MDF Madrone
Address: 1189 Ashland Street, Ashland, OR 97520
Client: Acom Consulting Inc.

Pg. No: A - 2
Date: 3/7/2024
Job No.: 19377

Seismic Loading: Building Structures

Main Seismic Force Resisting Systems

IBC 2018

Risk Category: III <i>High-Occupancy Building</i>	Fa = 1.33	Sms = 0.786
Ss = 0.593	hn = 38 ft	Fv = 1.97
S1 = 0.335	Ct = 0.02	Sml = 0.658
Ie = 1.25	SDC: D	Sds = 0.524
Site Class = D		Sd1 = 0.439

See ASCE 12.8 Equiv. Lateral Force Procedure

A1. Special Reinforced Concrete Shear Walls

R = 5.0 Ω_o = 2.5 Cd = 5.0

Cs = 0.131

T = 0.306 Seconds

Cs max = 0.358

Cs min = 0.010 S1 < 0.6

Cs min = Not Applicable S1 ≥ 0.6

Cs min = 0.010

V = 0.131 * W



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Project: Verizon MDF Madrone
Address: 1189 Ashland Street
Client: Acom Consulting, Inc.

Pg. No: MSFRS 1
Date: 3/7/24
Job No.: 19377

IBC Seismic

Vertical Shear Distribution of Seismic Forces

Level	Floor		Walls			Misc. Weight (lb)	Total Weight (lb)	Elevation (ft)	Mass Irregularity
	Area (ft ²)	Weight (psf)	Total L (ft)	Trib Ht (ft)	Weight (psf)				
1	0	0	0.00	6.00	0	0	0	0.00	N/A
2	11,828	83	480.33	12.00	55	500	1,293,289	12.00	OK
3	11,828	83	480.33	13.00	55	500	1,319,707	24.00	OK
4	11,828	83	480.33	7.00	55	500	1,161,197	38.00	N/A
5	0	0	0.00	0.00	0	0	0	0.00	N/A
6	0	0	0.00	0.00	0	0	0	0.00	N/A
7	0	0	0.00	0.00	0	0	0	0.00	N/A
8	0	0	0.00	0.00	0	0	0	0.00	N/A
9	0	0	0.00	0.00	0	0	0	0.00	N/A
10	0	0	0.00	0.00	10	0	0	0.00	N/A

- Note: Tributary Weights on Level 1 are ignored because level 1 is considered to be Grade Level

Base Shear: V = 494.47 k LRFD

Level	h ^x	wh ^x	Cvx	Fx (k) (LRFD)
1	0	0	0.000	0.00
2	12	15,519,465	0.170	84.04
3	24	31,672,970	0.347	171.50
4	38	44,125,489	0.483	238.93
5	0	0	0.000	0.00
6	0	0	0.000	0.00
7	0	0	0.000	0.00
8	0	0	0.000	0.00
9	0	0	0.000	0.00
10	0	0	0.000	0.00
Total:		91,317,924	1.000	494.47

Diaphragm Seismic Forces

Level	wpx	Cpx	Fpx (k) (LRFD)
1	0	0	0.000
2	1,293,289	0.13	169.438
3	1,319,707	0.17	218.329
4	1,161,197	0.21	238.932
5	0	0.00	0.000
6	0	0.00	0.000
7	0	0.00	0.000
8	0	0.00	0.000
9	0	0.00	0.000
10	0	0.00	0.000



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Project: Verizon MDF Madrone
Address: 1189 Ashland Street
Client: Acom Consulting, Inc.

Pg. No: MSFRS 2
Date: 3/7/24
Job No.: 19377

Seismic Loading: Components and Cladding

Non-Structural Systems

IBC 2018

Risk Category: III <i>High-Occupancy Building</i>		Fa = 1.33	Sms = 0.786
Ss = 0.593	hn = 38 ft	Fv = 1.97	Sm1 = 0.658
S1 = 0.335	Ct = 0.02		
Ie = 1.25	SDC: D	Sds = 0.524	
		Sd1 = 0.439	
Site Class = D			

See ASCE 13.3 Non Structural Systems

- Roof Top Cabinets

MEC6. Generators, Batteries, Inverters, Motors, Transformers, and Other Electrical Components Constructed of High Deformability Materials

Ap = 1.0	z = 38.00 ft	Ip = 1.0
Rp = 2.5	h = 38.00 ft	
Ωo = 2.5		
Fp = 0.25 * Wp		
Fp max = 0.84 * Wp		
Fp min = 0.16 * Wp		
Fp = 0.252 * Wp		

- Antennas

MEC8. Communication Equipment, Computers, Instrumentation, and Controls

Ap = 1.0	z = 38.00 ft	Ip = 1.0
Rp = 2.5	h = 38.00 ft	
Ωo = 2.5		
Fp = 0.25 * Wp		
Fp max = 0.84 * Wp		
Fp min = 0.16 * Wp		
Fp = 0.252 * Wp		

- Screen Wall

A3. Cantilever Elements (Unbraced or Braced to Structural Frame Below its Center of Mass) - Parapets and Cantilever Interior Non-Structural Walls

Ap = 2.5	z = 38.00 ft	Ip = 1.0
Rp = 2.5	h = 38.00 ft	
Ωo = 2.5		
Fp = 0.63 * Wp		
Fp max = 0.84 * Wp		
Fp min = 0.16 * Wp		
Fp = 0.629 * Wp		



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Project: Verizon MDF Madrone
Address: 1189 Ashland Street
Client: Acom Consulting, Inc.

Pg. No: C&C Seis 1
Date: 3/7/24
Job No.: 19377

Wind Loading: Main Wind Force Resisting System

ASCE 7-16 Chapter 27 - Directional Procedure for Enclosed and Partially Enclosed Buildings

Building Geometry and Site Characteristics:

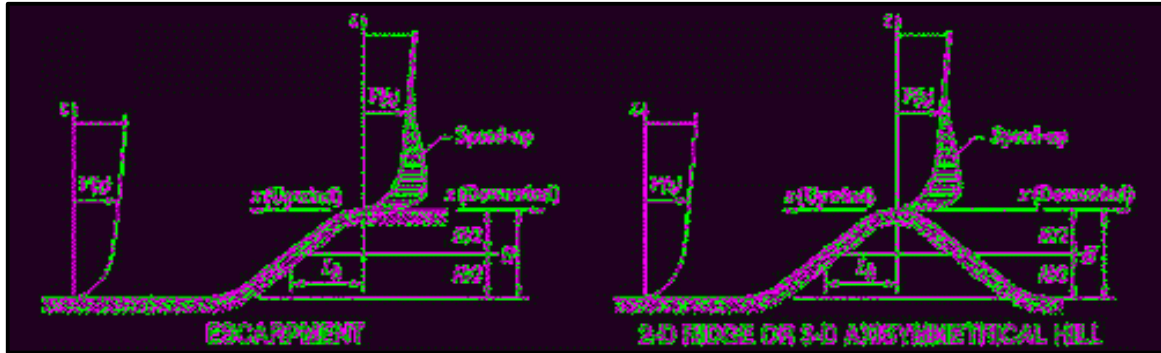
Mean Roof Height 'h': 38 ft
 (Larger) Length: 171 ft
 Width: 69.17 ft
 Roof Area: 11828 ft²

Building Type: Enclosed Buildings
 Ground Elev. above Sea Level, z_g : 2000 ft

Design Criteria & Velocity Pressure:

Basic Windspeed 'V': 103 mph
 Exposure Category: B
 Gust Effect Factor, G: 0.85
 Velocity Pressure Coefficient, K_z : 0.75
 Topographic Factor, K_{zt} : 0.81
 Wind Directionality Factor, K_d : 0.85
 Ground Elevation Factor, K_e : 0.93
 Velocity Pressure, $q_z = q_h$: 12.97 psf

Determination of Topographic Factor, K_{zt} :



Terrain Type: 2-dimensional ridges (or valleys with negative H in $K_1/(H/L_h)$)

Direction: Upwind of Crest

L_h :	3300.00 ft	Dist. Upwind of Crest to Half Ht of Hill or Escarp.
H:	1400.00 ft	Ht. of Hill or Escarp. Relative to the upwind terrain
x:	6200.00 ft	Dist. (Upwind or Downwind) from the crest to the building site
z:	338.00 ft	Ht above Local Ground Level
h:	338.00 ft	Mean Ht above Local Ground Level

H/L_h :	0.42
x/L_h :	1.88
z/L_h :	0.10

$K_1/(H/L_h)$:	1.30
K1:	0.551515152
μ :	1.5
K2:	-0.25252525
γ :	3
K3:	0.735

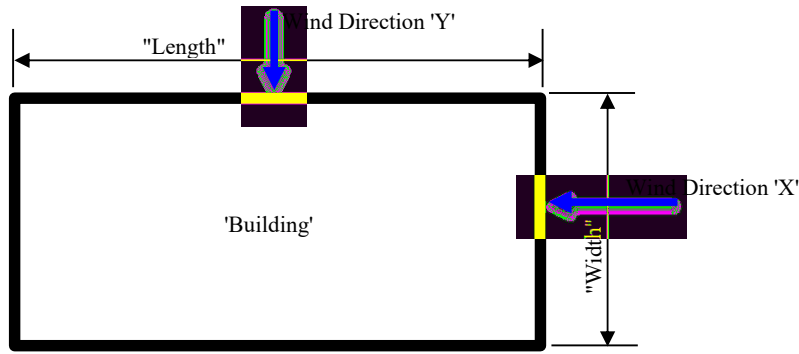
K_{zt} :	0.81 Equation 26.8-1
K_{zt} :	1.00 *User Input based on local jurisdiction criteria



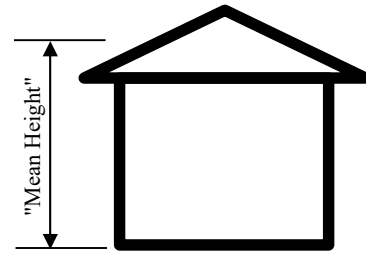
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Project: Verizon MDF Madrone
 Address: 1189 Ashland Street
 Client: Acom Consulting, Inc.

Pg. No: MWFRS 1
 Date: 3/7/24
 Job No.: 19377



Plan View



Elevation View

External Pressure Coefficients, C_p or C_n :

Wind Direction 'X':																											
Roof Angle:	0 - 10	degrees																									
L/B:	2.47	(Length / Width)																									
h/L:	0.22	(Height / Length)																									
<table><tr><th colspan="3">Wall Pressure Coefficients, C_p</th></tr><tr><td></td><td>C_p</td><td>Use w/</td></tr><tr><td>Windward Wall:</td><td>0.8</td><td>q_z</td></tr><tr><td>Leeward Wall:</td><td>-0.3</td><td>q_h</td></tr><tr><td>Sidewall:</td><td>-0.7</td><td>q_h</td></tr></table>				Wall Pressure Coefficients, C_p				C_p	Use w/	Windward Wall:	0.8	q_z	Leeward Wall:	-0.3	q_h	Sidewall:	-0.7	q_h									
Wall Pressure Coefficients, C_p																											
	C_p	Use w/																									
Windward Wall:	0.8	q_z																									
Leeward Wall:	-0.3	q_h																									
Sidewall:	-0.7	q_h																									
<table><tr><th colspan="4">Sloped Roof Pressure Coefficients, C_p</th></tr><tr><td></td><td>C_{p1}</td><td>C_{p2}</td><td>Use w/</td></tr><tr><td>Windward, $\theta > 10^\circ$:</td><td>N/A</td><td>N/A</td><td>q_h</td></tr><tr><td>Leeward, $\theta > 10^\circ$:</td><td>N/A</td><td>N/A</td><td>q_h</td></tr></table>				Sloped Roof Pressure Coefficients, C_p					C_{p1}	C_{p2}	Use w/	Windward, $\theta > 10^\circ$:	N/A	N/A	q_h	Leeward, $\theta > 10^\circ$:	N/A	N/A	q_h								
Sloped Roof Pressure Coefficients, C_p																											
	C_{p1}	C_{p2}	Use w/																								
Windward, $\theta > 10^\circ$:	N/A	N/A	q_h																								
Leeward, $\theta > 10^\circ$:	N/A	N/A	q_h																								
<table><tr><th colspan="4">Flat or Parallel to Ridge Roof Pressure Coeff., C_p</th></tr><tr><td></td><td>C_{p1}</td><td>C_{p2}</td><td>Use w/</td></tr><tr><td>0 to h/2:</td><td>-0.9</td><td>-0.18</td><td>q_h</td></tr><tr><td>h/2 to h:</td><td>-0.9</td><td>-0.18</td><td>q_h</td></tr><tr><td>h to 2h:</td><td>-0.5</td><td>-0.18</td><td>q_h</td></tr><tr><td>> 2h:</td><td>-0.3</td><td>-0.18</td><td>q_h</td></tr></table>				Flat or Parallel to Ridge Roof Pressure Coeff., C_p					C_{p1}	C_{p2}	Use w/	0 to h/2:	-0.9	-0.18	q_h	h/2 to h:	-0.9	-0.18	q_h	h to 2h:	-0.5	-0.18	q_h	> 2h:	-0.3	-0.18	q_h
Flat or Parallel to Ridge Roof Pressure Coeff., C_p																											
	C_{p1}	C_{p2}	Use w/																								
0 to h/2:	-0.9	-0.18	q_h																								
h/2 to h:	-0.9	-0.18	q_h																								
h to 2h:	-0.5	-0.18	q_h																								
> 2h:	-0.3	-0.18	q_h																								

Wind Direction 'Y':																											
Roof Angle:	0 - 10	degrees																									
L/B:	0.40	(Width / Length)																									
h/L:	0.55	(Height / Width)																									
<table><tr><th colspan="3">Wall Pressure Coefficients, C_p</th></tr><tr><td></td><td>C_p</td><td>Use w/</td></tr><tr><td>Windward Wall:</td><td>0.8</td><td>q_z</td></tr><tr><td>Leeward Wall:</td><td>-0.5</td><td>q_h</td></tr><tr><td>Sidewall:</td><td>-0.7</td><td>q_h</td></tr></table>				Wall Pressure Coefficients, C_p				C_p	Use w/	Windward Wall:	0.8	q_z	Leeward Wall:	-0.5	q_h	Sidewall:	-0.7	q_h									
Wall Pressure Coefficients, C_p																											
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Sloped Roof Pressure Coefficients, C_p																											
	C_{p1}	C_{p2}	Use w/																								
Windward, $\theta > 10^\circ$:	N/A	N/A	q_h																								
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<table><tr><th colspan="4">Flat or Parallel to Ridge Roof Pressure Coeff., C_p</th></tr><tr><td></td><td>C_{p1}</td><td>C_{p2}</td><td>Use w/</td></tr><tr><td>0 to h/2:</td><td>-0.94</td><td>-0.18</td><td>q_h</td></tr><tr><td>h/2 to h:</td><td>-0.88</td><td>-0.18</td><td>q_h</td></tr><tr><td>h to 2h:</td><td>-0.52</td><td>-0.18</td><td>q_h</td></tr><tr><td>> 2h:</td><td>-0.34</td><td>-0.18</td><td>q_h</td></tr></table>				Flat or Parallel to Ridge Roof Pressure Coeff., C_p					C_{p1}	C_{p2}	Use w/	0 to h/2:	-0.94	-0.18	q_h	h/2 to h:	-0.88	-0.18	q_h	h to 2h:	-0.52	-0.18	q_h	> 2h:	-0.34	-0.18	q_h
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13228 NE 20th St, Suite 100, Bellevue, WA 98005 | (425) 614-0949

Project: Verizon MDF Madrone
 Address: 1189 Ashland Street
 Client: Acom Consulting, Inc.

Pg. No: MWFRS 2
 Date: 3/7/24
 Job No.: 19377

Internal Pressure Coefficients, GC_{pi}

GC_{pi} : 0.18 or -0.18

Wind Pressure on Walls:**Terrain Exposure Parameters:**

α : 7
 z_g : 1200 ft

Wind Direction 'X':

Windward GC_p : 0.68
 Leeward GC_p : -0.24
 Sidewall GC_p : -0.60
 Int. Pressure GC_{pi} : 0.18 or -0.18

Height (ft)	Kz	Windward	(LRFD)	(ASD)
		Px (psf)	P (psf)	P (psf)
0	0.70	8.23	11.28	6.77
5	0.70	8.23	11.28	6.77
10	0.70	8.23	11.28	6.77
15	0.70	8.23	11.28	6.77
20	0.70	8.23	11.28	6.77
25	0.70	8.23	11.28	6.77
30	0.70	8.24	11.29	6.77
35	0.73	8.61	11.66	7.00
38	0.75	8.82	11.86	7.12

$P_{x, \text{Leeward}}$: -3.0 psf
 Sidewall: -7.72 psf
 Internal P_{xi} : 2.334 psf or -2.33 psf

Wind Direction 'Y':

Windward GC_p : 0.68
 Leeward GC_p : -0.43
 Sidewall GC_p : -0.6
 Int. Pressure GC_{pi} : 0.18 or -0.18

Height (ft)	Kz	Windward	(LRFD)	(ASD)
		Px (psf)	P (psf)	P (psf)
0.00	0.70	8.23	13.75	8.25
5.00	0.70	8.23	13.75	8.25
10.00	0.70	8.23	13.75	8.25
15.00	0.70	8.23	13.75	8.25
20.00	0.70	8.23	13.75	8.25
25.00	0.70	8.23	13.75	8.25
30.00	0.70	8.24	13.75	8.25
35.00	0.73	8.61	14.12	8.47
38.00	0.75	8.82	14.33	8.60

$P_{y, \text{Leeward}}$: -5.5 psf
 Sidewall: -7.72 psf
 Internal P_{yi} : 2.334 psf or -2.33 psf

Wind Pressure on Parapets:

Parapet Height above Grade: 48 ft
 Windward GC_{pn} : 1.5
 Leeward GC_{pn} : -1.0
 Parapet, K_z : 0.801
 q_p : 13.86 psf

Windward Parapet	
(LRFD)	(ASD)
P (psf)	P (psf)
20.79	12.48

Leeward Parapet	
(LRFD)	(ASD)
P (psf)	P (psf)
-13.86	-8.32



13228 NE 20th St, Suite 100, Bellevue, WA 98005 | (425) 614-0949

Project: Verizon MDF Madrone
 Address: 1189 Ashland Street
 Client: Acom Consulting, Inc.

Pg. No: MWFRS 3
 Date: 3/7/24
 Job No.: 19377

Wind Pressure on Roofs:			
Wind Direction 'X':		Wind Direction 'Y':	
Windward Forces Sloped Roof w/ $\theta > 10^\circ$		Windward Forces Sloped Roof w/ $\theta > 10^\circ$	
C_p N/A or N/A		C_p N/A or N/A	
Pressure, P (LRFD) N/A psf or N/A psf	Pressure, P (ASD) N/A psf or N/A psf	Pressure, P (LRFD) N/A psf or N/A psf	Pressure, P (ASD) N/A psf or N/A psf
Leeward Forces Sloped Roof w/ $\theta > 10^\circ$		Leeward Forces Sloped Roof w/ $\theta > 10^\circ$	
Cp: N/A		Cp: N/A	
Pressure, P (LRFD) N/A psf	Pressure, P (ASD) N/A psf	Pressure, P (LRFD) N/A psf	Pressure, P (ASD) N/A psf
Flat Roof or Parallel to Ridge Forces:		Flat Roof or Parallel to Ridge Forces:	
Location: C_p 0 to h/2: -0.9 or -0.18 h/2 to h: -0.9 or -0.18 h to 2h: -0.5 or -0.18 > 2h: -0.3 or -0.18		Location: C_p 0 to h/2: -0.94 or -0.18 h/2 to h: -0.88 or -0.18 h to 2h: -0.52 or -0.18 > 2h: -0.34 or -0.18	
Pressure, P (LRFD) 0 to h/2: -9.9 psf or -2.0 psf h/2 to h: -9.9 psf or -2.0 psf h to 2h: -5.5 psf or -2.0 psf > 2h: -3.3 psf or -2.0 psf	Pressure, P (ASD) -6.0 psf or -1.2 psf -6.0 psf or -1.2 psf -3.3 psf or -1.2 psf -2.0 psf or -1.2 psf	Pressure, P (LRFD) 0 to h/2: -10.4 psf or -2.0 psf h/2 to h: -9.7 psf or -2.0 psf h to 2h: -5.7 psf or -2.0 psf > 2h: -3.7 psf or -2.0 psf	Pressure, P (ASD) -6.2 psf or -1.2 psf -5.8 psf or -1.2 psf -3.4 psf or -1.2 psf -2.2 psf or -1.2 psf



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Project: Verizon MDF Madrone
Address: 1189 Ashland Street
Client: Acom Consulting, Inc.

Pg. No: MWFRS 4
Date: 3/7/24
Job No.: 19377

Wind Direction 'X': Summary				Wind Direction 'Y': Summary			
Surface	GC _{pi}	Pressure, p		Surface	GC _{pi}	Pressure, p	
		(LRFD)	(ASD)			(LRFD)	(ASD)
Windward Wall	0.18	6.5 psf	3.9 psf	Windward Wall	0.18	6.5 psf	3.9 psf
	-0.18	11.2 psf	6.7 psf		-0.18	11.2 psf	6.7 psf
Leeward Wall	0.18	-5.4 psf	-3.2 psf	Leeward Wall	0.18	-7.8 psf	-4.7 psf
	-0.18	-0.7 psf	-0.4 psf		-0.18	-3.2 psf	-1.9 psf
Sidewall	0.18	-10.0 psf	-6.0 psf	Sidewall	0.18	-10.0 psf	-6.0 psf
	-0.18	-5.4 psf	-3.2 psf		-0.18	-5.4 psf	-3.2 psf
Flat Roof or Parallel to Ridge: 0 to h/2	0.18	-12.3 psf	-7.4 psf	Flat Roof or Parallel to Ridge: 0 to h/2	0.18	-12.7 psf	-7.6 psf
	-0.18	-7.6 psf	-4.6 psf		-0.18	-8.0 psf	-4.8 psf
	0.18	-4.3 psf	-2.6 psf		0.18	-4.3 psf	-2.6 psf
	-0.18	0.4 psf	0.2 psf		-0.18	0.4 psf	0.2 psf
Flat Roof or Parallel to Ridge: h/2 to h	0.18	-12.3 psf	-7.4 psf	Flat Roof or Parallel to Ridge: h/2 to h	0.18	-12.0 psf	-7.2 psf
	-0.18	-7.6 psf	-4.6 psf		-0.18	-7.4 psf	-4.4 psf
	0.18	-4.3 psf	-2.6 psf		0.18	-4.3 psf	-2.6 psf
	-0.18	0.4 psf	0.2 psf		-0.18	0.4 psf	0.2 psf
Flat Roof or Parallel to Ridge: h to 2h	0.18	-7.8 psf	-4.7 psf	Flat Roof or Parallel to Ridge: h to 2h	0.18	-8.1 psf	-4.8 psf
	-0.18	-3.2 psf	-1.9 psf		-0.18	-3.4 psf	-2.0 psf
	0.18	-4.3 psf	-2.6 psf		0.18	-4.3 psf	-2.6 psf
	-0.18	0.4 psf	0.2 psf		-0.18	0.4 psf	0.2 psf
Flat Roof or Parallel to Ridge: >2h	0.18	-5.6 psf	-3.4 psf	Flat Roof or Parallel to Ridge: >2h	0.18	-6.1 psf	-3.6 psf
	-0.18	-1.0 psf	-0.6 psf		-0.18	-1.4 psf	-0.8 psf
	0.18	-4.3 psf	-2.6 psf		0.18	-4.3 psf	-2.6 psf
	-0.18	0.4 psf	0.2 psf		-0.18	0.4 psf	0.2 psf
Windward Sloped Roof w/ $\theta > 10^\circ$:	0.18	N/A psf	N/A psf	Windward Sloped Roof w/ $\theta > 10^\circ$:	0.18	N/A psf	N/A psf
	-0.18	N/A psf	N/A psf		-0.18	N/A psf	N/A psf
	0.18	N/A psf	N/A psf		0.18	N/A psf	N/A psf
	-0.18	N/A psf	N/A psf		-0.18	N/A psf	N/A psf
Leeward Sloped Roof w/ $\theta > 10^\circ$:	0.18	N/A psf	N/A psf	Leeward Sloped Roof w/ $\theta > 10^\circ$:	0.18	N/A psf	N/A psf
	-0.18	N/A psf	N/A psf		-0.18	N/A psf	N/A psf
Windward Parapet	N/A	20.8 psf	12.5 psf	Windward Parapet	N/A	20.8 psf	12.5 psf
Leeward Parapet	N/A	-13.9 psf	-8.3 psf	Leeward Parapet	N/A	-13.9 psf	-8.3 psf

Diaphragm Wind Forces

Wind Direction 'X'			
Level	p (psf) (LRFD)	Trib. Area (ft ²)	Fx (kip) (LRFD)
1	0.0	0	0
2	11.2	830	9
3	11.2	899	10
4	11.2	484	-412
	20.8	-20058.3	

Level 4 (roof) includes wind load on parapet.

Wind Direction 'X'			
Level	p (psf) (LRFD)	Trib. Area (ft ²)	Fx (kip) (LRFD)
1	0.0	0	0
2	11.2	2052	23
3	11.2	2223	25
4	11.2	1197	-1018
	20.8	-49590.0	

Level 4 (roof) includes wind load on parapet.



13228 NE 20th St, Suite 100, Bellevue, WA 98005 | (425) 614-0949

Project: Verizon MDF Madrone
 Address: 1189 Ashland Street
 Client: Acom Consulting, Inc.

Pg. No: MWFRS 5
 Date: 3/7/24
 Job No.: 19377

Wind Loading: Components & Cladding - Walls & Parapets

ASCE 7-16 Chapter 30 - Enclosed or Partially Enclosed Buildings: Walls and Parapets For Any Building Height

Building Geometry and Site Characteristics:

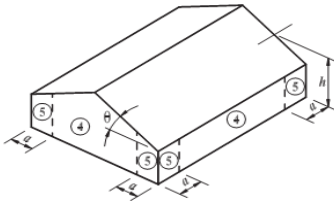
Height 'h': 38 ft
(Larger) Length: 171 ft
Width: 69.17 ft
Roof Area: 11828 ft²

Building Type: Enclosed Buildings
Ground Elev. above Sea Level, z_g : 2000 ft

Design Criteria & Velocity Pressure:

Basic Windspeed 'V': 103 mph
Component Exposure Category: B
Gust Effect Factor, G: 0.85
Velocity Pressure Coefficient, K_z : 0.75
Topographic Factor, K_{zt} : 0.81
Wind Directionality Factor, K_d : 0.85
Ground Elevation Factor, K_e : 0.93
Velocity Pressure, q_z : 12.97 psf

Building Parameters and Wall Wind Zone Designation



Roof Angle: ≤ 10 Degrees

Zone 5 Extent, a_{wall} : 6.917 ft

Internal Pressure Coefficients, GC_{pi}

GC_{pi} : 0.18 or -0.18

Walls: External Pressure Coefficients, GC_{pf} :

Zone	Area (ft ²)																
	0	10	20	50	75	100	125	150	175	200	225	250	275	300	350	400	500
4 & 5 (+)	0.90	0.90	0.85	0.79	0.76	0.74	0.73	0.71	0.70	0.69	0.69	0.68	0.67	0.67	0.65	0.65	0.63
4 (-)	-0.99	-0.99	-0.94	-0.88	-0.85	-0.83	-0.82	-0.80	-0.79	-0.78	-0.78	-0.77	-0.76	-0.76	-0.74	-0.74	-0.72
5 (-)	-1.26	-1.26	-1.16	-1.04	-0.98	-0.94	-0.91	-0.89	-0.86	-0.85	-0.83	-0.82	-0.80	-0.79	-0.77	-0.75	-0.72

* GC_{pf} is Reduced by 10% due to Roof Slope

Walls: External Wind Loads, P (psf) in (LRFD)

Zone	Area (ft ²)																
	0	10	20	50	75	100	125	150	175	200	225	250	275	300	350	400	500
4 & 5 (+)	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
4 (-)	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0
5 (-)	-18.7	-18.7	-17.4	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0

Walls: External Wind Loads, P (psf) in (ASD)

Zone	Area (ft ²)																
	0	10	20	50	75	100	125	150	175	200	225	250	275	300	350	400	500
4 & 5 (+)	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6
4 (-)	-9.6	-9.6	-9.6	-9.6	-9.6	-9.6	-9.6	-9.6	-9.6	-9.6	-9.6	-9.6	-9.6	-9.6	-9.6	-9.6	-9.6
5 (-)	-11.2	-11.2	-10.5	-9.6	-9.6	-9.6	-9.6	-9.6	-9.6	-9.6	-9.6	-9.6	-9.6	-9.6	-9.6	-9.6	-9.6



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Project: Verizon MDF Madrone
Address: 1189 Ashland Street
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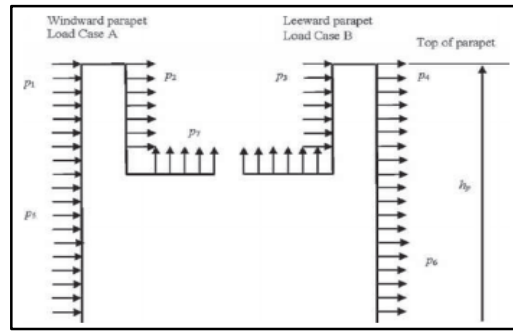
Pg. No: C&C Wall 1
Date: 3/7/24
Job No.: 19377

Parapet Geometry and Design Criteria

Parapet Height above Grade: 48 ft
 Parapet Height above Roof: 10 ft
 Parapet, Kz: 0.801
 q_p : 13.86 psf
 Internal Pressure Present?: No

Terrain Exposure Parameters:

α : 7
 z_g : 1200 ft

**Parapets: Roof External Pressure Coefficients, GCpf: (Ref. Sheet "C&C Roof 1")**

Zone	Area (ft ²)																
	0	10	20	50	75	100	125	150	175	200	225	250	275	300	350	400	500
1 & 1' (+)	0.30	0.30	0.27	0.23	0.21	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
2 & 3 (+)	1.00	1.00	0.95	0.88	0.85	0.82	0.81	0.79	0.78	0.77	0.76	0.75	0.75	0.74	0.73	0.72	0.70
1 (-)	-1.70	-1.70	-1.58	-1.41	-1.34	-1.29	-1.25	-1.22	-1.19	-1.16	-1.14	-1.12	-1.11	-1.09	-1.06	-1.04	-1.00
1' (-)	-0.90	-0.90	-0.90	-0.90	-0.90	-0.90	-0.85	-0.81	-0.78	-0.75	-0.72	-0.70	-0.68	-0.66	-0.63	-0.60	-0.55
2 (-)	-2.30	-2.30	-2.14	-1.93	-1.84	-1.77	-1.72	-1.68	-1.64	-1.61	-1.58	-1.56	-1.54	-1.52	-1.48	-1.45	-1.40
3 (-)	-2.30	-2.30	-2.14	-1.93	-1.84	-1.77	-1.72	-1.68	-1.64	-1.61	-1.58	-1.56	-1.54	-1.52	-1.48	-1.45	-1.40

Parapets: Load Case A - Windward Parapets: External Wind Loads, P (psf) in (LRFD)

Zone	Area (ft ²)																
	0	10	20	50	75	100	125	150	175	200	225	250	275	300	350	400	500
Ext. Side, 4 (+)	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Roof Side, 4 (-)	-31.9	-31.9	-29.7	-26.7	-25.5	-24.5	-23.8	-23.2	-22.8	-22.3	-22.0	-21.6	-21.3	-21.0	-20.5	-20.1	-19.4
Ext. Side, 5 (+)	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Roof Side, 5 (-)	-31.9	-31.9	-29.7	-26.7	-25.5	-24.5	-23.8	-23.2	-22.8	-22.3	-22.0	-21.6	-21.3	-21.0	-20.5	-20.1	-19.4

Parapets: Load Case B - Leeward Parapets: External Wind Loads, P (psf) in (LRFD)

Zone	Area (ft ²)																
	0	10	20	50	75	100	125	150	175	200	225	250	275	300	350	400	500
Ext. Side, 4 (-)	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0
Roof Side, 4 (+)	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Ext. Side, 5 (-)	-17.5	-17.5	-16.1	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0
Roof Side, 5 (+)	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0

Use Case: A

Parapets: Maximum External Wind Loads, P (psf) in (LRFD)

Zone	Area (ft ²)																
	0	10	20	50	75	100	125	150	175	200	225	250	275	300	350	400	500
4	47.9	47.9	45.7	42.7	41.5	40.5	39.8	39.2	38.8	38.3	38.0	37.6	37.3	37.0	36.5	36.1	35.4
5	47.9	47.9	45.7	42.7	41.5	40.5	39.8	39.2	38.8	38.3	38.0	37.6	37.3	37.0	36.5	36.1	35.4

Parapets: Maximum External Wind Loads, P (psf) in (ASD)

Zone	Area (ft ²)																
	0	10	20	50	75	100	125	150	175	200	225	250	275	300	350	400	500
4	28.7	28.7	27.4	25.6	24.9	24.3	23.9	23.5	23.3	23.0	22.8	22.6	22.4	22.2	21.9	21.7	21.2
5	28.7	28.7	27.4	25.6	24.9	24.3	23.9	23.5	23.3	23.0	22.8	22.6	22.4	22.2	21.9	21.7	21.2



13228 NE 20th St, Suite 100, Bellevue, WA 98005 | (425) 614-0949

Project: Verizon MDF Madrone
 Address: 1189 Ashland Street
 Client: Acom Consulting, Inc.

Pg. No: C&C Wall 2
 Date: 3/7/24
 Job No.: 19377

Screenwall Design:

There are 2 types of screen wall: cantilever screen wall & braced screen wall.

Loads:**Dead Loads:**

Screenwall steel frame =	10	psf
Screenwall insulated metal panel siding =	5	psf
Total Screenwall Wt. =	15	psf

Wind Load:

Wind Pressure =	25.65	psf (ASD)
=	42.75	psf (LRFD)

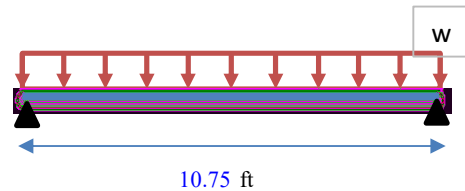
Seismic Load:

Seismic Load =	6.60	psf (ASD)
=	9.43	psf (LRFD)

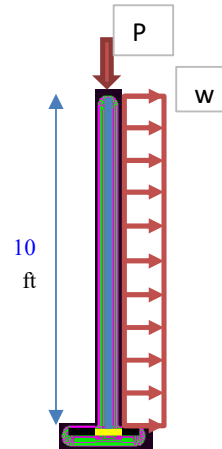
By inspection, wind load controls lateral design of the screen wall.

Design Checks:**Horizontal Member:**

Screen Trib. Width =	4.75	ft
W_{DL} =	71.25	plf
W_{WL} =	121.8	plf (ASD)
M_{xx} =	1.029	k.ft (ASD)
M_{yy} =	1.76	k.ft (ASD)
Try: HSS5x4x1/4	flat	
$M_{xx-allow}$ =	12.8	k.ft (ASD) (AISC Table 3-14)
$M_{yy-allow}$ =	14.9	k.ft (ASD) (AISC Table 3-14)
Unity =	0.19	OK
I_{y-y} =	13.4	in ⁴
Δ_{y-y} =	0.07	in = L/ 1956.1

**Vertical Member:** By inspection, cantilever screen wall controls.

Screen Trib. Area =	80	ft ²
P_{DL} =	1200	lbs
W_{WL} =	205.2	plf (ASD)
P_{axial} =	1.2	kip (ASD)
M_{xx} =	10.26	k.ft
Try: HSS5x5x5/16		
KL =	20	ft
P_{allow} =	49.6	kip (ASD) (AISC Table 4-4)
Unity =	0.02	OK
$M_{xx-allow}$ =	21	k.ft (ASD) (AISC Table 3-13)
Unity =	0.49	OK
Combined Unity =	0.50	OK
I_{y-y} =	19	in ⁴
Δ_{x-x} =	0.56	in = L/ 426.22



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Project: Verizon MDF Madrone
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Pg. No: Screenwall 1
Date: 3/7/24
Job No.: 19377

Vertical Member Weld to Base PL:

$$V_{\max} = 2.052 \text{ kip (ASD)}$$

$$M_{\max} = 123.1 \text{ kip.in (ASD)}$$

$$\text{Weld Length "L"} = 20.00 \text{ in}$$

$$\text{Weld S} = 33.33 \text{ in}^2$$

$$\text{Stress on weld} = 3.69 \text{ ksi}$$

$$\text{Weld Size} = 0.313 \text{ in}$$

$$\text{Weld Capacity} = 4.64 \text{ ksi}$$

$$\text{Unity} = 0.80 \text{ OK}$$

Base PL:

$$P_{\text{vert}} = 1200.00 \text{ lbs (1.0D)}$$

$$M_{\text{OT}} = 123118.7 \text{ lbs.in}$$

$$R_1 = 9659.9 \text{ lbs}$$

$$R_2 = 10859.9 \text{ lbs}$$

$$\text{Plate Moment} = 38.0 \text{ k.in}$$

Capacity:

$$\text{PL width} = 15 \text{ in}$$

$$\text{PL thickness} = 0.75 \text{ in}$$

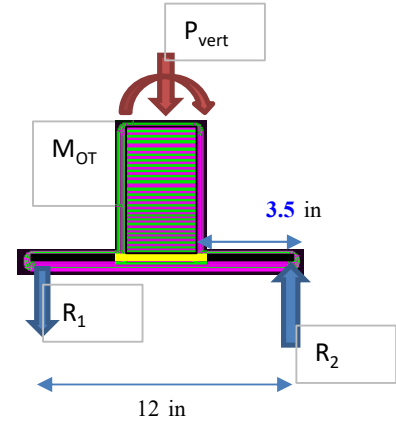
$$S_y = 1.406 \text{ in}^3$$

$$Z_y = 2.109 \text{ in}^3$$

$$F_y = 36 \text{ ksi}$$

$$M_n/\Omega = 45.47 \text{ k.in}$$

$$\text{Unity} = 0.84 \text{ OK}$$

**Vertical Member Anchorage to (E) Concrete Beam:**

$$V_{\max} = 3420.0 \text{ lbs (LRFD)}$$

$$M_{\max} = 205197.9 \text{ lbs.in (LRFD)}$$

$$P = 1080 \text{ lbs (0.9D)}$$

Use: **(4) 3/4" Dia. Threaded Rod w/ Hilti HY 200 Epoxy (10" nom. Embed.)**

See next pages for calcs.



13228 NE 20th St, Suite 100, Bellevue, WA 98005 | (425) 614-0949

Project: Verizon MDF Madrone
Address: 1189 Ashland Street
Client: Acom Consulting, Inc.

Pg. No: Screenwall 2
Date: 3/7/24
Job No.: 19377



Profis Anchor 2.8.3

www.hilti.us

Company:
Specifier:
Address:
Phone | Fax:
E-Mail:

Page: 1
Project:
Sub-Project | Pos. No.:
Date: 10/28/2019

Specifier's comments:

1 Input data

Anchor type and diameter: HIT-HY 200 + HAS-V-36 HDG (ASTM F1554 Gr.36) 

Effective embedment depth: $h_{ef,act} = 10.000$ in. ($h_{ef,limit} = -$ in.)

Material: ASTM A 1554 Grade 36

Evaluation Service Report: ESR-3187

Issued | Valid: 3/1/2018 | 3/1/2020

Proof: Design method ACI 318-14 / Chem

Stand-off installation: $e_b = 0.000$ in. (no stand-off); $t = 0.500$ in.

Anchor plate: $l_x \times l_y \times t = 12.000$ in. $\times$ 15.000 in. $\times$ 0.500 in.; (Recommended plate thickness: not calculated)

Profile: Square HSS (AISC); $(L \times W \times T) = 5.000$ in. $\times$ 5.000 in. $\times$ 0.313 in.

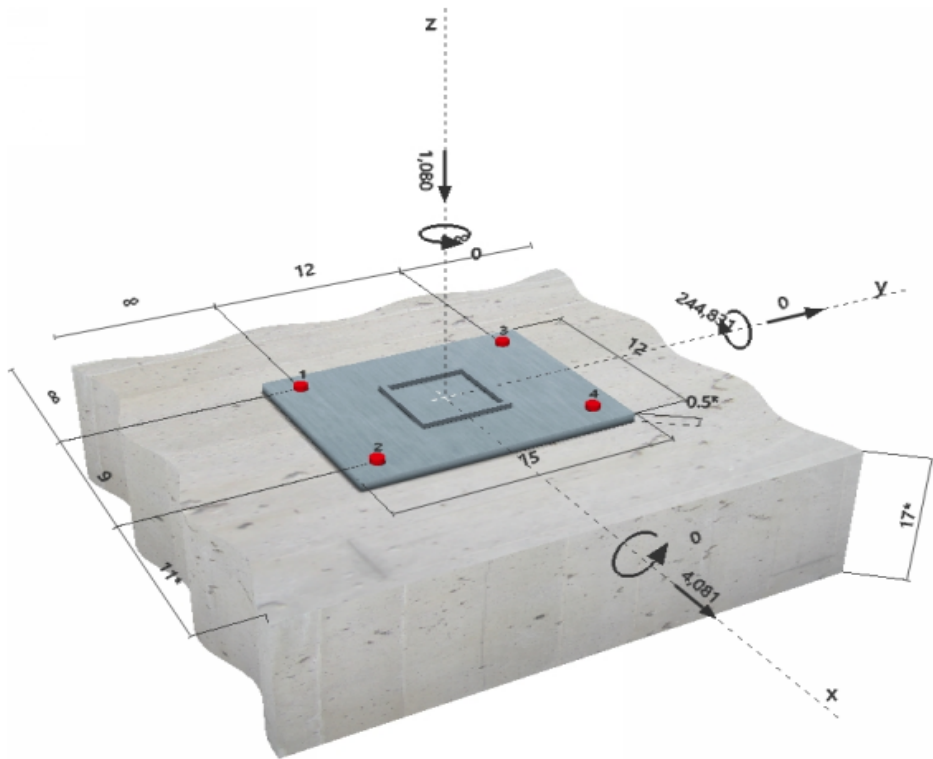
Base material: cracked concrete, 3000 , $f'_c = 3,000$ psi; $h = 17.000$ in., Temp. short/long: $32/32$ °F

Installation: **hammer drilled hole, Installation condition: Dry**

Reinforcement: tension: condition B, shear: condition B; no supplemental splitting reinforcement present
edge reinforcement: none or $< \text{No. } 4$ bar

R - The anchor calculation is based on a rigid anchor plate assumption.

Geometry [in.] & Loading [lb, in.lb]



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Project: Verizon MDF Madrone
Address: 1189 Ashland Street
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Pg. No: Screenwall 3
Date: 3/7/24
Job No.: 19377



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Page:
Project:
Sub-Project / Pce. No.:
Date:

2

10/28/2018

Profil Anchor 2.8.3

2 Proof / Utilization (Governing Cases)

Loading	Proof	Design values [lb]		Utilization	
		Load	Capacity	P_R / P_R [%]	Status
Tension	Concrete Breakout Strength	24,640	28,785	82.1%	OK
Shear	Concrete edge failure in direction α°	4,081	17,167	23.8%	OK

Loading	S_N	S_e	ξ	Utilization P_{PR} [%]	Status
Combined tension and shear loads	0.016	0.233	0.3	3%	OK

3 Warnings

Please consider all details and hints/warnings given in the detailed report!

Fastening meets the design criterial

4 Remarks: Your Cooperation Duties

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Project:	Verizon MDF Madrone	Pg. No:	Screenwall 4
Address:	1189 Ashland Street	Date:	3/7/24
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Total Page Number: 382

Brace for Braced Screen Wall:

Brace Max. Trib. Area = 52.5 ft²
 Brace Angle = 45 degree
 Brace Max. Axial Load = 1.90 kip (ASD)
 = 3.17 kip (LRFD)

Try: **L5x5x5/16**

KL = 15 ft
 $P_{allow} = 12.3$ kip (AISC Table 4-11)
 Unity = 0.15 **OK**

Brace Connection to Tube Steel"

$P_{max} = 1.90$ kip (ASD)

Try: **5/8" dia. A325 bolt****Bolt Shear Strength:**

Bolt Diameter = **0.625** in
 $F_{nv} = 54$ ksi
 $A_g = 0.307$ in²
 $R_v = 16.6$ kip

Bearing @ bolt hole:

$l_c = 0.66$ in
 $t = 0.313$ in
 $F_u = 58$ ksi
 $R_n = 14.27$ kip

Connection Capacity:No. of Bolt = **1**

$V_n/\Omega = 7.14$ kip

Unity = 0.267 **OK**

Support Post:

$P = 1.35$ kip
 $V = 1.35$ kip
 Post Ht. = 12 in
 $M = 16.2$ k.in = 1.35 k.ft

Try: **HSS3x3x1/4**

KL = 2.00 ft
 $P_n/\Omega = 62.6$ kip (AISC Table 4-4)
 Unity = 0.022 **OK**
 $M_n/\Omega = 5.69$ k.ft (AISC Table 3-13)
 Unity = 0.237 **OK**
 Combined Unity = 0.247 **OK**



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 Address: 1189 Ashland Street
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Pg. No: Screenwall 5
 Date: 3/7/24
 Job No.: 19377

Steel Base PL check:

Plate Length =	3	ft	
PL width =	12	in	
PL thickness =	0.75	in	
S_x =	18.000	in ³	(strong axis elastic section modulus)
Z_x =	27.000	in ³	(strong axis plastic section modulus)
S_{y_1} =	1.125	in ³	(weak axis elastic section modulus for bending about the width of the base PL)
Z_{y_1} =	1.688	in ³	(weak axis plastic section modulus for bending about the width of the base PL)
S_{y_2} =	3.375	in ³	(weak axis elastic section modulus for bending about the length of the base PL)
Z_{y_2} =	5.063	in ³	(weak axis plastic section modulus for bending about the length of the base PL)
F_y =	36	ksi	
M_{nx-x}/Ω =	582.04	k-in	(strong axis bending capacity)
M_{ny-y_1}/Ω =	36.38	k-in	(weak axis bending capacity about the width of the base PL)
M_{ny-y_2}/Ω =	109.13	k-in	(weak axis bending capacity about the length of the base PL)

Demands:

M_{x-x} =	12.12	k.in	(strong axis bending due to horizontal shear force)
Unity =	0.021	OK	
M_{y-y_1} =	12.12	k.in	(weak axis bending due to tension uplift)
Unity =	0.33	OK	
M_{y-y_2} =	10.60	k.in	(weak axis bending due to moment from horizontal shear & vertical offset)
Unity =	0.10	OK	
Weak Axis Combined Unity =	0.430	OK	
Total Combined Unity =	0.451	OK	

Angle Base Connection to (E) Concrete Joist:

Per 1 row of anchors:

T_{max} =	1122.18	lbs (LRFD)
M_{max} =	13466.11	lbs (LRFD)
V_{max} =	1122.18	lbs (LRFD)

Use: **5/8" Dia. Threaded Rod w/ Hilti HY 200 Epoxy (9" nom. Embed.)**

See next pages for calcs.



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Project: Verizon MDF Madrone
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Pg. No: Screenwall 6
 Date: 3/7/24
 Job No.: 19377



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Page: 1
Project:
Sub-Project | Pos. No.:
Date: 8/18/2020

Specifier's comments:

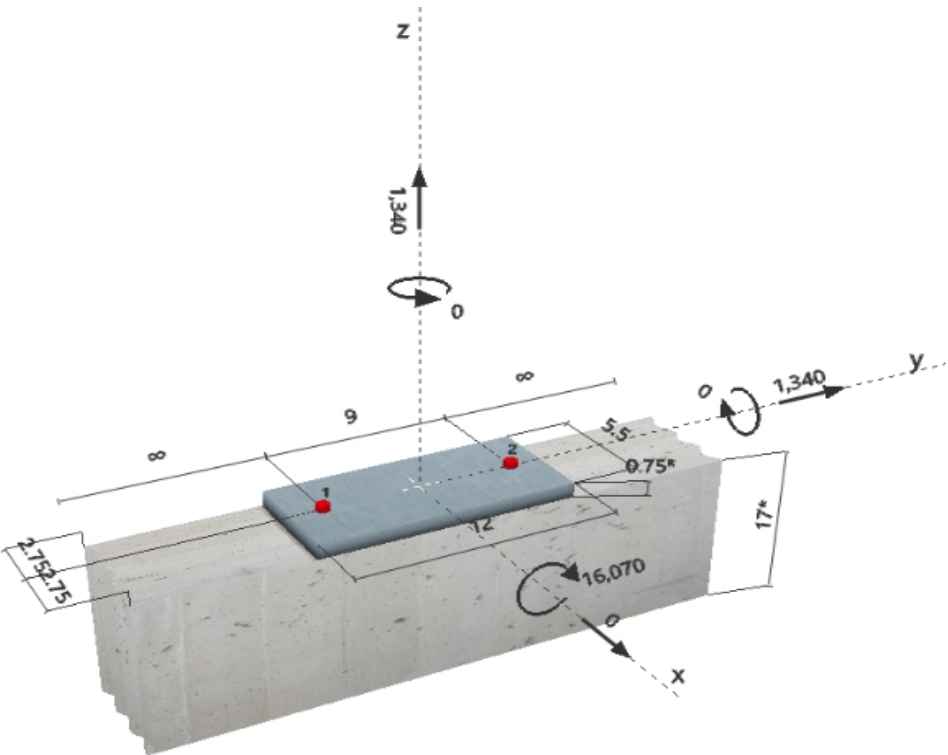
1 Input data

Anchor type and diameter:	HIT-HY 200 + HAS-V-36 (ASTM F1554 Gr.36) 5/8
Effective embedment depth:	$h_{ef,act} = 9.000$ in. ($h_{ef,lim} = -$ in.)
Material:	ASTM A 1554 Grade 36
Evaluation Service Report:	ESR-3187
Issued Valid:	3/1/2018 3/1/2020
Proof:	Design method ACI 318-14 / Chem
Stand-off installation:	$e_b = 0.000$ in. (no stand-off); $t = 0.750$ in.
Anchor plate:	$l_x \times l_y \times t = 5.500$ in. $\times$ 12.000 in. $\times$ 0.750 in.; (Recommended plate thickness: not calculated)
Profile:	no profile
Base material:	cracked concrete, 3000 , $f'_c = 3,000$ psi; $h = 17.000$ in., Temp. short/long: $32/32$ °F
Installation:	hammer drilled hole, Installation condition: Dry
Reinforcement:	tension: condition B, shear: condition B; no supplemental splitting reinforcement present edge reinforcement: none or $\leq$ No. 4 bar



^R - The anchor calculation is based on a rigid anchor plate assumption.

Geometry [in.] & Loading [lb, in.lb]



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Pg. No: Screenwall 7
Date: 3/7/24
Job No.: 19377



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Page: 2
 Project:
 Sub-Project | Pos. No.:
 Date: 8/18/2020

2 Proof | Utilization (Governing Cases)

Loading	Proof	Design values [lb]		Utilization	
		Load	Capacity	β_N / β_V [%]	Status
Tension	Concrete Breakout Strength	2,351	2,539	93 / -	OK
Shear	Concrete edge failure in direction x+	1,340	5,866	- / 23	OK

Loading	β_N	β_V	ζ	Utilization $\beta_{N,V}$ [%]	Status
Combined tension and shear loads	0.926	0.228	1.0	97	OK

3 Warnings

- Please consider all details and hints/warnings given in the detailed report!

Fastening meets the design criteria!

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Project:	Verizon MDF Madrone	Pg. No:	Screenwall 8
Address:	1189 Ashland Street	Date:	3/7/24
Client:	Acom Consulting, Inc.	Job No.:	19377

Check (E) Structure for additional load from screen wall:

The concrete beams on the west & east side of the building are supported continuously by precast panels below, which carry the load to the foundation. By inspection, these beams are adequate to carry the additional load from the screen wall.

The concrete beams on the north side of the building are supported by concrete columns at 18 ft O.C. RB-16 & RB-17 are the controlling members because they have similar size to all the north side beams and they also carry additional load from the roof top cabinets. We'll check these beams for additional load on the Roof Top Cabinets Calcs Section, see page "RTC 11".

The lateral load from the screen wall will be transferred from the concrete beam to the roof diaphragm.

On Page "MWFRS 5", the total wind load found on the roof diaphragm including the screen wall is **-1018 kip (LRFD)**.

On Page "MSFRS 2", the total seismic load found on the roof diaphragm is **238.93 kip (LRFD)**.

So, even though the screen wall increased the wind load on the roof diaphragm. This load is still lower than the seismic load that the roof diaphragm was designed for. Thus, the roof diaphragm is adequate to handle the additional load from the screen wall.

The horizontal brace force from the screen wall will be handled by the roof diaphragm.

The vertical brace force from the screen wall will be handled by the (E) concrete joists. We'll check the joist for additional vertical load.

(E) Concrete Joist: J24 controls the design

(E) Dead Loads:

Concrete Roof Structure =	83	psf
Trib. Width =	2.96	ft
W_{DL} =	244.1	plf

(E) Snow Load:

Flat roof Snow Load =	25	psf
Trib. Width =	2.96	ft
W_{SL} =	74.0	plf

(N) Wind Load:

Brace Load =	1122.18	lbs
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Design Check:

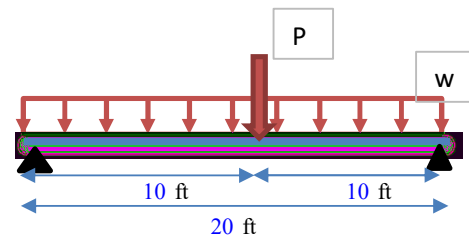
For 1.2D + 0.5S + 1.0W load combo:

w =	329.9	plf
P =	1122.18	lbs

V_{max} =	3859.6	lbs
$M_{pin-pin}$ =	22103.6	lbs.ft

Distributing 10% of moment to negative side:

$M_{(+)}$ =	19893.2	lbs.ft
$M_{(-)}$ =	2210.4	lbs.ft

**Beam Material Properties:**

f_c =	3,000	psi
f_y =	40,000	psi



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Project: Verizon MDF Madrone
Address: 1189 Ashland Street
Client: Acom Consulting, Inc.

Pg. No: Screenwall 9
Date: 3/7/24
Job No.: 19377

Positive Bending Capacity:

Beam Size **5.5** x **17**
 Slab Thickness: **3** in
 Bar Size: **#6**
 Number of Bars: **1**
 $A_s = 0.44$ in² T&B
 $b_{eff} = 24$ in
 $a = 0.288$ in
 cover = **1.50** in
 $d = 15.500$ in

$M_n = 22,522$ lb-ft
 $\Phi M_n = 20,270$ lb-ft
 Unity = 0.981 **OK**

Negative Bending Capacity:

Beam Size **5.5** x **17**
 Slab Thickness: **0** in
 Bar Size: **#5**
 Number of Bars: **1**
 $A_s = 0.31$ in² T&B
 $b_{eff} = 5.5$ in
 $a = 0.884$ in
 cover = **1.50** in
 $d = 15.500$ in

$M_n = 15,560$ lb-ft
 $\Phi M_n = 14,004$ lb-ft
 Unity = 0.158 **OK**

Shear Capacity:

Beam Size **5.5** x **17**
 cover = **1.50** in
 $d = 15.500$ in

$V_n = 9338.7$ lbs
 $\Phi V_n = 7,004$ lbs
 Unity = 0.551 **OK**

So, the (E) concrete joists are adequate to carry the additional loads from the screen walls.



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 Address: 1189 Ashland Street
 Client: Acom Consulting, Inc.

Pg. No: Screenwall 10
 Date: 3/7/24
 Job No.: 19377

Screen Wall Mounted Antennas:Loads:**Dead Loads:**

Antenna wt. =	65	lbs
OVP wt. =	32	lbs
RRU wt. =	75	lbs
Steel Pipe =	35	lbs
Misc. =	13	lbs
Total Antenna wt. =	220	lbs

Seismic Load:

Hor. Seismic Load =	38.74	lbs (ASD)
=	55.34	lbs (LRFD)

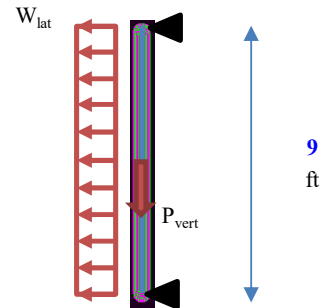
Wind Load:

Wind Pressure =	28.7	psf (ASD)
=	47.9	psf (LRFD)
Out-of-plane Profile Area =	9	ft ²
P _{out-of-plane} =	258.6	lbs (ASD)
=	430.9	lbs (LRFD)
In-plane Profile Area =	18	ft ²
P _{in-plane} =	517.1	lbs (ASD)
=	861.9	lbs (LRFD)

By inspection, wind load controls lateral design.

Design Check:**Pipe:**

P _{vert} =	220.00	lbs (ASD)
W _{lat} =	57.46	plf (ASD)
P _{axial} =	0.220	kip (ASD)
M =	0.582	k.ft (ASD)



Try: **Pipe2SH40**

Thick =	0.154	in	KL =	4.5	ft
Area =	1	in ²	Fe =	61.4	ksi
I =	0.627	in ⁴	Fy =	35	ksi
r =	0.791	in	Fcr =	27.6	ksi

P_n = 27.57 kip

P_{allow} = 16.51 kip

Unity = 0.013 **OK**

M_{allow} = 1.25 k-ft (AISC Table 3-15)

Unity = 0.465 **OK**

Combined Unity = 0.472 **OK**



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Project: Verizon MDF Madrone
Address: 1189 Ashland Street
Client: Acom Consulting, Inc.

Pg. No: Antenna 1
Date: 3/7/24
Job No.: 19377

Pipe Conn. To Standoff:

$$T = 129.28 \text{ lbs}$$

$$V = 110.0 \text{ lbs}$$

Clamp Capacity:

T will be handled by tensile strength of the U-bolts. By inspection, the bolts are adequate.

V will be handled by the clamp force between the U-bolts & the steel pipe.

$$\text{Steel to Steel Coeff. Of Friction} = 0.7$$

$$\text{Required net normal force from U-bolts} = 785.7 \text{ lbs} \quad (\text{use a F.S of 5})$$

T will counter the clamp force. So:

$$\text{Required total normal force from U-bolts} = 915.0 \text{ lbs}$$

$$\text{Torque Coeff., K} = 0.25 \quad (\text{hot dip galvanized})$$

$$\text{Bolt Diameter, D} = 0.5 \text{ in}$$

$$\text{No. of Bolts} = 4 \quad (2 \text{ U-bolts})$$

$$\text{Required Torque, T} = 2.38 \text{ ft lbs}$$

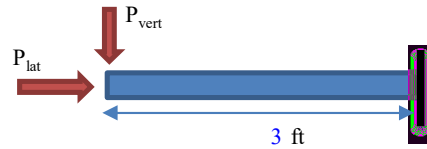
Standoff:Out of Plane Seismic:

$$P_{\text{vert}} = 110.00 \text{ lbs (ASD)}$$

$$P_{\text{lat}} = 129.28 \text{ lbs (ASD)}$$

$$P_{\text{axial}} = 0.129 \text{ kip (ASD)}$$

$$M = 0.330 \text{ k.ft (ASD)}$$



Try: HSS3x3x1/8

$$KL = 6 \text{ ft}$$

$$P_{\text{allow}} = 27.8 \text{ kip} \quad (\text{AISC Table 4-4})$$

$$\text{Unity} = 0.0047 \quad \text{OK}$$

$$M_{\text{allow}} = 3.21 \text{ k.ft} \quad (\text{AISC Table 3-13})$$

$$\text{Unity} = 0.10 \quad \text{OK}$$

$$\text{Combined Unity} = 0.11 \quad \text{OK}$$

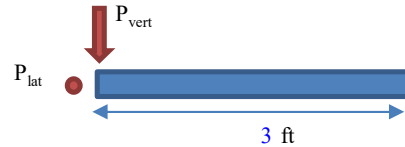
In-plane Seismic:

$$P_{\text{vert}} = 110.00 \text{ lbs (ASD)}$$

$$P_{\text{lat}} = 258.56 \text{ lbs (ASD)}$$

$$M_{yy} = 0.776 \text{ k.ft (ASD)}$$

$$M_{xx} = 0.330 \text{ k.ft (ASD)}$$



Try: HSS3x3x1/8

$$M_{xx-\text{allow}} = M_{yy-\text{allow}} = 3.21 \text{ k.ft} \quad (\text{AISC Table 3-13})$$

$$\text{Unity} = 0.34 \quad \text{OK}$$



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Project: Verizon MDF Madrone
Address: 1189 Ashland Street
Client: Acom Consulting, Inc.

Pg. No: Antenna 2
Date: 3/7/24
Job No.: 19377

Standoff Conn. To screen wall horizontal member:

By inspection, (4) 5/8" dia. SS A316 bolts are more than adequate.

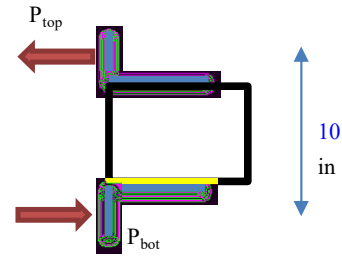
Check FRP angle leg for flat PL bending.

$$\begin{aligned} M &= 3.96 \text{ k.in} \\ T &= 0.129 \text{ kip} \end{aligned}$$

$$\begin{aligned} P_{\max} &= 0.46 \text{ kip} \\ \text{ecc.} &= 2 \text{ in} \\ M_{\max} &= 0.92 \text{ k.in} \end{aligned}$$

Capacity:

$$\begin{aligned} \text{PL width} &= 9 \text{ in} \\ \text{PL thickness} &= 0.50 \text{ in} \\ S_y &= 0.375 \text{ in}^3 \\ F_y &= 10 \text{ ksi} \quad (\text{Flexural Stress, CW}) \\ Mn/\Omega &= 1.50 \text{ k-in} \\ \text{Unity} &= 0.614 \quad \text{OK} \end{aligned}$$

**Check Screen Wall Horizontal Member:**

By inspection, load combo D+0.6W controls.

Demands from Screen Wall & Wind Load:

$$\begin{aligned} M_{xx} &= 1.029 \text{ k.ft (ASD)} \\ M_{yy} &= 1.76 \text{ k.ft (ASD)} \\ V_{xx} &= 0.38 \text{ kip (ASD)} \\ V_{yy} &= 0.65 \text{ kip (ASD)} \end{aligned}$$

Demands from dead load of the antenna:

$$\begin{aligned} M_{xx} &= 0.591 \text{ k.ft (ASD)} \quad (\text{support 2 antennas}) \\ M_{yy} &= 0.69 \text{ k.ft (ASD)} \quad (\text{support 2 antennas}) \\ V_{xx} &= 0.110 \text{ kip (ASD)} \\ V_{yy} &= 0.129 \text{ kip (ASD)} \\ \text{Torque} &= 0.33 \text{ k.ft (ASD)} \end{aligned}$$

Total demands on the member:

$$\begin{aligned} M_{xx} &= 1.620 \text{ k.ft (ASD)} \\ M_{yy} &= 2.45 \text{ k.ft (ASD)} \\ V_{xx} &= 0.493 \text{ kip (ASD)} \\ V_{yy} &= 0.784 \text{ kip (ASD)} \\ \text{Torque} &= 0.33 \text{ k.ft (ASD)} \end{aligned}$$

Try: 6x3/8 EXTREN 525 Square Tube

$$\begin{aligned} F_b &= 6158 \text{ psi} \\ S_{xx} = S_{yy} &= 14.14 \text{ in}^3 \\ F_v &= 1500 \text{ psi} \\ A &= 3.94 \text{ in}^2 \\ J &= 66.74 \text{ in}^4 \\ h &= 3 \text{ in} \end{aligned}$$

$$\text{Temp. Factor} = 0.85$$



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Project: Verizon MDF Madrone
Address: 1189 Ashland Street
Client: Acom Consulting, Inc.

Pg. No: Antenna 3
Date: 3/7/24
Job No.: 19377

$$\begin{aligned}
 M_{xx_allow} &= 6.17 & \text{k.ft} \\
 \text{Unity} &= 0.26 & \text{OK} \\
 M_{yy_allow} &= 6.17 & \text{k.ft} \\
 \text{Unity} &= 0.40 & \text{OK} \\
 \text{Combined Flexural Unity} &= 0.66 & \text{OK} \\
 V_{xx_allow} &= 5.02 & \text{kip} \\
 \text{Unity} &= 0.10 & \text{OK} \\
 V_{yy_allow} &= 5.02 & \text{kip} \\
 \text{Unity} &= 0.16 & \text{OK} \\
 \text{Torque}_{allow} &= 7.09 & \text{kip.ft} \\
 \text{Unity} &= 0.047 & \text{OK} \\
 \text{Combined Shear Unity} &= 0.20 & \text{OK} \\
 I_{y-y} &= 42.41 & \text{in}^4 \\
 \Delta_{y-y} &= 0.23 & \text{in} = L/555.1
 \end{aligned}$$

Check Screen Wall Horizontal Member Connection to Post:

Check Bolt Conn. Between Angle to FRP Post:

$$\begin{aligned}
 V_{xx} &= 493.0 & \text{lbs} \\
 V_{yy} &= 832.1 & \text{lbs (include the effect from torque)} \\
 V_{total} &= 967.1 & \text{lbs}
 \end{aligned}$$

Try: **5/8" Dia. FIBREBOLT****Bolt Shear Strength:**

$$\text{Bolt Shear} = 950 \text{ lbs}$$

Bearing @ bolt hole:

$$\text{Bolt Bearing} = 1758 \text{ lbs}$$

Connection Capacity:

$$\begin{aligned}
 \text{No. of Bolt} &= 2 \\
 \text{Temp. Factor} &= 0.85 \\
 V_{allow} &= 1615 & \text{lbs} \\
 \text{Unity} &= 0.60 & \text{OK}
 \end{aligned}$$



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Project: Verizon MDF Madrone
 Address: 1189 Ashland Street
 Client: Acom Consulting, Inc.

Pg. No: Antenna 4
 Date: 3/7/24
 Job No.: 19377

Check FRP Post at the NW corner:

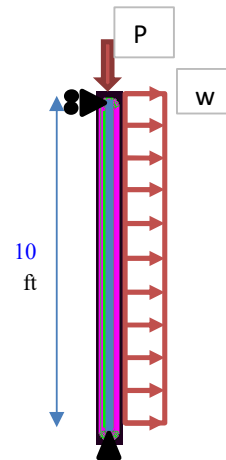
This post is at the corner. So, it is braced for out-of-plane load by the steel frame line in each direction.

$$\begin{aligned}\text{Screen Trib. Area} &= 53.75 \text{ ft}^2 \\ P_{DL} &= 493.0 \text{ lbs} \\ W_{WL} &= 137.9 \text{ plf (ASD)}\end{aligned}$$

$$\begin{aligned}P_{axial} &= 0.49 \text{ kip (ASD)} \\ M_{xx} &= 1.72 \text{ k.ft}\end{aligned}$$

Try: 6x3/8 EXTREN 525 Square Tube

$$\begin{aligned}F_b &= 6158 \text{ psi} \\ S &= 14.14 \text{ in}^3 \\ KL &= 10 \text{ ft} \\ \text{Temp. Factor} &= 0.85 \\ M_{allow} &= 6.17 \text{ k.ft} \\ \text{Unity} &= 0.28 \text{ OK} \\ P_{allow} &= 35.59 \text{ kip} \\ \text{Unity} &= 0.01 \text{ OK} \\ \text{Combined Unity} &= 0.29 \text{ OK}\end{aligned}$$

**Check FRP Post Top Connection to FRP Beam for brace load:**

$$P_{max} = 689.34 \text{ lbs (ASD)}$$

Try: 5/8" Dia. FIBREBOLT

Bolts in tension:

$$\begin{aligned}T_u &= 3100 \text{ lbs} \\ \text{Bolt Tensile Strength} &= 775 \text{ lbs} \\ \text{Temp. Factor} &= 0.85 \\ \text{No. of Bolts} &= 4 \\ \text{Conn. Tensile Strength} &= 2635 \text{ lbs} \\ \text{Unity} &= 0.26 \text{ OK}\end{aligned}$$

Bolts in shear:

$$\begin{aligned}\text{Bolt Shear Strength} &= 1875 \text{ lbs (double shear)} \\ \text{Temp. Factor} &= 0.85 \\ \text{No. of Bolts} &= 2 \\ \text{Conn. Shear Strength} &= 3187.5 \text{ lbs} \\ \text{Unity} &= 0.22 \text{ OK}\end{aligned}$$

Check FRP Post Connection to FRP Base Angle:

$$V_{max} = 689.34 \text{ lbs (ASD)}$$

Try: 5/8" Dia. FIBREBOLT

Bolts in shear:

$$\begin{aligned}\text{Bolt Shear Strength} &= 1875 \text{ lbs (double shear)} \\ \text{Temp. Factor} &= 0.85 \\ \text{No. of Bolts} &= 2 \\ \text{Conn. Shear Strength} &= 3187.5 \text{ lbs} \\ \text{Unity} &= 0.22 \text{ OK}\end{aligned}$$

Check Base Angle Connection (E) Concrete Beam:

$$\begin{aligned}V_{max} &= 1148.89 \text{ lbs (LRFD)} \\ ecc. &= 4 \text{ in} \\ M_{max} &= 4595.58 \text{ lbs.in (LRFD)}\end{aligned}$$

Use: 5/8" Dia. Threaded Rod w/ Hilti HY 200 Epoxy (4.5" nom. Embed.)

See next pages for calcs.

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Project:	Verizon MDF Madrone	Pg. No:	Antenna 5
Address:	1189 Ashland Street	Date:	3/7/24
Client:	Acom Consulting, Inc.	Job No.:	19377



Profis Anchor 2.8.3

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Company:
Specifier:
Address:
Phone | Fax:
E-Mail:

Page: 1
Project:
Sub-Project | Pos. No.:
Date: 11/11/2019

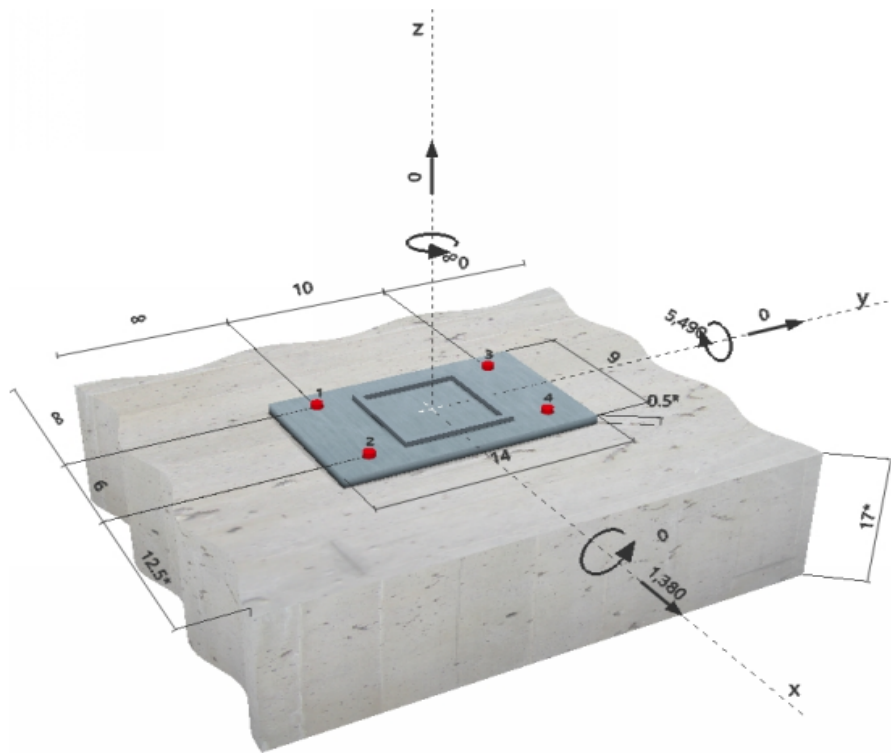
Specifier's comments:

1 Input data

Anchor type and diameter:	HIT-HY 200 + HAS-V-36 HDG (ASTM F1554 Gr.36) :	
Effective embedment depth:	$h_{ef,act} = 4.500$ in. ($h_{ef,limit} = -$ in.)	
Material:	ASTM A 1554 Grade 36	
Evaluation Service Report:	ESR-3187	
Issued Valid:	3/1/2018 3/1/2020	
Proof:	Design method ACI 318-14 / Chem	
Stand-off installation:	$e_b = 0.000$ in. (no stand-off); $t = 0.500$ in.	
Anchor plate:	$l_x \times l_y \times t = 9.000$ in. $\times$ 14.000 in. $\times$ 0.500 in.; (Recommended plate thickness: not calculated)	
Profile:	Square HSS (AISC); ($L \times W \times T$) = 6.000 in. $\times$ 6.000 in. $\times$ 0.375 in.	
Base material:	cracked concrete, 3000, $f'_c = 3,000$ psi; $h = 17.000$ in., Temp. short/long: 32/32 °F	
Installation:	hammer drilled hole, Installation condition: Dry	
Reinforcement:	tension: condition B, shear: condition B; no supplemental splitting reinforcement present edge reinforcement: none or < No. 4 bar	

^R - The anchor calculation is based on a rigid anchor plate assumption.

Geometry [in.] & Loading [lb, in.lb]



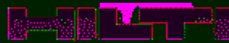
Input data and results must be checked for agreement with the existing conditions and for plausibility!
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Project: Verizon MDF Madrone
Address: 1189 Ashland Street
Client: Acom Consulting, Inc.

Pg. No: Antenna 6
Date: 3/7/24
Job No.: 19377



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Specifier:
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Page:
Project:
Sub-Project / Pos. No.:
Date:

1

11/11/2019

2 Proof / Utilization (Governing Cases)

Loading	Proof	Design values [lb]		Utilization	Status
		Load	Capacity	β_x / β_y [%]	
Tension	Bond Strength	768	10,676	87.1	OK
Shear	Concrete edge failure in direction x/-	1,580	16,798	9.5	OK

Loading	β_x	β_y	ξ	Utilization $\beta_{x,y}$ [%]	Status
Combined tension and shear loads	0.076	0.082	0.3	5	OK

3 Warnings

- Please consider all details and findings given in the detailed report!

Fastening meets the design criteria!

4 Remarks: Your Cooperation Duties

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Project: Verizon MDF Madrone
Address: 1189 Ashland Street
Client: Acom Consulting, Inc.

Pg. No: Antenna 7
Date: 3/7/24
Job No.: 19377

Wind & Seismic Loading On Battery & Future Cabinet

ASCE 7-16 Chapter 29.4.1 - Rooftop Structures and Equipment for Any Building Height | ASCE 7-16 Chapter 13 Seismic Design of Nonstructural Components

Building Geometry and Site Characteristics:

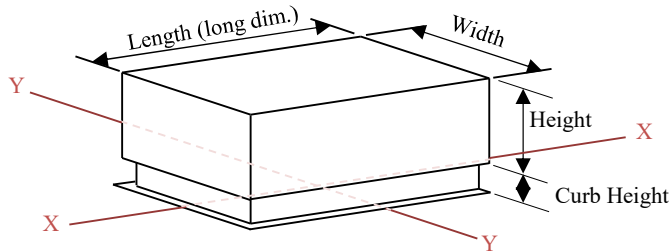
Height 'h': 38 ft
 (Larger) Length: 171 ft
 Width: 69.17 ft
 Roof Area: 11828 ft²

Building Type: Enclosed Buildings
 Ground Elev. above Sea Level, z_g : 2000 ft

Wind Design Criteria & Velocity Pressure:

Basic Windspeed 'V': 103 mph
 Component Exposure Category: B
 Gust Effect Factor, G: 0.85
 Velocity Pressure Coefficient, K_z : 0.75
 Topographic Factor, K_{zt} : 0.81
 Wind Directionality Factor, K_d : 0.85
 Ground Elevation Factor, K_e : 0.93
 Velocity Pressure, $q_z = q_h$: 12.97 psf

Rooftop Equipment Parameters:



Unit Weight: 4500 lb

Unit Length: 39.1 in

Unit Width: 30 in

Unit Height: 72 in

Curb Height: 0 in

Curb Adapter Height: 0 in (if applicable)

Total Height: 72 in

Seismic Design Parameters & Loading:

Seismic Component: - Roof Top Cabinets

Seismic Component Description:

MEC6. Generators, Batteries, Inverters, Motors, Transformers, and Other Electrical Components Constructed of High Deformability Materials

a_p : 1

R_p : 2.5

Ω_o : 2.5

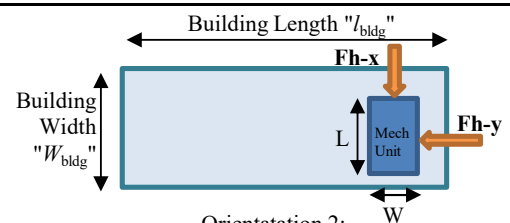
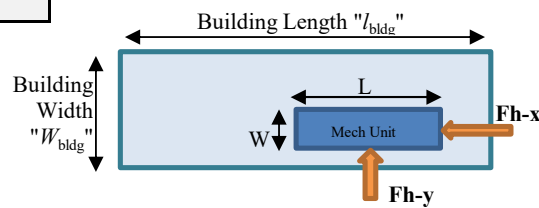
Site Sds: 0.52

F_{p_Horiz} : 0.252 *W

F_{p_Horiz} : 1132.0 lbs (LRFD) --> 792.4 lbs (ASD)

F_{p_Vert} : 471.6 lbs (LRFD) --> 330.2 lbs (ASD)

Design Wind Loading:



Orientation Diagram: Orientation 2

' F_{h-y} ' Lateral Force:

0.1Bh: 262.8 ft²

Bh: 2628 ft²

Af: 19.55 ft²

GCr: 1.9

Fh-y: 481.6 lb (LRFD)

Orientation 1:

' F_{h-x} ' Lateral Force:

0.1Bh: 649.8 ft²

Bh: 6498 ft²

Af: 15 ft²

GCr: 1.9

Fh-x: 369.5 lb (LRFD)

' F_v ' Vertical Uplift Force:

0.1BL: 1183 ft²

BL: 11828 ft²

Ar: 8.146 ft²

GCr: 1.5

Fv: 158.4 lb (LRFD)



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Project: Verizon MDF Madrone

Address: 1189 Ashland Street

Client: Acom Consulting, Inc.

Pg. No: RTC 1

Date: 3/7/24

Job No.: 19377

Unit Anchorage to Structure - Design and Analysis:			
'Fy' Direction Loading (Overturning about the X-X Axis)			
Wind Loading:		Seismic Loading:	
F _y : 481.6 lb @ 3 ft above top of curb		F _y : 1132.0 lb @ 4 ft above top of curb	
At Curb to Structure Connection:		At Curb to Structure Connection:	
OTM: 1445 lb-ft		OTM: 4528 lb-ft	
Resist. OTM: 5625 lb-ft		Resist. OTM: 5625 lb-ft	
Tension: N/A lb (ASD, LC 0.6D+0.6W)		Tension: 82.87 lb (ASD, LC 0.6D+0.7E)	
Compression: 2597 lb (ASD, LC 1.0D+0.6W)		Compression: 3518 lb (ASD, LC 1.0D+0.6W)	
Unit Connection to Curb: (Worst Case)			
Curb Connection to Structure: (Worst Case)			
Try: 3/8" Dia. A307 Bolts	Eff. Tension Fasteners: (2)	-> 41.43 lb/fastener	0.017 OK
Tallow: 2485 lb	Eff. Shear Fasteners: (4)	-> 283 lb/fastener	0.19 OK
Vallow: 1490 lb			Unity Check: 0.207 OK
'Fx' Direction Loading (Overturning about the Y-Y Axis)			
Wind Loading:		Seismic Loading:	
F _x : 369.5 lb @ 3 ft above top of curb		F _x : 1132.0 lb @ 4 ft above top of curb	
At Curb to Structure Connection:		At Curb to Structure Connection:	
OTM: 1109 lb-ft		OTM: 4528 lb-ft	
Resist. OTM: 7331 lb-ft		Resist. OTM: 7331 lb-ft	
Tension: N/A lb (ASD, LC 0.6D+0.6W)		Tension: N/A lb (ASD, LC 0.6D+0.7E)	
Compression: 2516 lb (ASD, LC 1.0D+0.6W)		Compression: 3518 lb (ASD, LC 1.0D+0.6W)	
Unit Connection to Curb: (Worst Case)			
Curb Connection to Structure: (Worst Case)			
Try: 3/8" Dia. A307 Bolts	Eff. Tension Fasteners: (2)	-> 0 lb/fastener	0 OK
Tallow: 2485 lb	Eff. Shear Fasteners: (4)	-> 283 lb/fastener	0.19 OK
Vallow: 1490 lb			Unity Check: 0.19 OK



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Project: Verizon MDF Madrone
Address: 1189 Ashland Street
Client: Acom Consulting, Inc.

Pg. No: RTU 2
Date: 3/7/24
Job No.: 19377

Wind & Seismic Loading On Radio Cabinet

ASCE 7-16 Chapter 29.4.1 - Rooftop Structures and Equipment for Any Building Height | ASCE 7-16 Chapter 13 Seismic Design of Nonstructural Components

Building Geometry and Site Characteristics:

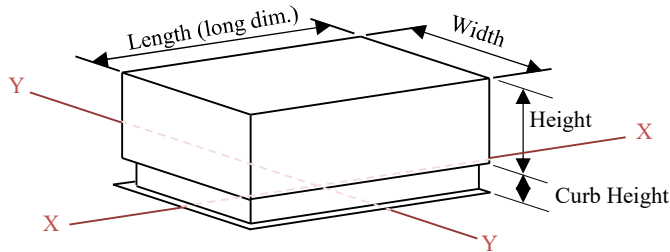
Height 'h': 38 ft
 (Larger) Length: 171 ft
 Width: 69.17 ft
 Roof Area: 11828 ft²

Building Type: Enclosed Buildings
 Ground Elev. above Sea Level, z_g : 2000 ft

Wind Design Criteria & Velocity Pressure:

Basic Windspeed 'V': 103 mph
 Component Exposure Category: B
 Gust Effect Factor, G: 0.85
 Velocity Pressure Coefficient, K_z : 0.75
 Topographic Factor, K_{zt} : 0.81
 Wind Directionality Factor, K_d : 0.85
 Ground Elevation Factor, K_e : 0.93
 Velocity Pressure, $q_z = q_h$: 12.97 psf

Rooftop Equipment Parameters:



Unit Weight: 2500 lb

Unit Length: 40.6 in
 Unit Width: 36 in
 Unit Height: 72 in
 Curb Height: 0 in
 Curb Adapter Height: 0 in (if applicable)
 Total Height: 72 in

Seismic Design Parameters & Loading:

Seismic Component: - Roof Top Cabinets

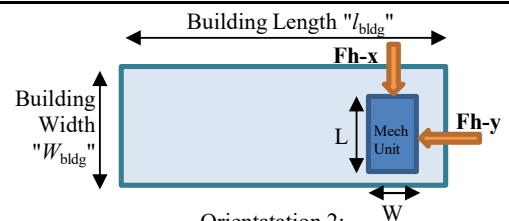
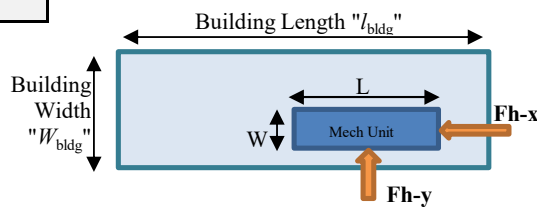
a_p : 1
 R_p : 2.5
 Ω_o : 2.5
 Site Sds: 0.52
 F_{p_Horiz} : 0.252 *W

F_{p_Horiz} : 628.9 lbs (LRFD) --> 440.2 lbs (ASD)
 F_{p_Vert} : 262.0 lbs (LRFD) --> 183.4 lbs (ASD)

Seismic Component Description:

MEC6. Generators, Batteries, Inverters, Motors, Transformers, and Other Electrical Components Constructed of High Deformability Materials

Design Wind Loading:



Orientation Diagram: **Orientation 2**

F_{h-y} 'Lateral Force:

0.1Bh: 262.8 ft²
 Bh: 2628 ft²
 Af: 20.3 ft²
 GCr: 1.9

Fh-y: 500.1 lb (LRFD)

Orientation 1:

F_{h-x} 'Lateral Force:

0.1Bh: 649.8 ft²
 Bh: 6498 ft²
 Af: 18 ft²
 GCr: 1.9

Fh-x: 443.5 lb (LRFD)

F_v 'Vertical Uplift Force:

0.1BL: 1183 ft²
 BL: 11828 ft²
 Ar: 10.15 ft²
 GCr: 1.5

Fv: 197.4 lb (LRFD)



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Project: Verizon MDF Madrone
 Address: 1189 Ashland Street
 Client: Acom Consulting, Inc.

Pg. No: RTC 3
 Date: 3/7/24
 Job No.: 19377

Unit Anchorage to Structure - Design and Analysis:			
'Fy' Direction Loading (Overturning about the X-X Axis)			
Wind Loading:		Seismic Loading:	
F _y : 500.1 lb @ 3 ft above top of curb		F _y : 628.9 lb @ 4 ft above top of curb	
<u>At Curb to Structure Connection:</u> OTM: 1500 lb-ft Resist. OTM: 3750 lb-ft Tension: N/A lb (ASD, LC 0.6D+0.6W) Compression: 1550 lb (ASD, LC 1.0D+0.6W)		<u>At Curb to Structure Connection:</u> OTM: 2515 lb-ft Resist. OTM: 3750 lb-ft Tension: N/A lb (ASD, LC 0.6D+0.7E) Compression: 1837 lb (ASD, LC 1.0D+0.6W)	
Unit Connection to Curb: (Worst Case)			
Curb Connection to Structure: (Worst Case)			
Try: 3/8" Dia. A307 Bolts		Eff. Tension Fasteners: (2) ->	0 lb/fastener 0 OK
Tallow: 2485 lb		Eff. Shear Fasteners: (8) ->	78.61 lb/fastener 0.053 OK
Vallow: 1490 lb		Unity Check: 0.053 OK	
'Fx' Direction Loading (Overturning about the Y-Y Axis)			
Wind Loading:		Seismic Loading:	
F _x : 443.5 lb @ 3 ft above top of curb		F _x : 628.9 lb @ 4 ft above top of curb	
<u>At Curb to Structure Connection:</u> OTM: 1330 lb-ft Resist. OTM: 4229 lb-ft Tension: N/A lb (ASD, LC 0.6D+0.6W) Compression: 1516 lb (ASD, LC 1.0D+0.6W)		<u>At Curb to Structure Connection:</u> OTM: 2515 lb-ft Resist. OTM: 4229 lb-ft Tension: N/A lb (ASD, LC 0.6D+0.7E) Compression: 1837 lb (ASD, LC 1.0D+0.6W)	
Unit Connection to Curb: (Worst Case)			
Curb Connection to Structure: (Worst Case)			
Try: 3/8" Dia. A307 Bolts		Eff. Tension Fasteners: (2) ->	0 lb/fastener 0 OK
Tallow: 2485 lb		Eff. Shear Fasteners: (8) ->	78.61 lb/fastener 0.053 OK
Vallow: 1490 lb		Unity Check: 0.053 OK	



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Project: Verizon MDF Madrone
Address: 1189 Ashland Street
Client: Acom Consulting, Inc.

Pg. No: RTU 4
Date: 3/7/24
Job No.: 19377

Steel Structure supporting the roof top cabinets:

Per page "RTC 1" & "RTC 2", the total seismic load on the cabinets is higher than the total wind load on the cabinets. Thus, seismic controls.

Loads:

Dead Loads:

Battery Cabinet =	4500	lbs
Radio Canibet =	2500	lbs
Future Cabinet =	4500	lbs
Load Center/Fiber Cabinet =	300	lbs

Seismic Load:

Hor. Seismic Load:

Battery Cabinet =	1131.96	lbs (LRFD)	@	48 in above base
Radio Canibet =	628.86	lbs (LRFD)	@	48 in above base
Future Cabinet =	1131.96	lbs (LRFD)	@	48 in above base
Load Center/Fiber Cabinet =	75.46	lbs (LRFD)	@	48 in above base

Vert. Seismic Load:

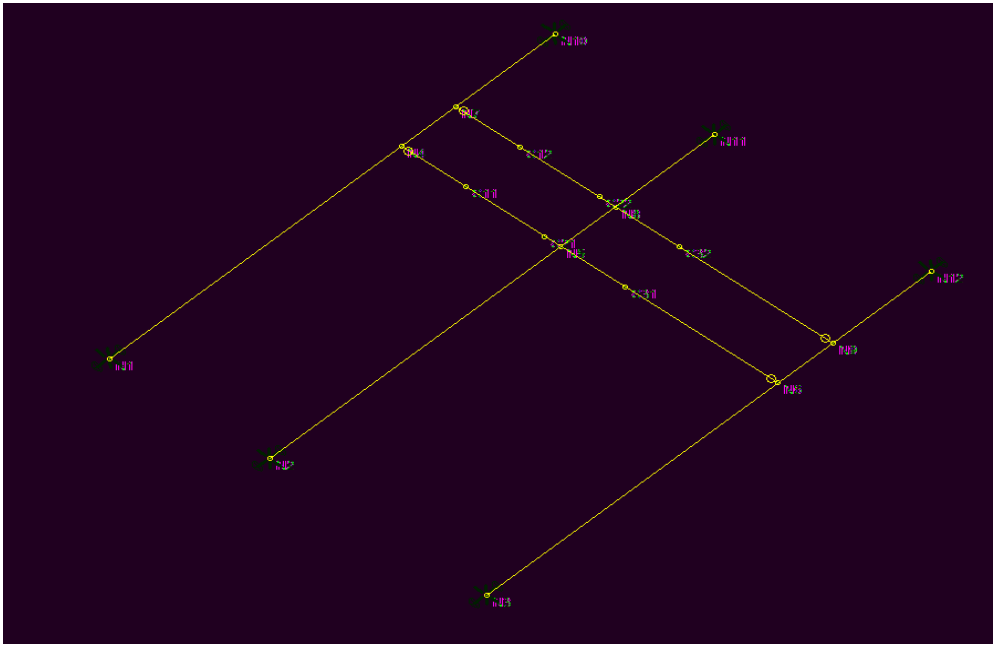
Battery Cabinet =	471.65	lbs (LRFD)
Radio Canibet =	262.03	lbs (LRFD)
Future Cabinet =	471.65	lbs (LRFD)
Load Center/Fiber Cabinet =	31.44	lbs (LRFD)

Load Combos to be considered:

1. 1.4 D
2. (1.2+0.2Sds)D + 1.0E
3. 1.0D (for deflection check)
3. (0.9-0.2Sds)D + 0.5E (for post anchorage check)

Structural Modeling:

The steel structure was modeled in RISA3D:



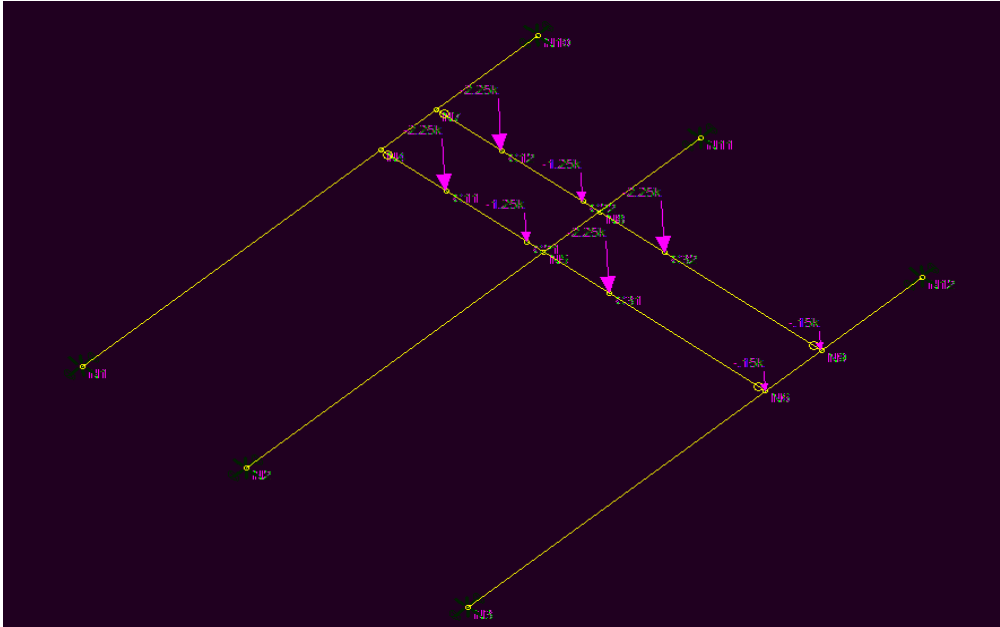
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Project: Verizon MDF Madrone
Address: 1189 Ashland Street
Client: Acom Consulting, Inc.

Pg. No: RTC 3
Date: 3/7/24
Job No.: 19377

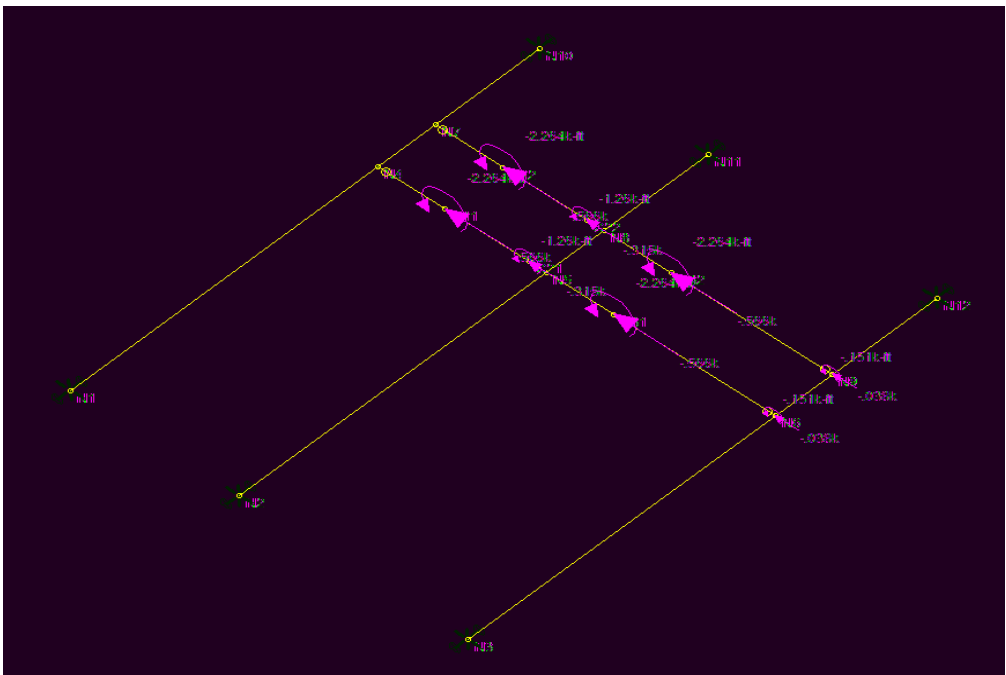


Applied Dead Load from the Cabinets:



Applied Seismic Load from the Cabinets to the Frame :

Case 1:

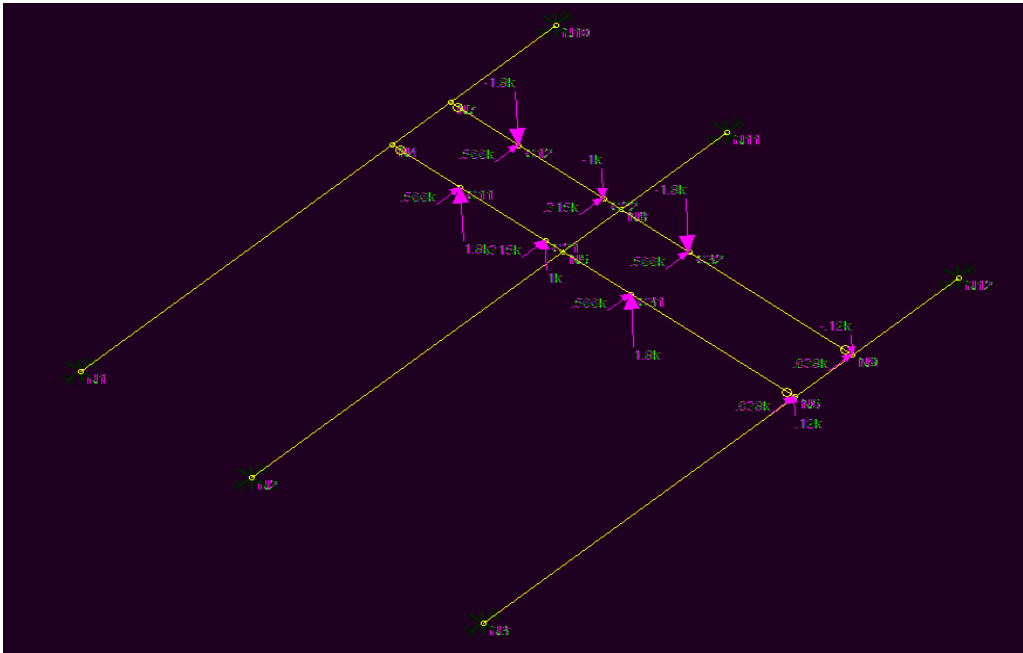


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Project: Verizon MDF Madrone
Address: 1189 Ashland Street
Client: Acom Consulting, Inc.

Pg. No: RTC 4
Date: 3/7/24
Job No.: 19377

Case 2:

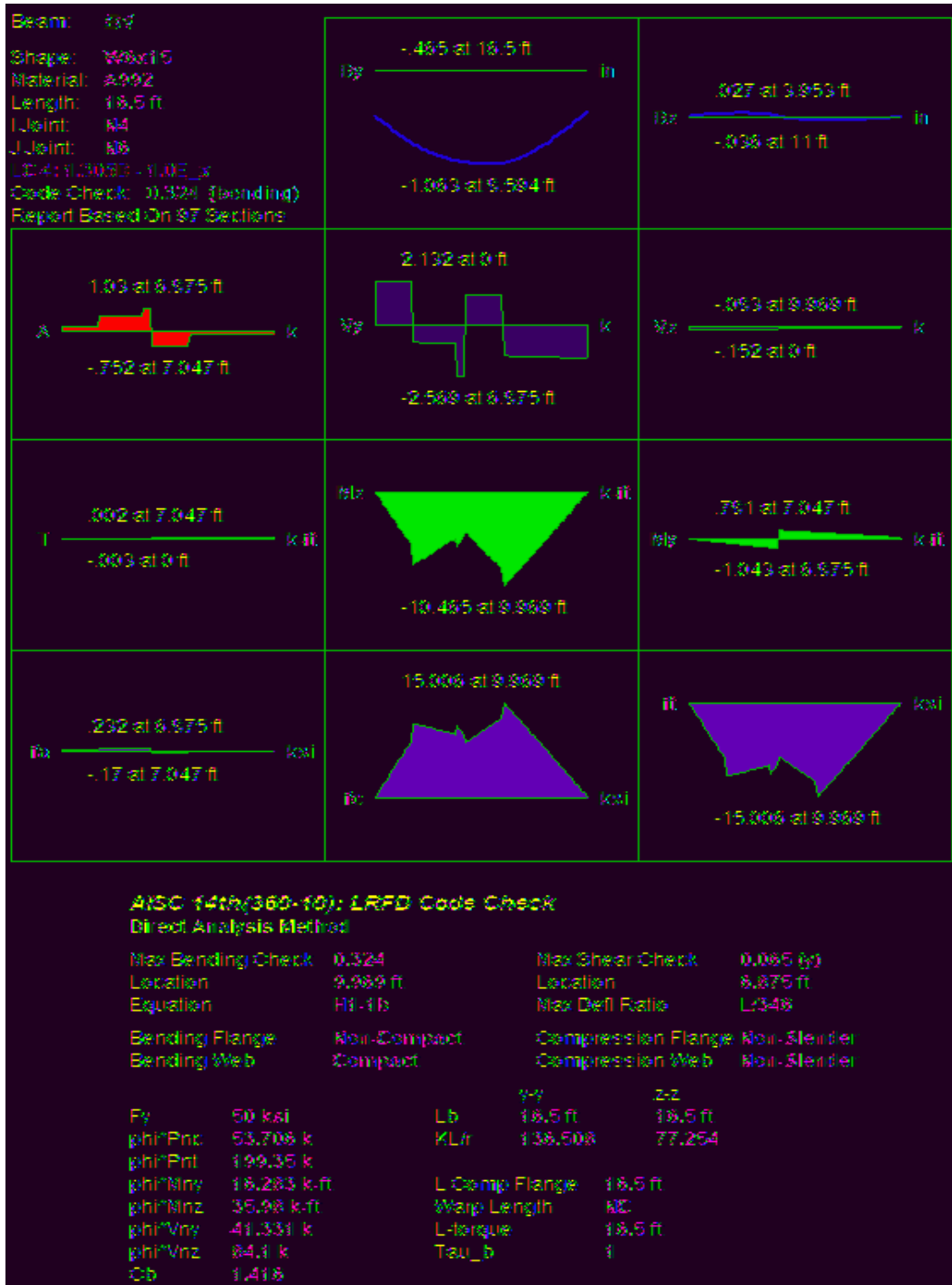


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Project:	Verizon MDF Madrone	Pg. No:	RTC 5
Address:	1189 Ashland Street	Date:	3/7/24
Client:	Acom Consulting, Inc.	Job No.:	19377

Design Checks:**Upper Beam:**

The controlling load combo is (1.2+0.2Sds)D + 1.0E. The seismic load is per case 1 above but in the opposite direction. W6x15 is adequate.



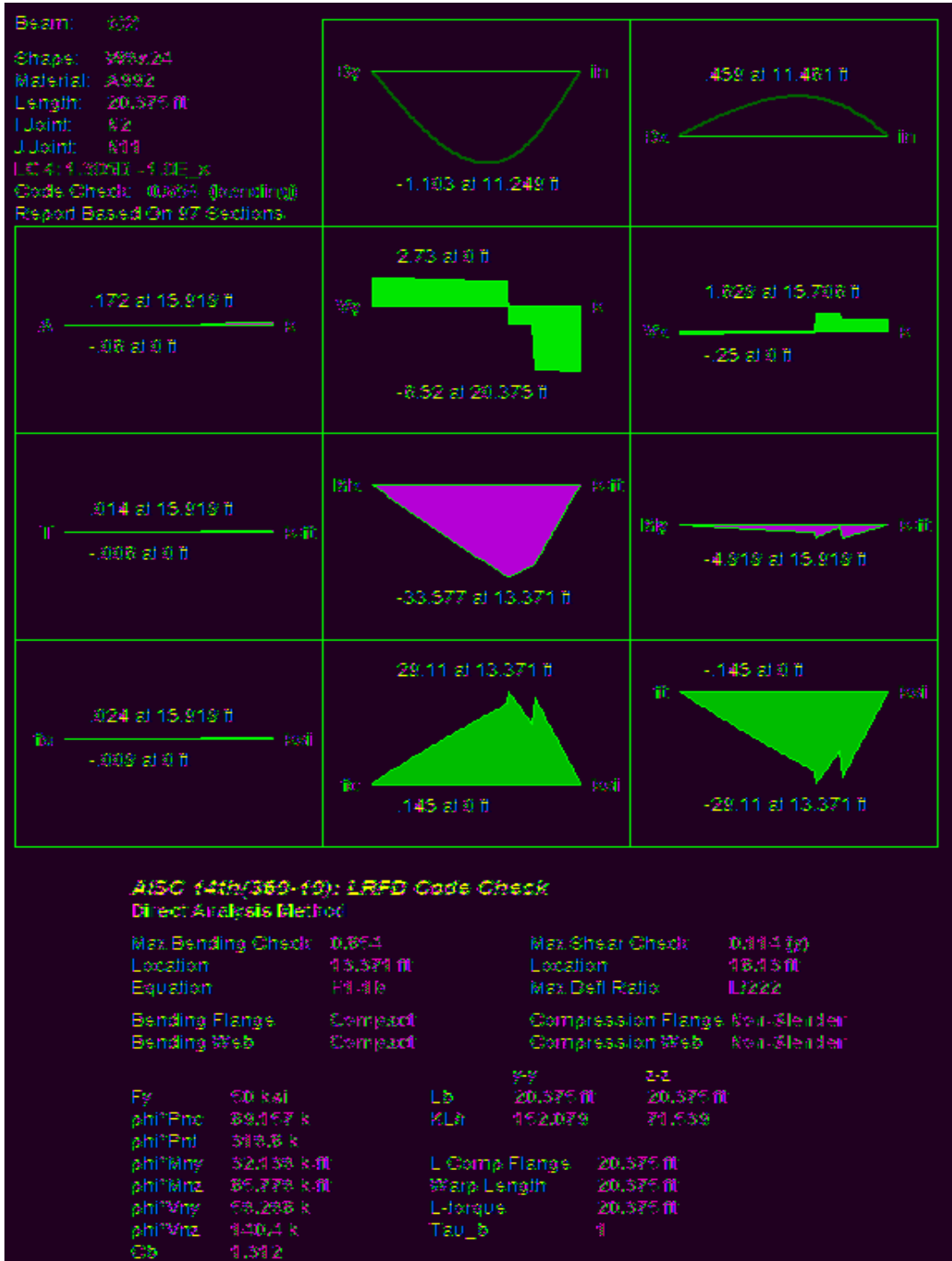
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Project: Verizon MDF Madrone
 Address: 1189 Ashland Street
 Client: Acom Consulting, Inc.

Pg. No: RTC 6
 Date: 3/7/24
 Job No.: 19377

Upper Beam:

The controlling load combo is $(1.2+0.2Sds)D + 1.0E$. The seismic load is per case 1 above but in the opposite direction.
 The beam in the middle is the controlling member.
 W8x24 is adequate.



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Project: Verizon MDF Madrone
 Address: 1189 Ashland Street
 Client: Acom Consulting, Inc.

Pg. No: RTC 7
 Date: 3/7/24
 Job No.: 19377

Deflection Check:

The controlling load combo is 1.0E.

The highest deflection is 0.824 in, at about mid span of the lower middle beam.

Maximum allowable deflection: $L/240 = 1.02$ in **OK**

Support Post:

The controlling load combo is $(1.2+0.2Sds)D + 1.0E$. The seismic load is per case 1 above but in the opposite direction.

The post at node N11 is the controlling member.

Per RISA3D analysis results:

P = 6.981 kip
 V = 1.739 kip
 Post Ht. = 18 in
 M = 31.302 k.in = 2.61 k.ft

Try: **HSS3x3x1/4**

KL = 3.00 ft
 $\Phi P_n = 94.1$ kip (AISC Table 4-4)
 Unity = 0.074 **OK**
 $\Phi M_n = 8.55$ k.ft (AISC Table 3-13)
 Unity = 0.305 **OK**
 Combined Unity = 0.342 **OK**

Post Weld to Base PL:

$V_{max} = 1.739$ kip (LRFD)
 $M_{max} = 31.3$ kip.in (LRFD)

Weld Length "L" = 12.00 in
 Weld S = 12.00 in²
 Stress on weld = 2.61 ksi
 Weld Size = 0.250 in
 Weld Capacity = 5.57 ksi
 Unity = 0.47 **OK**

Base PL bearing on concrete:

$P_{max} = 6.981$ kip (LRFD)
 $f_c = 3000$ psi
 $A_1 = 81$ in²
 $A_2 = 441$ in²
 $\Phi P_p = 268.515$ kip
 Unity = 0.026 **OK**

Base PL Anchorage to Concrete Beam:

The controlling load combo is $(0.9-0.2Sds)D + \Omega E$. The seismic load is per case 2 above but in the opposite direction.

The forces at node N11 is the controlling demand.

P = 2264 lbs (LRFD)
 V = 4347 lbs (LRFD)
 Post Ht. = 18 in
 M = 78246 lbs.in (LRFD)



13228 NE 20th St, Suite 100, Bellevue, WA 98005 | (425) 614-0949

Project: Verizon MDF Madrone
 Address: 1189 Ashland Street
 Client: Acom Consulting, Inc.

Pg. No: RTC 8
 Date: 3/7/24
 Job No.: 19377



www.hilti.us		Profis Anchor 2.8.3	
Company:		Page:	1
Specifier:		Project:	
Address:		Sub-Project / Pos. No.:	
Phone / Fax:		Date:	7/30/2020
E-Mail:			

Specifier's comments:

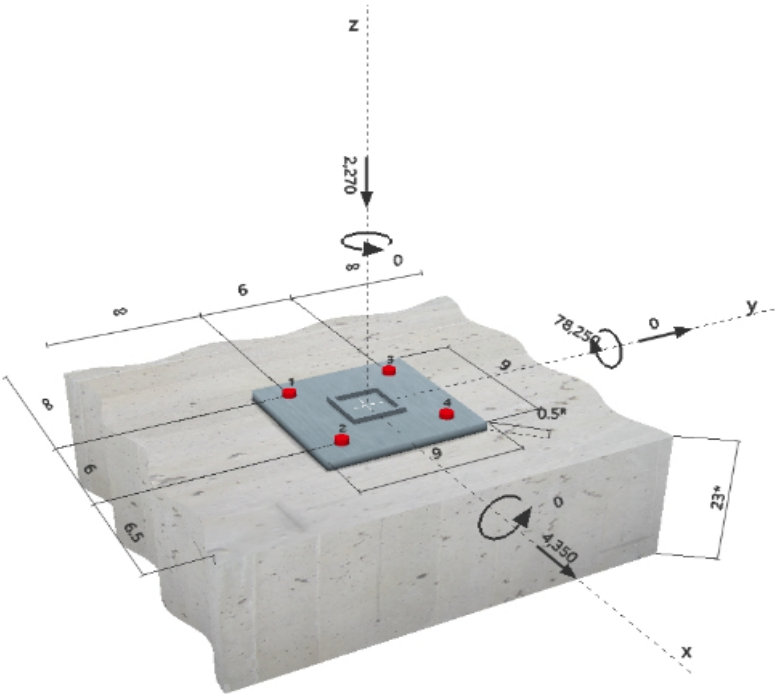
1 Input data

Anchor type and diameter:	HIT-HY 200 + HAS-V-36 (ASTM F1554 Gr.36) 3/4
Effective embedment depth:	$h_{ef,act} = 10.000$ in. ($h_{ef,limit} = -$ in.)
Material:	ASTM A 1554 Grade 36
Evaluation Service Report:	ESR-3187
Issued / Valid:	3/1/2018 / 3/1/2020
Proof:	Design method ACI 318-14 / Chem
Stand-off installation:	$e_b = 0.000$ in. (no stand-off); $t = 0.500$ in.
Anchor plate:	$l_x \times l_y \times t = 9.000$ in. $\times$ 9.000 in. $\times$ 0.500 in.; (Recommended plate thickness: not calculated)
Profile:	Square HSS (AISC); ($L \times W \times T$) = 3.000 in. $\times$ 3.000 in. $\times$ 0.250 in.
Base material:	cracked concrete, 3000, $f'_c = 3,000$ psi; $h = 23.000$ in., Temp. short/long: 32/32 °F
Installation:	hammer drilled hole, Installation condition: Dry
Reinforcement:	tension: condition B, shear: condition B; no supplemental splitting reinforcement present edge reinforcement: none or $\leq$ No. 4 bar
Seismic loads (cat. C, D, E, or F)	Tension load: yes (17.2.3.4.3 (d)) Shear load: yes (17.2.3.5.3 (c))



^R - The anchor calculation is based on a rigid anchor plate assumption.

Geometry [in.] & Loading [lb, in.lb]



Input data and results must be checked for agreement with the existing conditions and for plausibility!
PROFIS Anchor (c) 2003-2009 Hilti AG, FL-9494 Schaan Hilti is a registered Trademark of Hilti AG, Schaan



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Project:	Verizon MDF Madrone	Pg. No:	RTC 9
Address:	1189 Ashland Street	Date:	3/7/24
Client:	Acom Consulting, Inc.	Job No.:	19377



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Profis Anchor 2.8.3

Company:
 Specifier:
 Address:
 Phone | Fax:
 E-Mail:

Page: 2
 Project:
 Sub-Project | Pos. No.:
 Date: 7/30/2020

2 Proof | Utilization (Governing Cases)

Loading	Proof	Design values [lb]		Utilization	
		Load	Capacity	β_N / β_V [%]	Status
Tension	Concrete Breakout Strength	10,466	15,000	70 / -	OK
Shear	Concrete edge failure in direction x+	4,350	7,478	- / 59	OK

Loading	β_N	β_V	ζ	Utilization $\beta_{N,V}$ [%]	Status
Combined tension and shear loads	0.698	0.582	5/3	96	OK

3 Warnings

- Please consider all details and hints/warnings given in the detailed report!

Fastening meets the design criteria!

4 Remarks; Your Cooperation Duties

- Any and all information and data contained in the Software concern solely the use of Hilti products and are based on the principles, formulas and security regulations in accordance with Hilti's technical directions and operating, mounting and assembly instructions, etc., that must be strictly complied with by the user. All figures contained therein are average figures, and therefore use-specific tests are to be conducted prior to using the relevant Hilti product. The results of the calculations carried out by means of the Software are based essentially on the data you put in. Therefore, you bear the sole responsibility for the absence of errors, the completeness and the relevance of the data to be put in by you. Moreover, you bear sole responsibility for having the results of the calculation checked and cleared by an expert, particularly with regard to compliance with applicable norms and permits, prior to using them for your specific facility. The Software serves only as an aid to interpret norms and permits without any guarantee as to the absence of errors, the correctness and the relevance of the results or suitability for a specific application.
- You must take all necessary and reasonable steps to prevent or limit damage caused by the Software. In particular, you must arrange for the regular backup of programs and data and, if applicable, carry out the updates of the Software offered by Hilti on a regular basis. If you do not use the AutoUpdate function of the Software, you must ensure that you are using the current and thus up-to-date version of the Software in each case by carrying out manual updates via the Hilti Website. Hilti will not be liable for consequences, such as the recovery of lost or damaged data or programs, arising from a culpable breach of duty by you.

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Project: Verizon MDF Madrone
 Address: 1189 Ashland Street
 Client: Acom Consulting, Inc.

Pg. No: RTC 10
 Date: 3/7/24
 Job No.: 19377

Check (E) Structures that support the (N) screen wall & the roof top cabinets:

Check the (E) Concrete Beam & Column that support the new screen wall & roof top cabinets.

By inspection, load combo 1.2D + 1.6S controls the design of the roof beam, 1.2D+1.6L+0.5S controls the design of column.

(E) Exterior Concrete Beams:

The (E) Exterior Concrete Beams need to carry the additional weight from the screenwall & roof top cabinets

RB-16 is the exterior beam that need to carry the most weight from the roof top cabinets. If this beam is adequate to carry the additional loads, other exterior beams should be adequate as well.

(E) Dead Loads:

Concrete Floor/Roof Structure =	83	psf
Trib. Width =	10	ft
Beam SW =	300	plf
W_{DL} =	1125	plf

(E) Snow Load:

Flat roof Snow Load =	25	psf
Trib. Width =	10	ft
W_{SL} =	250	plf

(N) Dead Loads:

Screen Wall =	15	psf
Trib. Height =	10	ft
$W_{screenwall}$ =	150	plf
$P_{cabinets}$ =	1300	lbs (from 1.0D load combo, node N1)

(N) Snow Load (Drift):

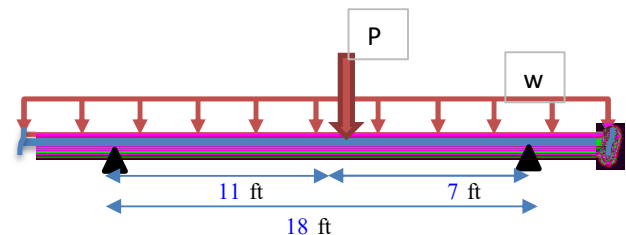
W_{snow_drift} =	70.7	plf
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Design Check:

For 1.2D +1.6S load combo:

w =	2043.1	plf
P =	1300	lbs

M_{max} =	63578.2	lbs.ft (negative M @ support)
V_{max} =	19251.4	lbs

**Beam Material Properties:**

f_c =	3,000	psi
f_y =	40,000	psi

Bending Capacity (negative & positive):

Beam Size 12 x 24

Bar Size: #7

Number of Bars: 3

A_s = 1.8 in² T&B

a = 2.353 in

cover = 1.50 in

d = 22.063 in

M_n = 125,316 lb-ft

ΦM_n = 112,785 lb-ft

Unity = 0.564 OK

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Project: Verizon MDF Madrone
Address: 1189 Ashland Street
Client: Acom Consulting, Inc.

Pg. No: RTC 11
Date: 3/7/24
Job No.: 19377

Shear Capacity:

Stirrup: #4

$$a_v = 0.40 \text{ in}^2 @ 18 \text{ in O.C.}$$

$$V_c = 29,002 \text{ lb}$$

$$V_s = 19,611 \text{ lb}$$

$$V_n = 48,613 \text{ lb}$$

$$\Phi V_n = 41,321 \text{ lb}$$

$$\text{Unity} = 0.466 \text{ OK}$$

So, the (E) exterior concrete beams are adequate to carry the additional loads from the roof top cabinets & screen walls.

(E) Exterior Concrete Columns:

The (E) Exterior Concrete Columns need to carry the additional weight from the screenwall & roof top cabinets

Concrete Col 20 is the exterior column that need to carry the most weight from the roof top cabinets. If this column is adequate to carry the additional loads, other exterior columns should be adequate as well.

Based on the As-built Drawings, Col 20 at roof level & 3rd floor level have the same dimensions, unbraced length, & reinforcement. Thus, they have the same capacity. We'll check Col 20 on the 3rd floor for the additional loads since it will need to carry more load than Col 20 at roof level.

(E) Dead Loads:

Concrete Floor/Roof Structure =	83	psf	
Trib. Area =	360	ft ²	(roof & 3rd floor)
Conc. Beam SW =	300	plf	
Col Spacing =	18	ft	
Conc. Col SW =	187.5	plf	
Col Trib. Height =	18	ft	
P _{DL} =	43875	lbs	

(E) Snow Load:

Flat roof Snow Load =	25	psf	
Trib. Area =	180	ft	(roof)
P _{SL} =	4500	lbs	

(E) Floor Live Load:

Floor Live Load =	100	psf	
Trib. Area =	180	ft	(3rd floor)
P _{LL} =	18000	lbs	

(N) Dead Loads:

W _{screenwall} =	150	psf	
Trib. Length =	18	ft	
P _{screenwall} =	2700	lbs	
P _{cabinets} =	3256	lbs	(from 1.0D load combo)
P _{(N)DL} =	5956	lbs	

(N) Snow Load (Drift):

W _{snow_drift} =	70.7	plf	
Trib. Length =	18	ft	
P _{snow_drift} =	1273	lbs	



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Project: Verizon MDF Madrone
Address: 1189 Ashland Street
Client: Acom Consulting, Inc.

Pg. No: RTC 12
Date: 3/7/24
Job No.: 19377

Design Check:

For 1.2D + 1.6L + 0.5 S load combo:

$P_{max} = 91483.5 \text{ lbs}$

Column Material Properties:

$f_c = 4,000 \text{ psi}$

$f_y = 50,000 \text{ psi}$

Column Capacity: ignore steel reinf (conservative)

$A_g = 180 \text{ in}^2$ $P_n = 389812.5 \text{ lbs}$

$l_c = 120.00 \text{ in}$ $\phi P_n = 233887.5 \text{ lbs}$

$h = 12 \text{ in}$ $Unity = 0.39 \text{ OK}$

So, the (E) concrete columns are adequate to carry the additional loads from the roof top cabinets & screen walls.



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Project:	Verizon MDF Madrone	Pg. No:	RTC 13
Address:	1189 Ashland Street	Date:	3/7/24
Client:	Acom Consulting, Inc.	Job No.:	19377

(E) Interior Concrete Beams:

The (E) Interior Concrete Beams need to carry the additional weight from the roof top cabinets

RB-34 is the interior beam that need to carry the most weight from the roof top cabinets. If this beam is adequate to carry the additional loads, other exterior beams should be adequate as well.

(E) Dead Loads:

Concrete Floor/Roof Structure =	83	psf
Trib. Width =	25	ft
Beam SW =	300	plf
W_{DL} =	2362.5	plf

(E) Snow Load:

Flat roof Snow Load =	25	psf
Trib. Width =	25	ft
W_{SL} =	625	plf

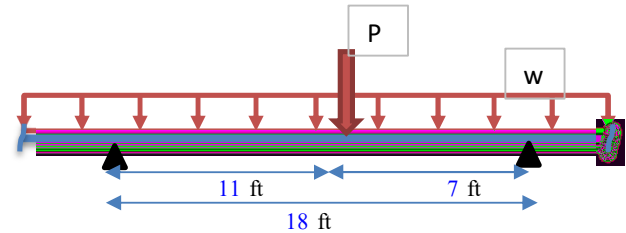
(N) Dead Loads:

$P_{cabinets}$ =	2857	lbs	(from 1.0D load combo, node N11)
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Design Check:

For 1.2D +1.6S load combo:

w =	3835.0	plf
P =	2857	lbs
M_{max} =	165317.0	lbs.ft (pin-pin)
V_{max} =	36411.8	lbs

**Beam Material Properties:**

f_c =	3,000	psi
f_y =	40,000	psi

Bending Capacity (positive):

Beam Size 30 x 21

Bar Size: #9

Number of Bars: 4

A_s =	4	in ² T&B
a =	2.092	in
cover =	1.50	in
d =	19.063	in

M_n =	240,223	lb-ft
ΦM_n =	216,201	lb-ft
Unity =	0.765	OK

Shear Capacity:

Stirrup: #4

a_v =	0.40	in ² @ 8 in O.C.
V_c =	62,646	lb
V_s =	38,125	lb

V_n =	100,771	lb
ΦV_n =	85,655	lb
Unity =	0.425	OK

So, the (E) interior concrete beams are adequate to carry the additional loads from the roof top cabinets & screen walls.



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Project: Verizon MDF Madrone
Address: 1189 Ashland Street
Client: Acom Consulting, Inc.

Pg. No: RTC 14
Date: 3/7/24
Job No.: 19377

(E) Interior Concrete Columns:

The (E) Interior Concrete Columns need to carry the additional weight from the roof top cabinets

Concrete Col 44 is the interior column that need to carry the most weight from the roof top cabinets. If this column is adequate to carry the additional loads, other interior columns should be adequate as well.

Based on the As-built Drawings, Col 44 at roof level & 3rd floor level have the same dimensions, unbraced length, & reinforcement. Thus, they have the same capacity. We'll check Col 44 on the 3rd floor for the additional loads since it will need to carry more load than Col 44 at roof level.

(E) Dead Loads:

Concrete Floor/Roof Structure =	83	psf	
Trib. Area =	900	ft ²	(roof & 3rd floor)
Conc. Beam SW =	656.25	plf	
Col Spacing =	18	ft	
Conc. Col SW =	300	plf	
Col Trib. Height =	18	ft	
P _{DL} =	103275	lbs	

(E) Snow Load:

Flat roof Snow Load =	25	psf	
Trib. Area =	450	ft	(roof)
P _{SL} =	11250	lbs	

(E) Floor Live Load:

Floor Live Load =	100	psf	
Trib. Area =	450	ft	(3rd floor)
P _{LL} =	45000	lbs	

(N) Dead Loads:

P _{cabinets} =	7470	lbs	(from 1.0D load combo)
-------------------------	------	-----	------------------------

Design Check:

For 1.2D + 1.6L + 0.5 S load combo:

$$P_{\max} = 210519.5 \text{ lbs}$$

Column Material Properties:

$$f_c = 4,000 \text{ psi}$$

$$f_y = 50,000 \text{ psi}$$

Column Capacity: ignore steel reinf (conservative)

Ag =	288	in ²	P _n =	623700	lbs
lc =	120.00	in	ΦP _n =	374220	lbs
h =	12	in	Unity =	0.56	OK

So, the (E) concrete columns are adequate to carry the additional loads from the roof top cabinets.



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Project: Verizon MDF Madrone
Address: 1189 Ashland Street
Client: Acom Consulting, Inc.

Pg. No: RTC 15
Date: 3/7/24
Job No.: 19377

Exhibit 1 - Zoning Drawings

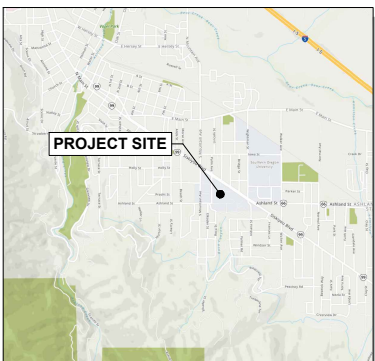
MDF
MADRONE

1250 ASHLAND STREET
ASHLAND, OR 97520

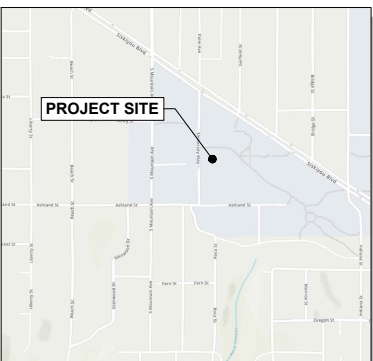
PSLC: 318113 / FUZE ID: 2518468
MDG LOCATION ID: 5000245112



VICINITY MAP



AREA MAP



PROJECT CONTACT LIST

PROPERTY OWNER:

GREG PERKINSON
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ASHLAND, OR
PHONE: (541) 552-6319

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(d/b/a VERIZON WIRELESS)
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PORTLAND, OR 97230
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nathaniel.kuhn@verizonwireless.com

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AUE STRUCTURAL ENGINEERING
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PHONE: 425.614.0949

APPLICANT:

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(d/b/a VERIZON WIRELESS)
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BELLEVUE, WA 98008

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rick.matteson@acomconsultinginc.com

ZONING / PERMITTING:

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DRAWING INDEX

T-1	COVER SHEET
T-2	GENERAL NOTES & SYMBOLS
A-1	PROPOSED OVERALL SITE PLAN
A-2	PROPOSED ENLARGED SITE PLAN
A-2.1	PROPOSED ANTENNA PLANS
A-2.2	PROPOSED EQUIPMENT PLAN
A-2.3	PROPOSED SCREEN WALL PLAN
A-3	PROPOSED NORTH & SOUTH EXTERIOR ELEVATIONS
A-3.1	PROPOSED EAST & WEST EXTERIOR ELEVATIONS
A-4	CONSTRUCTION DETAILS
A-5	CONSTRUCTION DETAILS
A-6	EQUIPMENT PLATFORM DETAILS
A-6.1	SCREEN WALL DETAILS
A-7	SIGNAGE INFORMATION
RF-1	PROPOSED ANTENNA CONFIGURATION
RF-2	RF EQUIPMENT
RF-3	RF EQUIPMENT
RF-4	PROPOSED IT DIAGRAM
S-001	GENERAL NOTES & ABBREVIATIONS (BY OTHERS)
S-002	STRUCTURAL ROOF FRAMING PLAN (BY OTHERS)
S-003	STRUCTURAL DETAILS (BY OTHERS)
S-004	STRUCTURAL DETAILS (BY OTHERS)
S-005	STRUCTURAL DETAILS (BY OTHERS)
E-1	GENERAL ELECTRICAL NOTES
E-2	ONE-LINE DIAGRAMS & PANEL SCHEDULE
E-3	ELECTRICAL SITE PLAN
E-4	ELECTRICAL GROUNDING PLAN
E-5	GROUNDING DETAILS

DRIVING DIRECTIONS

FROM VERIZON WIRELESS OFFICE - PORTLAND, OR:

FROM VERIZON OFFICE: HEAD SOUTHWEST ON NE 122ND AVE. TURN RIGHT ONTO NE FREMONT ST. TURN LEFT ONTO NE 102ND AVE. TURN RIGHT TO MERGE ONTO I-54 W/US-30 W TOWARD PORTLAND. MERGE ONTO I-54 W/US-30 W. USE THE LEFT 2 LANES TO TAKE THE EXIT TOWARD SALEM. MERGE ONTO I-5 S. KEEP RIGHT TO STAY ON I-5 S. FOLLOW SIGNS FOR INTERSTATE 5 S/SALEM. TAKE EXIT 14 FOR OR-66 TOWARD ASHLAND/KLAMATH FALLS. TURN RIGHT ONTO OR-66 W/ASHLAND ST. USE ANY LANE TO TURN SLIGHTLY RIGHT ONTO SISKIYOU BLVD. TURN LEFT ONTO S MOUNTAIN AVE. TURN LEFT ONTO ASHLAND ST.

CODE COMPLIANCE

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT CONDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES:

OREGON STATE AND LOCAL BUILDING CODES WITH THE FOLLOWING REFERENCE CODE:

- 2021 IBC, STANDARDS AND AMENDMENTS - 2022 OSSC
- 2022 OREGON MECHANICAL SPECIALTY CODE (OMSC)
- 2021 IFC, STANDARDS AND AMENDMENTS - 2022 OFC
- 2021 UPC, STANDARDS AND AMENDMENTS - 2021 OPSC
- 2020 NEC, STANDARDS AND AMENDMENTS - 2021 OESC

ACCESSIBILITY REQUIREMENTS FOR PERSONS WITH DISABILITIES:
FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. ACCESSIBILITY IS NOT REQUIRED.

NOTE:
CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION WITH SOUTHERN OREGON UNIVERSITY PRIOR TO START OF CONSTRUCTION
SOU CONTACT:
GREG PERKINSON
PERKINSOG@SOU.EDU
PHONE: (541) 552-6319

PROJECT INFORMATION

CODE INFORMATION:

JURISDICTION: CITY OF ASHLAND
ZONING CLASSIFICATION: SO
CONSTRUCTION TYPE: II-B
OCCUPANCY: UTILITY
PROPOSED BUILDING USE: TELECOM

SITE LOCATION (NAVD88):

GROUND ELEVATION: 2063.7' AMSL
STRUCTURE HEIGHT: 39.1' (TOP OF PARAPET)
48.2' (TOP OF ANTENNAS)
61.9' (HIGHEST STRUCTURE)

GEODETIC COORDINATES (NAD83):

ALPHA & GAMMA LATITUDE: 42.185167° (42° 11' 06.6" N)
LONGITUDE: -122.697389° (122° 41' 50.6" W)
BETA LATITUDE: 42.185111° (42° 11' 06.4" N)
LONGITUDE: -122.696889° (122° 41' 48.8" W)

LEASE AREA SIZE:

EQUIPMENT AREA: 54 SF
ANTENNA AREA: 198 SF

PARCEL SIZE:

15.17 ACRES

PARCEL NUMBER:

39S1E18BB-00100

SCOPE OF WORK

VERIZON PROPOSES TO CONSTRUCT AN UNMANNED TELECOMMUNICATIONS FACILITY CONSISTING OF A 3-SECTOR ANTENNA ARRAY WITH (6) PANEL ANTENNAS (2 PER SECTOR), (12) RRUS, (3) OVP'S AND (3) 6x12 HYBRID CABLES; (1) GPS ANTENNA; AND (2) EQUIPMENT CABINETS; ALL BEHIND A PROPOSED 10' HIGH MECHANICAL EQUIPMENT SCREEN WALL WITH FRP SECTIONS, TO BE INSTALLED ON THE ROOFTOP OF AN EXISTING BUILDING

DO NOT SCALE DRAWINGS. CONTRACTOR MUST VERIFY ALL DIMENSIONS AND ADVISE CONSULTANTS OF ANY ERRORS OR OMISSIONS. NO VARIATIONS OR MODIFICATIONS TO WORK SHOWN SHALL BE IMPLEMENTED WITHOUT PRIOR WRITTEN APPROVAL. ALL PREVIOUS ISSUES OF THIS DRAWING ARE SUPERSEDED BY THE LATEST REVISION. ALL DRAWINGS AND SPECIFICATIONS REMAIN THE PROPERTY OF ACOM CONSULTING.

NO	DATE	DRAWN	REVISION
A	11/15/19	KM	90% PCD REVIEW
B	01/10/20	RM	CLIENT COMMENTS
0	01/30/20	RM	100% FINAL CD
1	08/10/20	RM	LANDLORD COMMENTS
2	03/11/24	DO	SA BY AUE UPDATE
3	03/22/24	DO	CLIENT COMMENTS

CLIENT:



A&E CONSULTANT, SITE ACQUISITION AND PERMITTING

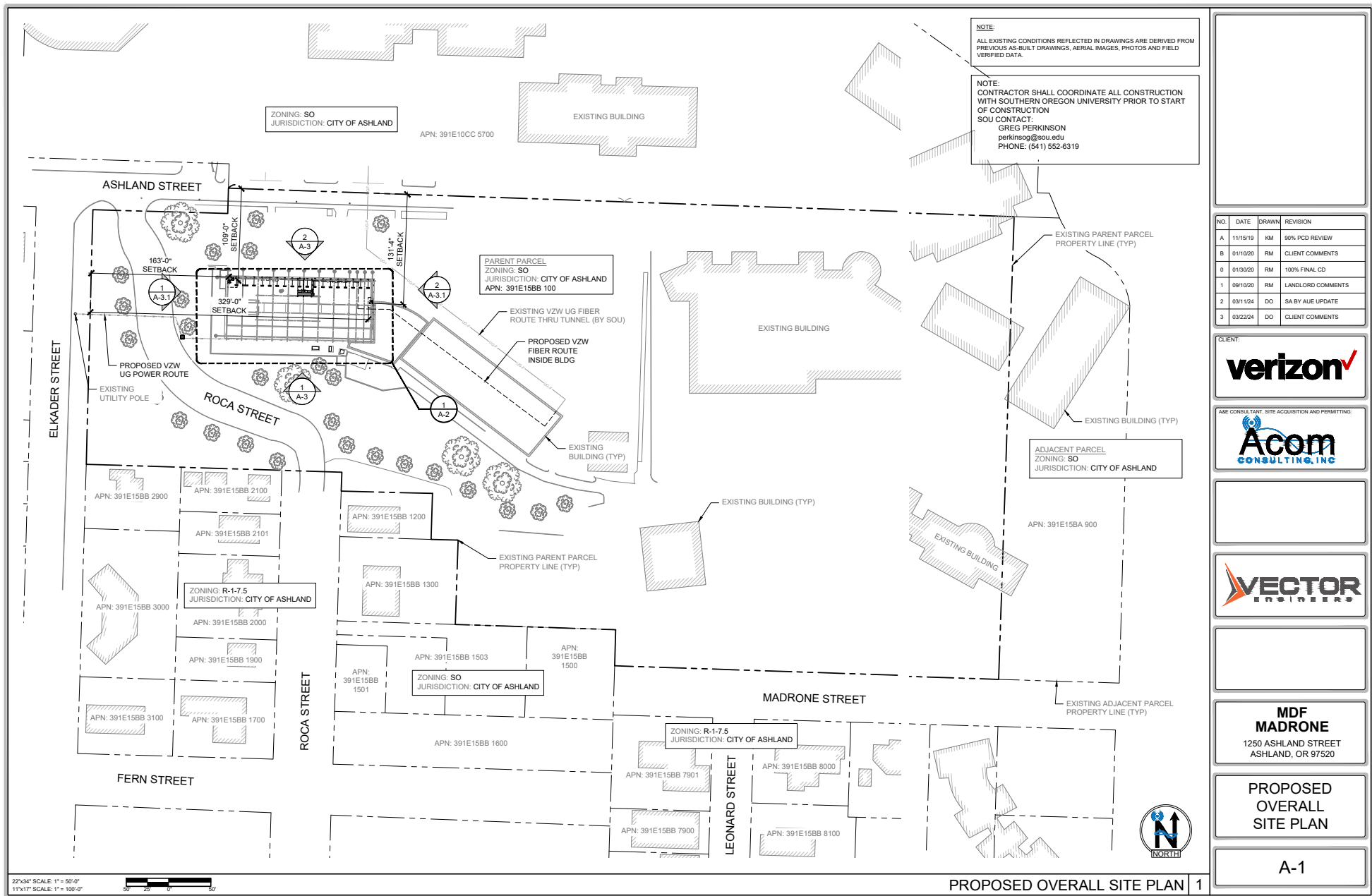


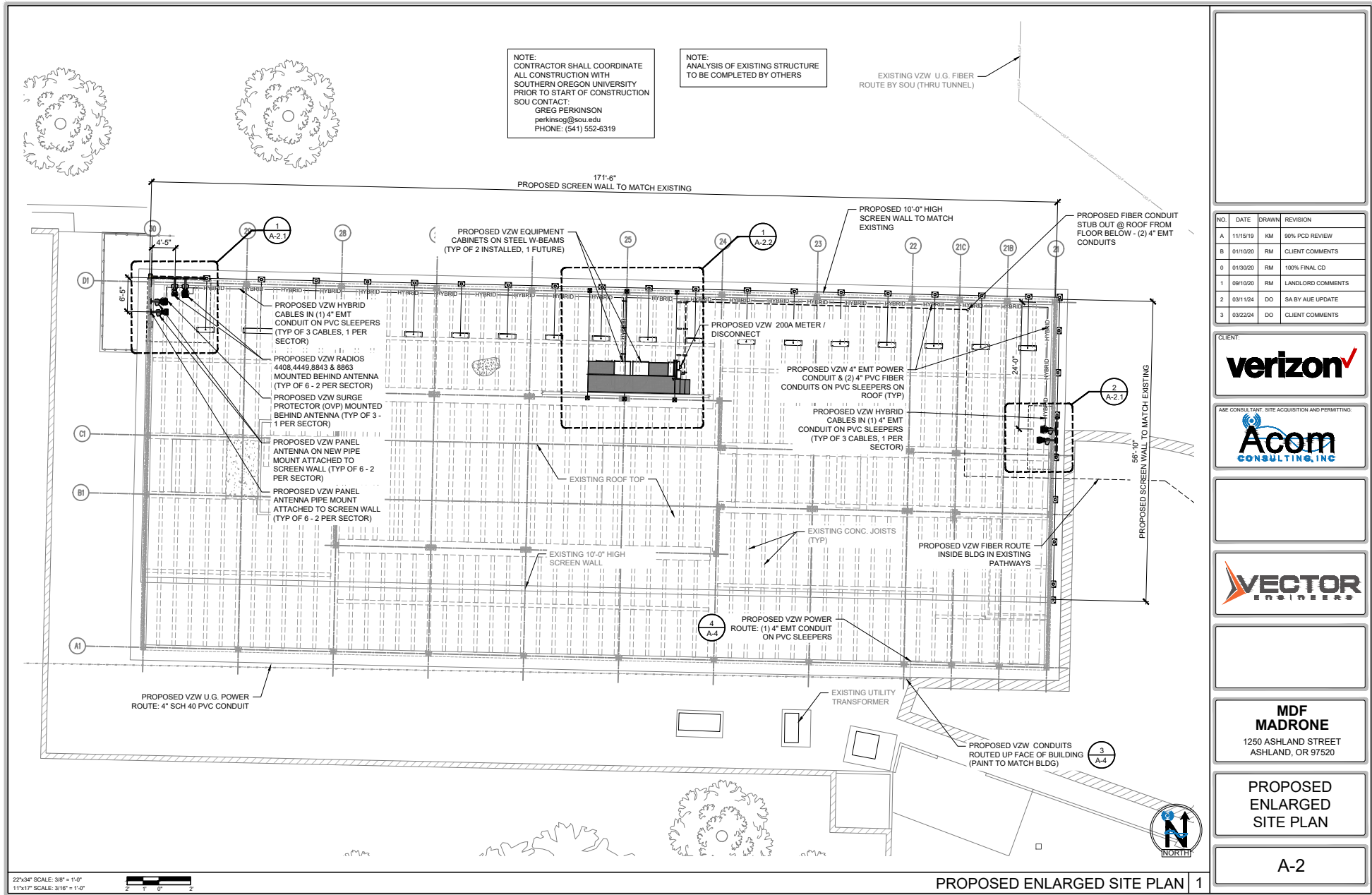
MDF
MADRONE
1250 ASHLAND STREET
ASHLAND, OR 97520

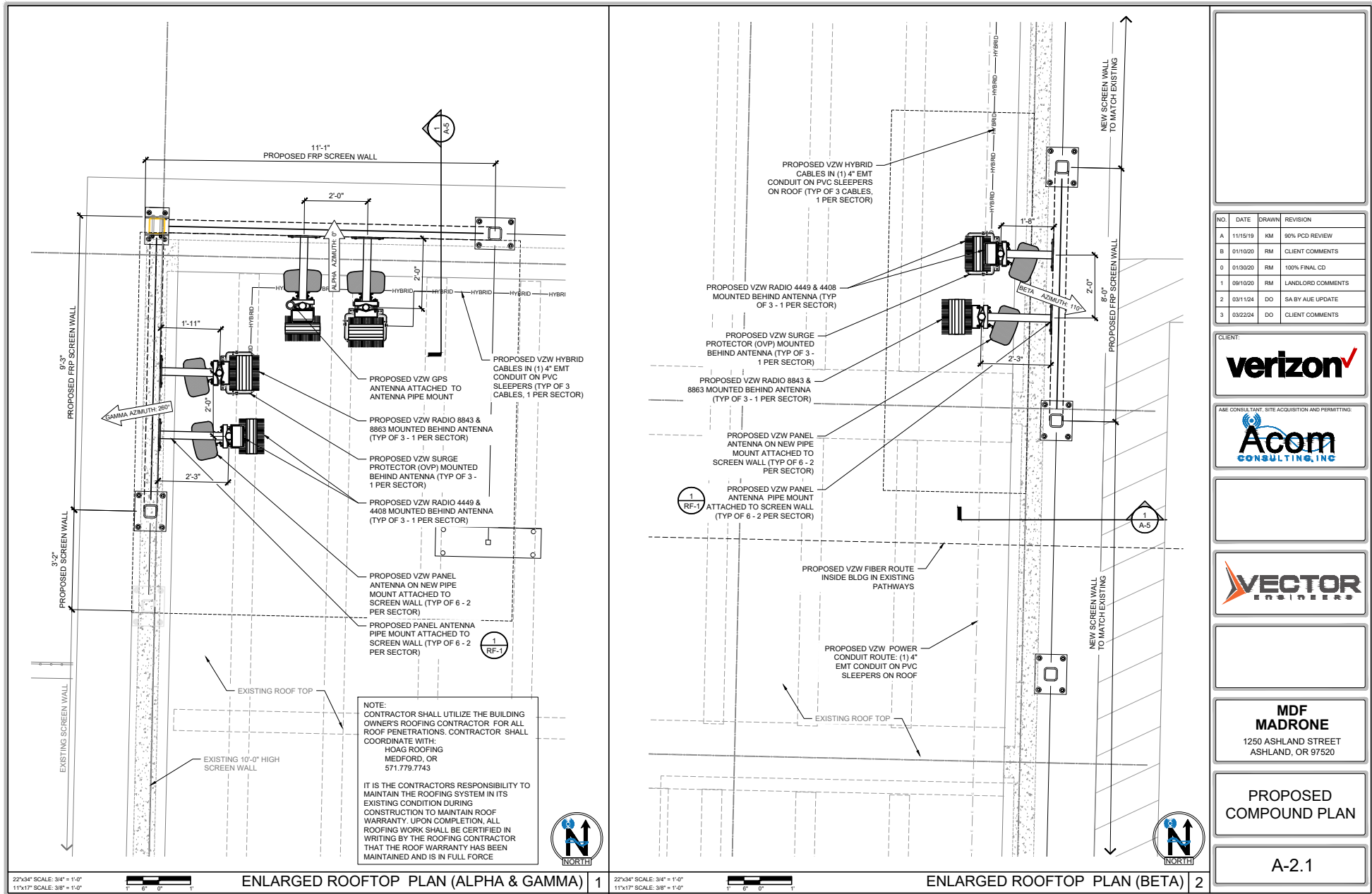
COVER SHEET

T-1

GENERAL NOTES 1. WORK SHALL COMPLY WITH ALL APPLICABLE CODES, ORDINANCES, AND REGULATIONS. ALL NECESSARY LICENSES, CERTIFICATES, ETC., REQUIRED BY AUTHORITY HAVING JURISDICTION SHALL BE PROCURED AND PAID FOR BY THE CONTRACTOR. 2. ACOM HAS NOT CONDUCTED, NOR DOES IT INTEND TO CONDUCT ANY INVESTIGATION AS TO THE PRESENCE OF HAZARDOUS MATERIAL, INCLUDING, BUT NOT LIMITED TO, ASBESTOS WITHIN THE CONFINES OF THIS PROJECT. ACOM DOES NOT ACCEPT RESPONSIBILITY FOR THE INDEMNIFICATION, THE REMOVAL, OR ANY EFFECTS FROM THE PRESENCE OF THESE MATERIALS. IF EVIDENCE OF HAZARDOUS MATERIALS IS FOUND, WORK IS TO BE SUSPENDED AND THE OWNER NOTIFIED. THE CONTRACTOR IS NOT TO PROCEED WITH FURTHER WORK UNTIL INSTRUCTED BY THE OWNER IN WRITING. 3. ALL MATERIAL FURNISHED UNDER THIS CONTRACT SHALL BE PROPOSED, UNLESS OTHERWISE NOTED. ALL WORK SHALL BE GUARANTEED AGAINST DEFECTS IN MATERIALS AND WORKMANSHIP. THE CONTRACTOR SHALL REPAIR OR REPLACE AT HIS EXPENSE ALL WORK THAT MAY DEVELOP DEFECTS IN MATERIALS OR WORKMANSHIP WITHIN SAID PERIOD OF TIME OR FOR ONE YEAR AFTER THE FINAL ACCEPTANCE OF THE ENTIRE PROJECT, WHICHEVER IS GREATER. 4. THE GENERAL CONTRACTOR AND EACH SUBCONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS AND UTILITIES AT THE JOB SITE BEFORE WORK IS STARTED. NO CLAIMS FOR EXTRA COMPENSATION FOR WORK WHICH COULD HAVE BEEN FORESEEN BY AN INSPECTION, WHETHER SHOWN ON THE CONTRACT DOCUMENTS OR NOT, WILL BE ACCEPTED OR PAID. 5. THE GENERAL CONTRACTOR AND EACH SUBCONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING DIMENSIONS AND CONDITIONS AT THE JOB SITE WHICH COULD AFFECT THE WORK UNDER THIS CONTRACT. ALL MANUFACTURERS RECOMMENDED SPECIFICATIONS, EXCEPT THOSE SPECIFICATIONS HEREIN, WHERE MOST STRINGENT SHALL BE COMPLIED WITH. 6. THE CONTRACTOR SHALL VERIFY AND COORDINATE SIZE AND LOCATION OF ALL OPENINGS FOR STRUCTURAL, MECHANICAL, ELECTRICAL, PLUMBING, CIVIL, OR ARCHITECTURAL WORK. 7. THE CONTRACTOR SHALL VERIFY THAT NO CONFLICTS EXIST BETWEEN THE LOCATIONS OF ANY AND ALL MECHANICAL, ELECTRICAL, PLUMBING, OR STRUCTURAL ELEMENTS, AND THAT ALL REQUIRED CLEARANCES FOR INSTALLATION AND MAINTENANCE ARE MET. NOTIFY THE CONSULTANT OF ANY CONFLICTS. THE CONSULTANT HAS THE RIGHT TO MAKE MINOR MODIFICATIONS IN THE DESIGN OF THE CONTRACT WITHOUT THE CONTRACTOR GETTING ADDITIONAL COMPENSATION. 8. DO NOT SCALE THE DRAWINGS. DIMENSIONS ARE EITHER TO THE FACE OF FINISHED ELEMENTS OR TO THE CENTER LINE OF ELEMENTS, UNLESS NOTED OTHERWISE. CRITICAL DIMENSIONS SHALL BE VERIFIED AND NOTIFY THE CONSULTANT OF ANY DISCREPANCIES. 9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAILY CLEAN UP OF ALL TRADES AND REMOVE ALL DEBRIS FROM THE CONSTRUCTION SITE. AT THE COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL THOROUGHLY CLEAN THE BUILDING, SITE, AND ANY OTHER SURROUNDING AREAS TO A BETTER THAN EXISTING CONDITION. 10. THE CONTRACTOR IS RESPONSIBLE FOR ADEQUATELY BRACING AND PROTECTING ALL WORK DURING CONSTRUCTION AGAINST DAMAGE, BREAKAGE, COLLAPSE, ETC. ACCORDING TO APPLICABLE CODES, STANDARDS, AND GOOD CONSTRUCTION PRACTICES. 11. THE CONTRACTOR SHALL MEET ALL OSHA REQUIREMENTS FOR ALL INSTALLATIONS. 12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES TO THE EXISTING CONSTRUCTION AND REPAIR ALL DAMAGES TO BETTER THAN PROPOSED CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY DAMAGE TO THE BUILDING SITE OR ANY ADJACENT STRUCTURES AROUND THE PROJECT. THE CONSULTANT SHALL BE SOLE AND FINAL JUDGE AS TO THE QUALITY OF THE REPAIRED CONSTRUCTION. ANY ADDITIONAL MODIFICATIONS WHICH MUST BE MADE SHALL BE MADE AT THE CONTRACTOR'S EXPENSE. 13. WHERE ONE DETAIL IS SHOWN FOR ONE CONDITION, IT SHALL APPLY FOR ALL LIKE OR SIMILAR CONDITIONS, EVEN THOUGH NOT SPECIFICALLY MARKED ON THE DRAWINGS OR REFERRED TO IN THE SPECIFICATIONS, UNLESS NOTED OTHERWISE. 14. WHERE PROPOSED PAVING, CONCRETE SIDEWALKS OR PATHS MEET EXISTING CONSTRUCTION, THE CONTRACTOR SHALL MATCH THE EXISTING PITCH, GRADE, AND ELEVATION SO THE ENTIRE STRUCTURE SHALL HAVE A SMOOTH TRANSITION. 15. THE CONTRACTOR SHALL MODIFY THE EXISTING FLOORS, WALL, CEILING, OR OTHER CONSTRUCTION AS REQUIRED TO GAIN ACCESS TO AREAS FOR ALL MECHANICAL, PLUMBING, ELECTRICAL, OR STRUCTURAL MODIFICATIONS. WHERE THE EXISTING CONSTRUCTION DOORS, PARTITIONS, CEILING, ETC., ARE TO BE REMOVED, MODIFIED, OR REARRANGED OR WHERE THE EXPOSED OR HIDDEN MECHANICAL, ELECTRICAL, SYSTEMS ARE ADDED OR MODIFIED, THE GENERAL CONTRACTOR SHALL REPAIR, PATCH AND MATCH ALL EXISTING CONSTRUCTION AND FINISHES OF ALL FLOORS WALLS AND CEILINGS. WHERE CONCRETE MASONRY CONSTRUCTION IS MODIFIED, THE CONTRACTOR SHALL TOOTH IN ALL PROPOSED CONSTRUCTION TO MATCH THE EXISTING BOND. WHERE CONCRETE CONSTRUCTION IS MODIFIED, THE CONTRACTOR SHALL VERIFY THE EXACT DETAILS TO BE USED FOR CONSTRUCTION. ALL WORK SHALL BE COVERED UNDER THE GENERAL CONTRACT. 16. VERIFY ALL EXISTING DIMENSIONS PRIOR TO PERFORMING WORK. 17. VERIFY LOCATION OF ALL BURIED UTILITIES PRIOR TO ANY EXCAVATION. 18. IN RAWLAND CONDITIONS, TOWER FOUNDATION STRUCTURAL STEEL TO BE GROUNDING PRIOR TO CONCRETE POUR. TOWER FOUNDATION STRUCTURAL STEEL TO BE CONNECTED TO PERMANENT GROUND ROD PRIOR TO TOWER ERECTION. TOWER GROUND MUST BE MAINTAINED AT ALL TIMES. 19. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR APPLYING FOR COMMERCIAL POWER IMMEDIATELY UPON AWARD OF CONTRACT. THE GENERAL CONTRACTOR IS REQUIRED TO KEEP ALL DOCUMENTATION RECEIVED FROM THE POWER COMPANY. ACKNOWLEDGING APPLICATION FOR POWER, WRITTEN AND VERBAL DISCUSSIONS WITH THE POWER COMPANY, ETC. 20. THE GENERAL CONTRACTOR SHALL OBTAIN WRITTEN CONFIRMATION OF THE EXPECTED DATE OF COMPLETION OF THE POWER CONNECTION FROM THE POWER COMPANY. 21. IF THE POWER COMPANY IS UNABLE TO PROVIDE THE POWER CONNECTION BY OWNER'S REQUIRED DATE, THE GENERAL CONTRACTOR SHALL PROVIDE AND MAINTAIN A TEMPORARY GENERATOR UNTIL THE POWER COMPANY CONNECTION IS COMPLETED. COSTS ASSOCIATED WITH THE TEMPORARY GENERATOR TO BE APPROVED BY THE OWNER. 22. IF THE GENERAL CONTRACTOR FAILS TO TAKE NECESSARY MEASURES AS DESCRIBED IN NOTES 19, 20 AND 21 ABOVE, THE GENERAL CONTRACTOR SHALL PROVIDE A TEMPORARY GENERATOR AT NO COST TO THE OWNER. 23. PLANS PART OF THIS SET ARE COMPLEMENTARY. INFORMATION IS NOT LIMITED TO ONE PLAN. DRAWINGS AND SPECIFICATIONS ARE INSTRUMENTS OF SERVICE AND SHALL REMAIN THE PROPERTY OF THE ARCHITECT. WHETHER THE PROJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT, THEY ARE NOT TO BE USED BY THE OWNER ON OTHER PROJECTS OR EXTENSION TO THIS PROJECT EXCEPT BY AGREEMENT IN WRITING AND WITH APPROPRIATE COMPENSATION TO THE ARCHITECT. THESE PLANS WERE PREPARED TO BE SUBMITTED TO GOVERNMENTAL BUILDING AUTHORITIES FOR REVIEW FOR COMPLIANCE WITH APPLICABLE CODES AND IT IS THE SOLE RESPONSIBILITY OF THE OWNER AND/OR CONTRACTOR TO BUILD ACCORDING TO APPLICABLE BUILDING CODES. 24. IF CONTRACTOR OR SUB-CONTRACTOR FIND IT NECESSARY TO DEVIATE FROM ORIGINAL APPROVED PLANS, THEN IT IS THE CONTRACTOR'S AND THE SUB-CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE ARCHITECT WITH 4 COPIES OF THE PROPOSED CHANGES FOR HIS APPROVAL BEFORE PROCEEDING WITH THE WORK. IN ADDITION THE CONTRACTOR AND SUB-CONTRACTORS SHALL BE RESPONSIBLE FOR PROCURING ALL NECESSARY APPROVALS FROM THE BUILDING AUTHORITIES FOR THE PROPOSED CHANGES BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR AND SUB-CONTRACTORS SHALL BE RESPONSIBLE FOR PROCURING ALL NECESSARY INSPECTIONS AND APPROVALS FROM BUILDING AUTHORITIES DURING THE EXECUTION OF THE WORK. 25. IN EVERY EVENT, THESE CONSTRUCTION DOCUMENTS AND SPECIFICATIONS SHALL BE INTERPRETED TO BE A MINIMUM ACCEPTABLE MEANS OF CONSTRUCTION BUT THIS SHALL NOT RELIEVE THE CONTRACTOR, SUB-CONTRACTOR, AND/OR SUPPLIER/MANUFACTURER FROM PROVIDING A COMPLETE AND CORRECT JOB WHEN ADDITIONAL ITEMS ARE REQUIRED TO THE MINIMUM SPECIFICATION. IF ANY ITEMS NEED TO EXCEED THESE MINIMUM SPECIFICATIONS TO PROVIDE A COMPLETE, ADEQUATE AND SAFE WORKING CONDITION, THEN IT SHALL BE DEEMED AND UNDERSTOOD TO BE INCLUDED IN THE DRAWINGS. FOR EXAMPLE, IF AN ITEM AND/OR PIECE OF EQUIPMENT REQUIRES A LARGER WIRE SIZE (I.E. ELECTRICAL WIRE), STRONGER OR LARGER PIPING, INCREASED QUANTITY (I.E. STRUCTURAL ELEMENTS), REDUCED SPACING, AND/OR INCREASED LENGTH (I.E. BOLT LENGTHS, BAR LENGTHS) THEN IT SHALL BE DEEMED AND UNDERSTOOD TO BE INCLUDED IN THE BID/PROPOSAL. THESE DOCUMENTS ARE MEANT AS A GUIDE AND ALL ITEMS REASONABLY INFERRED SHALL BE DEEMED TO BE INCLUDED. 26. THESE CONTRACT DOCUMENTS AND SPECIFICATIONS SHALL NOT BE CONSTRUED TO CREATE A CONTRACTUAL RELATIONSHIP OF ANY KIND BETWEEN THE ARCHITECT AND THE CONTRACTOR.		LINE/ANTENNA NOTES 1. ALL THREADED STRUCTURAL FASTENERS FOR ANTENNA SUPPORT ASSEMBLES SHALL CONFORM TO ASTM A307 OR ASTM A36. ALL STRUCTURAL FASTENERS FOR STRUCTURAL STEEL FRAMING SHALL CONFORM TO ASTM A325. FASTENERS SHALL BE 5/8" MIN. DIA. BEARING TYPE CONNECTIONS WITH THREADS EXCLUDED FROM THE PLANE. ALL EXPOSED FASTENERS, NUTS, AND WASHERS SHALL BE GALVANIZED OTHERWISE NOTED. CONCRETE EXPANSION ANCHORS SHALL BE HILTI KWIK BOLTS UNLESS OTHERWISE NOTED. ALL ANCHORS INTO CONCRETE SHALL BE STAINLESS STEEL. 2. NORTH ARROW SHOWN ON PLANS REFERS TO TRUE NORTH. CONTRACTOR SHALL VERIFY MAGNETIC NORTH AND NOTIFY CONSULTANT OF ANY DISCREPANCY BEFORE STARTING CONSTRUCTION. 3. PROVIDE LOCK WASHERS FOR ALL MECHANICAL CONNECTIONS FOR GROUND CONDUCTORS. USE STAINLESS STEEL HARDWARE THROUGHOUT. 4. THOROUGHLY REMOVE ALL PAINT AND CLEAN ALL DIRT FROM SURFACES REQUIRING GROUND CONNECTIONS. 5. MAKE ALL GROUND CONNECTIONS AS SHORT AND DIRECT AS POSSIBLE. AVOID SHARP BENDS. ALL BENDS TO BE A MIN. OF 8" RADIUS. 6. FOR GROUNDING TO BUILDING FRAME AND HATCH PLATE GROUND BARS. USE A TWO-BOLT HOLE NEMA DRILLED CONNECTOR SUCH AS T&B 32007 OR APPROVED EQUAL. 7. FOR ALL EXTERNAL GROUND CONNECTIONS, CLAMPS AND CADWELDS, APPLY A LIBERAL PROTECTIVE COATING OR AN ANTI-OXIDE COMPOUND SUCH AS "NO-OXIDE A" BY DEARBORN CHEMICAL COMPANY. 8. REPAIR ALL GALVANIZED SURFACES THAT HAVE BEEN DAMAGED BY THERMO-WELDING. USE ERICO T-319 GALVANIZING BAR/COLD GALVANIZING PAINT. 9. SEAL ALL CONDUIT PENETRATIONS INTO MODULAR BUILDING WITH A SILICONE SEALANT AND ALL CONDUIT OPENINGS. 10. ANTENNAS AND COAX TO BE PROVIDED BY VERIZON WIRELESS, CONTRACTOR TO COORDINATE DELIVERY.	<table><tr><th>NO.</th><th>DATE</th><th>DRAWN</th><th>REVISION</th></tr><tr><td>A</td><td>11/15/19</td><td>KM</td><td>90% PCD REVIEW</td></tr><tr><td>B</td><td>01/10/20</td><td>RM</td><td>CLIENT COMMENTS</td></tr><tr><td>0</td><td>01/03/20</td><td>RM</td><td>100% FINAL CD</td></tr><tr><td>1</td><td>09/10/20</td><td>RM</td><td>LANDLORD COMMENTS</td></tr><tr><td>2</td><td>03/11/24</td><td>DO</td><td>SA BY AUE UPDATE</td></tr><tr><td>3</td><td>03/22/24</td><td>DO</td><td>CLIENT COMMENTS</td></tr></table> CLIENT: verizon ASE CONSULTANT, SITE ACQUISITION AND PERMITTING Acom CONSULTING, INC VECTOR ENGINEERS MDF MADRONE 1250 ASHLAND STREET ASHLAND, OR 97520 GENERAL NOTES AND SYMBOLS T-2	NO.	DATE	DRAWN	REVISION	A	11/15/19	KM	90% PCD REVIEW	B	01/10/20	RM	CLIENT COMMENTS	0	01/03/20	RM	100% FINAL CD	1	09/10/20	RM	LANDLORD COMMENTS	2	03/11/24	DO	SA BY AUE UPDATE	3	03/22/24	DO	CLIENT COMMENTS
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LEGEND ABBREVIATIONS: (E) EXISTING (P) PROPOSED BUILDING/WALL/DETAIL SECTION: DETAIL NUMBER X X-X SHEET NUMBER WHERE DETAILED REFERENCE: DETAIL NUMBER X X-X REFERENCE DRAWING LARGE SCALE DETAIL: DETAIL NUMBER X X-X REFERENCE DRAWING ELEVATION REFERENCE: DETAIL NUMBER X X-X REFERENCE DRAWING		IMPORTANT NOTICE THE EXISTING CONDITIONS REPRESENTED HEREIN ARE BASED ON VISUAL OBSERVATIONS AND INFORMATION PROVIDED BY OTHERS. ACOM CONSULTING CANNOT GUARANTEE THE CORRECTNESS NOR COMPLETENESS OF THE EXISTING CONDITIONS SHOWN AND ASSUMES NO RESPONSIBILITY THEREOF. CONTRACTOR AND HIS SUB-CONTRACTORS SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS AS REQUIRED FOR PROPER EXECUTION OF PROJECT. REPORT ANY CONFLICTS OR DISCREPANCIES TO THE CONSULTANT PRIOR TO CONSTRUCTION. NOTE: CONTRACTOR SHALL COORDINATE ANY SCHEDULED WORK WITH SOUTHERN OREGON UNIVERSITY PRIOR TO START OF CONSTRUCTION SOU CONTACT: GREG PERKINSON perkinsog@sou.edu PHONE: (541) 552-6319																													







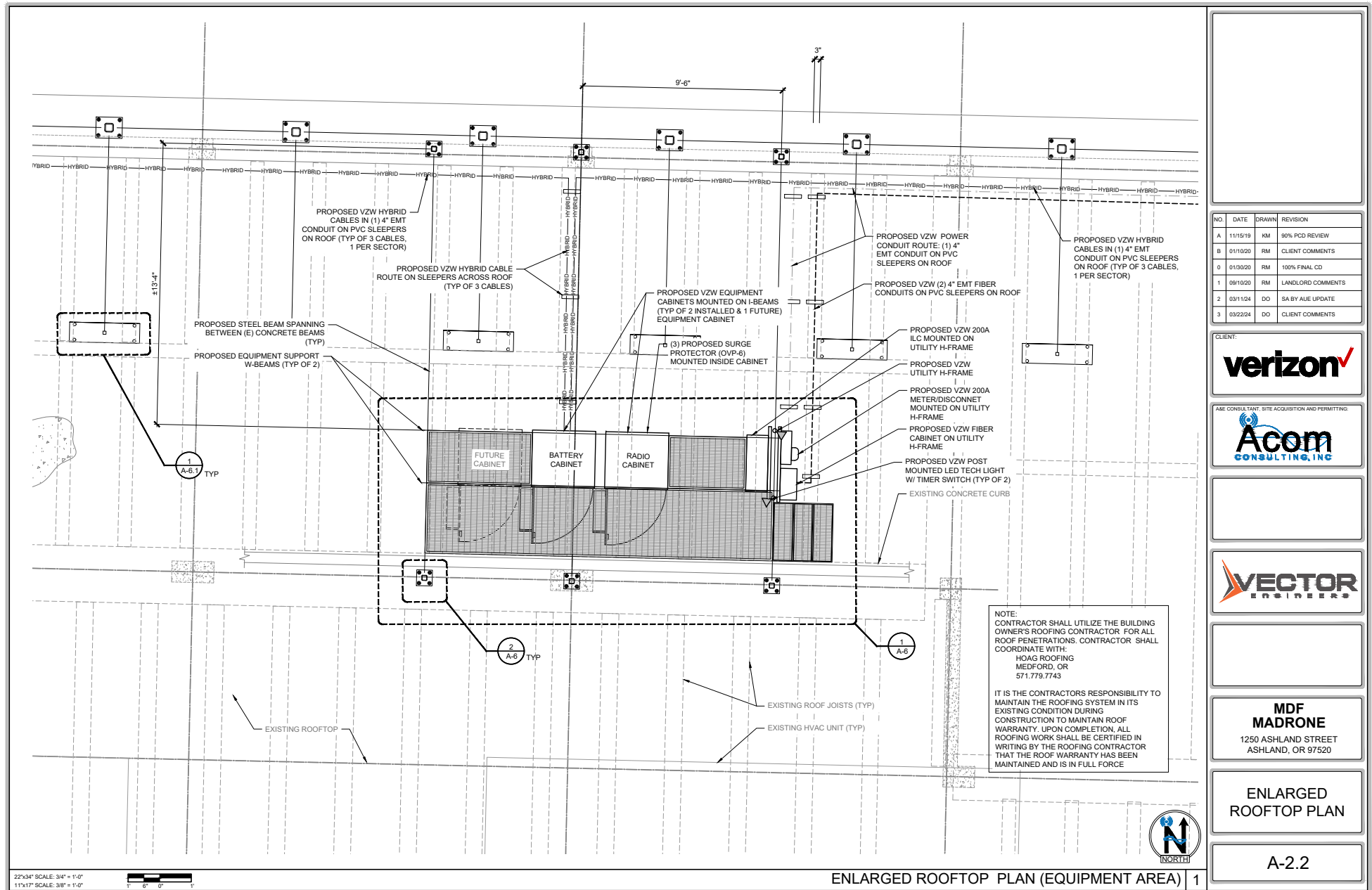
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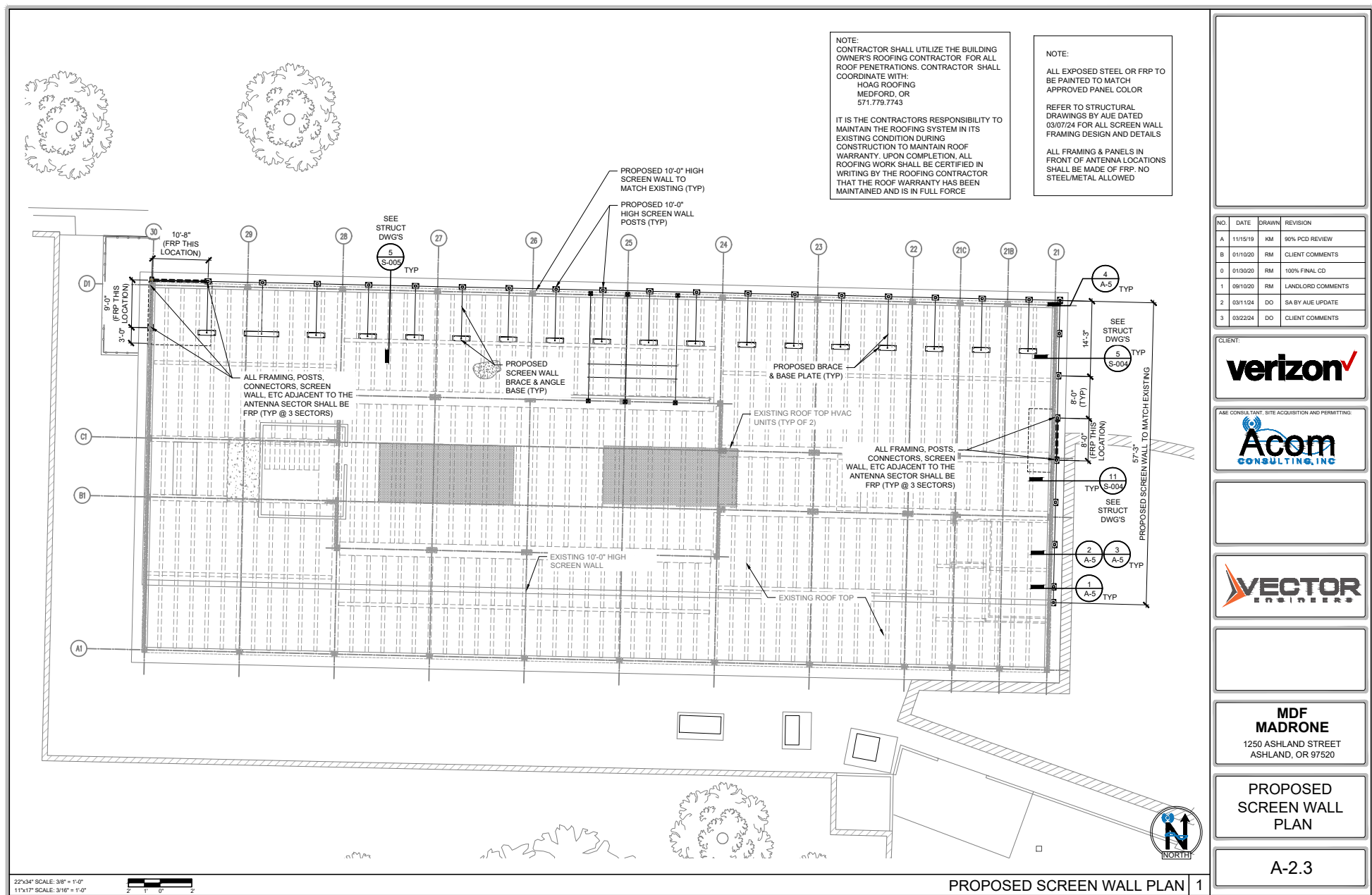


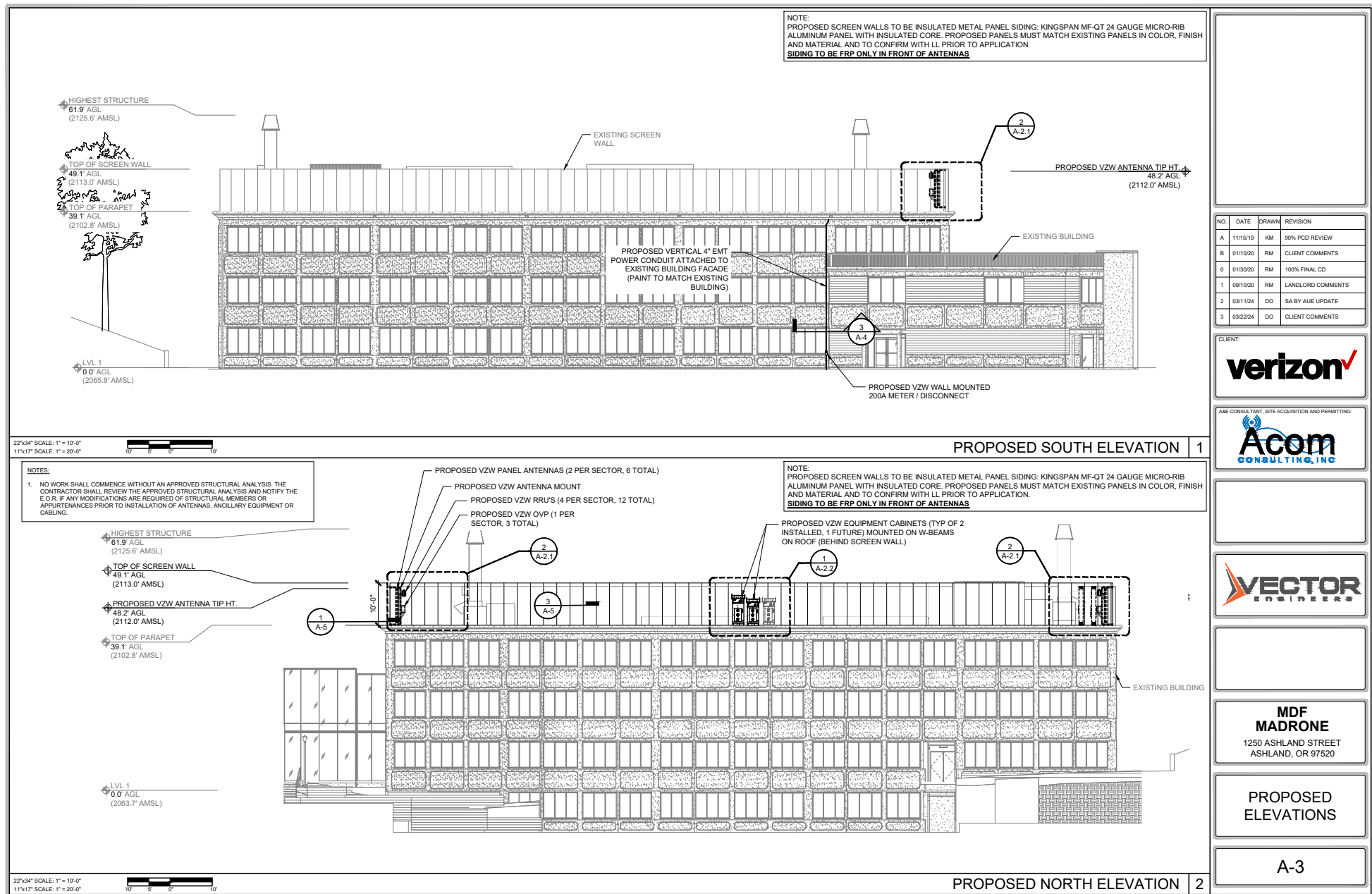
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PROPOSED COMPOUND PLAN

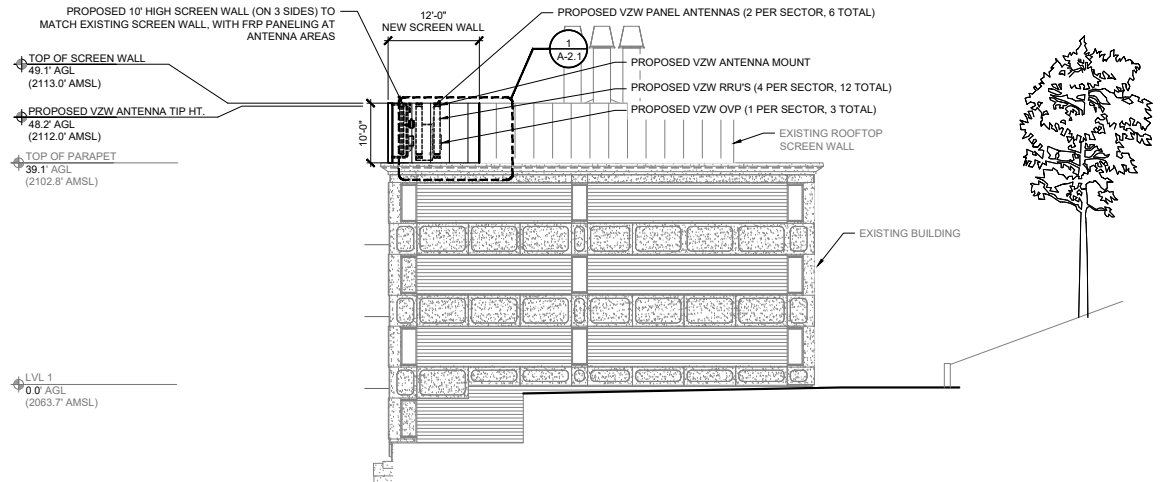
A-2.1







NOTE:
PROPOSED SCREEN WALLS TO BE INSULATED METAL PANEL SIDING: KINGSPAN MF-QT 24 GAUGE MICRO-RIB ALUMINUM PANEL WITH INSULATED CORE. PROPOSED PANELS MUST MATCH EXISTING PANELS IN COLOR, FINISH AND MATERIAL AND TO CONFIRM WITH LL PRIOR TO APPLICATION.
SIDING TO BE FRP ONLY IN FRONT OF ANTENNAS

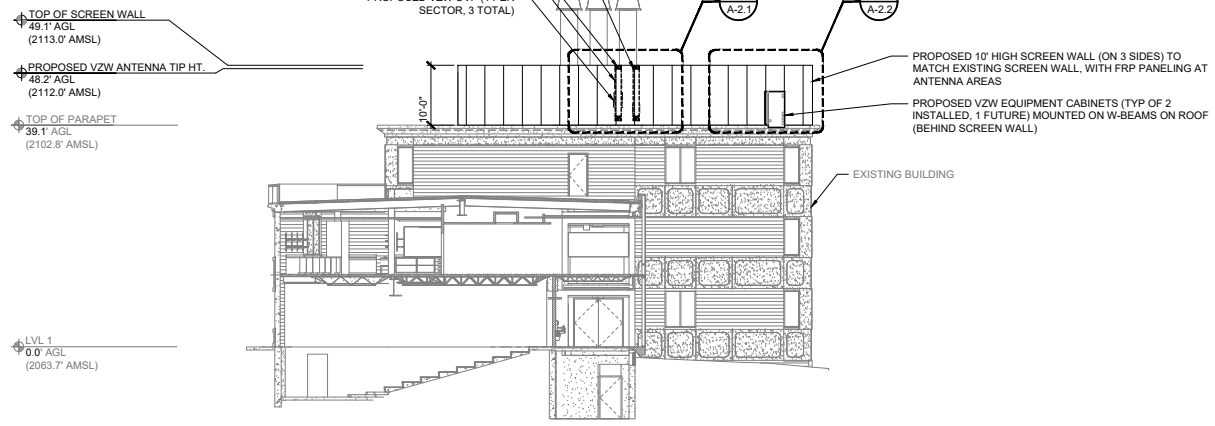


22'x34' SCALE: 1" = 10'-0"
11'x17' SCALE: 1" = 20'-0"



PROPOSED WEST ELEVATION | 1

NOTES:
1. NO WORK SHALL COMMENCE WITHOUT AN APPROVED STRUCTURAL ANALYSIS. THE CONTRACTOR SHALL REVIEW THE APPROVED STRUCTURAL ANALYSIS AND NOTIFY THE E.O.R. IF ANY MODIFICATIONS ARE REQUIRED OF STRUCTURAL MEMBERS OR APPURTENANCES PRIOR TO INSTALLATION OF ANTENNAS, ANCILLARY EQUIPMENT OR CABLING.



NOTE:
PROPOSED SCREEN WALLS TO BE INSULATED METAL PANEL SIDING: KINGSPAN MF-QT 24 GAUGE MICRO-RIB ALUMINUM PANEL WITH INSULATED CORE. PROPOSED PANELS MUST MATCH EXISTING PANELS IN COLOR, FINISH AND MATERIAL AND TO CONFIRM WITH LL PRIOR TO APPLICATION.
SIDING TO BE FRP ONLY IN FRONT OF ANTENNAS

22'x34' SCALE: 1" = 10'-0"
11'x17' SCALE: 1" = 20'-0"



PROPOSED EAST ELEVATION | 2

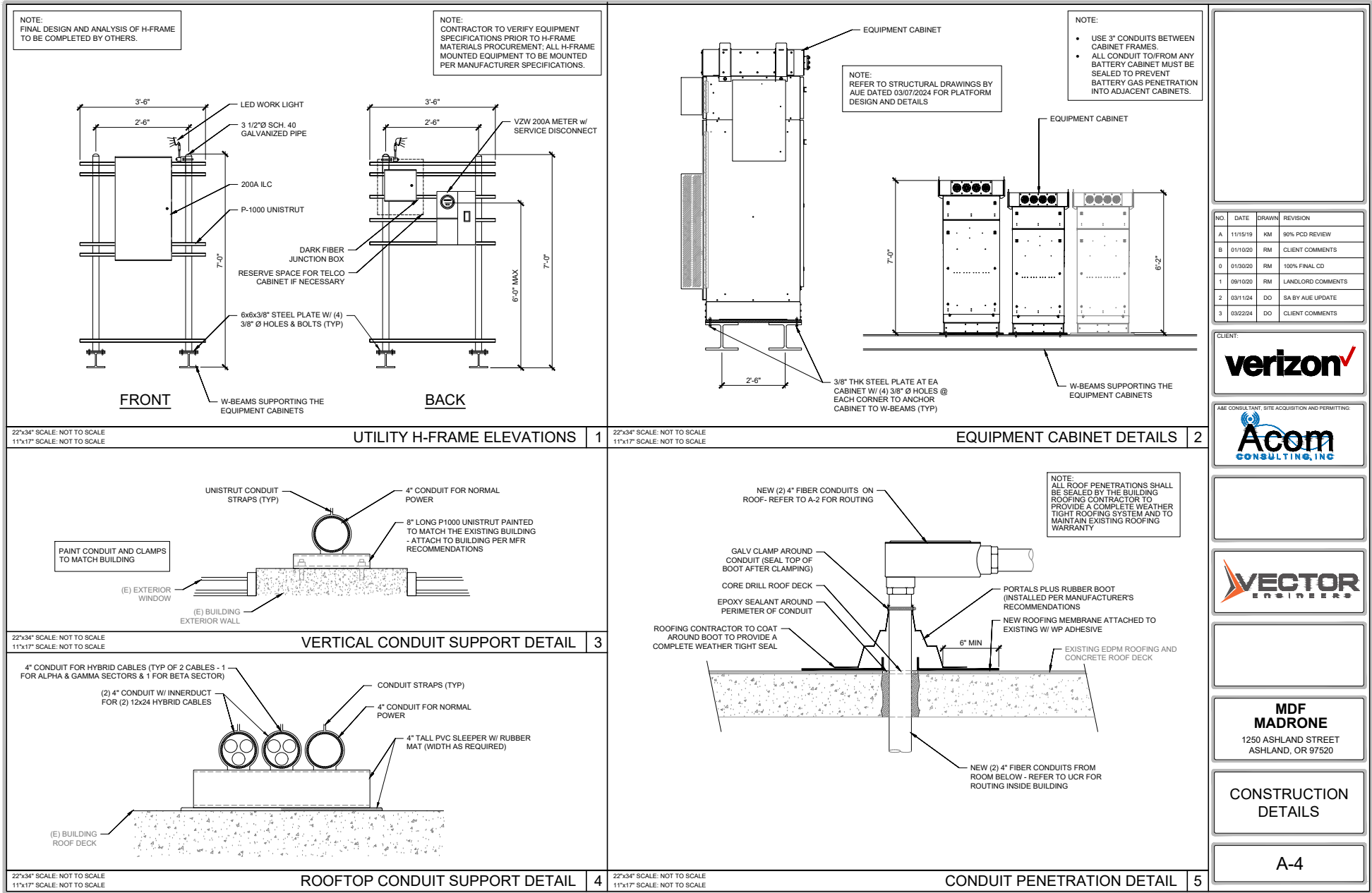
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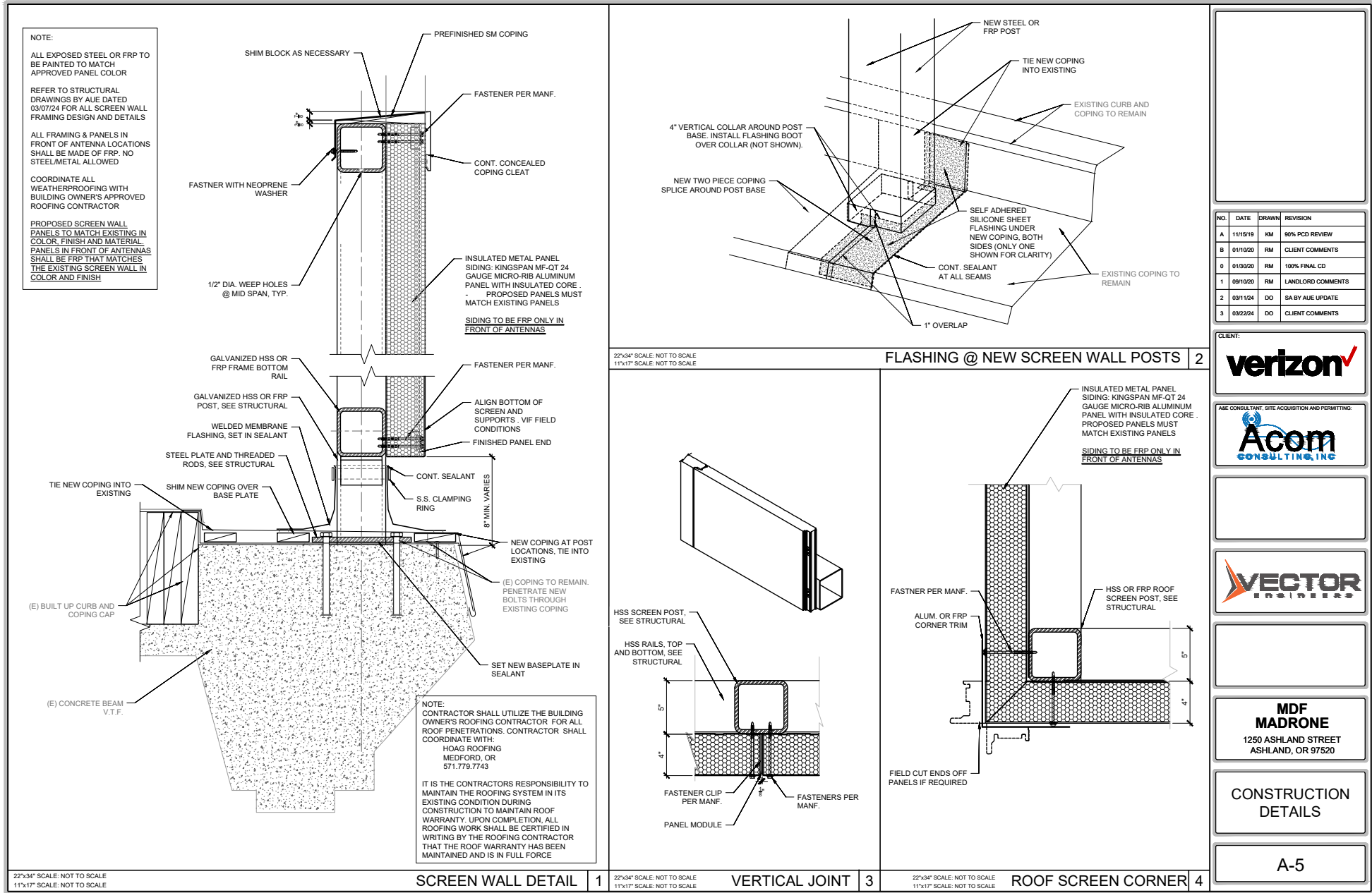


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PROPOSED ELEVATIONS

A-3.1





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3	03/22/24	DO	CLIENT COMMENTS

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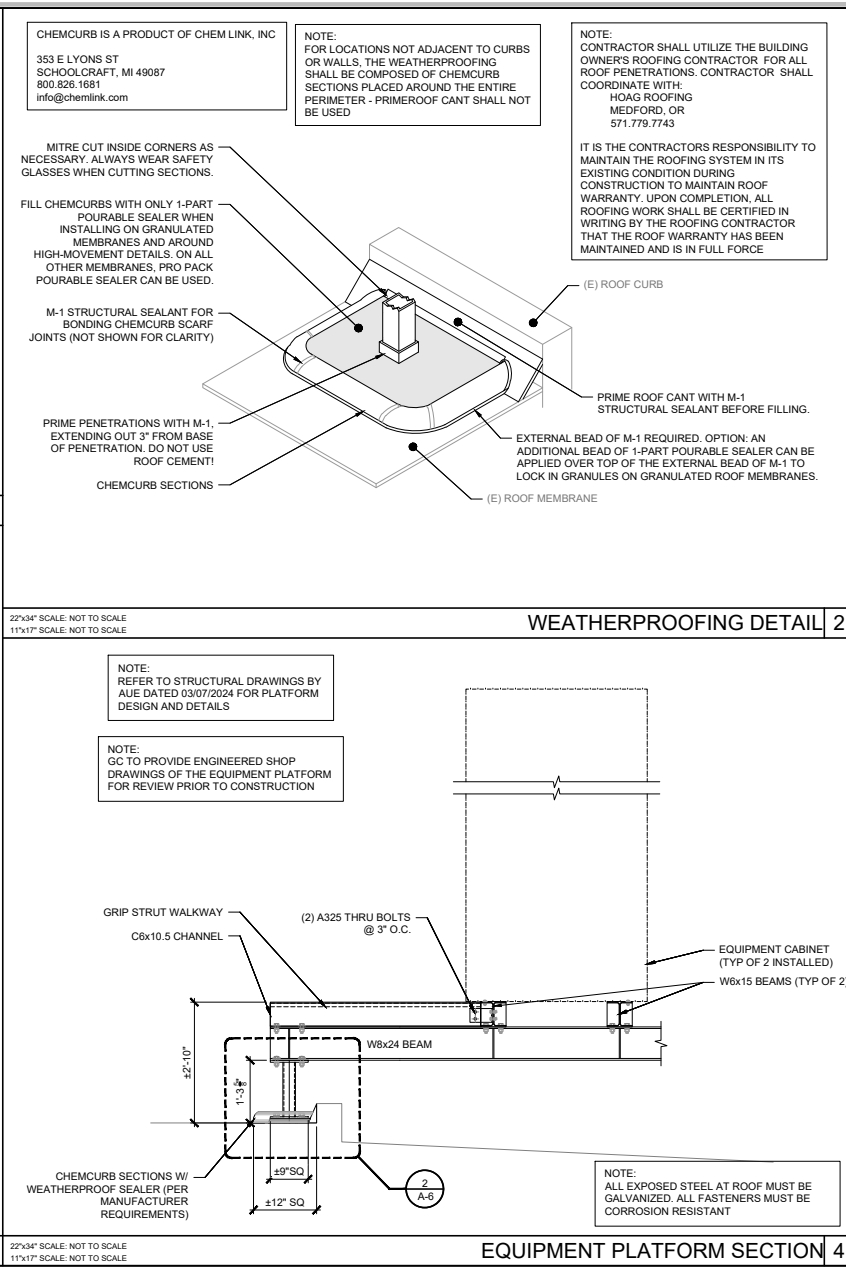
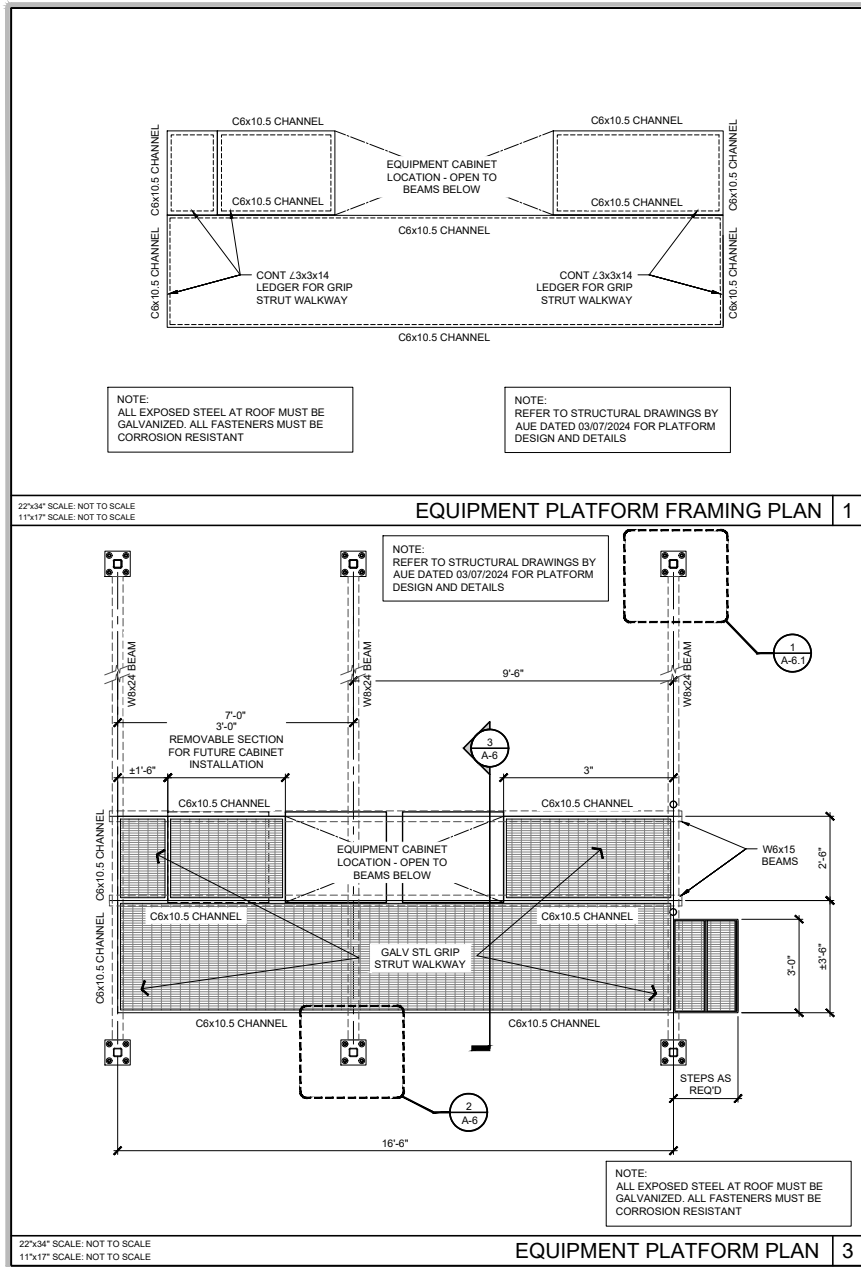
AUE CONSULTANT, SITE ACQUISITION AND PERMITTING
Acom
CONSULTING, INC.

VECTOR
INSIDERS

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CONSTRUCTION
DETAILS

A-5



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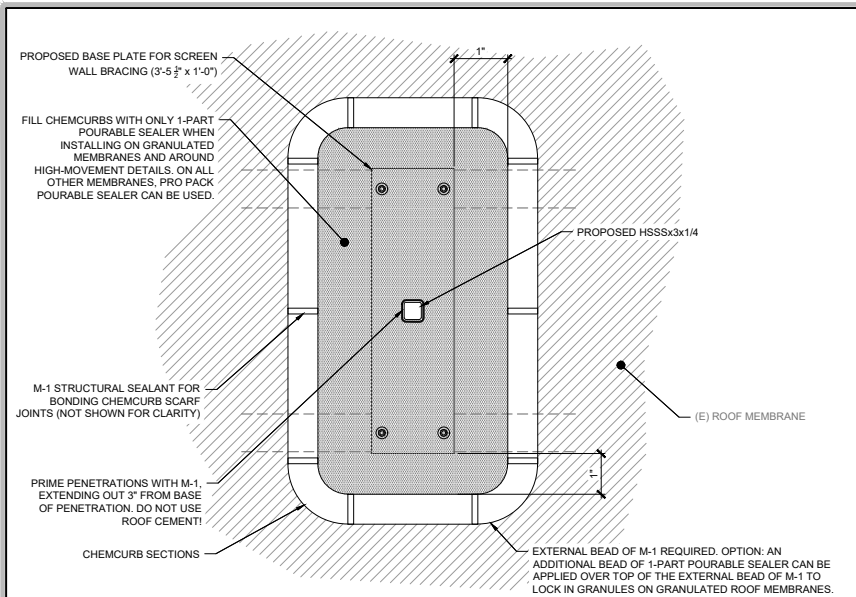
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CONSULTING, INC.

VECTOR
INSIDERS

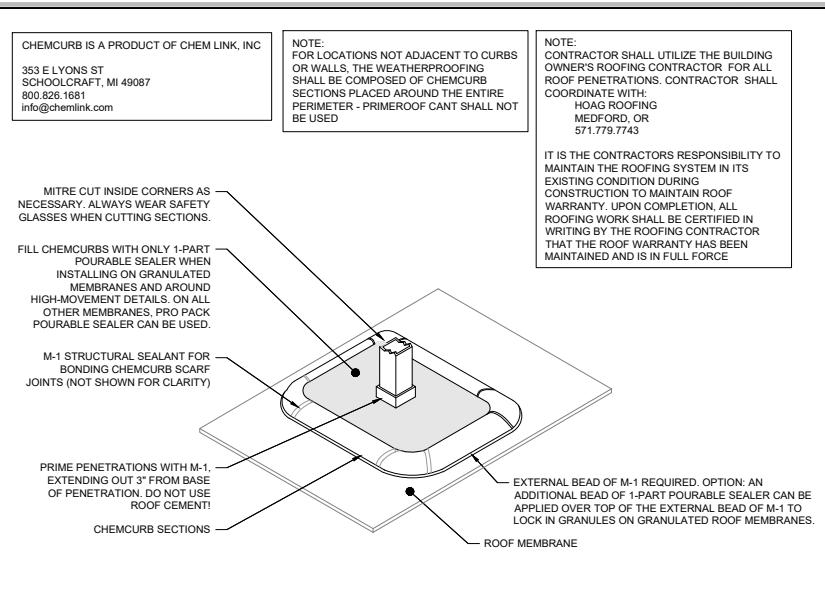
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PLATFORM DETAILS

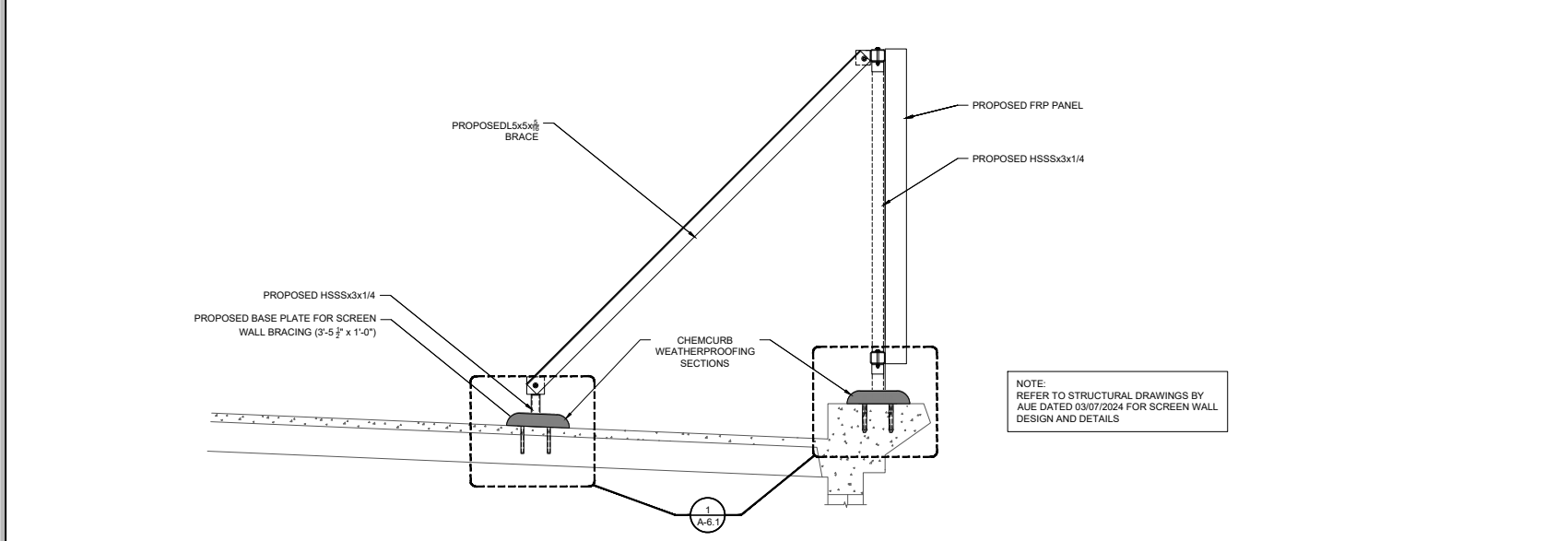
A-6



22'x34" SCALE: NOT TO SCALE
11'x17" SCALE: NOT TO SCALE
WEATHERPROOFING DETAIL (PLAN VIEW) 1



22'x34" SCALE: NOT TO SCALE
11'x17" SCALE: NOT TO SCALE
WEATHERPROOFING DETAIL (ISOMETRIC VIEW) 2



22'x34" SCALE: NOT TO SCALE
11'x17" SCALE: NOT TO SCALE
SCREEN WALL SECTION 3

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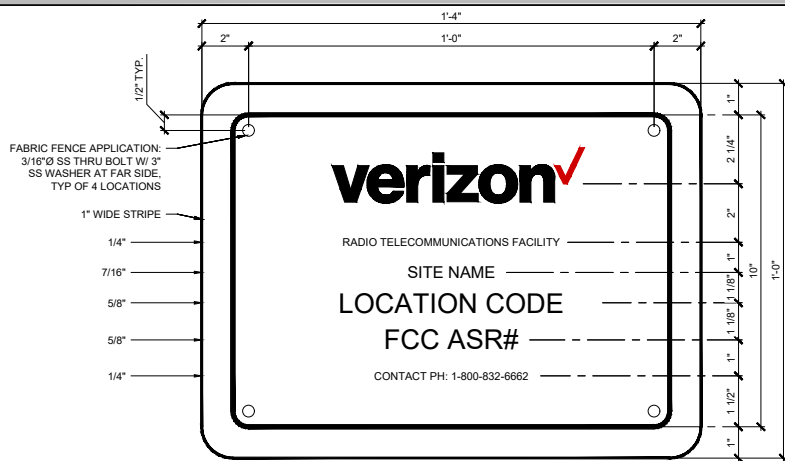
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**SCREEN WALL
DETAILS**

A-6.1



VERIZON SIGNAGE DETAIL

NOT TO SCALE



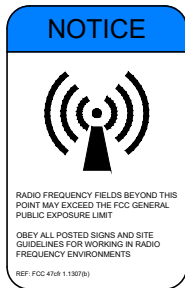
- 3" HIGH BLACK LETTERING WITH 1/2" MIN. STROKE
- WHITE ALUMINUM SIGN PER JURISDICTIONAL & VERIZON WIRELESS REQUIREMENTS

FLAMMABLE LIQUIDS SIGN
NOT TO SCALE



- 3" HIGH BLACK LETTERING WITH 1/2" MIN. STROKE
- WHITE ALUMINUM SIGN PER JURISDICTIONAL & VERIZON WIRELESS REQUIREMENTS

NO SMOKING SIGN
NOT TO SCALE



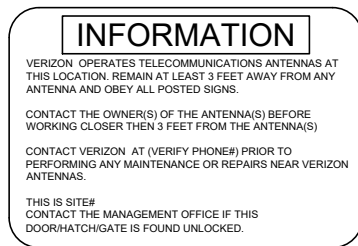
RF NOTICE SIGN
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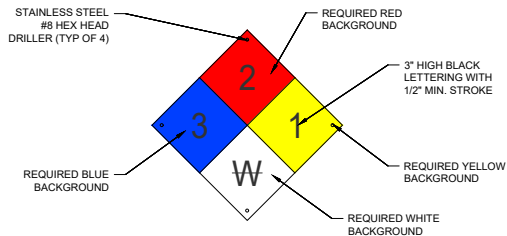
RF CAUTION SIGN
NOT TO SCALE



RF WARNING SIGN
NOT TO SCALE



INFORMATION SIGN
NOT TO SCALE



NFPA 704 PLACARD
NOT TO SCALE

SIGNAGE NOTES:

1. SIGNS & PLACEMENT
 - A. LOW LEVEL (BLUE) WARNING SIGNS - PLACE AT SITE ENTRY/ACCESS POINTS ONLY:

ROOF TOPS: PLACE SIGNS ON THE INSIDE OF ROOF HATCH; PLACE ON ACCESS DOOR UNLESS DOOR IS USED BY GENERAL PUBLIC OR BUILDING TENANTS REGULARLY FOR ACCESS - IN THESE CASES CONSIDER CONSTRUCTION MANAGER OR QC SUPERVISOR.

WATER TANKS: PLACE SIGNS ON COMPOUND GATE.

VERTICAL - OWNED SITES: PLACE ONE SIGN AT SITE GATE.
 - B. HIGH LEVEL (RED) CAUTION SIGNS - PLACE AT ALL ANTENNA SECTORS WHERE ACCESS BY THE GENERAL PUBLIC TO THE ANTENNAS IS POSSIBLE.

ALL SIGNS WILL BE SECURED WITH EITHER STAINLESS STEEL ZIP TIES OR STAINLESS TECH SCREWS.

2. CC PARTICIPATION IN SIGN LOCATION
- CM WILL MEET WITH ALL CC'S TO OUTLINE CRITERIA FOR SIGN PLACEMENT; EMPHASIS WILL BE ON 'GRAY AREA' SITES, WHERE SIGN PLACEMENT IS PARTICULARLY CHALLENGING - WE WILL GIVE CC'S AS MUCH GUIDANCE ON SPECIFIC SITUATIONS AS WE CAN FORESEE, BUT CC'S WILL BE ENCOURAGED TO PARTNER CM OR QC IN DECIDING PLACEMENT OF DIFFICULT SITES. A JOINT SITE VISIT MAY BE REQUIRED TO FULFILL REQUIREMENTS.

CC WILL CALL OUT SIGN LOCATION(S) AT THE A&E WALL
FOR EACH SITE AS THOSE OCCUR.

ON SITES WITH EXISTING A&E BUT NOT YET CONSTRUCTED, CC WILL BE ASKED TO PROVIDE (WITHIN A REASONABLE TIME FRAME TBD) A DETAIL FOR SIGN PLACEMENT THAT WILL BE SLIP-SHEETED INTO EXISTING SETS.

3. SIGN DISBURSEMENT FROM WAREHOUSE
- SIGNS WILL BE IN STACK AT KENT WAREHOUSE TO BE DISBURSED AS PART OF THE GC BOM AS CALLED OUT IN A&E DRAWINGS FOR EACH SITE
4. SIGN DESIGN STANDARDS

INSTALL PER MANUFACTURER SPECIFICATIONS, FCC AND
VERIZON WIRELESS GUIDELINES.

FOR VERIZON LOGO SEE VERIZON DESIGN SPECIFICATIONS (PROVIDED BY VERIZON).

ALL TEXT FONT IS ARIAL UNO.

CONTRACTOR TO PROCURE FCC NO. FROM COMPLIANCE
COORDINATOR PH: (425) 895-7000.

TEXT FOR SIGNAGE SHALL INDICATE CORRECT SITE NAME AND NUMBER AS PER VERIZON CONSTRUCTION MANAGER RECOMMENDATIONS.

CABINET / SHELTER MOUNTING APPLICATION REQUIRES ANOTHER PLATE APPLIED TO THE FACE OF THE CABINET WITH WATER PROOF POLYURETHANE ADHESIVE.

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3	03/22/24	DO	CLIENT COMMENTS

CLIENT:



A&E CONSULTANT, SITE ACQUISITION AND PERMITTING:



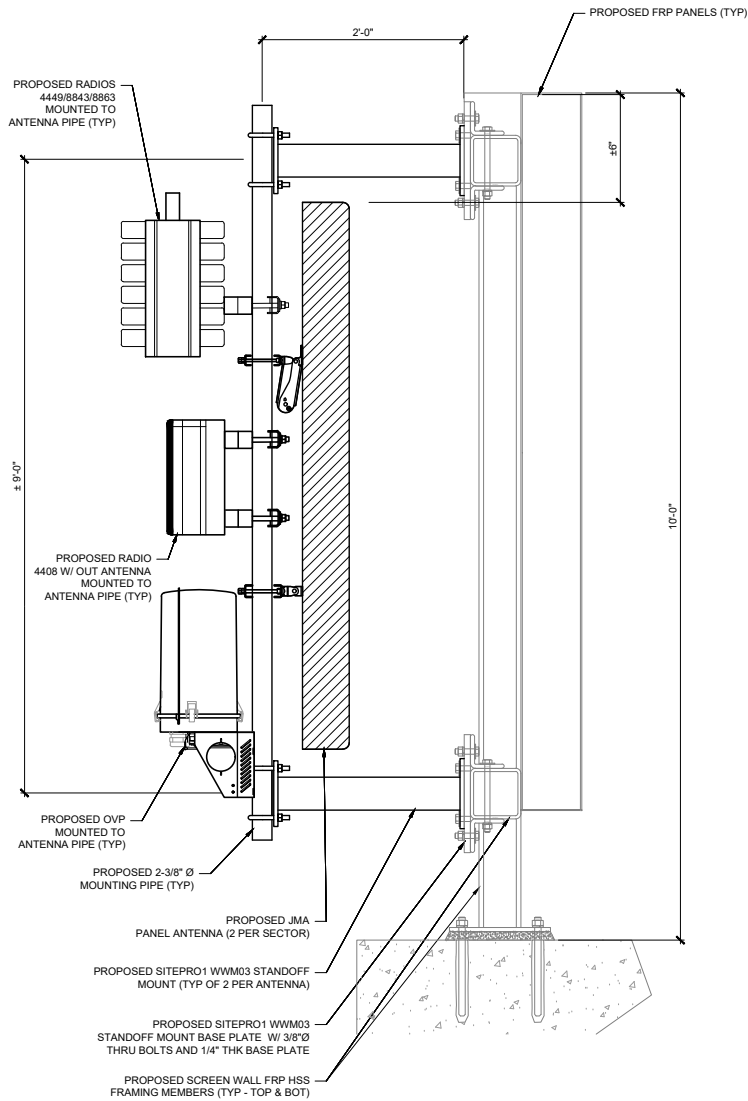
**MDF
MADRONE**
1250 ASHLAND STREET
ASHLAND, OR 97520

SIGNAGE INFORMATION

A-7

NOTES:

1. REFER TO STRUCTURAL ANALYSIS AND DETAILS COMPLETED BY AJE DATED 03/07/24 FOR ALL ANTENNA MOUNTING TO SCREEN WALL DETAILS

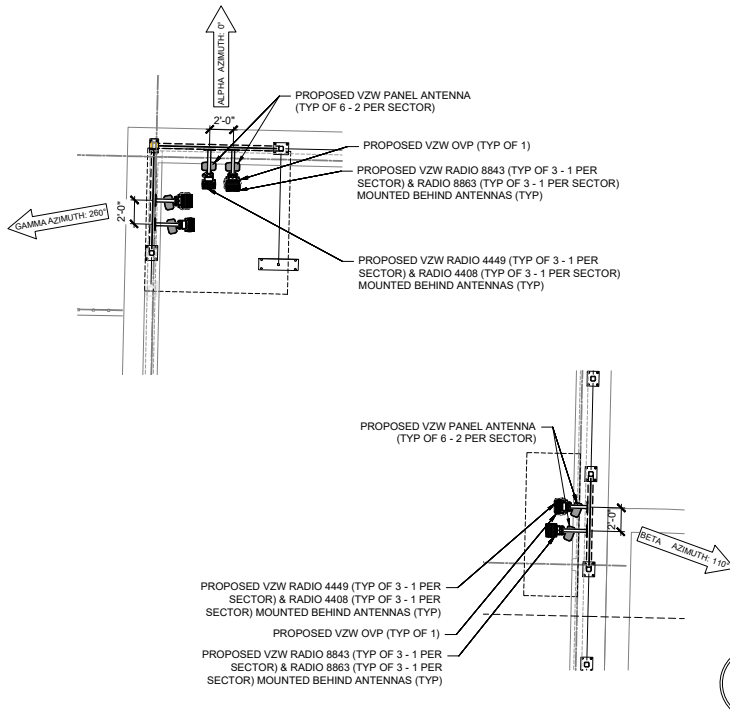


ANTENNA MOUNT DETAILS 1

22"x34" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE

PROPOSED ANTENNA AND ANCILLARY EQUIPMENT SCHEDULE

ALPHA SECTOR	AZIMUTH	TIP HEIGHT	QUANTITY	VENDOR	MODEL	MECH TILT	ELEC TILT	NUMBER OF FEEDERS	FEEDER TYPE	FEEDER LENGTH
AWS/CBRS	ADD	0"	48.2'	1	JMA	MX10FTT865-B02	-	-	-	-
700/1900L-SUB6	ADD	0"	48.2'	1	JMA	MX14FTT86501	-	-	-	-
CBRS	ADD	-	-	1	ERICSSON	RADIO 4408 W/ OUT ANTENNA	-	-	-	-
700	ADD	-	-	1	ERICSSON	RADIO 4449	-	-	-	-
1900/AWS	ADD	-	-	1	ERICSSON	RADIO 8843	-	-	-	-
L-SUB6	ADD	-	-	1	ERICSSON	RADIO 8863	-	-	-	-
N/A	ADD	-	-	1	RAYCAP	OVP - RCMDC-3315-PF-48	-	-	1	HYBRID FIBER
										TBD
BETA SECTOR	AZIMUTH	TIP HEIGHT	QUANTITY	VENDOR	MODEL	MECH TILT	ELEC TILT	NUMBER OF FEEDERS	FEEDER TYPE	FEEDER LENGTH
AWS/CBRS	ADD	110"	48.2'	1	JMA	MX10FTT865-B02	-	-	-	-
700/1900L-SUB6	ADD	110"	48.2'	1	JMA	MX14FTT86501	-	-	-	-
CBRS	ADD	-	-	1	ERICSSON	RADIO 4408 W/ OUT ANTENNA	-	-	-	-
700	ADD	-	-	1	ERICSSON	RADIO 4449	-	-	-	-
1900/AWS	ADD	-	-	1	ERICSSON	RADIO 8843	-	-	-	-
L-SUB6	ADD	-	-	1	ERICSSON	RADIO 8863	-	-	-	-
N/A	ADD	-	-	1	RAYCAP	OVP - RCMDC-3315-PF-48	-	-	1	HYBRID FIBER
										TBD
GAMMA SECTOR	AZIMUTH	TIP HEIGHT	QUANTITY	VENDOR	MODEL	MECH TILT	ELEC TILT	NUMBER OF FEEDERS	FEEDER TYPE	FEEDER LENGTH
AWS/CBRS	ADD	260"	48.2'	1	JMA	MX10FTT865-B02	-	-	-	-
1900L-SUB6	ADD	260"	48.2'	1	JMA	MX14FR0845-02	-	-	-	-
CBRS	ADD	-	-	1	ERICSSON	RADIO 4408 W/ OUT ANTENNA	-	-	-	-
700	ADD	-	-	1	ERICSSON	RADIO 4449	-	-	-	-
1900/AWS	ADD	-	-	1	ERICSSON	RADIO 8843	-	-	-	-
L-SUB6	ADD	-	-	1	ERICSSON	RADIO 8863	-	-	-	-
N/A	ADD	-	-	1	RAYCAP	OVP - RCMDC-3315-PF-48	-	-	1	HYBRID FIBER
										TBD



PROPOSED ANTENNA CONFIGURATION 2

22"x34" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE

NO.	DATE	DRAWN	REVISION
A	11/15/19	KM	90% PCD REVIEW
B	01/10/20	RM	CLIENT COMMENTS
0	01/03/20	RM	100% FINAL CD
1	09/10/20	RM	LANDLORD COMMENTS
2	03/11/24	DO	SABY AUE UPDATE
3	03/22/24	DO	CLIENT COMMENTS

CLIENT:



AJE CONSULTANT, SITE ACQUISITION AND PERMITTING

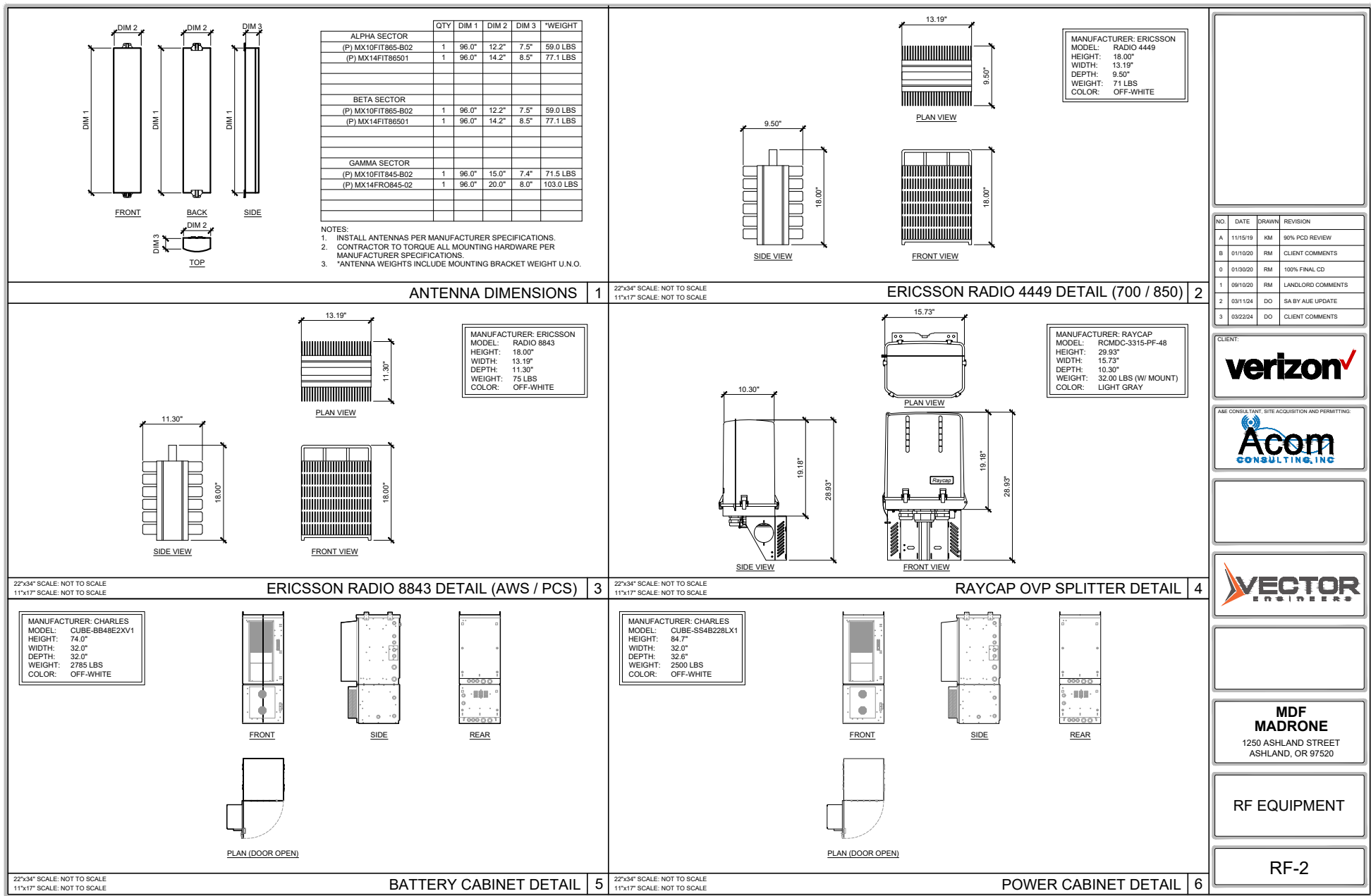


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PROPOSED ANTENNA CONFIGURATION

RF-1





14.7" 6.1" PLAN VIEW 6.1" 18.81" SIDE VIEW 14.7" 18.81" FRONT VIEW MANUFACTURER: ERICSSON MODEL: RADIO 8863 HEIGHT: 18.81" WIDTH: 14.7" DEPTH: 6.1" WEIGHT: 75 LBS COLOR: OFF-WHITE		7.87" 3.94" PLAN VIEW 3.94" 7.88" SIDE VIEW 7.88" FRONT VIEW MANUFACTURER: ERICSSON MODEL: RADIO 4408 W/ KRE105281 ANTENNA HEIGHT: 7.88" WIDTH: 7.88" DEPTH: 3.94" WEIGHT: 11.02 LBS COLOR: OFF-WHITE					
22"x34" SCALE: NOT TO SCALE 11"x17" SCALE: NOT TO SCALE		ERICSSON RADIO 8863 DETAIL 1		22"x34" SCALE: NOT TO SCALE 11"x17" SCALE: NOT TO SCALE		ERICSSON RADIO 4408 W/ ANTENNA 2	
		NOT USED 3				NOT USED 4	
		NOT USED 5				NOT USED 6	

NO.	DATE	DRAWN	REVISION
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CLIENT:

ASE CONSULTANT, SITE ACQUISITION AND PERMITTING

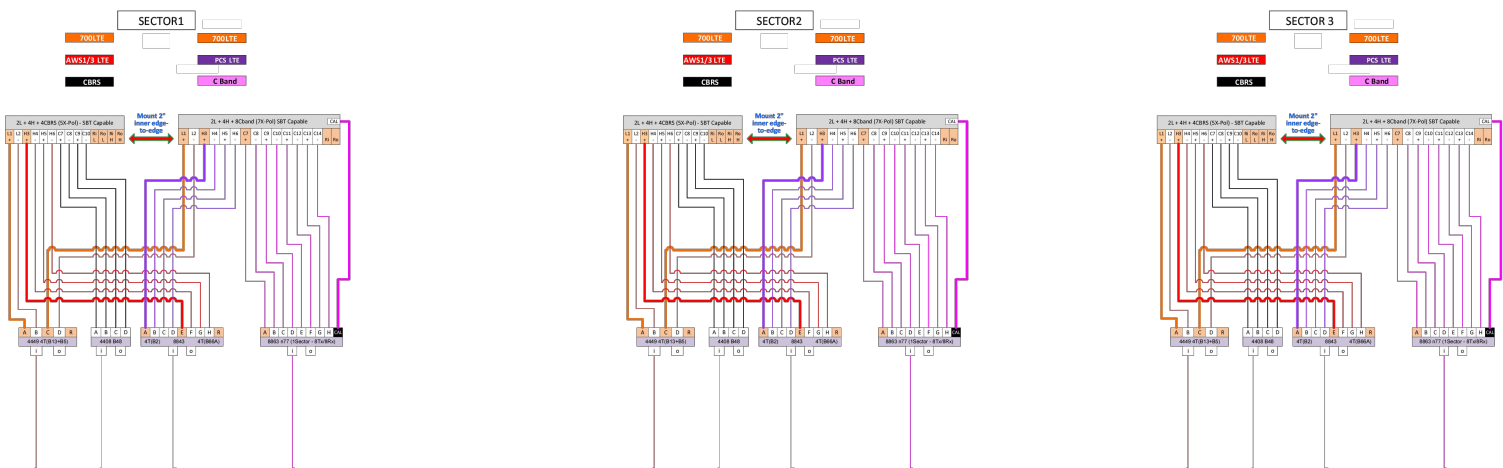
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ASHLAND, OR 97520

RF EQUIPMENT

RF-3

EUG MADRONE [3 Sectors – 4x4 RET RRH (700, PCS, AWS1, AWS3,CBRS)] [3 Sector – 5G n77]



RET Control Path Note:
All Smart BiasT's (SBT)/Internal BiasT's, or External AISG RET Controllers are driven by the **BOLD** coax/jumper pathways.

Example:
Antenna port '1' driven by RRH port 'A'

RRU Bands

700	Band 13
AWS	Band 4
PCS	Band 2
850	Band 5
AWS-1/3	Band 66A
CBRS	Band 48
LAA	Band 46

NO.	DATE	DRAWN	REVISION
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B	01/10/20	RM	CLIENT COMMENTS
0	01/03/20	RM	100% FINAL CD
1	09/10/20	RM	LANDLORD COMMENTS
2	03/11/24	DO	SA BY AUE UPDATE
3	03/22/24	DO	CLIENT COMMENTS



MDF MADRONE
1250 ASHLAND STREET
ASHLAND, OR 97520

PROPOSED
IT DIAGRAM

RF-4

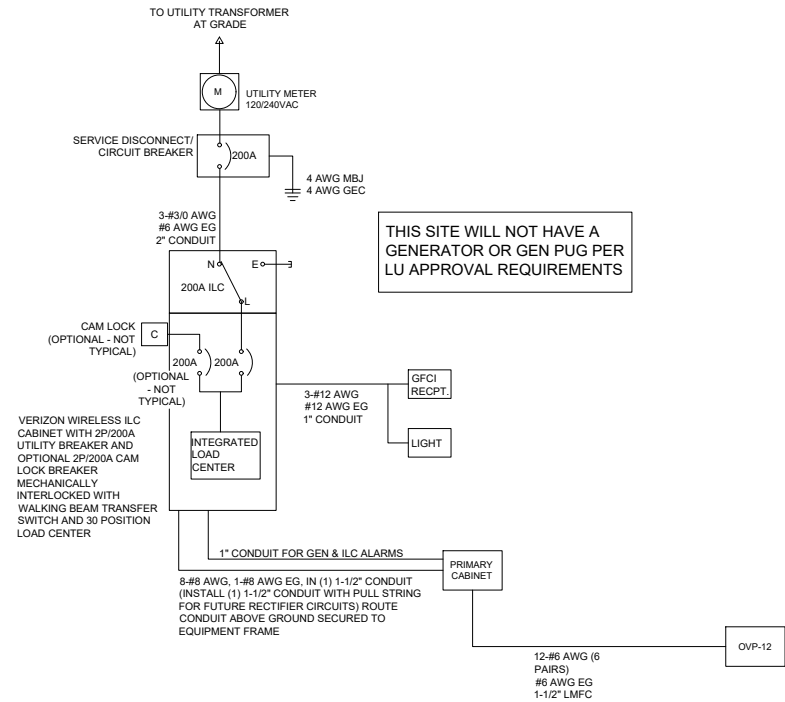
GENERAL ELECTRICAL NOTES		LEGEND																																															
GENERAL: 1. EXAMINE THE SITE CONDITIONS VERY CAREFULLY AND THE SCOPE OF PROPOSED WORK TOGETHER WITH THE WORK OF ALL OTHER TRADES AND INCLUDE IN THE BID PRICE ALL COSTS FOR WORK SUCH AS EQUIPMENT AND WIRING MADE NECESSARY TO ACCOMMODATE THE ELECTRICAL SYSTEMS SHOWN AND SYSTEMS OF OTHER TRADES. 2. SUBMITTAL OF BID INDICATES CONTRACTOR IS COGNIZANT OF ALL JOB SITE CONDITIONS AND WORK TO BE PERFORMED UNDER THIS CONTRACT. 3. PERFORM DETAILED VERIFICATION OF WORK PRIOR TO ORDERING THE ELECTRICAL EQUIPMENT AND COMMENCING CONSTRUCTION. ISSUE A WRITTEN NOTICE TO THE CONSULTANT OF ANY DISCREPANCIES. 4. OBTAIN ALL PERMITS, PAY ASSOCIATED FEES AND SCHEDULE INSPECTION. 5. PROVIDE ALL LABOR, MATERIAL, EQUIPMENT, INSURANCE, AND SERVICES TO COMPLETE THIS PROJECT IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND PRESENT IT AS FULLY OPERATIONAL TO THE SATISFACTION OF THE OWNER. 6. PROVIDE ALL LABOR, MATERIAL, EQUIPMENT, INSURANCE, AND SERVICES TO COMPLETE THIS PROJECT IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND PRESENT IT AS FULLY OPERATIONAL TO THE SATISFACTION OF THE OWNER. 7. CARRY OUT WORK IN ACCORDANCE WITH ALL GOVERNING STATE, COUNTY AND LOCAL CODES AND O.S.H.A. 8. PRIOR TO BEGINNING WORK COORDINATE ALL POWER AND TELCO WORK WITH THE LOCAL UTILITY COMPANY AS IT MAY APPLY TO THIS SITE. ALL WORK TO COMPLY WITH THE RULES AND REGULATIONS OF THE UTILITIES INVOLVED. 9. FABRICATION AND INSTALLATION OF THE COMPLETE ELECTRICAL SYSTEM SHALL BE DONE IN A FIRST CLASS WORKMANSHIP PER NECA STANDARD 1-2000 BY QUALIFIED PERSONNEL EXPERIENCED IN SUCH WORK AND SHALL SCHEDULE THE WORK IN AN ORDERLY MANNER SO AS NOT TO IMPEDE PROGRESS OF THE PROJECT. 10. DURING PROGRESS OF THE WORK, MAINTAIN AN ACCURATE RECORD OF THE INSTALLATION OF THE ELECTRICAL SYSTEMS, LOCATING EACH CIRCUIT PRECISELY AND DIMENSIONING EQUIPMENT, CONDUIT AND CABLE LOCATIONS. UPON COMPLETION OF THE INSTALLATION, TRANSFER ALL RECORD DATA TO BLACK LINE PRINTS OF THE ORIGINAL DRAWINGS AND SUBMIT THESE DRAWINGS AS RECORD DRAWINGS TO THE CONSULTANT. 11. COMPLETE JOB SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR AFTER THE DATE OF JOB ACCEPTANCE BY OWNER, ANY WORK, MATERIAL, OR EQUIPMENT FOUND TO BE FAULTY DURING THAT PERIOD SHALL BE CORRECTED AT ONCE UPON WRITTEN NOTIFICATION, AT THE EXPENSE OF THE CONTRACTOR. 12. GENERAL CONTRACTOR IS RESPONSIBLE FOR REQUESTING CONNECTION OF COMMERCIAL POWER FROM THE POWER COMPANY. ELECTRICAL CONTRACTOR SHALL COORDINATE THIS WORK WITH THE GENERAL CONTRACTOR. 13. COORDINATE EXACT TELEPHONE REQUIREMENTS AND SERVICE ROUTING WITH LOCAL TELEPHONE COMPANY. APPLY FOR TELEPHONE SERVICE IMMEDIATELY UPON AWARD OF CONTRACT. BASIC MATERIALS AND METHODS: 1. ALL ELECTRICAL WORK SHALL CONFORM TO THE EDITION OF THE NEC ACCEPTED BY THE LOCAL JURISDICTION AND TO THE APPLICABLE LOCAL CODES AND REGULATIONS. 2. ALL MATERIALS AND EQUIPMENT SHALL BE PROPOSED. MATERIALS AND EQUIPMENT SHALL BE THE STANDARD PRODUCTS OF MANUFACTURER'S CURRENT DESIGN. ANY FIRST-CLASS PRODUCT MADE BY A REPUTABLE MANUFACTURER MAY BE USED PROVIDING IT CONFORMS TO THE CONTRACT REQUIREMENTS AND MEETS THE APPROVAL OF THE CONSULTANT AND THE OWNER. 3. ARRANGE CONDUIT, WIRING, EQUIPMENT, AND OTHER WORK GENERALLY AS SHOWN, PROVIDING PROPER CLEARANCES AND ACCESS. CAREFULLY EXAMINE ALL CONTRACT DRAWINGS AND FIT THE WORK IN EACH LOCATION WITHOUT SUBSTANTIAL ALTERATION. WHERE DEPARTURES ARE PROPOSED BECAUSE OF FIELD CONDITIONS OR OTHER CAUSES, PREPARE AND SUBMIT DETAILED DRAWINGS FOR ACCEPTANCE. 4. THE CONTRACT DRAWINGS ARE GENERALLY DIAGRAMMATIC AND ALL OFFSETS, BENDS, FITTINGS AND ACCESSORIES ARE NOT NECESSARILY SHOWN. PROVIDE ALL SUCH ITEMS AS MAY BE REQUIRED TO FIT THE WORK TO THE CONDITIONS. 5. MAINTAIN ALL CLEARANCES AS REQUIRED BY NEC. 6. SEAL AROUND CONDUITS AND AROUND CONDUCTORS WITHIN CONDUITS ENTERING THE BUILDING WHERE PENETRATION OCCURS WITH A SILICONE SEALANT TO PREVENT MOISTURE PENETRATION INTO BUILDING/SHELTER. 7. SILICONE SEAL AROUND ALL BOLTS AND SCREWS USED TO SECURE EQUIPMENT TO EXTERIOR OF BUILDING. CONDUCTORS AND CONNECTORS: 1. UNLESS NOTED OTHERWISE, ALL CONDUCTORS SHALL BE COPPER, MINIMUM SIZE #12 AWG, WITH THERMOPLASTIC INSULATION CONFORMING TO NEMA WCS OR CROSS-LINKED POLYETHYLENE INSULATION CONFORMING TO NEMA WC7. (TYPES THHN OR THWN-2). INSULATION SHALL BE RATED FOR 90°C CONDUCTORS SHALL BE COLOR CODED IN ACCORDANCE WITH NEC. 2. ALL CONDUCTORS USED FOR GROUNDING SHALL BE COPPER AND SHALL HAVE GREEN INSULATION EXCEPT WHERE NOTED. 3. FOR COPPER CONDUCTORS #6 AWG AND SMALLER USE 3M SCOTCH-LOK OR T&B STA-KON COMPRESSION TYPE CONNECTORS WITH INTEGRAL OR SEPARATE INSULATION CAPS. FOR COPPER CONDUCTORS LARGER THAN #6 AWG USE SOLDERLESS, IDENT HEX SCREW OR BOLT TYPE PRESSURE CONNECTORS OR DOUBLE COMPRESSION C-CLAMP CONNECTORS, UNLESS SPECIFIED OTHERWISE ON DRAWINGS. 4. UNLESS NOTED OTHERWISE ALL LUGS SHALL BE TIN PLATED COPPER, TWO-HOLE, LONG BARREL, COMPRESSION TYPE. 5. CONDUCTOR LENGTHS SHALL BE CONTINUOUS FROM TERMINATION TO TERMINATION WITHOUT SPLICES. SPLICES ARE NOT ACCEPTABLE. IF SPLICES ARE UNAVOIDABLE PRIOR APPROVAL FROM THE ENGINEER MUST BE OBTAINED.	RACEWAYS AND BOXES: 1. ALL CONDUIT SHALL BE UL LABELED. 2. ALL EMPTY CONDUITS INSTALLED FOR FUTURE USE SHALL HAVE A PULL CORD. 3. SHEET METAL BOXES SHALL CONFORM TO NEMA OS1; CAST-METAL BOXES SHALL CONFORM TO NEMA #1 AND SHALL BE SIZED IN ACCORDANCE WITH NEC UNLESS NOTED OTHERWISE. GROUNDING: 1. ALL LIGHTNING PROTECTION AND SAFETY GROUNDING OF THE ELECTRICAL EQUIPMENT SHALL BE CARRIED OUT IN ACCORDANCE WITH THE CURRENT NFPA STANDARDS AND VERIZON WIRELESS STANDARDS. 2. GROUND LUGS ARE SPECIFIED UNDER SECTION 3 "CONDUCTORS AND CONNECTORS". 3. ALL GROUND LUG AND COMPRESSION CONNECTIONS SHALL BE COATED WITH ANTI-OXIDANT AGENT, SUCH AS NO-OX, NOALOX, PENETROX OR KOPRSHIELD. 4. GROUND ALL EXPOSED METALLIC OBJECTS ON EQUIPMENT ROOM EXTERIOR. 5. PROVIDE LOCK WASHERS FOR ALL MECHANICAL CONNECTIONS FOR GROUND CONDUCTORS. USE STAINLESS STEEL HARDWARE THROUGHOUT. 6. DO NOT INSTALL GROUND RING OUTSIDE OF LEASE AREA. 7. REMOVE ALL PAINT AND CLEAN ALL DIRT FROM SURFACES REQUIRING GROUND CONNECTIONS, REPAINT TO MATCH AFTER CONNECTION IS MADE TO MAINTAIN CORROSION RESISTANCE. 8. ALL EXTERIOR GROUNDING CONDUCTORS INCLUDING EXTERIOR GROUND RING SHALL BE #2 AWG SOLID BARE TINNED COPPER UNLESS NOTED OTHERWISE. MAKE ALL GROUND CONNECTIONS AS SHORT AND DIRECT AS POSSIBLE. AVOID SHARP BENDS. THE RADIUS OF ANY BEND SHALL NOT BE LESS THAN 8" AND THE ANGLE OF ANY BEND SHALL NOT EXCEED 90°. GROUNDING CONDUCTORS SHALL BE ROUTED DOWNWARD TOWARD THE BURIED GROUND RING. 9. BOND ALL EXTERIOR CONDUITS, PIPES AND CYLINDRICAL METALLIC OBJECTS WITH A PENN-UNION GT SERIES CLAMP, BLACKBURN GUV SERIES CLAMP OR A BURNDY GAR 3900BU SERIES CLAMP ONLY, NO SUBSTITUTES ACCEPTED. 10. ALL GROUND CONNECTIONS SHALL BE APPROVED FOR THE METALS BEING CONNECTED 11. ALL EXTERNAL GROUND CONNECTIONS SHALL BE EXOTHERMICALLY WELDED. ALL EXOTHERMIC WELDS TO EXTERIOR GROUND RING SHALL BE THE PARALLEL TYPE, EXCEPT FOR THE GROUND RODS WHICH ARE TEE EXOTHERMIC WELDS. REPAIR ALL GALVANIZED SURFACES THAT HAVE BEEN DAMAGED BY EXOTHERMIC WELDING. USE SPRAY GALVANIZER SUCH AS HOLLUB LECTROSOL #15-501. 12. CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER WHEN THE BURIED GROUND RING IS INSTALLED SO THE REPRESENTATIVE CAN INSPECT THE GROUND RING BEFORE IT IS BACKFILLED WITH SOIL. 13. FOR METAL FENCE POST GROUNDING, USE A HEAVY DUTY TYPE GROUNDING CLAMP OR EXOTHERMIC WELD CONNECTION TO POST. GROUND ALL FENCE POSTS WITHIN 6' OF EQUIPMENT. 14. WHERE MECHANICAL CONNECTORS (TWO-HOLE OR CLAMP) ARE USED, APPLY A LIBERAL PROTECTIVE COATING OF AN ANTI-OXIDE COMPOUND SUCH AS NO-OX, NOALOX, PENETROX OR KOPRSHIELD ON ALL CONNECTORS. OVERCURRENT & SHORT-CIRCUIT/GND FAULT PROTECTION (IF APPLICABLE): 1. CONTRACTOR SHALL RECORD LOAD READINGS WHEN SITE POWER ORIGINATES FROM A 3Ø SERVICE TO MONITOR & ASSURE A BALANCED LOAD AT THE PRIMARY SUPPLY. RECORDS SHALL BE PROVIDED TO THE SITE/FACILITY OWNER. CONTRACTOR SHALL CONSULT MANUFACTURER'S PLANS, SHOP DRAWINGS AND SPECS FOR INDOOR/OUTDOOR EQUIPMENT LOCATION & INSTALLATION. ELECTRIC SERVICE SHALL BE IN COMPLIANCE WITH ALL RULES & REGULATIONS OF THE UTILITY CO. ELECT. CONTRACTOR SHALL PROVIDE EQUIPMENT WITH HIGHER SHORT-CIRCUIT FAULT CURRENT RATINGS (KA I.C.) AS REQUIRED TO MATCH & EXCEED UTILITY CO. AVAILABLE SYMMETRICAL & ASYMMETRICAL FAULT CURRENT LEVELS. FUSES IN SERVICE SWITCHES SHALL BE CLASS "RK1", CURRENT LIMITING TYPE, 200 KA I.C., NON-TIME DELAY, DISCONNECT SWITCHES TO HAVE REJECTION CLIPS, UNLESS INDICATED OTHERWISE. ELECTRICAL EQUIPMENTS & PROTECTIONS SHALL BE STANDARD KAIC RATED HIGHER THAN INCOMING EQUIPMENT AND/OR UTILITY CO. KAIC RATE AND CONSIDERING ELECTRIC MOTORS FAULT CONTRIBUTION, CONTRACTOR SHALL NOT BEGIN CONSTRUCTION UNTIL THIS MANDATORY REQUIREMENT IS MET. IF PROPOSED LOAD IS ADDED CONTRACTOR SHALL VERIFY & CONFIRM BEFORE CONSTRUCTION THAT TOTAL UTILITY SERVICE LOAD SHALL KEEP EQUAL TO 125% MAX. DEMAND+ PROPOSED LOAD)+ 80% SERVICE ENTRANCE CONDUCTORS/MAIN OVER CURRENT PROTECTION CAPACITY, WHICHEVER RATING IS LOWER. LIGHTING SHALL MEET NEC, IESNA AND/OR FAA STANDARDS IF APPLICABLE. PHOTOMETRIC LEVELS SHALL COMPLY WITH LOCAL, STATE & FEDERAL RULES. ALL ELECTRICAL EQUIPMENT SHALL BE INSTALLED IN ACCESSIBLE AREAS ONLY. THE ELECTRICAL INSTALLATION SHALL MEET ALL STANDARD REQUIREMENTS OF POWER AND TELE- PHONE UTILITY COMPANIES.	<table><tr><th>SYMBOL</th><th>DESCRIPTION</th></tr><tr><td></td><td>CIRCUIT BREAKER</td></tr><tr><td></td><td>NON-FUSIBLE DISCONNECT SWITCH</td></tr><tr><td></td><td>FUSIBLE DISCONNECT SWITCH</td></tr><tr><td></td><td>SURFACE MOUNTED PANEL BOARD</td></tr><tr><td></td><td>TRANSFORMER</td></tr><tr><td></td><td>KILOWATT HOUR METER</td></tr><tr><td></td><td>DENOTES CABLE OR CONDUIT TURNING UP IN PLAN VIEW</td></tr><tr><td></td><td>DENOTES CABLE OR CONDUIT TURNING DOWN IN PLAN VIEW</td></tr><tr><td></td><td>JUNCTION BOX</td></tr><tr><td></td><td>PULL BOX TO NEC/TELCO STANDARDS</td></tr><tr><td></td><td>OVERHEAD UTILITIES</td></tr><tr><td></td><td>UNDERGROUND TELCO</td></tr><tr><td></td><td>UNDERGROUND POWER</td></tr><tr><td></td><td>DENOTES REFERENCE NOTE</td></tr><tr><td></td><td>EXOTHERMIC WELD CONNECTION</td></tr><tr><td></td><td>MECHANICAL CONNECTION (eg LUG, C-TAP)</td></tr><tr><td></td><td>GROUND ROD</td></tr><tr><td></td><td>GROUND ROD WITH INSPECTION SLEEVES</td></tr><tr><td></td><td>GROUND BAR</td></tr><tr><td></td><td>PIN AND SLEEVE RECEPTACLE</td></tr><tr><td></td><td>GROUND CONDUCTOR</td></tr><tr><td></td><td>MOTOZ W/ HORSEPOWER RATING</td></tr></table>	SYMBOL	DESCRIPTION		CIRCUIT BREAKER		NON-FUSIBLE DISCONNECT SWITCH		FUSIBLE DISCONNECT SWITCH		SURFACE MOUNTED PANEL BOARD		TRANSFORMER		KILOWATT HOUR METER		DENOTES CABLE OR CONDUIT TURNING UP IN PLAN VIEW		DENOTES CABLE OR CONDUIT TURNING DOWN IN PLAN VIEW		JUNCTION BOX		PULL BOX TO NEC/TELCO STANDARDS		OVERHEAD UTILITIES		UNDERGROUND TELCO		UNDERGROUND POWER		DENOTES REFERENCE NOTE		EXOTHERMIC WELD CONNECTION		MECHANICAL CONNECTION (eg LUG, C-TAP)		GROUND ROD		GROUND ROD WITH INSPECTION SLEEVES		GROUND BAR		PIN AND SLEEVE RECEPTACLE		GROUND CONDUCTOR		MOTOZ W/ HORSEPOWER RATING	
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COMMON V2W DC PLANT RECTIFIER REQUIREMENTS			
RECTIFIER	INPUT FLA CURRENT AT 240 VAC (EACH RECTIFIER)	2 RECT / BRANCH CIRCUIT ALTERNATE APPROACH	1 RECT / BRANCH CIRCUIT ALTERNATE APPROACH
VERTIV 3500W (R48-2000e3 OR SIM)	15.5 AMPS	40A/2P (OR 45A/2P) # 8 THHN	30A/2P # 10 THHN
GE 75A (NE075AC48xxxx OR SIM)	22 AMPS (MAX.)	60A/2P # 6 THHN	30A/2P # 10 THHN
OTHER - COORD W/ VENDOR	REFER TO CUT SHEETS	REFER TO CUT SHEETS	REFER TO CUT SHEETS

LOAD CALCULATION	
LOAD	AMPS
PROPOSED LOAD:	123.0
TOTAL DEMAND:	129.0
VOLTAGE: 120/240V SINGLE PHASE 3W 200A	

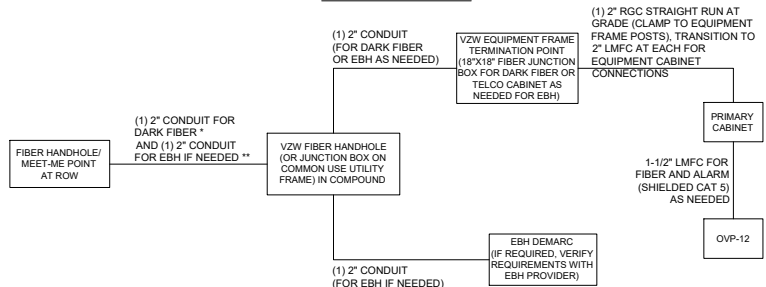
PANEL NAME:		V2W ILC			MODEL NUMBER:		INTERSECT AA300G-1PH-3R									
RATED VOLTAGE:		240	120	VOLTS	PHASE/WIRE:		1	3				KEY DOOR LATCH:		YES		
MAIN BREAKER:		200	AMPS		BUS RATING:		200						HINGED DOOR:		YES	
MOUNT:		SURFACE			NEUTRAL BAR:		YES									
ENCLOSURE TYPE:		NEMA 3R			AIC:		65K									
POS	USAGE FACTOR	BUS AMPS		LOAD	POLES	AMPS	L1	L2	AMPS	POLES	LOAD	BUS AMPS		USAGE FACTOR	POS	
		L1	L2									L1	L2			
1	1	18		RECTIFIER	2	30A			30A	2	FUTURE RECTIFIER	18		1	2	
3	1		18													
5	1	18		RECTIFIER	2	30A			30A	2	FUTURE RECTIFIER	18		1	6	
7	1		18													
9	1	18		RECTIFIER	2	30A								1	10	
11	1		18													
13	1	18		RECTIFIER	2	30A									14	
15	1		18													
17	1.25	12		GFI RECEPT. /LIGHT	1	20A									18	
19	1.25		12	BLOCK HEATER	1	20A									20	
21	1.25	5		BATT. CHARGER	1	20A									22	
23															24	
25															26	
27															28	
29															30	
		93.25	87	:SUB TOTAL AMPS								SUB TOTAL AMPS:		36	36	
												FACTORED TOTAL AMPS:		129.25	123	
NOTES: 1. ALL CONDUCTORS ARE TYPE THWN (75°C) COPPER. 2. MAXIMUM LENGTH OF RUN FOR RECTIFIER CIRCUITS IS 50FT. 3. INTERSECT GENERAC INTEGRATED LOAD CENTER INCLUDES 200 AMP MAIN DISCONNECT AND TRANSFER SWITCH FOR PORTABLE OR PERMANENT GENERATOR. 4. RECTIFIER LOADS ARE CONSIDERED TO BE NON-CONTINUOUS. 5. IF ADDITIONAL FUTURE LOADS ARE ADDED WHICH CAUSE TOTAL DEMAND TO EXCEED GENERATOR BREAKER SIZE, BACKUP POWER SYSTEM SHALL BE EVALUATED AND UPGRADED AS NECESSARY.																



ELECTRICAL SINGLE LINE DIAGRAM

- NOTES:
- ALL EQUIPMENT SHALL BE NEMA 3R RATED.
 - ALL EQUIPMENT SHALL BE LIGHTNING PROTECTED IN ACCORDANCE WITH TIA-222-G AND VERIZON WIRELESS STANDARDS.
 - CONDUCTOR SIZES AND DISTANCES HAVE BEEN SIZED FOR 3% MAX VOLTAGE DROP (TOTAL SYSTEM VOLTAGE DROP ON BOTH FEEDERS AND BRANCH CIRCUITS TO THE FARTHEST DEMAND SHALL NOT EXCEED 5%).
 - WIRE SIZING AND MAXIMUM DISTANCE FROM GENERATOR TO ILC ASSUMES POWER FACTOR OF 0.9.
 - BELOW GRADE CONDUIT SHALL BE SCHEDULE 80 PVC. ABOVE GRADE CONDUIT SHALL BE GALVANIZED RIGID CONDUIT. BELOW GRADE PVC CONDUIT SHALL TRANSITION TO GRC PRIOR TO RISING ABOVE GRADE. ALL BENDS SHALL HAVE A MINIMUM 24" RADIUS. ALL FITTINGS SHALL BE SUITABLE FOR USE WITH THREADED RIGID CONDUIT. VERIFY CONDUIT TYPE WITH LOCAL CONSTRUCTION MANAGER AND ADJUST IF NECESSARY. ALL CONDUIT SHALL MEET NEC, STATE, AND LOCAL CODE REQUIREMENTS AS REQUIRED.

PANEL SCHEDULE

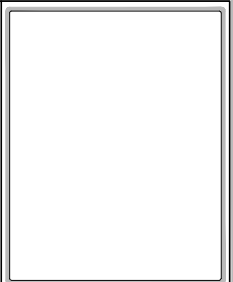


FIBER SINGLE LINE DIAGRAM

- NOTES:
- * ADD (1) ADDITIONAL 2" CONDUIT FOR DARK FIBER (2 TOTAL) IF REQUIRED BY LOCAL MARKET FACILITIES. VERIFY PRIOR TO CONSTRUCTION. (ADD 2 PULL STRINGS TO EACH CONDUIT)
 - ** VERIFY EBH REQUIREMENTS WITH TELCO PROVIDER PRIOR TO CONSTRUCTION. (ADD 2 PULL STRINGS TO EACH CONDUIT)

22"x34" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE

ONE-LINE DIAGRAMS & PANEL SCHEDULE 2



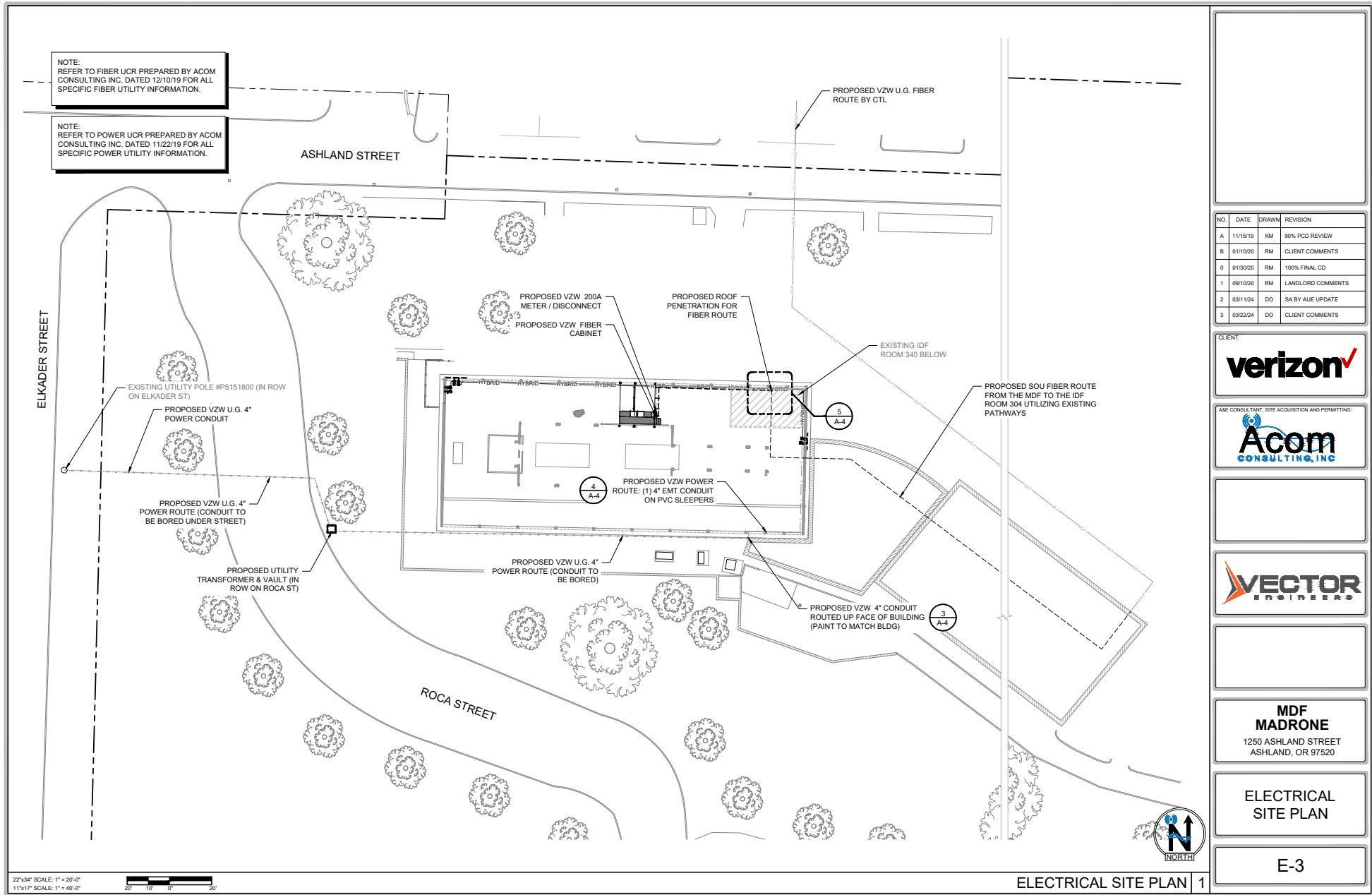
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MDF MADRONE
1250 ASHLAND STREET
ASHLAND, OR 97520

ONE-LINE DIAGRAMS
& PANEL SCHEDULE

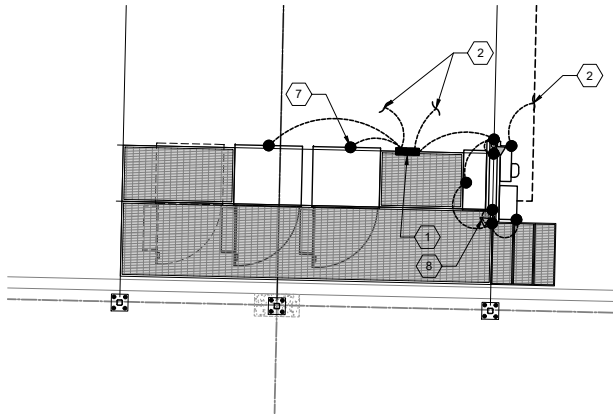
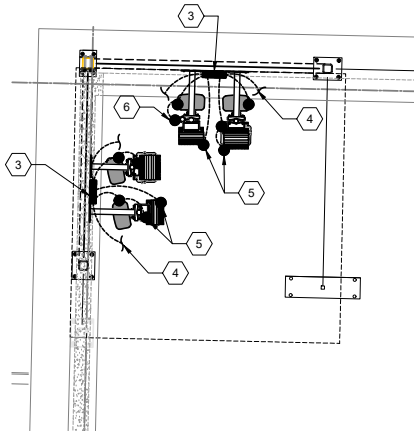
E-2



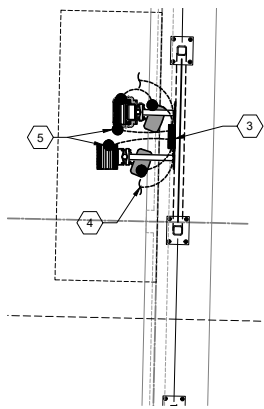
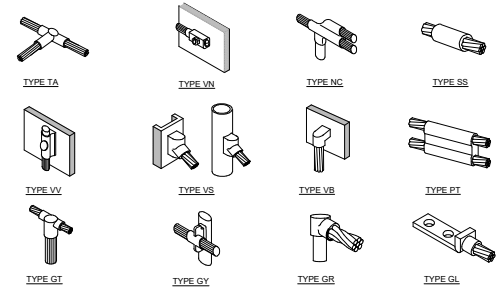
GROUNDING PLAN - KEYED NOTES

- 1 MAIN GROUND BUS BAR MOUNTED BY EQUIPMENT CABINETS. SEE DETAIL 4/E-5 FOR GROUND BAR CONSTRUCTION
- 2 #2 AWG GROUND FROM EQUIPMENT GROUND BAR TO EXISTING BUILDING STEEL (TYP OF (2) PLACES)
- 3 ANTENNA GROUND BUS BAR AT ANTENNA LEVEL WITH COAX GROUND KIT. SEE DETAIL 4/E-5 FOR GROUND BAR CONSTRUCTION, AND SEE DETAIL 5/E-5 FOR ANTENNA GROUNDING.
- 4 #2 AWG GROUND FROM ANTENNA GROUND BUS BAR TO EQUIPMENT GROUND BAR OR BUILDING STEEL (TYP OF (2) PLACES).
- 5 #6 AWG GROUND FROM ANTENNA / RRH / OVP TO ANTENNA GROUND BAR, TYP.
- 6 #6 AWG GROUND FROM GPS ANTENNA MOUNT TO EQUIPMENT GROUND BAR.
- 7 #6 AWG GROUND FROM EQUIPMENT CABINET TO EQUIPMENT GROUND BAR, TYP.
- 8 #6 AWG GROUND FROM EQUIPMENT SUPPORT BEAMS TO EQUIPMENT GROUND BAR, TYP.

SYMBOL	DESCRIPTION
	GROUND BAR
	CONNECTION
	GROUND ROD
	GROUND TEST WELL



CADWELD GROUND CONNECTION DETAILS



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A	11/15/19	KM	90% PCD REVIEW
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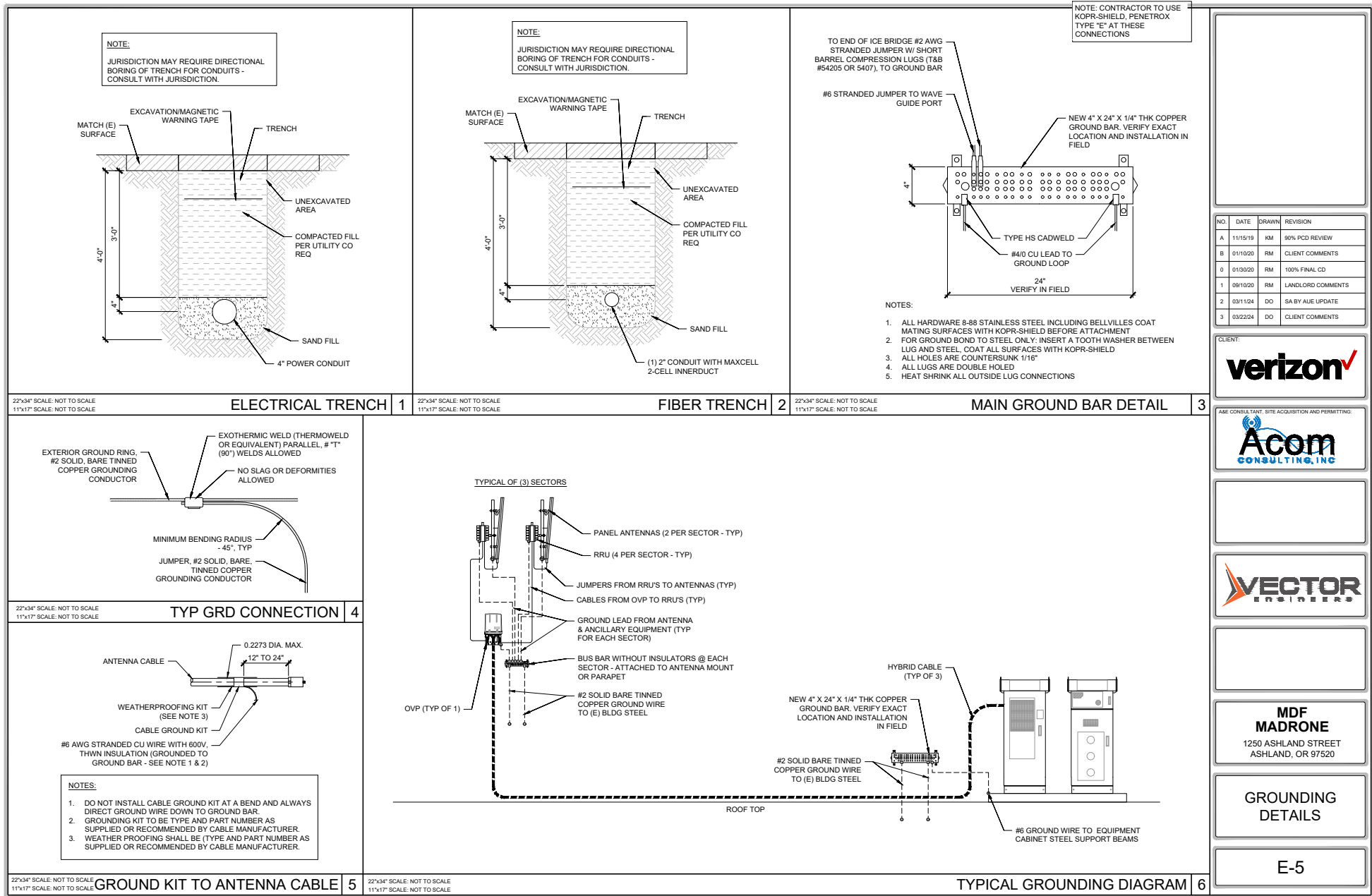


MDF MADRONE
1250 ASHLAND STREET
ASHLAND, OR 97520

**ELECTRICAL
GROUNDING PLAN**

E-4

22"x34" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE



NOTE: CONTRACTOR TO USE KOPR-SHIELD, PENETROX TYPE "E" AT THESE CONNECTIONS

Labels: TO END OF ICE BRIDGE #2 AWG STRANDED JUMPER W/ SHORT BARREL COMPRESSION LUGS (T&B #54205 OR 5407), TO GROUND BAR, #6 STRANDED JUMPER TO WAVE GUIDE PORT, NEW 4" X 24" X 1/4" THK COPPER GROUND BAR, VERIFY EXACT LOCATION AND INSTALLATION IN FIELD, TYPE HS CADWELD, #4/0 CU LEAD TO GROUND LOOP, 24" VERIFY IN FIELD.

22"x34" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE

MAIN GROUND BAR DETAIL 3

Labels: EXOTHERMIC WELD (THERMOWELD OR EQUIVALENT) PARALLEL, # "T" (90°) WELDS ALLOWED, NO SLAG OR DEFORMITIES ALLOWED, MINIMUM BENDING RADIUS - 45°, TYP, JUMPER, #2 SOLID, BARE, TINNED COPPER GROUNDING CONDUCTOR.

22"x34" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE

TYP GRD CONNECTION 4

Labels: ANTENNA CABLE, 0.2273 DIA. MAX., 12" TO 24", WEATHERPROOFING KIT (SEE NOTE 3), CABLE GROUND KIT, #6 AWG STRANDED CU WIRE WITH 600V THWN INSULATION (GROUNDED TO GROUND BAR - SEE NOTE 1 & 2).

22"x34" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE

GROUND KIT TO ANTENNA CABLE 5

TYPICAL OF (3) SECTORS

Labels: PANEL ANTENNAS (2 PER SECTOR - TYP), RRU (4 PER SECTOR - TYP), JUMPERS FROM RRU'S TO ANTENNAS (TYP), CABLES FROM OVP TO RRU'S (TYP), GROUND LEAD FROM ANTENNA & ANCILLARY EQUIPMENT (TYP FOR EACH SECTOR), BUS BAR WITHOUT INSULATORS @ EACH SECTOR - ATTACHED TO ANTENNA MOUNT OR PARAPET, #2 SOLID BARE TINNED COPPER GROUND WIRE TO (E) BLDG STEEL, NEW 4" X 24" X 1/4" THK COPPER GROUND BAR, VERIFY EXACT LOCATION AND INSTALLATION IN FIELD, #6 GROUND WIRE TO EQUIPMENT CABINET STEEL SUPPORT BEAMS, ROOF TOP.

22"x34" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE

TYPICAL GROUNDING DIAGRAM 6

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CLIENT:

MDF MADRONE
1250 ASHLAND STREET
ASHLAND, OR 97520

GROUNDING
DETAILS

E-5

UNFINISHED BUSINESS

**Approval of Draft Findings for
PA-APPEAL-2024-00019,
1250 Ashland Street**

DRAFT - BEFORE THE PLANNING COMMISSION - DRAFT
July 9, 2024

IN THE MATTER OF PA-APPEAL-2024-00019, AN APPEAL OF THE STAFF)
APPROVAL OF PA-T1-2024-00233 A REQUEST FOR SITE DESIGN REVIEW)
TO INSTALL WIRELESS COMMUNICATION FACILITIES (ANTENNAS AND)
ASSOCIATED EQUIPMENT) ON THE ROOF OF THE SCIENCE BUILDING AT)
1250 ASHLAND STREET ON THE SOUTHERN OREGON UNIVERSITY CAMPUS.)
THE APPLICATION ALSO INCLUDES A REQUEST FOR A CONDITIONAL USE)
PERMIT BECAUSE WITH INSTALLATION OF PANELS PROPOSED TO SCREEN)
THE WIRELESS COMMUNICATION FACILITY INSTALLATION, THE BUILDING) **FINDINGS,**
HEIGHT WILL EXCEED 40 FEET. STAFF INITIALLY DENIED THE APPLI-) **CONCLUSIONS &**
CATION ADMINISTRATIVELY, AND SUBSEQUENT TO THE MAILING OF THE) **ORDERS**
NOTICE OF DECISION, THE APPLICANT VERIZON WIRELESS TIMELY FILED)
AN APPEAL REQUEST.)
)
)
OWNER: Southern Oregon University)
APPLICANT: Verizon Wireless)
APPELLANT: Verizon Wireless)

RECITALS:

- 1) Tax lot #100 of Map 39 1E 15BB is located at 1250 Ashland Street on the Southern Oregon University campus and is zoned SO (Southern Oregon University District).
- 2) The application is a request for a Site Design Review Permit to install wireless communication facilities (antennas and associated equipment) on the roof of the Science Building at 1250 Ashland Street on the Southern Oregon University Campus. The application also includes a request for a Conditional Use Permit for the installation of panels proposed to screen the wireless communication facility installation, which will require the building height to exceed 40 feet. Staff initially denied the application administratively based on the findings of an independent third-party reviewer who determined that the technical materials provided failed to meet the burden of proof. Subsequent to the mailing of a Notice of Decision, the applicant Verizon Wireless appealed the decision. The applicant has subsequently provided additional materials responding in detail to the issues raised by staff. Proposed site improvements are outlined on the plans on file at the Department of Community Development.
- 3) The criteria for Site Design Review approval are described in AMC 18.5.2.050 as follows:
 - A. ***Underlying Zone:** The proposal complies with all of the applicable provisions of the underlying zone (part 18.2), including but not limited to: building and yard setbacks, lot*

area and dimensions, density and floor area, lot coverage, building height, building orientation, architecture, and other applicable standards.

- B. **Overlay Zones:** *The proposal complies with applicable overlay zone requirements (part 18.3).*
 - C. **Site Development and Design Standards:** *The proposal complies with the applicable Site Development and Design Standards of part 18.4, except as provided by subsection E, below.*
 - D. **City Facilities:** *The proposal complies with the applicable standards in section 18.4.6 Public Facilities and that adequate capacity of City facilities for water, sewer, electricity, urban storm drainage, paved access to and throughout the property and adequate transportation can and will be provided to the subject property.*
 - E. **Exception to the Site Development and Design Standards.** *The approval authority may approve exceptions to the Site Development and Design Standards of part 18.4 if the circumstances in either subsection 1 or 2, below, are found to exist.*
 - 1. *There is a demonstrable difficulty meeting the specific requirements of the Site Development and Design Standards due to a unique or unusual aspect of an existing structure or the proposed use of a site; and approval of the exception will not substantially negatively impact adjacent properties; and approval of the exception is consistent with the stated purpose of the Site Development and Design; and the exception requested is the minimum which would alleviate the difficulty.;*
or
 - 2. *There is no demonstrable difficulty in meeting the specific requirements, but granting the exception will result in a design that equally or better achieves the stated purpose of the Site Development and Design Standards.*
- 4) The Wireless Communication Facility Design Standards are described in AMC 18.4.10.030 as follows:

All wireless communication facilities shall be located, designed, constructed, treated, and maintained in accordance with the following standards.

A. General Provisions

- 1. *All facilities shall be installed and maintained in compliance with the requirements of the Building Code. At the time of building permit application, written statements from the Federal Aviation Administration (FAA), the Aeronautics Section of the Oregon Department of Transportation, and the Federal Communication Commission (FCC) confirming that the proposed wireless communication facility complies with regulations administered by that agency or that the facility is exempt from regulation.*
- 2. *All associated transmittal equipment must be housed in a building, above or below ground level, which must be designed and landscaped to achieve minimal visual impact with the surrounding*

environment.

3. *Wireless communication facilities shall be exempted from height limitations imposed in each zone.*
4. *Wireless communication facilities shall be installed at the minimum height and mass necessary for its intended use. A submittal verifying the proposed height and mass shall be prepared by a licensed engineer.*
5. *Lattice towers are prohibited as freestanding wireless communication support structures.*
6. *Signage for wireless communication facilities shall consist of a maximum of two non-illuminated signs, with a maximum of two square feet each, stating the name of the facility operator and a contact phone number.*
7. *The applicant is required to remove all equipment and structures from the site and return the site to its original condition, or condition as approved by the Staff Advisor, if the facility is abandoned for a period greater than six months. Removal and restoration must occur within 90 days of the end of the six-month period.*
8. *All new wireless communication support structures shall be constructed so as to allow other users to collocate on the facility.*

B. Preferred Designs. *The following preferred designs are a stepped hierarchy, and the standards shall be applied in succession from subsection a to e, with the previous standard exhausted before moving to the following design alternative. For the purpose of chapter 18.4.10, feasible is defined as capable of being done, executed or effected; possible of realization. A demonstration of feasibility requires a substantial showing that a preferred design can or cannot be accomplished.*

1. **Collocation.** *Where possible, the use of existing wireless communication facilities sites for new installations shall be encouraged. Collocation of new facilities on existing facilities shall be the preferred option. Where technically feasible, collocate new facilities on pre-existing structures with wireless communication facilities in place or on pre-existing towers.*
2. **Attached to Existing Structure.** *If (a) above is not feasible, wireless communication facilities shall be attached to pre-existing structures, when feasible.*
3. **Alternative Structure.** *If (a) or (b) above are not feasible, alternative structures shall be used with design features that conceal, camouflage, or mitigate the visual impacts created by the proposed wireless communication facilities.*
4. **Freestanding Support Structure.** *If (1), (2), or (3) listed above are not feasible, a monopole design shall be used with the attached antennas positioned in a vertical manner to lessens the visual impact compared to the antennas in a platform design. Platform designs shall be used only if it is shown that the use of an alternate attached antenna design is not feasible.*
5. **Lattice towers** *are prohibited as freestanding wireless communication support structures.*

C. Collocation Standards

1. *The collocation feasibility study shall meet all of the following requirements.*
 - a. *Document that alternative sites have been considered and are technologically unfeasible*

or unavailable.

- b. *Demonstrate that a reasonable effort was made to locate collocation sites that meet the applicant's service coverage area needs.*
- c. *Document the reasons collocation can or cannot occur.*

2. *Relief from collocation under this section may be granted at the discretion of the approval authority if the application and independent third party analysis demonstrate collocation is not feasible because one or more of the following conditions exist at prospective collocation sites.*

- a. *A significant service gap in coverage area.*
- b. *Sufficient height cannot be achieved by modifying existing structure or towers.*
- c. *Structural support requirements cannot be met.*
- d. *Collocation would result in electronic, electromagnetic, obstruction, or other radio frequency interference.*

D. Landscaping. *The following standards apply to all wireless communication facilities with any primary or accessory equipment located on the ground and visible from a residential use or the public right-of-way.*

- 1. *Vegetation and materials shall be selected and sited to produce a drought resistant landscaped area.*
- 2. *The perimeter of the wireless communication facilities shall be enclosed with a security fence or wall. Such barriers shall be landscaped in a manner that provides a natural sight obscuring screen around the barrier to a minimum height of six feet.*
- 3. *The outer perimeter of the wireless communication facilities shall have a landscaped buffer zone ten feet in width.*
- 4. *The landscaped area shall be irrigated and maintained to provide for proper growth and health of the vegetation.*
- 5. *One tree shall be required per 20 feet of the landscape buffer zone to provide a continuous canopy around the perimeter of the wireless communication facilities. Each tree shall have a caliper of two inches, measured at breast height, at the time of planting.*

E. Visual Impacts

- 1. *Wireless communication facilities shall be located in the area of minimal visual impact within the site which will allow the facility to function consistent with its purpose.*
- 2. *Wireless communication facilities, in any zone, must be set back from any residential zone a distance equal to twice its overall height. The setback requirement may be reduced if, as determined by the approval authority, it can be demonstrated through findings of fact that increased mitigation of visual impact can be achieved within of the setback area. Underground accessory equipment is not subject to the setback requirement.*
- 3. *Antennas attached to a pre-existing or alternative structure shall be integrated into the existing*

PA-APPEAL-2024-00019

July 9, 2024

Page 4

building architecturally and to the greatest extent possible shall not exceed the height of the pre-existing or alternative structure.

4. *Antennas attached to a pre-existing or alternative structure shall have a non-reflective finish and color that blends with the color and design of the structure to which it is attached.*
5. *All wireless communication support structures must have a non-reflective finish and color that will mitigate visual impact, unless otherwise required by other government agencies.*
6. *Exterior lighting for a wireless communication facility is permitted only when required by a federal or state authority.*
7. *Should it be deemed necessary by the approval authority for the mitigation of visual impact of the wireless communication facility, additional design measures may be required. These may include, but are not limited to: additional camouflage materials and designs, facades, specific colors and materials, masking, and shielding techniques.*

5) The criteria for Conditional Use Permit approval are described in AMC 18.5.4.050.A as follows:

1. *That the use would be in conformance with all standards within the zoning district in which the use is proposed to be located, and in conformance with relevant Comprehensive plan policies that are not implemented by any City, State, or Federal law or program.*
2. *That adequate capacity of City facilities for water, sewer, electricity, urban storm drainage, paved access to and throughout the development, and adequate transportation can and will be provided to the subject property.*
3. *That the conditional use will have no greater adverse material effect on the livability of the impact area when compared to the development of the subject lot with the target use of the zone, pursuant with subsection 18.5.4.050.A.5, below. When evaluating the effect of the proposed use on the impact area, the following factors of livability of the impact area shall be considered in relation to the target use of the zone.*
 - a. *Similarity in scale, bulk, and coverage.*
 - b. *Generation of traffic and effects on surrounding streets. Increases in pedestrian, bicycle, and mass transit use are considered beneficial regardless of capacity of facilities.*
 - c. *Architectural compatibility with the impact area.*
 - d. *Air quality, including the generation of dust, odors, or other environmental pollutants.*
 - e. *Generation of noise, light, and glare.*
 - f. *The development of adjacent properties as envisioned in the Comprehensive Plan.*
 - g. *Other factors found to be relevant by the approval authority for review of the proposed use.*
4. *A conditional use permit shall not allow a use that is prohibited or one that is not permitted pursuant to this ordinance.*
5. *For the purposes of reviewing conditional use permit applications for conformity with the approval criteria of this subsection, the target uses of each zone are as follows.*
 - i. **HC, NM, and SOU.** *The permitted uses listed in chapters 18.3.3 Health Care Services, 18.3.5 North Mountain Neighborhood, and 18.3.6 Southern Oregon University District, respectively, complying with all ordinance requirements.*

6) The Planning Commission, following proper public notice, held a public hearing on July 9, 2024, at

which time testimony was received and exhibits were presented. Following closing of the record and the public hearing, the Planning Commission determined that based on new materials submitted since the original decision, the applicant had met the burden of proof for the requested Site Design Review and Conditional Use Permits to install Wireless Communication Facilities on the SOU Science Building at 1250 Ashland Street, upholding the appeal and approving the application subject to conditions pertaining to the appropriate development of the site.

Now, therefore, the Planning Commission of the City of Ashland finds, concludes and recommends as follows:

SECTION 1. EXHIBITS

For the purposes of reference to these Findings, the attached index of exhibits, data, and testimony will be used.

Staff Exhibits lettered with an "S"

Proponent's Exhibits, lettered with a "P"

Opponent's Exhibits, lettered with an "O"

Hearing Minutes, Notices, and Miscellaneous Exhibits lettered with an "M"

SECTION 2. CONCLUSORY FINDINGS

2.1 The Planning Commission finds that it has received all information necessary to make a decision based on the Staff Report, public hearing testimony and the exhibits received.

2.2 The Planning Commission finds that the proposal for Site Design Review meets all applicable criteria for Site Design Review approval described in section 18.5.2.050, for Wireless Communication Facilities described in section 18.4.10.030, and for Conditional Use Permit approval described in section 18.5.4.050.A. The site plan and elevation drawings provided delineate the proposed wireless communication facility installation locations, designs and associated improvements.

2.3 The Planning Commission finds that, as detailed in AMC 18.4.10.020, wireless communication facilities (WCF) attached to existing structures in the Southern Oregon University are subject to Site Design Review. The Commission further finds that the current Site Design Review application was denied by staff on May 14, 2024, with a 12-day appeal period which extended through the end of business on May 28, 2024. On May 23, 2024, prior to the end of the appeal period, Verizon Wireless, timely filed a notice of land use appeal. As the applicant, Verizon Wireless has standing to appeal. The notice of appeal identified six specific points of appeal which are discussed in detail in Section 2.7.

AMC 18.5.1.050.G. explains that appeal hearings on Type I decisions made by the Staff Advisor are “*de novo*” hearings before the Planning Commission and follow the standard Type II public hearing procedure except that the decision of the Planning Commission is the final decision of the City. Consideration of

PA-APPEAL-2024-00019

July 9, 2024

Page 6

the appeal is not limited to the application materials, evidence and other documentation, and specific issues raised in the review leading up to the Type I decision but may include other relevant evidence and arguments. The Commission may allow additional evidence, testimony, or argument concerning any relevant ordinance provision.

2.4 The Planning Commission finds that the application explains that the proposed rooftop antennas and associated equipment are designed to provide additional services to customers in and around the Southern Oregon University campus and to improve service capacity, thereby improving overall performance. The applicants emphasize that if additional WCF are not built soon to provide more capacity, Verizon Wireless's existing sites will exhaust their capacity and no longer be able to provide service to customers in the area.

The building and associated site improvements here received Site Design Review approval relatively recently, and the Commission's review here is limited to considering how the addition of the proposed WCF complies with the applicable WCF design standards.

The Planning Commission further notes that Ashland's standards regulate the placement and appearance of wireless communication facilities (WCF) while providing residents with the ability to access and adequately utilize the services that these facilities support. These standards are based on a recognition that, because of the physical characteristics of WCF, the visual and aesthetic impacts of these facilities affect not only the neighboring residents but also the community as a whole. The standards are intended to ensure that the visual and aesthetic impacts of wireless communication facilities are mitigated to the greatest extent possible, especially in or near residential areas. The key concern most often raised in WCF applications – the environmental health impacts associated with such installations – is explicitly precluded from consideration by federal law. This preclusion applies to moratoria, as well as to individual land use decisions. As such, WCF applications are carefully considered in terms of the applicable local land use regulations including requirements for Site Design Review approval, specific design standards and in this instance an associated Conditional Use Permit related to the proposed increase in building height.

With regard to the design standards, the Commission finds that the antennas and associated equipment will be located on the roof and will be screened and concealed by the existing screen wall as well as a new proposed screening wall which will go around the remainder of the building and include fiberglass reinforced plastic (FRP) around the WCF, matching the existing screening wall to minimize any visual impacts. The equipment will be visually screened by the wall at the top of the building – the antennas and equipment cabinets are shorter than the wall and will not extend above the wall. No vegetative screening is proposed as the installation is entirely limited to the rooftop, and the rooftop installation is noted as being only as high as necessary to achieve the coverage goals. No signage beyond any required by state and federal laws is proposed to be posted, no exterior lighting is proposed, and the applicants agree to remove all equipment from the site and return it to its original condition within 90 days if and when the facility is ever abandoned for a period of greater than six months. The application asserts, and staff have confirmed, that the building is set back more than twice its overall height from any residential zone.

The Planning Commission further finds that the WCF design standards in AMC 18.4.10.030.B include a "stepped hierarchy" of preferred designs which are to be considered in succession. The feasibility of a

preferred design must first be exhausted before moving to the next alternative. Under this hierarchy, collocation on an existing wireless facility is the preferred option and placement on an existing structure may only be considered once collocation has been demonstrated to be technically not feasible or the location unavailable.

The Commission notes that staff initially administratively denied the application. As provided in the ordinance, the city retained the services of a qualified, independent third-party reviewer who analyzed the application and determined that the application's collocation study included insufficient objective evidence to meet the requirements of the collocation standards or show that the proposed site produces acceptable performance and fills the area's coverage/capacity needs. Specifically, the city's independent third-party reviewer William Johnson noted:

- The original analysis submitted by the applicant was silent with regard to mid-band RF coverage which represents roughly 90 percent of the available licensed spectrum. Analysis of the need for the proposed site as well as evaluation of alternative sites is heavily dependent on the propagation limitations of mid-band spectrum, and in Johnson's review there was no information about this important band from the applicant other than to mention that it will be deployed.
- Johnson further noted that no trend metrics such as Forward Data Volume (FDV), Average Scheduled Eligible Users (ASEU), and Average Active Connections (AvgAC) were provided to support claims that a new base station facility was needed to off-load traffic or draw local mobile subscribers onto the new site using mid-band spectrum to free up low-band spectrum.
- Johnson added that the scale of the RF propagation plots provided made it nearly impossible to identify locations where in-building service was needed and how the proposed base station would be able to satisfy that need.
- Johnson noted that for the alternate site analysis, city staff eyes-on observations had shown that two of the potential collocation sites did not appear to have any existing WCF in place and there was no record of any approved facilities at these locations. Johnson recommends that the applicant revisit the alternate site analysis to ascertain how realistic the alternative sites are to the present application.
- Finally, Johnson noted that the application materials lack supporting documentation to show that existing structure collocation on the new AT&T light standard at Raider Stadium approved in 2017-2018 is not possible for design or loading issues, and while the materials indicated the landowner was unwilling to allow collocation, there was no documentation provided to support that assertion.

The Commission finds that after considering all information in the record, the Staff Advisor found that the application as initially presented failed to meet the burden of proof in that the applicant's collocation study/alternative sites analysis was insufficient in demonstrating a service gap and in demonstrating that collocation or placement on an existing structure was not feasible. The Commission further finds that relief from the collocation requirements calls for a clear and defensible demonstration both of a service gap in the coverage area and that collocation is either not feasible or not available. In the initial application materials, a service gap was not clearly and adequately demonstrated and while the applicant suggested that the alternative site on the light standard at Raider Stadium was not available, there was insufficient

documentation to support that assertion.

2.5 The Planning Commission notes that the subject property is located within the Southern Oregon University (SOU) District, a special district designed to provide for the unique needs of Southern Oregon University as a State educational institution functioning within the planning framework of the City. The SOU District is regulated under AMC Chapter 18.3.6 and by the SOU Campus Master Plan which has been adopted by the City as Ordinance #3014.

The Planning Commission further notes that within the SOU District, WCF are authorized subject to Chapter 18.4.10. In addition, any construction over 40 feet in height is subject to the approval of a Conditional Use Permit per Chapter 18.5.4. The Planning Commission finds that while WCF are exempted from height restrictions in each zone, with the addition of the proposed ten-foot tall FRP screen walls here, the height of the existing building will exceed 40 feet. Currently, the building is noted as 39.1 feet in height above the finished grade, with the existing mechanical equipment noted at 61.9 feet above finished grade at its highest point, and both the existing and proposed screen walls extend to 49.1 feet above finished grade.

Conditional Use Permits provide for discretionary review of the adverse material impacts of a request in comparison to adverse material impacts that could reasonably be expected from the property's target use, which for the SOU District is "*The permitted uses listed in... (chapter) 18.3.6 Southern Oregon University District... complying with all ordinance requirements.*" Consideration in the criteria include adequate capacity of city facilities, impacts on the livability of the impact area when considered in terms of scale, bulk, and coverage; traffic generation; architectural compatibility; air quality; generation of noise, light, and glare; the development of adjacent properties as envisioned in the Comprehensive Plan; and other factors found to be relevant by the hearing authority. Conditional use permits provide the city with the ability to impose conditions necessary to mitigate these adverse material impacts.

The application asserts that the proposal is in conformance with the standards of the SOU District and relevant Comprehensive Plan policies. The application further explains that because the proposal is for an unmanned WCF it will not impact access to city services, generate any additional traffic or impact transportation in any way. In addition, the applicants assert that the antennas and equipment that will be going on the roof will be screened with material that will match the current screening wall but extend around the whole building, and as such will have no greater impact on the livability of the surroundings than would the target use. The applicants emphasize that the installation will not affect air quality, and have provided an acoustic report which concludes that, "*the predicted noise levels are significantly lower than both the code limit and the existing ambient noise levels, and as such will not contribute to the existing noise environment.*" No added exterior lighting is proposed in conjunction with this WCF installation. The applicants note that the proposal is limited to the campus and will not affect the future development of adjacent properties and is an allowed use in the district subject to the requirements of AMC Chapter 18.4.10.

The Planning Commission finds that the building already has a partial screen wall in place, and that the applicants propose to place the antennas and all associated equipment on the building's roof, rather than placing accessory equipment on the ground and screening it with vegetation. All equipment is to be

screened entirely behind a screen wall which will extend the existing screen wall around the building roof's full perimeter, and fiberglass reinforced plastic will be used to mitigate the visual and acoustic impacts of the WCF installation. The Commission further finds that the extension of the existing screening wall to enclose the full perimeter of the building with a matching wall which will conceal the proposed WCF installation is what is triggering the Conditional Use Permit component of the application – the added height of the screening around the full perimeter of the building alters the building's height as calculated by code to exceed 40 feet. The Commission finds that this installation is intended to match the height of the screen wall already in place, and to fully conceal the WCF. The application emphasizes the height of the proposed WCF equipment is to be lower than the screen wall and includes an acoustic report demonstrating that the placement and screening of the WCF will be below not only the allowed noise levels of the code, but significantly below the ambient noise levels already generated by traffic in the area. The Planning Commission concludes that the benefits demonstrated by the applicants of installing the screening wall outweigh and mitigate the impacts associated with the additional height involved. The Commission also recognizes that concerns regarding environmental health impacts fall within the federal regulations which preclude the city's ability to consider the direct or indirect environmental or health impacts of such an installation when the installation complies with all federal regulations.

2.6 Subsequent to the mailing of a Notice of Complete Application (NOCA), nine parties submitted written comments with regard to the proposal during the public comment period.

- **David DeHaas** submitted comments in opposition asking that the applicant be required to prove with “*facts of real measurements*” their gap in coverage. He emphasized that the applicant has not proven they have a significant gap in coverage for cell phone calls, and that the maps provided show no real data. He suggested that 5G towers are for broadband data, not for cell phone calls and as the proposal is for broadband it can be rejected outright.
- **Elaine Sayre** asked that the comment deadline be extended and a better effort to inform the neighborhood residents be made. She added that the science building is in a residential area and that she has health concerns and concerns with her view.
- **Marilyn Lindsay** expressed frustration that the city has allowed wireless technology to be advanced/updated to out compete for profit telecommunication wireless communication facilities (WCFs) in terms of data speed, capacity, security and safety (from both RF radiation, and fire). She suggests that no matter how many citizens gave their time to research and educate the city on the ill health effects of RF radiation and the advantage of fiber optics as a safe alternative, the city was determined to pursue its agenda.
- **Laura McLellan** expressed her opposition to the proposal, noting that there is no proof that WCF's are safe, that many scientists believe they pose health hazards, and that this will make Ashland and the neighborhood unsafe, especially for children.
- **Robert McLellan** contested the proposed WCF installation, noting concerns with the health issues caused by 5G technology. He suggested that placing a WCF on a campus and so close to a densely populated neighborhood is a major concern as opposed to placing it in an open space across the freeway and asked that the project be rejected.

- **Paul Mozina** suggested that relying on the Telecommunications Act of 1996 as a basis for not considering health impacts is willful ignorance and disregard for the impacts WCFs have on living things. He noted that he lives in the area and has adequate cell service and suggested that this real-world test should outweigh computer modeling that shows a service gap. He further emphasized that the Telecommunications Act of 1996 was never intended to support the ‘internet of things’ at the heart of 5G technology, and that the Federal Communications Commission has failed to respond to the August 31, 2021, decision of the US Court of Appeals for the DC District. He cited the Flower Hill case, which is now under appeal, as precedent that new uses of wireless such as broadband and other services are not protected by the 1996 Telecommunications Act. Mozina’s materials conclude suggesting that cities should consider denying small cell applications unless there is a demonstrable gap in phone coverage.
- An **anonymous** commenter suggested that they did not know enough about the 5G issue to have an informed opinion, but they nonetheless urged weighing development considerations against the potential long-term health consequences.
- **Steve Belsky** expressed his dissatisfaction with the city’s approach in recent wireless applications, suggesting that the height limitation imposed on the AT&T WCF installation on the light standard at Raider Stadium was counter to the city’s own standards and had the effect of preventing collocation, in an area that was better suited for WCF installation by virtue of being farther from residential neighborhoods. He suggested that the city reconsider whether the stadium light standard could be reconstructed to enable collocation.
- **Kelly Marcotulli** urged denial, suggesting that there was ample service for Verizon customers; she expressed concerns with environmental and health impacts, killing of pollinators and increased fire risk.

In terms of consideration of the health impacts of wireless communication facilities noted by several of those commenting, the Commission finds that Title 47 U.S. Code, Chapter 5, Subchapter III, Part 1 §332.7.B.iv “*Mobile Services – Preservation of Local Zoning Authority*” provides that “*No state or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the (Federal Communication) Commission’s regulations concerning such emissions.*” Federal law explicitly precludes the city’s consideration of potential environmental health impacts of wireless communication facilities through the city’s local zoning authority. This preclusion prevents the city from considering health impacts in individual land use decisions and would also prevent the city from imposing a moratorium on facilities of this nature.

In terms of concerns over adequate notice and requests to extend the comment period, the Commission finds that the timeline for comment is set in state law and city code at 14 days, and there are timelines established in state and federal law specifically for wireless applications that require that the city reach a decision within a specific number of days. There are no allowances for the city to extend those timelines. Notices making the comment period clear were mailed to all property owners within 200 feet of the

property as required by the city's code. That notice can be seen on-line at: <https://gis.ashland.or.us/arcgis/rest/services/planning/PlanningAction2/FeatureServer/0/81634/attachments/111254>. Signs with the notice were also posted at the subject property so as to be visible from the right-of-way, and the applicant conducted a neighborhood meeting prior to making application and provided written notice to all neighbors within 300 feet as required in the city's code. Details of the neighborhood meeting are included in the full application submittal on the city's website at: <https://gis.ashland.or.us/arcgis/rest/services/planning/PlanningAction2/FeatureServer/0/84434/attachments/116454>, and were publicized in the Ashland News at <https://ashland.news/verizon-to-host-public-meeting-thursday-about-proposed-cell-antenna/> and <https://ashland.news/verizon-cell-tower-meeting-draws-concerned-ashland-residents/>

Mr. Belsky asserts that the city erred in limiting the height of the AT&T WCF installation on the light standard at Raider Stadium, violating the city design standard that, *“All new wireless communication support structures shall be constructed so as to allow other users to collocate on the facility”* because the additional height would have supported collocation here. The Planning Commission finds that the decision on that application was based on the application failing to demonstrate the additional height was necessary based on another design standard that, *“Wireless communication facilities shall be installed at the minimum height and mass necessary for its intended use.”* The Commission further finds that the decision in that application (PA-T1-2021-00158) was initially appealed to the Planning Commission and then on to the Land Use Board of Appeals (LUBA) and was upheld by both bodies.

2.7 The Planning Commission finds that on May 23, 2024, prior to the end of the appeal period, Verizon Wireless timely filed a notice of land use appeal. As the applicant, Verizon had standing to appeal. Verizon's notice of appeal identified six points:

1. The Director erred by denying a proposal that is identical to the proposal approved by the Director and the Planning Commission in 2018. Both the Director and the Planning Commission approved the identical proposal in 2018 (PA #2017-01486), but that land use approval ultimately expired. The current proposal and the City's approval standards are identical to the 2018 proposal and standards. The Director failed to explain why he denied the Application given that it is identical to the proposal approved in 2018 subject to the same approval standards.
2. The Director erred by denying the Application based exclusively on comments from the City RF consultant which the Applicant was never provided an opportunity to respond to or address. The City RF consultant's letter is dated April 24, 2024, but the City did not provide the Applicant with a copy of the letter until it issued the Director's decision on May 14, 2024. The City RF consultant's letter raises several questions and issues that the Applicant could have corrected or clarified. Nonetheless, the Applicant will respond to the City RF consultant's letter as part of this appeal.
3. The Director erred by denying the Application based on the City RF consultant's request for specific technical information that is not required under the City's application submittal or approval standards. AMC Chapter 18.4.10 does not require the Applicant to provide RF

PA-APPEAL-2024-00019

July 9, 2024

Page 12

propagation maps that identify and address different bands of operation, trend metrics, or scales of RF propagation plots. The City cannot deny the Application based on the lack of technical information that the Applicant was not required to provide under the City's submittal or approval standards. Nonetheless, the Applicant will respond to these City RF consultant's comments as part of this appeal.

4. The Director erred by denying the Application on the grounds that the Applicant failed to demonstrate a "service gap" in the coverage area. The Applicant provided substantial evidence demonstrating that there is a significant coverage and capacity gap in this area of the City. The City RF consultant did not dispute this claim, but rather merely requested additional technical information that the Applicant was not required to submit under AMC Chapter 18.4.10. Additionally, the Applicant would not undertake the time and expense of pursuing approval of the proposed wireless communications facility if it was unnecessary to resolve a coverage and capacity gap in this area. Nonetheless, the Applicant will provide additional information and clarification demonstrating there is a significant coverage and capacity gap in this area of the City.
5. The Director erred in denying the Application on the grounds that the Applicant failed to demonstrate "*that collocation or placement on an existing structure are not feasible.*" The Application proposes a wireless communications facility that will be attached to an existing structure, and therefore the Applicant did demonstrate that placement on an existing structure is feasible consistent with AMC 18.4.10.040(B)(2). The Applicant demonstrated that the AT&T reconstructed stadium light standard at Raider Stadium is not a feasible collocation option for several reasons. The city staff is well aware of the Applicant's efforts to explore collocation opportunities on the AT&T light standard since the Applicant specifically requested the city staff's assistance in pursuing this option. The Applicant contacted AT&T before it constructed the light standard and was advised by AT&T that it is not feasible to collocate on this facility because it is a custom fabricated concrete pole that cannot structurally support an additional wireless communication facility. AT&T rejected any proposal to collocate on the stadium light facility due to the inability to support another wireless communication facility. The Applicant asked the City to assist in exploring collocation options with AT&T that could accommodate an additional wireless communication facility, but the City advised the Applicant that it is not appropriate, nor does the City have the authority, to require AT&T to work with the Applicant on this issue. AT&T has since constructed the replacement stadium light standard and it is unable to support another wireless communication facility. Since the replacement stadium light standard cannot support another wireless communication facility, the Applicant cannot force AT&T to allow for collocation and the city was unwilling to require AT&T to do so, this collocation option is not available. Even if the City RF consultant was correct that two of the rooftop options the Applicant considered do not have existing wireless communication facilities, that does not provide a basis for denying the Application. The proposal is a rooftop option that is a preferred design option consistent with AMC 18.4.10.040(B)(2) if no collocation options are feasible and therefore the Applicant is not required to rule out other rooftop options that do not have existing wireless communication facilities. The City RF consultant did not identify any other collocation options. Nonetheless, the Applicant will provide additional information and evidence supporting

PA-APPEAL-2024-00019

July 9, 2024

Page 13

the conclusion that there are no feasible collocation options under AMC 18.4.10.040(B)(2) and the proposal is consistent with the preferred design standards.

6. The Applicant reserves the right to raise additional appeal issues since AMC 18.5.1.050(G)(3) does not limit the appeal to the specific grounds listed in the notice of appeal.

2.8 The Commission notes that the applicants initially provided the code-required collocation study, and as required by ordinance the City retained the services of an independent third-party reviewer. The code requires that the applicants deposit funds with the city with their application fee to pay for this independent third-party review. William P. Johnson, RF Engineering Consultant, reviewed the application materials to ensure that the site approvals are based on an objective need. In his initial review, Johnson concluded that the applicants had failed to provide sufficient objective evidence relevant to the proposal documenting the need for additional RF coverage and capacity. With their appeal submittal, the applicants have provided additional technical submittals in response to the deficiencies identified in the third-party review. In reviewing these subsequent materials submitted by the applicants in response to his initial report, William Johnson notes that:

1. The target area is currently served to some extent by existing sites shown in #3 page 7 that are between one- and two-miles away. Sites at that distance might provide some low-band RF coverage, but it is often unreliable and service quality depends on subscriber location and local RF “clutter.” It is nearly impossible for sites at that distance to provide reliable mid-band RF coverage in an urban/suburban area.
2. Existing spotty low-band (700/850MHz) RF coverage from existing neighbor sites provides about ten percent of Appellant’s bandwidth. Item #3 pages 14-15 and 18-19 show existing and proposed low-band RF coverage. Mid-band spectrum, which accounts for about 90 percent of Appellant’s subscriber bandwidth, is likewise spotty and served from existing neighbor sites at or below the outdoor service level. See Item #3 pages 21-22 and 25-26. We therefore conclude that Appellant has shown an RF service coverage gap in the vicinity of the proposed site that could be remedied by a new WCF.
3. In addition to the RF coverage gaps noted above, Appellant has provided Forward Data Volume (FDV) and Average Scheduled Eligible Users (ASEU) metric plots for an un-named existing neighbor site sector. The plots do not identify the band of operation, but we suspect they are for existing low-band services. Those plots show, at least for that unnamed sector, two issues that will affect reliable service. First, the FDV plot shows that the serving sector cannot support the number of users and their bandwidth demands during the busiest times each day. Second, the ASEU plot likely reflects the make-and-break connections subscribers experience while trying to hold voice and data sessions on the LTE network from the unnamed sector. Both metrics tend to support Appellant’s claim of need for a WCF in the vicinity of the proposed site.
4. Appellant has also supplemented their materials with “crowd-sourced” data from the “*Ookla Verizon 4G*” database that show user devices reporting less-than-reliable service levels in the vicinity of the proposed site. See Item #3 page 11. That crowd-sourced data is consistent with the

PA-APPEAL-2024-00019

July 9, 2024

Page 14

existing RF coverage levels shown for low-band and mid-band and is consistent with Appellant's ASEU metrics that show excessive sessions held by the existing WCF sector in question.

5. Due to the propagation characteristics of both low-band and mid-band signals, any prospective alternate sites that are more distant than Appellant's existing WCF sites are likely to fail to provide sufficient signal strength to the target coverage area.
6. Documentation Item #2 "Alternate Site Analysis" lists site numbers 1 through 4. Sites 1, 2 and 3 are either located near existing sites operated by Appellant or are at comparable distances to existing sites. These alternate sites would likely have the same signal level issues discussed above for existing low-band and mid-band service that create the need for a WCF in the vicinity of the proposed site.
7. Appellant states that Site 4, the 85-foot light pole location, provides acceptable performance, but Appellant states that location is "not available." See Item #2 page 20.
8. Additional alternate sites identified by city staff or during public comment near the target area, *if any*, that have lower antenna center line (ACL) elevation or that are located at other coordinates will require additional propagation modeling by Appellant to assess performance should they be considered.

The Planning Commission further finds that in addition to the new technical materials provided with the appeal, the applicant/appellant has also provided a letter with attachments speaking to the feasibility of collocation on the new AT&T wireless facility at Raider Stadium, on a light standard, elsewhere on the SOU campus. The letter and associated attachments total 31 pages to document the applicant/appellant's efforts to pursue collocation on the AT&T facility. In summary, the University as the property owner has indicated to the applicant/appellant that while the University does not "*have any objections to collocating with AT&T*" the applicant/appellant would need to discuss feasibility with AT&T. In subsequent outreach to AT&T, AT&T indicated that the light standard as approved and installed is "*fairly short*" and "*would not be suitable for additional collocators*". The applicant/appellant further explains:

First, AT&T rejected Verizon's attempts to explore any proposal to collocate on the stadium light facility based on AT&T's position that the reconstructed stadium light standard is incapable of supporting another WCF. ... Both AT&T and its consultant made it clear that a collocation of another WCF at this site is not feasible due to the lower approved height and the fact that the AT&T reconstructed stadium light standard is a custom fabricated concrete pole that cannot structurally support another WCF. Since AT&T is unwilling and/or unable to allow collocation on the reconstructed stadium light standard and Verizon cannot force AT&T to permit collocation, this is not a feasible option.

Second, the property owner (Southern Oregon University) was unable or unwilling to assist Verizon in facilitating collocation on the reconstructed stadium light standard. Since Southern Oregon University is the property owner for both the AT&T stadium light facility and Verizon's proposed rooftop site, Verizon reached out to Southern Oregon University to facilitate a discussion with AT&T about collocating on the stadium light standard. As reflected in the attached emails between Southern Oregon University and Acom, Southern Oregon University was unable or

PA-APPEAL-2024-00019

July 9, 2024

Page 15

unwilling to assist.

Third, the city was unable or unwilling to assist Verizon in facilitating collocation on the reconstructed stadium light standard before AT&T constructed it....

The Planning Commission finds that the same proposal was previously approved in the same location, and that with there now being adequate technical data in the application to support the request based on independent third-party review, the only change in conditions since the previous approval is that there is now an AT&T facility at Raider Stadium that needs to be ruled out for collocation before the applicant can move on to the next step in the stepped hierarchy of the design standards and locate on an existing structure. The Planning Commission concludes that the letter and associated attachments provided can be found to demonstrate that *“a reasonable effort was made to locate collocation sites that meet the applicant’s service coverage area needs”* and that *“alternative sites have been considered and are technologically unfeasible or unavailable.”*

2.8 The Planning Commission finds that with regard to the first appeal issue, that staff erred by denying a proposal that is identical to the proposal approved in 2018, the difference in the 2018 and 2024 proposals is that in 2024, there is now a wireless communication facility (WCF) in place elsewhere on campus. The WCF design standards in AMC 18.4.10.030.B include a “stepped hierarchy” of preferred designs which are to be considered in succession, and the feasibility of a preferred design must first be exhausted before moving to the next alternative. Under this hierarchy, collocation on an existing wireless facility (i.e. the light standard at the stadium) is the preferred option and placement on an existing structure (i.e. the Science Building) may only be considered once collocation has been demonstrated to be technically not feasible or the location unavailable. Staff and the independent third-party reviewer found that the initial application materials here lacked sufficient documentation to demonstrate that collocation was not feasible or that the location was unavailable. The Commission finds that the applicant has since provided sufficient additional documentation to remedy this deficiency.

With regard to the second appeal issue, that staff erred in denying the application based on review by the city’s independent third-party reviewer without providing the applicant an opportunity to respond, the Planning Commission finds that this has been remedied through the appeal process and that the applicant/appellant has now been able to provide a detailed and thorough response to the third-party reviewer’s comments.

For the third appeal issue, that staff erred in denying the application based on the third-party reviewer’s determination that specific technical information was needed to demonstrate a service gap when that technical information was not required under the city’s application submittal or approval standards. The Planning Commission finds that while the city standards do not require specific technical data, AMC 18.4.10.040.C.2 requires a collocation study including a demonstration of a significant service gap in the coverage area which is to be subject to third party analysis. AMC 18.4.10.030.H further provides that the third-party reviewer *“... must provide objective advice based on professional qualifications and*

PA-APPEAL-2024-00019

July 9, 2024

Page 16

experience in telecommunication/radio frequency engineering, structural engineering, assessment of electromagnetic fields, telecommunications law, and other related fields of expertise.” The Planning Commission finds that by its nature, the submittal requirements cannot include all specific technical requirements of a study, but that the study must demonstrate a service gap in sufficient technical detail to hold up to a detailed third-party analysis.

For the fourth appeal issue, that staff erred in denying the application for failing to demonstrate a service gap when the materials provided substantial evidence that there was a significant coverage and capacity gap in this area, the Planning Commission finds that the third-party reviewer's initial findings were that the materials initially provided lacked sufficient detail on the mid-band spectrum, that analysis of the need for the proposed site as well as evaluation of alternative sites was heavily dependent on the propagation limitations of mid-band spectrum, that no supporting trend metrics were provided to support the claimed need for a new facility, and that the scale of propagation plots provided was such that they could not be used to identify in-building service needs or how the proposed WCF would satisfy those needs. The Commission finds that staff did not err, and that there was ample basis for the original decision in the third-party reviewer's initial report. The Commission further finds that with the additional materials provided since the appeal and subsequent review by the third-party reviewer, these deficiencies have been remedied.

With regard to the fifth point of appeal, that staff erred in denying the application on the basis that it failed to demonstrate that collocation on an existing WCF was not feasible, the Planning Commission finds that while staff may have been aware of the reasons why collocation was not feasible through conversations with the applicant, these reasons were not sufficiently documented in the record to meet the burden of proof. The Planning Commission further finds that the applicant has subsequently provided ample evidence demonstrating that collocation is not feasible.

The Planning Commission finds that the sixth appeal issue is simply a reiteration that as provided in AMC 18.5.1.050.G.3, appeals of Type I decisions to the Planning Commission are de novo hearings and are not limited to the appeal points or evidence already in the record.

SECTION 3. DECISION

3.1 Based on the record of the Public Hearing on this matter, the Planning Commission concludes that the request for Site Design Review and Conditional Use Permit approvals to install wireless communication facilities on the roof of the Southern Oregon University Science Building is supported by evidence contained within the whole record.

The Planning Commission upholds the appeal, reverses the Staff Advisor's original denial, and approves the Site Design Review and Conditional Use Permits to allow the installation of wireless communication facilities, including antennas and associated equipment, on the roof of the Science Building at 1250 Ashland Street on the Southern Oregon University Campus subject to the conditions detailed below. Further, if any one or more of the conditions below are found to be invalid, for any reason whatsoever, then PA-T1-2024-00233 is denied. The following are the conditions, and they are attached to the approval:

PA-APPEAL-2024-00019
July 9, 2024
Page 17

1. That all proposals of the applicant shall be conditions of approval unless otherwise specifically modified herein, including:
 - a. That a screening wall matching the existing partial screening wall, with FRP paneling at antenna areas, shall be extended around the full perimeter of the building roof as proposed by the applicants.
 - b. That the proposed equipment cabinet, battery cabinet and antennas shall not extend above the level of the screen wall.
 - c. That vertical conduit attached to the building façade shall be painted to match the existing building.
 - d. That there shall be no new exterior lighting in conjunction with the proposal; and
 - e. That no associated equipment, other than the existing power transformers and generator, shall be placed on the ground.
2. That all conditions of the previous land use approvals for the Science Building shall remain in effect unless otherwise specifically modified herein.
3. That the applicants obtain required building permits, including any structural, mechanical and electrical permits; pay associated fees and charges; and obtain all required inspection approvals. All requirements of the Building Division, including but not limited to that final drawings prepared by an Oregon-licensed design professional may be necessary to complete the submission for permits; that permit drawings shall address any applicable Oregon Structural Specialty Code requirements (i.e. wind, seismic and tributary loads, and forms of attachment).
4. That the building permit submittals shall include written communications from the Federal Aviation Administration, the Aeronautics section of the Oregon Department of Transportation, and the Federal Communications Commission that the proposed wireless communication facility complies with the regulations of their respective agencies or is exempt from those regulations.
5. That the plans submitted for the building permit shall be in conformance with those approved as part of this application. If the plans submitted for the building permit are not in substantial conformance with those approved as part of this application, an application to modify this Site Design Review and Conditional Use Permit approval shall be submitted and approved prior to issuance of a building permit.
6. That prior to the issuance of a building permit, the applicants shall obtain a business license from the City of Ashland.
7. That prior to use of the proposed wireless communications facility (WCF), the applicants shall paint, texture or otherwise treat the proposed screening wall in a non-reflective finish and color to match the existing screening wall.

Planning Commission Approval

July 9, 2024
Date

PA-APPEAL-2024-00019
July 9, 2024
Page 18

DRAFT - BEFORE THE PLANNING COMMISSION - DRAFT

July 9, 2024

IN THE MATTER OF PA-APPEAL-2024-00019, AN APPEAL OF THE STAFF)
APPROVAL OF PA-T1-2024-00233 A REQUEST FOR SITE DESIGN REVIEW)
TO INSTALL WIRELESS COMMUNICATION FACILITIES (ANTENNAS AND)
ASSOCIATED EQUIPMENT) ON THE ROOF OF THE SCIENCE BUILDING AT)
1250 ASHLAND STREET ON THE SOUTHERN OREGON UNIVERSITY CAMPUS.)
THE APPLICATION ALSO INCLUDES A REQUEST FOR A CONDITIONAL USE)
PERMIT BECAUSE WITH INSTALLATION OF PANELS PROPOSED TO SCREEN)
THE WIRELESS COMMUNICATION FACILITY INSTALLATION, THE BUILDING) **FINDINGS,**
HEIGHT WILL EXCEED 40 FEET. STAFF INITIALLY DENIED THE APPLI-) **CONCLUSIONS &**
CATION ADMINISTRATIVELY, AND SUBSEQUENT TO THE MAILING OF THE) **ORDERS**
NOTICE OF DECISION, THE APPLICANT VERIZON WIRELESS TIMELY FILED)
AN APPEAL REQUEST.)

OWNER: Southern Oregon University)
APPLICANT: Verizon Wireless)
APPELLANT: Verizon Wireless)

RECITALS:

- 1) Tax lot #100 of Map 39 1E 15BB is located at 1250 Ashland Street on the Southern Oregon University campus and is zoned SO (Southern Oregon University District).
- 2) The application is a request for a Site Design Review Permit to install wireless communication facilities (antennas and associated equipment) on the roof of the Science Building at 1250 Ashland Street on the Southern Oregon University Campus. The application also includes a request for a Conditional Use Permit for the installation of panels proposed to screen the wireless communication facility installation, which will require the building height to exceed 40 feet. Staff initially denied the application administratively based on the findings of an independent third-party reviewer who determined that the technical materials provided failed to meet the burden of proof. Subsequent to the mailing of a Notice of Decision, the applicant Verizon Wireless appealed the decision. Proposed site improvements are outlined on the plans on file at the Department of Community Development.
- 3) The criteria for Site Design Review approval are described in AMC 18.5.2.050 as follows:
 - A. ***Underlying Zone:*** *The proposal complies with all of the applicable provisions of the underlying zone (part 18.2), including but not limited to: building and yard setbacks, lot area and dimensions, density and floor area, lot coverage, building height, building orientation, architecture, and other applicable standards.*

PA-APPEAL-2024-00019
July 9, 2024
Page 1

- B. **Overlay Zones:** *The proposal complies with applicable overlay zone requirements (part 18.3).*
 - C. **Site Development and Design Standards:** *The proposal complies with the applicable Site Development and Design Standards of part 18.4, except as provided by subsection E, below.*
 - D. **City Facilities:** *The proposal complies with the applicable standards in section 18.4.6 Public Facilities and that adequate capacity of City facilities for water, sewer, electricity, urban storm drainage, paved access to and throughout the property and adequate transportation can and will be provided to the subject property.*
 - E. **Exception to the Site Development and Design Standards.** *The approval authority may approve exceptions to the Site Development and Design Standards of part 18.4 if the circumstances in either subsection 1 or 2, below, are found to exist.*
 - 1. *There is a demonstrable difficulty meeting the specific requirements of the Site Development and Design Standards due to a unique or unusual aspect of an existing structure or the proposed use of a site; and approval of the exception will not substantially negatively impact adjacent properties; and approval of the exception is consistent with the stated purpose of the Site Development and Design; and the exception requested is the minimum which would alleviate the difficulty.; or*
 - 2. *There is no demonstrable difficulty in meeting the specific requirements, but granting the exception will result in a design that equally or better achieves the stated purpose of the Site Development and Design Standards.*
- 4) The Wireless Communication Facility Design Standards are described in AMC 18.4.10.030 as follows:

All wireless communication facilities shall be located, designed, constructed, treated, and maintained in accordance with the following standards.

A. General Provisions

- 1. *All facilities shall be installed and maintained in compliance with the requirements of the Building Code. At the time of building permit application, written statements from the Federal Aviation Administration (FAA), the Aeronautics Section of the Oregon Department of Transportation, and the Federal Communication Commission (FCC) confirming that the proposed wireless communication facility complies with regulations administered by that agency or that the facility is exempt from regulation.*
- 2. *All associated transmittal equipment must be housed in a building, above or below ground level, which must be designed and landscaped to achieve minimal visual impact with the surrounding environment.*
- 3. *Wireless communication facilities shall be exempted from height limitations imposed in each zone.*

4. *Wireless communication facilities shall be installed at the minimum height and mass necessary for its intended use. A submittal verifying the proposed height and mass shall be prepared by a licensed engineer.*
5. *Lattice towers are prohibited as freestanding wireless communication support structures.*
6. *Signage for wireless communication facilities shall consist of a maximum of two non-illuminated signs, with a maximum of two square feet each, stating the name of the facility operator and a contact phone number.*
7. *The applicant is required to remove all equipment and structures from the site and return the site to its original condition, or condition as approved by the Staff Advisor, if the facility is abandoned for a period greater than six months. Removal and restoration must occur within 90 days of the end of the six-month period.*
8. *All new wireless communication support structures shall be constructed so as to allow other users to collocate on the facility.*

B. Preferred Designs. *The following preferred designs are a stepped hierarchy, and the standards shall be applied in succession from subsection a to e, with the previous standard exhausted before moving to the following design alternative. For the purpose of chapter 18.4.10, feasible is defined as capable of being done, executed or effected; possible of realization. A demonstration of feasibility requires a substantial showing that a preferred design can or cannot be accomplished.*

1. **Collocation.** *Where possible, the use of existing wireless communication facilities sites for new installations shall be encouraged. Collocation of new facilities on existing facilities shall be the preferred option. Where technically feasible, collocate new facilities on pre-existing structures with wireless communication facilities in place or on pre-existing towers.*
2. **Attached to Existing Structure.** *If (a) above is not feasible, wireless communication facilities shall be attached to pre-existing structures, when feasible.*
3. **Alternative Structure.** *If (a) or (b) above are not feasible, alternative structures shall be used with design features that conceal, camouflage, or mitigate the visual impacts created by the proposed wireless communication facilities.*
4. **Freestanding Support Structure.** *If (1), (2), or (3) listed above are not feasible, a monopole design shall be used with the attached antennas positioned in a vertical manner to lessens the visual impact compared to the antennas in a platform design. Platform designs shall be used only if it is shown that the use of an alternate attached antenna design is not feasible.*
5. **Lattice towers** *are prohibited as freestanding wireless communication support structures.*

C. Collocation Standards

1. *The collocation feasibility study shall meet all of the following requirements.*
 - a. *Document that alternative sites have been considered and are technologically unfeasible or unavailable.*

- b. *Demonstrate that a reasonable effort was made to locate collocation sites that meet the applicant's service coverage area needs.*
- c. *Document the reasons collocation can or cannot occur.*

2. *Relief from collocation under this section may be granted at the discretion of the approval authority if the application and independent third party analysis demonstrate collocation is not feasible because one or more of the following conditions exist at prospective collocation sites.*

- a. *A significant service gap in coverage area.*
- b. *Sufficient height cannot be achieved by modifying existing structure or towers.*
- c. *Structural support requirements cannot be met.*
- d. *Collocation would result in electronic, electromagnetic, obstruction, or other radio frequency interference.*

D. Landscaping. *The following standards apply to all wireless communication facilities with any primary or accessory equipment located on the ground and visible from a residential use or the public right-of-way.*

- 1. *Vegetation and materials shall be selected and sited to produce a drought resistant landscaped area.*
- 2. *The perimeter of the wireless communication facilities shall be enclosed with a security fence or wall. Such barriers shall be landscaped in a manner that provides a natural sight obscuring screen around the barrier to a minimum height of six feet.*
- 3. *The outer perimeter of the wireless communication facilities shall have a landscaped buffer zone ten feet in width.*
- 4. *The landscaped area shall be irrigated and maintained to provide for proper growth and health of the vegetation.*
- 5. *One tree shall be required per 20 feet of the landscape buffer zone to provide a continuous canopy around the perimeter of the wireless communication facilities. Each tree shall have a caliper of two inches, measured at breast height, at the time of planting.*

E. Visual Impacts

- 1. *Wireless communication facilities shall be located in the area of minimal visual impact within the site which will allow the facility to function consistent with its purpose.*
- 2. *Wireless communication facilities, in any zone, must be set back from any residential zone a distance equal to twice its overall height. The setback requirement may be reduced if, as determined by the approval authority, it can be demonstrated through findings of fact that increased mitigation of visual impact can be achieved within of the setback area. Underground accessory equipment is not subject to the setback requirement.*
- 3. *Antennas attached to a pre-existing or alternative structure shall be integrated into the existing building architecturally and to the greatest extent possible shall not exceed the height of the pre-existing or alternative structure.*

4. *Antennas attached to a pre-existing or alternative structure shall have a non-reflective finish and color that blends with the color and design of the structure to which it is attached.*
5. *All wireless communication support structures must have a non-reflective finish and color that will mitigate visual impact, unless otherwise required by other government agencies.*
6. *Exterior lighting for a wireless communication facility is permitted only when required by a federal or state authority.*
7. *Should it be deemed necessary by the approval authority for the mitigation of visual impact of the wireless communication facility, additional design measures may be required. These may include, but are not limited to: additional camouflage materials and designs, facades, specific colors and materials, masking, and shielding techniques.*

5) The criteria for Conditional Use Permit approval are described in AMC 18.5.4.050.A as follows:

1. *That the use would be in conformance with all standards within the zoning district in which the use is proposed to be located, and in conformance with relevant Comprehensive plan policies that are not implemented by any City, State, or Federal law or program.*
2. *That adequate capacity of City facilities for water, sewer, electricity, urban storm drainage, paved access to and throughout the development, and adequate transportation can and will be provided to the subject property.*
3. *That the conditional use will have no greater adverse material effect on the livability of the impact area when compared to the development of the subject lot with the target use of the zone, pursuant with subsection 18.5.4.050.A.5, below. When evaluating the effect of the proposed use on the impact area, the following factors of livability of the impact area shall be considered in relation to the target use of the zone.*
 - a. *Similarity in scale, bulk, and coverage.*
 - b. *Generation of traffic and effects on surrounding streets. Increases in pedestrian, bicycle, and mass transit use are considered beneficial regardless of capacity of facilities.*
 - c. *Architectural compatibility with the impact area.*
 - d. *Air quality, including the generation of dust, odors, or other environmental pollutants.*
 - e. *Generation of noise, light, and glare.*
 - f. *The development of adjacent properties as envisioned in the Comprehensive Plan.*
 - g. *Other factors found to be relevant by the approval authority for review of the proposed use.*
4. *A conditional use permit shall not allow a use that is prohibited or one that is not permitted pursuant to this ordinance.*
5. *For the purposes of reviewing conditional use permit applications for conformity with the approval criteria of this subsection, the target uses of each zone are as follows.*
 - i. **HC, NM, and SOU.** *The permitted uses listed in chapters 18.3.3 Health Care Services, 18.3.5 North Mountain Neighborhood, and 18.3.6 Southern Oregon University District, respectively, complying with all ordinance requirements.*

6) The Planning Commission, following proper public notice, held a public hearing on July 9, 2024, at which time testimony was received and exhibits were presented. Following closing of the record and the public hearing, the Planning Commission determined that the applicant **had failed to meet the burden of proof in addressing the feasibility of collocation** for the requested Site Design Review

and Conditional Use Permits to install Wireless Communication Facilities on the SOU Science Building at 1250 Ashland Street, denying the appeal, uphold the original staff decision and denying the application.

Now, therefore, the Planning Commission of the City of Ashland finds, concludes and recommends as follows:

SECTION 1. EXHIBITS

For the purposes of reference to these Findings, the attached index of exhibits, data, and testimony will be used.

Staff Exhibits lettered with an "S"

Proponent's Exhibits, lettered with a "P"

Opponent's Exhibits, lettered with an "O"

Hearing Minutes, Notices, and Miscellaneous Exhibits lettered with an "M"

SECTION 2. CONCLUSORY FINDINGS

2.1 The Planning Commission finds that it has received all information necessary to make a decision based on the Staff Report, public hearing testimony and the exhibits received.

2.2 The Planning Commission finds that the proposal for Site Design Review **fails to meet all standards for Wireless Communication Facilities described in section 18.4.10.030.** The site plan and elevation drawings provided delineate the proposed wireless communication facility installation locations, designs and associated improvements.

2.3 The Planning Commission finds that, as detailed in AMC 18.4.10.020, wireless communication facilities (WCF) attached to existing structures in the Southern Oregon University are subject to Site Design Review.

The Commission further finds that the current application was denied by staff on May 14, 2024, with a 12-day appeal period which extended through the end of business on May 28, 2024. On May 23, 2024, prior to the end of the appeal period, Verizon Wireless, timely filed a notice of land use appeal. As the applicant, Verizon Wireless has standing to appeal. The notice of appeal identified six specific points of appeal which are detailed and discussed in Section 2.7 below.

AMC 18.5.1.050.G. explains that appeal hearings on Type I decisions made by the Staff Advisor are “*de novo*” hearings before the Planning Commission and follow the standard Type II public hearing procedure except that the decision of the Planning Commission is the final decision of the City. Consideration of the appeal is not limited to the application materials, evidence and other documentation, and specific issues raised in the review leading up to the Type I decision but may include other relevant evidence and

PA-APPEAL-2024-00019

July 9, 2024

Page 6

arguments. The Commission may allow additional evidence, testimony, or argument concerning any relevant ordinance provision.

2.4 The Planning Commission finds that the application explains that the proposed rooftop antennas and associated equipment are designed to provide additional services to customers in and around the Southern Oregon University campus and to improve service capacity, thereby improving overall performance. The applicants emphasize that if additional WCF are not built soon to provide more capacity, Verizon Wireless's existing sites will exhaust their capacity and no longer be able to provide service to customers in the area.

The Planning Commission notes that WCF installations attached to existing structures in the Southern Oregon University district are subject to Site Design Review approval. In this instance, the building itself and associated site improvements received Site Design Review approval relatively recently, and the Commission's review here is limited to considering how the addition of the proposed WCF complies with the applicable WCF design standards.

The Planning Commission further notes that Ashland's standards regulate the placement and appearance of wireless communication facilities (WCF) while providing residents with the ability to access and adequately utilize the services that these facilities support. These standards are based on a recognition that, because of the physical characteristics of WCF, the visual and aesthetic impacts of these facilities affect not only the neighboring residents but also the community as a whole. The standards are intended to ensure that the visual and aesthetic impacts of wireless communication facilities are mitigated to the greatest extent possible, especially in or near residential areas. The key concern most often raised in WCF applications – the environmental health impacts associated with such installations – is explicitly precluded from local consideration by federal law. This preclusion applies to moratoria, as well as to individual land use decisions. As such, WCF applications are carefully considered in terms of the applicable local land use regulations including requirements for Site Design Review approval, specific design standards and in this instance an associated Conditional Use Permit related to the proposed increase in building height.

With regard to the design standards, the Commission finds that the antennas and associated equipment will be located on the roof and will be screened and concealed by the existing screen wall as well as a new proposed screening wall which will go around the remainder of the building and include fiberglass reinforced plastic (FRP) around the WCF, matching the existing screening wall to minimize any visual impacts. The equipment will be visually screened by the wall at the top of the building – the antennas and equipment cabinets are shorter than the wall and will not extend above the wall. No vegetative screening is proposed as the installation is entirely limited to the rooftop, and the rooftop installation is noted as being only as high as necessary to achieve the coverage goals. No signage beyond any required by state and federal laws is proposed to be posted, no exterior lighting is proposed, and the applicants agree to remove all equipment from the site and return it to its original condition within 90 days if and when the facility is ever abandoned for a period of greater than six months. The application asserts, and staff have confirmed, that the building is set back more than twice its overall height from any residential zone.

The Planning Commission further finds that the WCF design standards in AMC 18.4.10.030.B include a "stepped hierarchy" of preferred designs which are to be considered in succession. The feasibility of a

preferred design must first be exhausted before moving to the next alternative. Under this hierarchy, collocation on an existing wireless facility is the preferred option and placement on an existing structure may only be considered once collocation has been demonstrated to be technically not feasible or the location unavailable.

The Commission notes that staff initially administratively denied the application. As provided in the ordinance, the city retained the services of a qualified, independent third-party reviewer who analyzed the application and determined that the application's collocation study included insufficient objective evidence to meet the requirements of the collocation standards or show that the proposed site produces acceptable performance and fills the area's coverage/capacity needs. Specifically, the city's independent third-party reviewer William Johnson noted:

- The original analysis submitted by the applicant was silent with regard to mid-band RF coverage which represents roughly 90 percent of the available licensed spectrum. Analysis of the need for the proposed site as well as evaluation of alternative sites is heavily dependent on the propagation limitations of mid-band spectrum, and in Johnson's review there was no information about this important band from the applicant other than to mention that it will be deployed.
- Johnson further noted that no trend metrics such as Forward Data Volume (FDV), Average Scheduled Eligible Users (ASEU), and Average Active Connections (AvgAC) were provided to support claims that a new base station facility was needed to off-load traffic or draw local mobile subscribers onto the new site using mid-band spectrum to free up low-band spectrum.
- Johnson added that the scale of the RF propagation plots provided made it nearly impossible to identify locations where in-building service was needed and how the proposed base station would be able to satisfy that need.
- Johnson noted that for the alternate site analysis, city staff eyes-on observations had shown that two of the potential collocation sites did not appear to have any existing WCF in place and there was no record of any approved facilities at these locations. Johnson recommends that the applicant revisit the alternate site analysis to ascertain how realistic the alternative sites are to the present application.
- Finally, Johnson noted that the application materials lack supporting documentation to show that existing structure collocation on the new AT&T light standard at Raider Stadium approved in 2017-2018 is not possible for design or loading issues, and while the materials indicated the landowner was unwilling to allow collocation, there was no documentation provided to support that assertion.

The Commission finds that after considering all information in the record, the Staff Advisor found that the application as initially presented failed to meet the burden of proof in that the applicant's collocation study/alternative sites analysis was insufficient in demonstrating a service gap and in demonstrating that collocation or placement on an existing structure was not feasible. The Commission further finds that relief from the collocation requirements calls for a clear and defensible demonstration both of a service gap in the coverage area and that collocation is either not feasible or not available. In the initial application materials, a service gap was not clearly and adequately demonstrated and while the applicant suggested that the alternative site on the light standard at Raider Stadium was not available, there was insufficient

documentation to support that assertion.

2.5 The Planning Commission notes that the subject property is located within the Southern Oregon University (SOU) District, a special district designed to provide for the unique needs of Southern Oregon University as a State educational institution functioning within the planning framework of the City. The SOU District is regulated under AMC Chapter 18.3.6 and by the SOU Campus Master Plan which has been adopted by the City as Ordinance #3014.

The Planning Commission further notes that within the SOU District, WCF are authorized subject to Chapter 18.4.10. In addition, any construction over 40 feet in height is subject to the approval of a Conditional Use Permit per Chapter 18.5.4. The Planning Commission finds that while WCF are exempted from height restrictions in each zone, with the addition of the proposed ten-foot tall FRP screen walls here, the height of the existing building will exceed 40 feet. Currently, the building is noted as 39.1 feet in height above the finished grade, with the existing mechanical equipment noted at 61.9 feet above finished grade at its highest point, and both the existing and proposed screen walls extend to 49.1 feet above finished grade.

Conditional Use Permits provide for discretionary review of the adverse material impacts of a request in comparison to adverse material impacts that could reasonably be expected from the property's target use, which for the SOU District is "*The permitted uses listed in... (chapter) 18.3.6 Southern Oregon University District... complying with all ordinance requirements.*" Consideration in the criteria include adequate capacity of city facilities, impacts on the livability of the impact area when considered in terms of scale, bulk, and coverage; traffic generation; architectural compatibility; air quality; generation of noise, light, and glare; the development of adjacent properties as envisioned in the Comprehensive Plan; and other factors found to be relevant by the hearing authority. Conditional use permits provide the city with the ability to impose conditions necessary to mitigate these adverse material impacts.

The application asserts that the proposal is in conformance with the standards of the SOU District and relevant Comprehensive Plan policies. The application further explains that because the proposal is for an unmanned WCF it will not impact access to city services, generate any additional traffic or impact transportation in any way. In addition, the applicants assert that the antennas and equipment that will be going on the roof will be screened with material that will match the current screening wall but extend around the whole building, and as such will have no greater impact on the livability of the surroundings than would the target use. The applicants emphasize that the installation will not affect air quality, and have provided an acoustic report which concludes that, "*the predicted noise levels are significantly lower than both the code limit and the existing ambient noise levels, and as such will not contribute to the existing noise environment.*" No added exterior lighting is proposed in conjunction with this WCF installation. The applicants note that the proposal is limited to the campus and will not affect the future development of adjacent properties and is an allowed use in the district subject to the requirements of AMC Chapter 18.4.10.

The Planning Commission finds that the building already has a partial screen wall in place, and that the applicants propose to place the antennas and all associated equipment on the building's roof, rather than placing accessory equipment on the ground and screening it with vegetation. All equipment is to be

screened entirely behind a screen wall which will extend the existing screen wall around the building roof's full perimeter, and fiberglass reinforced plastic will be used to mitigate the visual and acoustic impacts of the WCF installation. The Commission further finds that the extension of the existing screening wall to enclose the full perimeter of the building with a matching wall which will conceal the proposed WCF installation is what is triggering the Conditional Use Permit component of the application – the added height of the screening around the full perimeter of the building alters the building's height as calculated by code to exceed 40 feet. The Commission finds that this installation is intended to match the height of the screen wall already in place, and to fully conceal the WCF. The application emphasizes the height of the proposed WCF equipment is to be lower than the screen wall and includes an acoustic report demonstrating that the placement and screening of the WCF will be below not only the allowed noise levels of the code, but significantly below the ambient noise levels already generated by traffic in the area. The Planning Commission concludes that the benefits demonstrated by the applicants of installing the screening wall outweigh and mitigate the impacts associated with the additional height involved. The Commission also recognizes that concerns regarding environmental health impacts fall within the federal regulations which preclude the city's ability to consider the direct or indirect environmental or health impacts of such an installation when the installation complies with all federal regulations.

2.6 Subsequent to the mailing of a Notice of Complete Application (NOCA), nine parties submitted written comments with regard to the proposal during the public comment period.

- **David DeHaas** submitted comments in opposition asking that the applicant be required to prove with "*facts of real measurements*" their gap in coverage. He emphasized that the applicant has not proven they have a significant gap in coverage for cell phone calls, and that the maps provided show no real data. He suggested that 5G towers are for broadband data, not for cell phone calls and as the proposal is for broadband it can be rejected outright.
- **Elaine Sayre** asked that the comment deadline be extended and a better effort to inform the neighborhood residents be made. She added that the science building is in a residential area and that she has health concerns and concerns with her view.
- **Marilyn Lindsay** expressed frustration that the city has allowed wireless technology to be advanced/updated to out compete for profit telecommunication wireless communication facilities (WCFs) in terms of data speed, capacity, security and safety (from both RF radiation, and fire). She suggests that no matter how many citizens gave their time to research and educate the city on the ill health effects of RF radiation and the advantage of fiber optics as a safe alternative, the city was determined to pursue its agenda.
- **Laura McLellan** expressed her opposition to the proposal, noting that there is no proof that WCF's are safe, that many scientists believe they pose health hazards, and that this will make Ashland and the neighborhood unsafe, especially for children.
- **Robert McLellan** contested the proposed WCF installation, noting concerns with the health issues caused by 5G technology. He suggested that placing a WCF on a campus and so close to a densely populated neighborhood is a major concern as opposed to placing it in an open space across the freeway and asked that the project be rejected.

- **Paul Mozina** suggested that relying on the Telecommunications Act of 1996 as a basis for not considering health impacts is willful ignorance and disregard for the impacts WCFs have on living things. He noted that he lives in the area and has adequate cell service and suggested that this real-world test should outweigh computer modeling that shows a service gap. He further emphasized that the Telecommunications Act of 1996 was never intended to support the ‘internet of things’ at the heart of 5G technology, and that the Federal Communications Commission has failed to respond to the August 31, 2021, decision of the US Court of Appeals for the DC District. He cited the Flower Hill case, which is now under appeal, as precedent that new uses of wireless such as broadband and other services are not protected by the 1996 Telecommunications Act. Mozina’s materials conclude suggesting that cities should consider denying small cell applications unless there is a demonstrable gap in phone coverage.
- An **anonymous** commenter suggested that they did not know enough about the 5G issue to have an informed opinion, but they nonetheless urged weighing development considerations against the potential long-term health consequences.
- **Steve Belsky** expressed his dissatisfaction with the city’s approach in recent wireless applications, suggesting that the height limitation imposed on the AT&T WCF installation on the light standard at Raider Stadium was counter to the city’s own standards and had the effect of preventing collocation, in an area that was better suited for WCF installation by virtue of being farther from residential neighborhoods. He suggested that the city reconsider whether the stadium light standard could be reconstructed to enable collocation.
- **Kelly Marcotulli** urged denial, suggesting that there was ample service for Verizon customers; she expressed concerns with environmental and health impacts, killing of pollinators and increased fire risk.

In terms of consideration of the health impacts of wireless communication facilities noted by several of those commenting, the Commission finds that Title 47 U.S. Code, Chapter 5, Subchapter III, Part 1 §332.7.B.iv “*Mobile Services – Preservation of Local Zoning Authority*” provides that “*No state or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the (Federal Communication) Commission’s regulations concerning such emissions.*” Federal law explicitly precludes the city’s consideration of potential environmental health impacts of wireless communication facilities through the city’s local zoning authority. This preclusion prevents the city from considering health impacts in individual land use decisions and would also prevent the city from imposing a moratorium on facilities of this nature.

In terms of concerns over adequate notice and requests to extend the comment period, the Commission finds that the timeline for comment is set in state law and city code at 14 days, and there are timelines established in state and federal law specifically for wireless applications that require that the city reach a decision within a specific number of days. There are no allowances for the city to extend those timelines. Notices making the comment period clear were mailed to all property owners within 200 feet of the

property as required by the city's code. That notice can be seen on-line at: <https://gis.ashland.or.us/arcgis/rest/services/planning/PlanningAction2/FeatureServer/0/81634/attachments/111254>. Signs with the notice were also posted at the subject property so as to be visible from the right-of-way, and the applicant conducted a neighborhood meeting prior to making application and provided written notice to all neighbors within 300 feet as required in the city's code. Details of the neighborhood meeting are included in the full application submittal on the city's website at: <https://gis.ashland.or.us/arcgis/rest/services/planning/PlanningAction2/FeatureServer/0/84434/attachments/116454>, and were publicized in the Ashland News at <https://ashland.news/verizon-to-host-public-meeting-thursday-about-proposed-cell-antenna/> and <https://ashland.news/verizon-cell-tower-meeting-draws-concerned-ashland-residents/>

Mr. Belsky asserts that the city erred in limiting the height of the AT&T WCF installation on the light standard at Raider Stadium, violating the city design standard that, *“All new wireless communication support structures shall be constructed so as to allow other users to collocate on the facility”* because the additional height would have supported collocation here. The Planning Commission finds that the decision on that application was based on the application failing to demonstrate the additional height was necessary based on another design standard that, *“Wireless communication facilities shall be installed at the minimum height and mass necessary for its intended use.”* The Commission further finds that the decision in that application (PA-T1-2021-00158) was initially appealed to the Planning Commission and then on to the Land Use Board of Appeals (LUBA) and was upheld by both bodies.

2.7 The Planning Commission finds that on May 23, 2024, prior to the end of the appeal period, Verizon Wireless timely filed a notice of land use appeal. As the applicant, Verizon had standing to appeal. Verizon's notice of appeal identified six points:

1. The Director erred by denying a proposal that is identical to the proposal approved by the Director and the Planning Commission in 2018. Both the Director and the Planning Commission approved the identical proposal in 2018 (PA #2017-01486), but that land use approval ultimately expired. The current proposal and the City's approval standards are identical to the 2018 proposal and standards. The Director failed to explain why he denied the Application given that it is identical to the proposal approved in 2018 subject to the same approval standards.
2. The Director erred by denying the Application based exclusively on comments from the City RF consultant which the Applicant was never provided an opportunity to respond to or address. The City RF consultant's letter is dated April 24, 2024, but the City did not provide the Applicant with a copy of the letter until it issued the Director's decision on May 14, 2024. The City RF consultant's letter raises several questions and issues that the Applicant could have corrected or clarified. Nonetheless, the Applicant will respond to the City RF consultant's letter as part of this appeal.
3. The Director erred by denying the Application based on the City RF consultant's request for specific technical information that is not required under the City's application submittal or approval standards. AMC Chapter 18.4.10 does not require the Applicant to provide RF

PA-APPEAL-2024-00019

July 9, 2024

Page 12

propagation maps that identify and address different bands of operation, trend metrics, or scales of RF propagation plots. The City cannot deny the Application based on the lack of technical information that the Applicant was not required to provide under the City's submittal or approval standards. Nonetheless, the Applicant will respond to these City RF consultant's comments as part of this appeal.

4. The Director erred by denying the Application on the grounds that the Applicant failed to demonstrate a "service gap" in the coverage area. The Applicant provided substantial evidence demonstrating that there is a significant coverage and capacity gap in this area of the City. The City RF consultant did not dispute this claim, but rather merely requested additional technical information that the Applicant was not required to submit under AMC Chapter 18.4.10. Additionally, the Applicant would not undertake the time and expense of pursuing approval of the proposed wireless communications facility if it was unnecessary to resolve a coverage and capacity gap in this area. Nonetheless, the Applicant will provide additional information and clarification demonstrating there is a significant coverage and capacity gap in this area of the City.
5. The Director erred in denying the Application on the grounds that the Applicant failed to demonstrate "*that collocation or placement on an existing structure are not feasible.*" The Application proposes a wireless communications facility that will be attached to an existing structure, and therefore the Applicant did demonstrate that placement on an existing structure is feasible consistent with AMC 18.4.10.040(B)(2). The Applicant demonstrated that the AT&T reconstructed stadium light standard at Raider Stadium is not a feasible collocation option for several reasons. The city staff is well aware of the Applicant's efforts to explore collocation opportunities on the AT&T light standard since the Applicant specifically requested the city staff's assistance in pursuing this option. The Applicant contacted AT&T before it constructed the light standard and was advised by AT&T that it is not feasible to collocate on this facility because it is a custom fabricated concrete pole that cannot structurally support an additional wireless communication facility. AT&T rejected any proposal to collocate on the stadium light facility due to the inability to support another wireless communication facility. The Applicant asked the City to assist in exploring collocation options with AT&T that could accommodate an additional wireless communication facility, but the City advised the Applicant that it is not appropriate, nor does the City have the authority, to require AT&T to work with the Applicant on this issue. AT&T has since constructed the replacement stadium light standard and it is unable to support another wireless communication facility. Since the replacement stadium light standard cannot support another wireless communication facility, the Applicant cannot force AT&T to allow for collocation and the city was unwilling to require AT&T to do so, this collocation option is not available. Even if the City RF consultant was correct that two of the rooftop options the Applicant considered do not have existing wireless communication facilities, that does not provide a basis for denying the Application. The proposal is a rooftop option that is a preferred design option consistent with AMC 18.4.10.040(B)(2) if no collocation options are feasible and therefore the Applicant is not required to rule out other rooftop options that do not have existing wireless communication facilities. The City RF consultant did not identify any other collocation options. Nonetheless, the Applicant will provide additional information and evidence supporting

PA-APPEAL-2024-00019

July 9, 2024

Page 13

the conclusion that there are no feasible collocation options under AMC 18.4.10.040(B)(2) and the proposal is consistent with the preferred design standards.

6. The Applicant reserves the right to raise additional appeal issues since AMC 18.5.1.050(G)(3) does not limit the appeal to the specific grounds listed in the notice of appeal.

2.8 The Commission notes that the applicants initially provided the code-required collocation study, and as required by ordinance the City retained the services of an independent third-party reviewer. The code requires that the applicants deposit funds with the city with their application fee to pay for this independent third-party review. William P. Johnson, RF Engineering Consultant, reviewed the application materials to ensure that the site approvals are based on an objective need. In his initial review, Johnson concluded that the applicants had failed to provide sufficient objective evidence relevant to the proposal documenting the need for additional RF coverage and capacity. With their appeal submittal, the applicants have provided additional technical submittals in response to the deficiencies identified in the third-party review. In reviewing these subsequent materials submitted by the applicants in response to his initial report, William Johnson notes that:

1. The target area is currently served to some extent by existing sites shown in #3 page 7 that are between one- and two-miles away. Sites at that distance might provide some low-band RF coverage, but it is often unreliable and service quality depends on subscriber location and local RF “clutter.” It is nearly impossible for sites at that distance to provide reliable mid-band RF coverage in an urban/suburban area.
2. Existing spotty low-band (700/850MHz) RF coverage from existing neighbor sites provides about ten percent of Appellant’s bandwidth. Item #3 pages 14-15 and 18-19 show existing and proposed low-band RF coverage. Mid-band spectrum, which accounts for about 90 percent of Appellant’s subscriber bandwidth, is likewise spotty and served from existing neighbor sites at or below the outdoor service level. See Item #3 pages 21-22 and 25-26. We therefore conclude that Appellant has shown an RF service coverage gap in the vicinity of the proposed site that could be remedied by a new WCF.
3. In addition to the RF coverage gaps noted above, Appellant has provided Forward Data Volume (FDV) and Average Scheduled Eligible Users (ASEU) metric plots for an un-named existing neighbor site sector. The plots do not identify the band of operation, but we suspect they are for existing low-band services. Those plots show, at least for that unnamed sector, two issues that will affect reliable service. First, the FDV plot shows that the serving sector cannot support the number of users and their bandwidth demands during the busiest times each day. Second, the ASEU plot likely reflects the make-and-break connections subscribers experience while trying to hold voice and data sessions on the LTE network from the unnamed sector. Both metrics tend to support Appellant’s claim of need for a WCF in the vicinity of the proposed site.
4. Appellant has also supplemented their materials with “crowd-sourced” data from the “*Ookla Verizon 4G*” database that show user devices reporting less-than-reliable service levels in the vicinity of the proposed site. See Item #3 page 11. That crowd-sourced data is consistent with the

PA-APPEAL-2024-00019

July 9, 2024

Page 14

existing RF coverage levels shown for low-band and mid-band and is consistent with Appellant's ASEU metrics that show excessive sessions held by the existing WCF sector in question.

5. Due to the propagation characteristics of both low-band and mid-band signals, any prospective alternate sites that are more distant than Appellant's existing WCF sites are likely to fail to provide sufficient signal strength to the target coverage area.
6. Documentation Item #2 "Alternate Site Analysis" lists site numbers 1 through 4. Sites 1, 2 and 3 are either located near existing sites operated by Appellant or are at comparable distances to existing sites. These alternate sites would likely have the same signal level issues discussed above for existing low-band and mid-band service that create the need for a WCF in the vicinity of the proposed site.
7. Appellant states that Site 4, the 85-foot light pole location, provides acceptable performance, but Appellant states that location is "not available." See Item #2 page 20.
8. Additional alternate sites identified by city staff or during public comment near the target area, *if any*, that have lower antenna center line (ACL) elevation or that are located at other coordinates will require additional propagation modeling by Appellant to assess performance should they be considered.

The Planning Commission further finds that in addition to the new technical materials provided with the appeal, the applicant/appellant has also provided a letter with attachments speaking to the feasibility of collocation on the new AT&T wireless facility at Raider Stadium, on a light standard, elsewhere on the SOU campus. The letter and associated attachments total 31 pages to document the applicant/appellant's efforts to pursue collocation on the AT&T facility. In summary, the University as the property owner has indicated to the applicant/appellant that while the University does not "*have any objections to collocating with AT&T*" the applicant/appellant would need to discuss feasibility with AT&T. In subsequent outreach to AT&T, AT&T indicated that the light standard as approved and installed is "*fairly short*" and "*would not be suitable for additional collocators*". The applicant/appellant further explains:

First, AT&T rejected Verizon's attempts to explore any proposal to collocate on the stadium light facility based on AT&T's position that the reconstructed stadium light standard is incapable of supporting another WCF. ... Both AT&T and its consultant made it clear that a collocation of another WCF at this site is not feasible due to the lower approved height and the fact that the AT&T reconstructed stadium light standard is a custom fabricated concrete pole that cannot structurally support another WCF. Since AT&T is unwilling and/or unable to allow collocation on the reconstructed stadium light standard and Verizon cannot force AT&T to permit collocation, this is not a feasible option.

Second, the property owner (Southern Oregon University) was unable or unwilling to assist Verizon in facilitating collocation on the reconstructed stadium light standard. Since Southern Oregon University is the property owner for both the AT&T stadium light facility and Verizon's proposed rooftop site, Verizon reached out to Southern Oregon University to facilitate a discussion with AT&T about collocating on the stadium light standard. As reflected in the attached emails between Southern Oregon University and Acom, Southern Oregon University was unable or

PA-APPEAL-2024-00019

July 9, 2024

Page 15

unwilling to assist.

Third, the city was unable or unwilling to assist Verizon in facilitating collocation on the reconstructed stadium light standard before AT&T constructed it....

The Planning Commission finds that the same proposal was previously approved in the same location, and that with there now being adequate technical data in the application to support the request based on independent third-party review, the only change in conditions since the previous approval is that there is now an AT&T facility at Raider Stadium that needs to be ruled out for collocation before the applicant can move on to the next step in the stepped hierarchy of the design standards and locate on an existing structure. **[NOTE: In staff's view, were the Commission to deny the request, it would need to be based on the failure to demonstrate that "a reasonable effort was made to locate collocation sites that meet the applicant's service coverage area needs" and that "alternative sites have been considered and are technologically unfeasible or unavailable." Staff would need specific direction at the meeting to finalize these findings with a clear identification of where the application materials are lacking.]**

2.8 The Planning Commission finds that with regard to the first appeal issue, that staff erred by denying a proposal that is identical to the proposal approved in 2018, the difference in the 2018 and 2024 proposals is that in 2024, there is now a wireless communication facility (WCF) in place elsewhere on campus. The WCF design standards in AMC 18.4.10.030.B include a "stepped hierarchy" of preferred designs which are to be considered in succession, and the feasibility of a preferred design must first be exhausted before moving to the next alternative. Under this hierarchy, collocation on an existing wireless facility (i.e. the light standard at the stadium) is the preferred option and placement on an existing structure (i.e. the Science Building) may only be considered once collocation has been demonstrated to be technically not feasible or the location unavailable. Staff and the independent third-party reviewer found that the initial application materials here lacked sufficient documentation to demonstrate that collocation was not feasible or that the location was unavailable.

With regard to the second appeal issue, that staff erred in denying the application based on review by the city's independent third-party reviewer without providing the applicant an opportunity to respond, the Planning Commission finds that this has been remedied through the appeal process and that the applicant/appellant has now been able to provide a detailed and thorough response to the third-party reviewer's comments.

For the third appeal issue, that staff erred in denying the application based on the third-party reviewer's determination that specific technical information was needed to demonstrate a service gap when that technical information was not required under the city's application submittal or approval standards, the Planning Commission finds that while the city standards do not require specific technical data, AMC 18.4.10.040.C.2 requires a collocation study including a demonstration of a significant service gap in the coverage area which is to be subject to third party analysis. AMC 18.4.10.030.H further provides that the third-party reviewer "... must provide objective advice based on professional qualifications and experience in telecommunication/radio frequency engineering, structural engineering, assessment of

electromagnetic fields, telecommunications law, and other related fields of expertise.” The Planning Commission finds that by its nature, the submittal requirements cannot include all specific technical requirements of s study, but that the study must demonstrate a service gap in sufficient technical detail to hold up to a detailed third-party analysis.

For the fourth appeal issue, that staff erred in denying the application for failing to demonstrate a service gap when the materials provided substantial evidence that there was a significant coverage and capacity gap in this area, the Planning Commission finds that the third-party reviewers initial findings was that the materials initially provided lacked sufficient detail on the mid-band spectrum, that analysis of the need for the proposed site as well as evaluation of alternative sites was heavily dependent on the propagation limitations of mid-band spectrum, that no supporting trend metrics were provided to support the claimed need for a new facility, and that the scale of propagation plots provided was such that they could not be used to identify in-building service needs or how the proposed WCF would satisfy those needs. The Commission finds that staff did not err, and that there was ample basis for the original decision in the third-party reviewer’s initial report.

With regard to the fifth point of appeal, that staff erred in denying the application on the basis that it failed to demonstrate that collocation on an existing WCF was not feasible, the Planning Commission finds that while staff may have been aware of the reasons why collocation was not feasible through conversations with the applicant, these reasons were not sufficiently documented in the record at the time to meet the burden of proof.

The Planning Commission finds that the sixth appeal issue is simply a reiteration that as provided in AMC 18.5.1.050.G.3, appeals of Type I decisions to the Planning Commission are de novo hearings and are not limited to the appeal points or evidence already in the record.

SECTION 3. DECISION

3.1 Based on the record of the Public Hearing on this matter, the Planning Commission concludes that the request for Site Design Review and Conditional Use Permit approvals to install wireless communication facilities on the roof of the Southern Oregon University Science Building is not supported by evidence contained within the whole record.

The Planning Commission rejects the appeal, upholds the Staff Advisor’s original denial, and denies the Site Design Review and Conditional Use Permits to allow the installation of wireless communication facilities, including antennas and associated equipment, on the roof of the Science Building at 1250 Ashland Street on the Southern Oregon University Campus.

Planning Commission Denial

July 9, 2024
Date

PA-APPEAL-2024-00019
July 9, 2024
Page 17

TYPE III PUBLIC HEARING

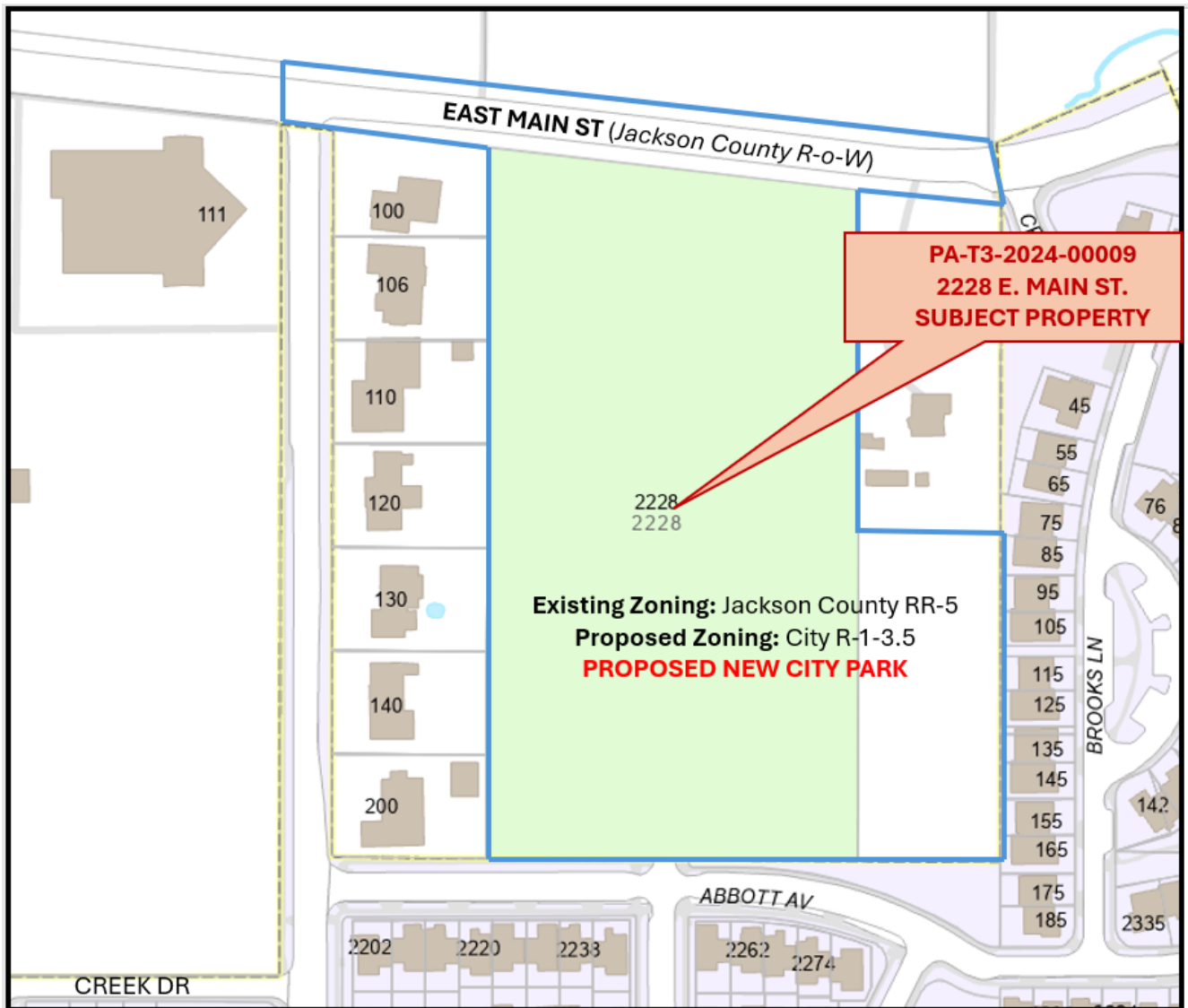
**PA-T3-2024-00009,
2228 East Main Street**



NOTICE OF PUBLIC HEARING

PLANNING ACTION: PA-T3-2024-00009
SUBJECT PROPERTY: 2228 East Main Street
APPLICANT/OWNER: Ashland Parks & Recreation/City of Ashland
DESCRIPTION: A request to annex the 6.51-acre property at 2228 East Main Street and the adjacent 0.97 acres of East Main Street right-of-way into the City of Ashland with Suburban Residential (R-1-3.5) zoning. The application also includes a request for Site Design Review approval to develop the annexed property as a new public park to include restrooms, a bike park with pump track & skills course, fenced dog park, play area, and a community garden.
COMPREHENSIVE PLAN DESIGNATION: Suburban Residential; **ZONING:** Existing – RR-5 (County); **Proposed** – R-1-3.5 (City); **ASSESSOR'S MAP:** 39 1E 11CB; **TAX LOT #'s:** 200

PLANNING COMMISSION HEARING: *Tuesday, July 9, 2024 at 7:00 p.m.*



PLANNING COMMISSION HEARING

Notice is hereby given that a PUBLIC HEARING on the following request with respect to the ASHLAND LAND USE ORDINANCE will be held before the ASHLAND PLANNING COMMISSION on meeting date shown above. The meeting will be at the ASHLAND CIVIC CENTER, 1175 East Main Street, Ashland, Oregon. You can watch the meeting on local channel 9, on Charter Communications channels 180 & 181, or you can stream the meeting via the internet by going to <https://rvtv.sou.edu> and selecting 'RVTV Civic.' Join the Zoom meeting at: <https://zoom.us/j/91339035306>.

All application materials are available on-line and written comments will be accepted via e-mail to PC-public-testimony@ashlandoregon.gov or can be provided in person or via Zoom during the public hearing. A copy of the application, including all documents, evidence and applicable criteria will be available on-line at "What's Happening in my City" at <https://gis.ashland.or.us/developmentproposals/> no less than 20 days prior to the meeting date shown above. A copy of the staff report will be available on-line in the Commission packet at: https://ashlandor.portal.civicclerk.com/?category_id=30 seven days prior to the meeting date shown above. Copies of application materials will be provided at reasonable cost, if requested. Application materials may be requested to be reviewed in-person during business hours at the Ashland Community Development & Engineering Services Building, 51 Winburn Way, via a pre-arranged appointment by calling (541) 488-5305 or emailing planning@ashlandoregon.gov

The ordinance criteria applicable to this application are attached to this notice. Oregon law states that failure to raise an objection concerning this application, either in person or by letter, or failure to provide sufficient specificity to afford the decision maker an opportunity to respond to the issue, precludes your right of appeal to the Land Use Board of Appeals (LUBA) on that issue. Failure to specify which ordinance criterion the objection is based on also precludes your right of appeal to LUBA on that criterion. Failure of the applicant to raise constitutional or other issues relating to proposed conditions of approval with sufficient specificity to allow this Commission to respond to the issue precludes an action for damages in circuit court.

Anyone wishing to submit comments can do so by sending an e-mail to PC-public-testimony@ashlandoregon.gov with the subject line "**July 9 PC Hearing Testimony**" by 10:00 a.m. on Monday, July 8, 2024. If the applicant wishes to provide a rebuttal to the testimony, they can submit the rebuttal via e-mail to PC-public-testimony@ashlandoregon.gov with the subject line "**July 9 PC Hearing Testimony**" by 10:00 a.m. on Tuesday, July 9, 2024. Written testimony received by these deadlines will be available for Planning Commissioners to review before the hearing and will be included in the meeting minutes.

Oral testimony will be taken both in person and via Zoom during the public hearing. If you wish to provide oral testimony via Zoom, please send an email to PC-public-testimony@ashlandoregon.gov by 10:00 a.m. on Monday, July 8, 2024. In order to provide testimony at the public hearing, please provide the following information: 1) make the subject line of the email "**July 9 PC Speaker Request**", 2) include your name, 3) the agenda item on which you wish to speak on, 4) specify if you will be participating by computer or telephone, and 5) the name you will use if participating by computer or the telephone number you will use if participating by telephone. Join the Zoom meeting at: <https://zoom.us/j/91339035306>

During the Public Hearing, the Chair shall allow testimony from the applicant and those in attendance concerning this request. The Chair shall have the right to limit the length of testimony and require that comments be restricted to the applicable criteria. Unless there is a continuance, if a participant so requests before the conclusion of the hearing, the record shall remain open for at least seven days after the hearing.

If you have questions or comments concerning this request, please feel free to contact Senior Planner Aaron Anderson, the staff planner assigned to this project, at 541-552-2052 or via e-mail to: aaron.anderson@ashlandoregon.gov.

In compliance with the American with Disabilities Act, if you need special assistance to participate in this meeting, please contact the City Administrator's office at 541-488-6002 (TTY phone number 1-800-735-2900). Notification 72 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to the meeting. (28 CFR 35.102.-35.104 ADA Title I).

AMC 18.5.8.050 Annexation Approval Criteria & Standards

An application for an annexation may be approved if the proposal meets the applicable criteria in subsections A through H below. The approval authority may, in approving the application, impose conditions of approval consistent with the applicable criteria and

standards, and grant exceptions and variances to the criteria and standards in this section in accordance with subsection 18.5.8.050.I.

- A. The annexed area is within the City's Urban Growth Boundary.
- B. The annexation proposal is consistent with the Comprehensive Plan plan designations applicable to the annexed area, including any applicable adopted neighborhood, master, or area plan, and is an allowed use within the proposed zoning.
- C. The annexed area is contiguous with the city limits.
- D. Adequate City facilities for the provision of water to the annexed area as determined by the Public Works Department; the transport of sewage from the annexed area to an approved waste water treatment facility as determined by the Public Works Department; the provision of electricity to the annexed area as determined by the Electric Department; urban storm drainage as determined by the Public Works Department can and will be provided from the annexed area. Unless the City has declared a moratorium based upon a shortage of water, sewer, or electricity, it is recognized that adequate capacity exists system-wide for these facilities. All required public facility improvements shall be constructed and installed in accordance with 18.4.6.030.A.
- E. Adequate transportation can and will be provided to serve the annexed area. For the purposes of this section "adequate transportation" for annexations consists of vehicular, bicycle, pedestrian, and transit transportation meeting the following standards.
 - 1. For vehicular transportation a minimum 22-foot wide paved access exists, or can and will be constructed, providing access to the annexed area from the nearest fully improved collector or arterial street. All streets bordering on the annexed area shall be improved, at a minimum, to an applicable City half-street standard. The approval authority may, after assessing the impact of the development, require the full improvement of streets bordering on the annexed area. All streets located within annexed areas shall be fully improved to City standards unless exception criteria apply. Where future street dedications are indicated on the Street Dedication Map or required by the City, provisions shall be made for the dedication and improvement of these streets and included with the application for annexation.
 - 2. For bicycle transportation safe and accessible bicycle facilities according to the safety analysis and standards of the governing jurisdiction of the facility or street (e.g., City of Ashland, Jackson County, Oregon Department of Transportation) exist, or can and will be constructed. Should the annexed area border an arterial street, bike lanes shall be constructed along the arterial street frontage of the annexed area. Likely bicycle destinations within a quarter of a mile from the annexed area shall be determined and the approval authority may require the construction of bicycle lanes or multi-use paths connecting the annexed area to the likely bicycle destinations after assessing the impact of the development proposed concurrently with the annexation.
 - 3. For pedestrian transportation safe and accessible pedestrian facilities according to the safety analysis and standards of the governing jurisdiction of the facility or street (e.g., City of Ashland, Jackson County, Oregon Department of Transportation). exist, or can and will be constructed. Full sidewalk improvements shall be provided on one side of all streets bordering on the proposed annexed area. Sidewalks shall be provided as required by ordinance on all streets within the annexed area. Where the annexed area is within a quarter of a mile of an existing sidewalk system or a location with demonstrated significant pedestrian activity, the approval authority may require sidewalks, walkways or multi-use paths to be constructed and connect to either or both the existing system and locations with significant pedestrian activity.
 - 4. For transit transportation, should transit service be available to the annexed area, or be likely to be extended to the annexed area in the future based on information from the local public transit provider, the approval authority may require construction of transit facilities, such as bus shelters and bus turn-out lanes.
 - 5. **Timing of Transportation Improvements.** All required transportation improvements shall be constructed and installed in accordance with 18.4.6.030.A.
- F. For all residential annexations, a plan shall be provided demonstrating that the development of the annexed area will ultimately occur at a minimum density of 90 percent of the base density for the zone, unless reductions in the total number of units are necessary to accommodate significant natural features, topography, access limitations, or similar physical constraints. The owner or owners of the annexed area shall sign an agreement, to be recorded with the county clerk after approval of the annexation, ensuring that future development will occur in accord with the minimum density indicated in the development plan. For purposes of computing maximum density, portions of the annexed area containing unbuildable lots, parcels, or portions of the annexed area such as existing streets and associated rights-of-way, railroad facilities and property, wetlands, floodplain corridor lands, slopes greater than 35 percent, or land area dedicated as a public park, shall not be included.
- G. Except as provided in 18.5.8.050.G.7, below, annexations with a density or potential density of four residential units or greater and involving residential zoned lands, or commercial, employment or industrial lands with a Residential Overlay (R-Overlay) shall meet the following requirements.
 - 1. The total number of affordable units provided to qualifying buyers, or to qualifying renters, shall be equal to or exceed 25 percent of

the base density as calculated using the unit equivalency values set forth herein. The base density of the annexed area for the purpose of calculating the total number of affordable units in this section shall exclude any unbuildable lots, parcels, or portions of the annexed area such as existing streets and associated rights-of-way, railroad facilities and property, wetlands, floodplain corridor lands, water resource areas, slopes greater than 35 percent, or land area dedicated as a public park.

- a. Ownership units restricted to households earning at or below 120 percent the area median income shall have an equivalency value of 0.75 unit.
 - b. Ownership units restricted to households earning at or below 100 percent the area median income shall have an equivalency value of 1.0 unit.
 - c. Ownership or rental units restricted to households earning at or below 80 percent the area median income shall have an equivalency value of 1.25 unit.
2. As alternative to providing affordable units per section 18.5.8.050.G.1, above, the applicant may provide title to a sufficient amount of buildable land for development complying with subsection 18.5.8.050.G.1.b, above, through transfer to a non-profit (IRC 501(3)(c) affordable housing developer or public corporation created under ORS 456.055 to 456.235.
- a. The land to be transferred shall be located within the project meeting the standards set forth in sections 18.5.8.050.G.5 and 18.5.8.050.G.6.
 - b. All needed public facilities shall be extended to the area or areas proposed for transfer.
 - c. Prior to commencement of the project, title to the land shall be transferred to the City, an affordable housing developer which must either be a unit of government, a non-profit 501(C)(3) organization, or public corporation created under ORS 456.055 to 456.235.
 - d. The land to be transferred shall be deed restricted to comply with Ashland's affordable housing program requirements.
 - e. Transfer of title of buildable land in accordance with this subsection shall exempt the project from the development schedule requirements set forth in 18.5.8.050.G.4.
3. The affordable units shall be comparable in bedroom mix with the market rate units in the development.
- a. The number of bedrooms per dwelling unit in the affordable units within the residential development shall be in equal proportion to the number of bedrooms per dwelling unit in the market-rate units within the residential development. This provision is not intended to require the same floor area in affordable units as compared to market-rate units. The minimum square footage of each affordable unit shall comply with the minimum required floor area based as set forth in Table 18.5.8.050.G.3, [or as](#) established by the U.S. Department of Housing and Urban Development (HUD) for dwelling units developed under the HOME program.

Table 18.5.8.050.G.3 – Minimum Required Floor Area for Affordable Units	
Unit Type	Minimum Required Unit Floor Area (Square Feet)
Studio	350
1 Bedroom	500
2 Bedroom	800
3 Bedroom	1,000
4 Bedroom	1,250

4. A development schedule shall be provided that demonstrates that that the affordable housing units per subsection 18.5.8.050.G shall be developed, and made available for occupancy, as follows.
- a. That 50 percent of the affordable units shall have been issued building permits prior to issuance of a certificate of occupancy for the last of the first 50 percent of the market rate units.
 - b. Prior to issuance of a building permit for the final ten percent of the market rate units, the final 50 percent of the affordable units shall have been issued certificates of occupancy.

5. That affordable housing units shall be constructed using comparable building materials and include equivalent amenities as the market rate units.
 - a. The exterior appearance of the affordable units in any residential development shall be visually compatible with the market-rate units in the development. External building materials and finishes shall be substantially the same in type and quality for affordable units as for market-rate units
 - b. Affordable units may differ from market-rate units with regard to floor area, interior finishes and materials, and housing type provided that the affordable housing units are provided with comparable features to the market rate units, and shall have generally comparable improvements related to energy efficiency, including plumbing, insulation, windows, appliances, and heating and cooling systems.
6. Exceptions to the requirements of 18.5.8.050, subsections G.2 – G.5, above, may be approved by the City Council upon consideration of one or more of the following.
 - a. That an alternative land dedication as proposed would accomplish additional benefits for the City, consistent with the purposes of this chapter, then would development meeting the on-site dedication requirement of subsection 18.5.8.050.G.2.
 - b. That the alternative phasing proposal not meeting subsection 18.5.8.050.G.4 provided by the applicant provides adequate assurance that the affordable housing units will be provided in a timely fashion.
 - c. That the materials and amenities applied to the affordable units within the development, that are not equivalent to the market rate units per subsection 18.5.8.050.G.5, are necessary due to local, State, or Federal Affordable Housing standards or financing limitations.
7. The total number of affordable units described in this section 18.5.8.050.G shall be determined by rounding up fractional answers to the nearest whole unit. A deed restriction or similar legal instrument shall be used to guarantee compliance with affordable criteria for a period of not less than 60 years for units qualified as affordable rental housing, or 30 years for units qualified as affordable for-purchase housing.

H. One or more of the following standards are met.

1. The annexation proposal shall meet the requirements of subsection 18.5.8.080.B, above.
2. A current or probable danger to public health exists within the proposed area for annexation due to lack of full City sanitary sewer or water services in accordance with the criteria in ORS Chapter 222 or successor state statute.
3. Existing development in the proposed area for annexation has inadequate water or sanitary sewer service, or the service will become inadequate within one year.
4. The proposed area for annexation has existing City water or sanitary sewer service extended, connected, and in use, and a signed consent to annexation agreement has been filed and accepted by the City.
5. The proposed area for annexation is an island surrounded by lands within the city limits.

I. Exceptions and Variances to the Annexation Approval Criteria and Standards. The approval authority may approve exceptions to and variances from the approval criteria and standards in this section using the criteria in section 18.4.6.020.B.1 Exceptions to the Street Design Standards or chapter 18.5.5. Variances.

AMC 18.5.2.050 Site Design Review Approval Criteria & Standards

The following criteria shall be used to approve or deny an application:

- A. **Underlying Zone:** The proposal complies with all of the applicable provisions of the underlying zone (part 18.2), including but not limited to: building and yard setbacks, lot area and dimensions, density and floor area, lot coverage, building height, building orientation, architecture, and other applicable standards.
- B. **Overlay Zones:** The proposal complies with applicable overlay zone requirements (part 18.3).
- C. **Site Development and Design Standards:** The proposal complies with the applicable Site Development and Design Standards of part 18.4, except as provided by subsection E, below.
- D. **City Facilities:** The proposal complies with the applicable standards in section 18.4.6 Public Facilities and that adequate capacity of City facilities for water, sewer, electricity, urban storm drainage, paved access to and throughout the property and adequate transportation can and will be provided to the subject property.
- E. **Exception to the Site Development and Design Standards:** The approval authority may approve exceptions to the Site Development and Design Standards of part 18.4 if the circumstances in either subsection 1 or 2, below, are found to exist.
 - 1. There is a demonstrable difficulty meeting the specific requirements of the Site Development and Design Standards due to a unique or unusual aspect of an existing structure or the proposed use of a site; and approval of the exception will not substantially negatively impact adjacent properties; and approval of the exception is consistent with the stated purpose of the Site Development and Design; and the exception requested is the minimum which would alleviate the difficulty.; or
 - 2. There is no demonstrable difficulty in meeting the specific requirements, but granting the exception will result in a design that equally or better achieves the stated purpose of the Site Development and Design Standards.

Staff Report

East Main Park

PA-T3-2024-00009 – Annexation and Site Design Review for a new park.



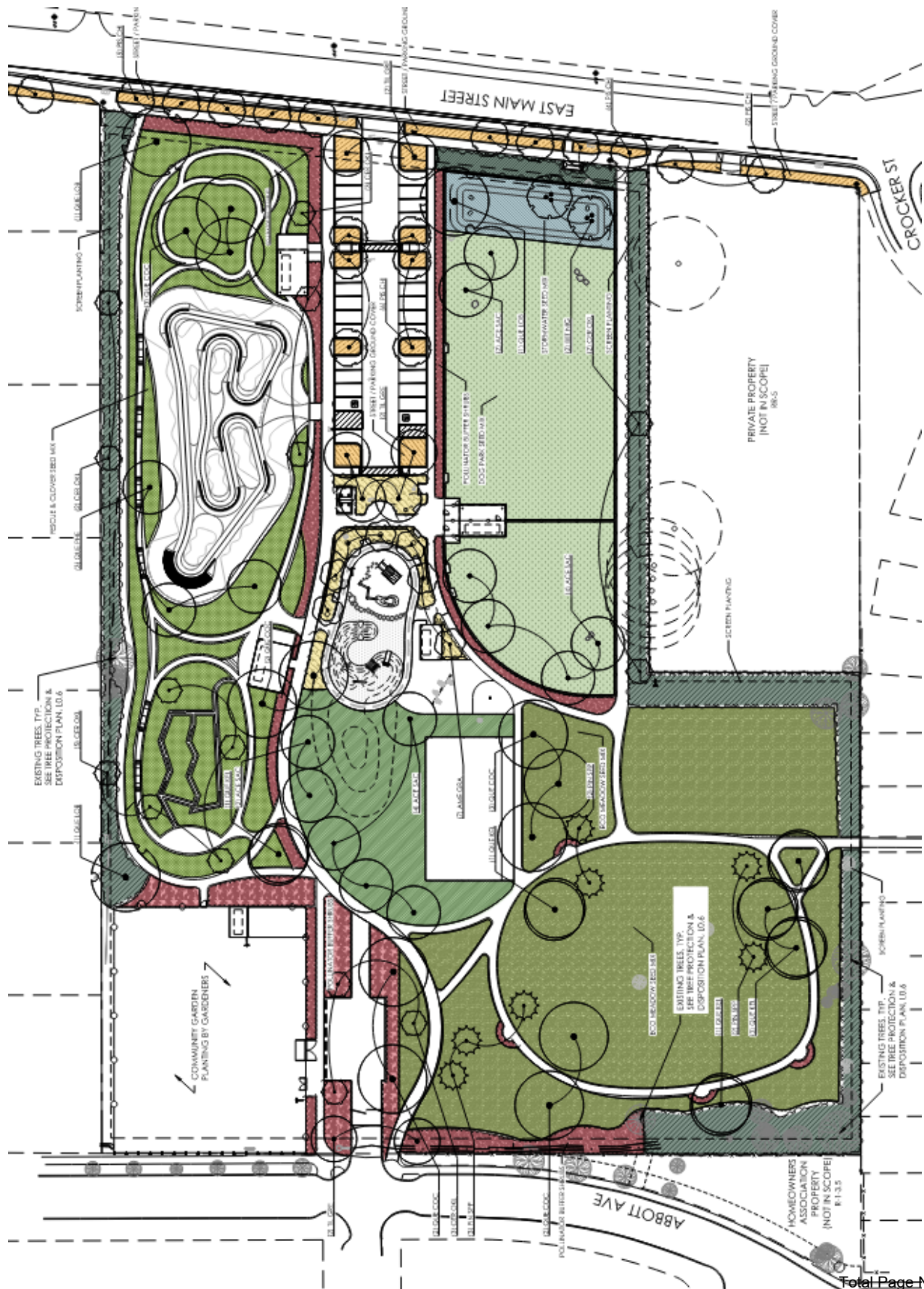
RENDERING BY TERRAIN LANDSCAPE ARCHITECTURE

Proposal Details

The application materials include the following narrative: “East Main Street Park is a park that will be teaming with dogs, dog owners, children of all ages, bike riders of all ages, neighbors, and community gardens. The park offers options for multiple park activities for the entire community to enjoy. Passive versus active recreation sets the tone for each area with common spaces creating boundaries between the different program elements. The park functions for multiple generations and user types and is grounded by the environment through material changes, signage, and sensory cues. Maintenance and longevity of the park is being explored and will continue to be researched throughout the remainder of the design process.”

East Main Park

PA-T3-2024-00009 – Annexation and Site Design Review for a new park.



East Main Park

PA-T3-2024-00009 – Annexation and Site Design Review for a new park.

Background:

This is the near culmination of a project that has been many years in the making. In 2017 with the sale of the YMCA property and the subsequent development on the Snowberry property it was understood that there was an unmet need for a park in the area to meet the city's long-standing goal of having a park facility within one quarter of a mile of all residents. The land was purchased by the city in December of 2018 and conveyed with a notation on the Deed that the property to remain in open space / park use. During the design process the Parks dept has had multiple public meetings and surveys to gain stakeholder input. These meetings were held across several years between 2019 and 2022. More recently the Parks Commission approved final designs at their November 08, 2023, business meeting.

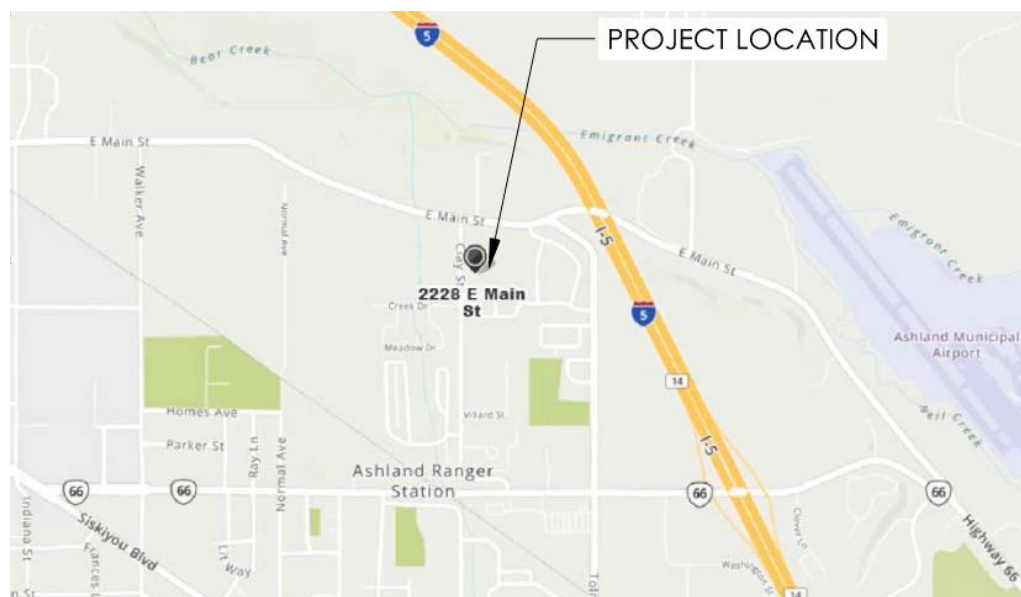
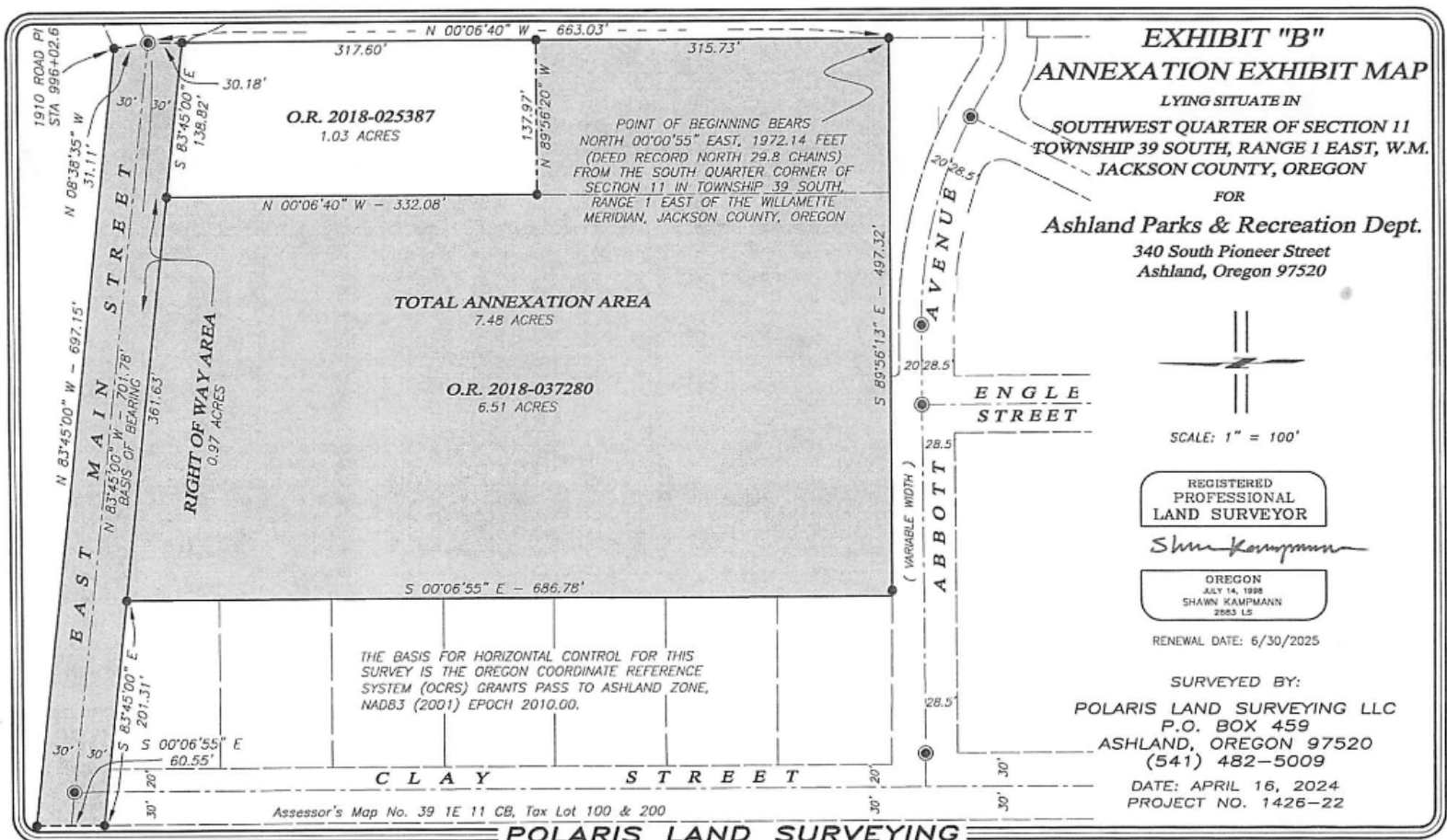
Property Description:

The subject property, outlined above, is Tax lot #200 of Assessor Map 39-1E-11-CB and is located on the south side of East Main Street. The property is vacant and is 6.51 acres in size.

Approval Criteria:

The packet includes a detailed staff report discussing each of the approval criteria and provides page number references to the application materials.

PA-T3-2024-00009 – Annexation and Site Design Review for a new park.



Staff Recommendation

Staff recommends that the application be forwarded to City Council for their approval with the conditions detailed in the attached Staff Report

**ASHLAND PLANNING DEPARTMENT
STAFF REPORT**

July 9, 2024

PLANNING ACTION: PA-T3-2024-00009
OWNER: City of Ashland
APPLICANT: Ashland Parks and Recreation Department
LOCATION: 2228 East Main Street
39-1E-11-CB Tax Lot 200
ZONE DESIGNATION: County RR-5 (R-1-3.5 requested)
COMP. PLAN DESIGNATION: Suburban Residential

ORDINANCE REFERENCES:

18.2	Zoning Regulations
18.2.2	Base Zones and Allowed Uses
18.2.4	General Regulations for Base Zones
18.3	Special Districts and Overlay Zones
18.4	Site Development and Design Standards
18.4.2	Building Placement, Orientation & Design
18.4.3	Parking, Access and Circulation
18.4.4	Landscaping, Lighting & Screening
18.4.5	Tree Preservation and Protection
18.4.6	Public Facilities
18.5.1	General Review Procedures
18.5.2	Site Design Review
18.5.8	Annexations
18.5.9	Comprehensive Plan, Zoning & Land Use Ordinance Amendments
18.6.1	Definitions

APPLICATION DATE: May 14, 2024
PUBLIC NOTICE: June 18, 2024
MEETING DATE: July 9, 2024

120-DAY DEADLINE: (*Type III applications not subject to 120-day limits)

PROPOSAL: A request for annexation and zone change of a 6.51-acre property and 0.97 acres of adjacent Right of Way (7.48 acres in total). The application also includes a request for Site Design Review approval for a city park. The proposed amenities include restrooms, a bike park with pump track & skills course, fenced dog park, play area, and community garden.

I. Introduction

1) Background

This is the near culmination of a project that has been many years in the making. In 2017 with the sale of the YMCA property and the subsequent development on the Snowberry property it was understood that there was an unmet need for a park in the area to meet the city's long-

standing goal of having a park facility within one quarter of a mile of all residents. The land was purchased by the city in December of 2018 and conveyed with a notation on the Deed that the property to remain in open space / park use, and that it is not to be used for housing. During the design process the Parks dept has had multiple public meetings and surveys to gain stakeholder input. These meetings were held across several years between 2019 and 2022. More recently the Parks Commission approved final designs at their November 08, 2023, business meeting.

From a Land Use perspective, the first pre-application was conducted in March of 2020, however the Covid pandemic caused those plans to be delayed. In September of 2023, a new pre-application was conducted where the primary item highlighted by staff was the need to complete the property line adjustment (which has since been completed) prior to the annexation so that the only lands being annexed were also being dedicated as parks lands.



2) Site Description

The subject property, outlined above, is Tax lot #200 of Assessor Map 39-1E-11-CB and is located on the south side of East Main Street. The property is vacant and is 6.51 acres in size. To the north the property has 361-feet of frontage along East Main and is lacking street improvements. To the south the property abuts a street plug along Abbott Ave and a small portion of open space dedicated as part of the “Bud’s Dairy” Subdivision. The adjacent Right-of-way of Abbott Ave. is fully improved with a park row and mature street trees.

The property is outside of city limits, so it does not have urban zoning. The comprehensive plan designation is ‘Suburban Residential.’ The property is adjacent to the city limits which run along the north edge of Bud’s Dairy, and along the west side of Chautauqua Trace Subdivision. The Urban Growth Boundary (UGB) runs along the North side of the East Main right-of-way (ROW). The annexation request includes the East Main ROW from the westerly side of Clay St to the eastern edge of the Desmit property (tax lot 100).

II. Project Proposal – Annexation and Site Design Review.

The application materials submitted in support of this application total 212 pages and by their reference are incorporated herein as if set out in full. In addition to various documents and supporting materials* they include the following plans, reports and findings:

- Findings of Fact and Conclusion for Annexation prepared by Richard Stevens & Associates, Inc. (p. 119 - 134)
- Findings of Fact and Conclusion for Site Design Review prepared by Terrain Architecture (p. 6 - 21)
- Traffic Impact Analysis (TIA) prepared by Southern Oregon Transportation Engineering, LLC (p. 28 - 51) & appendices (p. 52 - 107)
- Legal description and survey of land to be annexed prepared by Polaris Land Surveying, LLC (p. 135 – 136)
- Landscaping and Site Plans prepared by Terrain Architecture (p. 168 – 202)
- Civil engineering plans prepared by Powell Engineering and Consulting (p. 204 - 212)

The Findings of Fact and Conclusion for both annexation and Site Design Review include detailed responses to each of the related approval criteria and related standards. What follows is a summary of those materials and the relevant approval criteria.

1) Annexation

AMC 18.5.8.030 provides that: “*all annexations shall be processed under the Type III procedure.*” A type III planning action is a legislative Decision by definition. Legislative requests are not subject to the 120-day review period under subsection 18.5.1.090.B (ORS 227.178). Type III actions are reviewed by the Planning Commission, which makes a recommendation to the City Council. The Council makes final decisions on legislative proposals through enactment of an ordinance.

The approval criteria for annexation can be summarized as follows:[†]

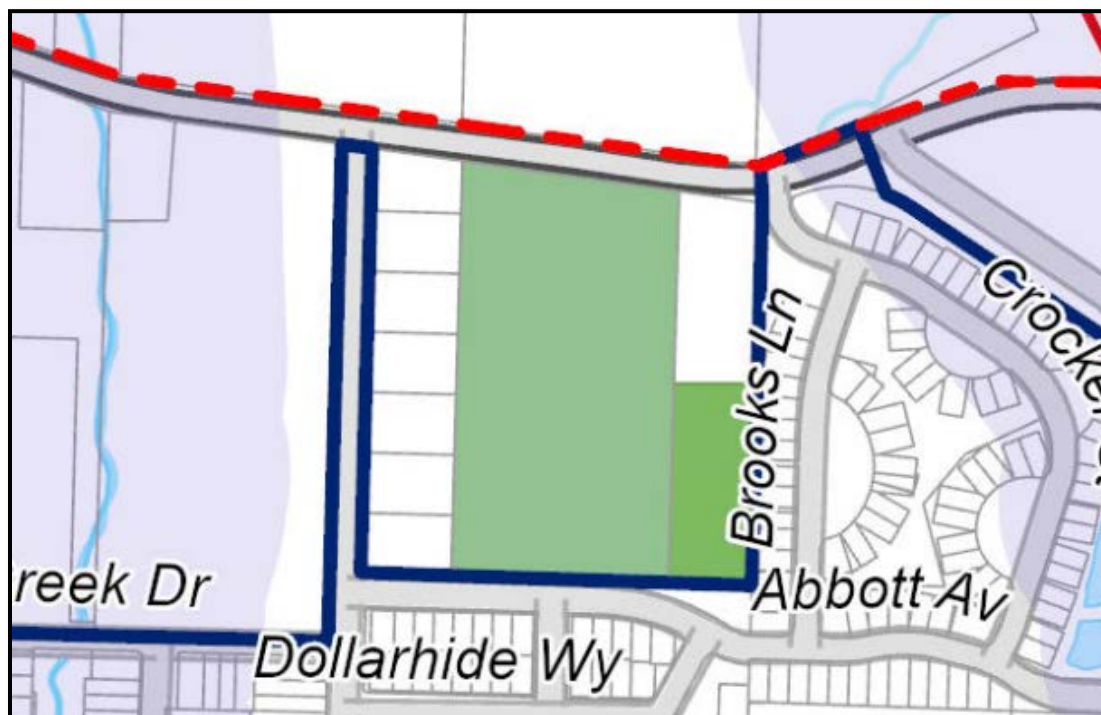
- A.** That the annexed area is within the City’s Urban Growth Boundary.
- B.** That the annexation proposal is consistent with the Comprehensive Plan designations.
- C.** That the annexed area is contiguous with the city limits.
- D.** That adequate City facilities are available as determined by Public Works.
- E.** That adequate transportation can and will be provided to serve the annexed area.

* Pages 137-167 are pages from the Comprehensive Plan and Pre-application meeting materials.

[†] Items F, G, & H are omitted for parsimony: F&G only relate to annexation with residential development; H is automatically satisfied if ‘B’ has been met. Complete approval criteria included in Section III below.

It is manifest that the property is both within the UGB and contiguous with the city limits. This satisfies the first and third approval criteria.

The second criteria of approval for annexation are that the *“proposal is consistent with the Comprehensive Plan designations.”* As mentioned above the comprehensive plan designation of the property is suburban residential, and the property does not yet have an assigned zone. The application requests a zone change to R-1-3.5 which would be appropriate for the comprehensive plan designation of suburban residential. Additionally, the City of Ashland’s Parks Trails and Open Space plan was recently approved and adopted by City Council. Shown below is a portion of the adopted map already showing the subject property as Park Land.



The table of allowed uses (AMC 18.2.2.030) indicates that a Park is permitted outright in the R-1-3.5 zone (as well as all other residential zones). Provided that the development of the park is guided by Site Design Review standards, it follows that the proposal is consistent with the comprehensive plan designation.

The fourth approval criterion for annexation is that *“Adequate City facilities as determined by the Public Works Department.”* The property is served by all city utilities with a 12” sewer main in East Main, an 8” water main that has been stubbed into the property at Abbott Ave, and electrical available from either frontage. The expected impact on sewer and water is de minimis based on the few facilities being proposed. The Public Works Department has confirmed that there are no concerns regarding the capacity of any City facilities.

The application includes a complete set of plans for the proposed civil improvements prepared by Powell Engineering & Consulting. These provide complete details on frontage improvements including curb, gutter, planter strip and sidewalk as well as a protected bike lane. These plans

have been reviewed by Public Works and feedback has been provided to the project engineer regarding modification to certain ADA crossings, and other utilities. Significantly it was discovered that the proposal included a water connection in East Main, however there is no water service in East Main with the exception of the two-inch PVC that transports lithia water to the plaza. The main purpose of the water connection was to service a proposed fire hydrant. After consultations with the Fire Marshal, it was determined that a fire hydrant was in fact, not required in this location based on the site of the proposed buildings. The project engineer will continue to work with Public Works to address the other outstanding issues. A condition of approval has been included below that the project engineer will be required to meet all Public Works requirements.

The fifth approval criterion for annexation is that “*Adequate transportation can and will be provided to serve the annexed area.*” The application material include a comprehensive Traffic Impact Analysis (TIA) prepared by Southern Oregon Transportation Engineering, LLC. It states that “the traffic impact analysis conclude that the proposed East Main Street Park can be approved without creating adverse impacts to the transportation system.”

These conclusions are supported by comparing the ‘no-build’ to the ‘build’ level of service (LOS) conditions at selected intersections using estimated trip generation processed using “SYNCHRO” timing software. The TIA explains that Institute of Transportation Engineers (ITE) Trip Generation is relied upon to inform trip generation. The ITE Trip Generation manual provides for a land use code for Public Park, however in the present application the Traffic Engineer explored the traffic generation for the individual component parts of the project: the dog park, the community garden, and the pump track. When the ITE manual does not provide a land use code local data is recommended. The TIA states that local data was gathered by taking manual counts at existing facilities in Ashland for the dog park and community garden. For the pump track, traffic generations were developed from estimations provided by the City of Redmond for a similar pump track that was recently built. It was estimated the entire park will generate 442 average daily trips (ADT) with 20 trips occurring during the a.m. peak hour and 43 during the p.m. peak hour. The TIA also examines Bike and Pedestrian traffic as well. The TIA concludes that “Streets that serve the subject property will accommodate projected peak hour traffic volumes while maintaining acceptable performance standards in accordance with the City of Ashland and Jackson County Transportation System Plans (TSP).”

The sixth and seventh approval criteria for annexation address residential density and affordable housing, respectively. Both of those approval criteria provide a manner to determine the required density / number of affordable units, and in each case “land area dedicated as a public park” is specifically excluded. The present proposal includes that the entire subject property is to be dedicated as a city park and has no residential component. Because there is no residential development these two approval criteria can be found to be satisfied.

With regard to ‘Goal-10’* compliance, the city is in the process of adopting a resolution accepting the recent Buildable Lands Inventory (BLI) update. This 2024 update to the City’s BLI

* The foundation of statewide program for land use planning in Oregon is a set of 19 Statewide Land Use Planning Goals. The goals express the state's policies on land use and related topics, like citizen involvement, housing, and natural resources. For the complete text of Goal 10: Housing see OAR 660-015-0000(10)

closed out its data set at the end of 2023. At that time the property line adjustment that added an additional acre of land to tax lot 200 had not yet been completed and the Desmit Property was 2.03 acres. The 2019 BLI already showed tax lot 200 designated as Park Lands without the expectation of the development of dwelling units, however the Desmit property was coded as “Partially Vacant” and expected to develop with at least ten dwelling units* That property is now half as large, and based on the width of the property and existing development it is very likely that when the BLI is next updated the expected number of dwellings that the Desmit property could support will likely be reduced to no more than four or five.

The BLI found that within the city it was estimated that 1,407 dwellings could be accommodated, with 1303 additional potential dwellings in the UGB. The BLI also determined, based on the conclusions of the Housing Capacity Analysis (HCA)[†], that the city had sufficient capacity across all comprehensive plan designations with the existing city limits. Based on the above, staff concludes that the reduction in five potential dwelling units from the BLI will not affect the conclusions of the BLI that the city has sufficient residential land for the next twenty-year planning period.

The eighth and final approval criterion for annexation requires that at least one of five standards to be met. The first[‡] of these is that “*The annexation proposal shall meet the requirements of subsection 18.5.8.050.B, above.*” This citation, AMC 18.5.8.050.B, is in fact the 2nd approval criterion. As discussed above, the 2nd approval criterion provides that the “*proposal is consistent with the Comprehensive Plan designations.*” Since the second criterion of approval was satisfied above then this eighth and final approval criterion is also satisfied.

Finally, the Land Use Ordinance requires that “*the applicant for the annexation shall also declare which procedure under ORS chapter 222 the applicant proposes that the Council use, and supply evidence that the approval through this procedure is likely*” (AMC 18.5.8.070). The application at pages 129 – 132 provide detailed findings addressing ORS chapter 222, as well as the ‘triple majority standard’ (which is clearly met in this case as the city is the sole owner of the entire parcel). The application states that because the city is the sole owner of the land to be annexed, with no electors, and controls the entirety of the assessed valuation within the territory and has submitted a petition and consent to annex that the application meets the standards of ORS 222.111 and ORS 222.125. The application states that because of this the City of Ashland can, by resolution or ordinance, proclaim the annexation without a hearing. The application further notes that it is the LUO that requires a public hearing to approve the annexation.

* The property was 2.03 acres with a comp plan designation that would allow for 7.2 dwellings per acre. This provided a calculated density of 14.6 rounded down to 10 based on the existing development

[†] The HCA determined that Ashland has a demand for 858 new dwellings over the next twenty-year period

[‡] The other four options are:

2. A current or probable danger to public health exists within the proposed area for annexation due to lack of full City sanitary sewer or water services in accordance with the criteria in ORS chapter 222 or successor state statute.
3. Existing development in the proposed area for annexation has inadequate water or sanitary sewer service, or the service will become inadequate within one year.
4. The proposed area for annexation has existing City water or sanitary sewer service extended, connected, and in use, and a signed consent to annexation agreement has been filed and accepted by the City.
5. The proposed area for annexation is an island surrounded by lands within the City limits.

2) Site Design Reivew

Annexation Review procedures at AMC 18.5.8.030 provides that “*annexation applications require an accompanying planning application for the development of the entirety of the annexed area in accordance with applicable procedure and approval criteria in chapter 18.5.1, General Review Procedures, concurrent with the annexation application.*” In the present case the planning application is to develop the entire property into a City Park which is an allowed use for the proposed city zoning as provided in the table of allowed uses at AMC 18.2.2.030. The proposed city park triggers a number of different thresholds for Site Design Review applicability AMC 18.5.2.020.

There are four approval criteria for Site Design Review at AMC 18.5.5.050 which require a development to demonstrate that it satisfies all of the relevant standards in each of the main chapters of the LUO: Underlying Zone (18.2); Overlay Zones (18.3); Site Development and Design Standards (18.4); and finally City Facilities (18.4.6).

The first approval criterion for Site Design Review is that “*The proposal complies with all of the applicable provisions of the underlying zone.*” Chapter AMC 18.2 provides for allowed uses and general regulations for base zones. As discussed above a city park is permitted outright as an allowed use in the proposed zone. The remainder of the relevant standards in the chapter provide setbacks and lot coverage. The application shows that all proposed buildings exceed the required setbacks and that the proposed lot coverage is 24.5% when 55% is allowed for the zone. Based on the application materials it is clear that all provisions of the underlying zone are met.

The second approval criterion for Site Design Review is that “*The proposal complies with all of the applicable overlay zone requirements*”. Chapter AMC 18.3 provides regulations for all relevant overlay zones. The only overlay zone that affects the property is the ‘Wildfire’ overlay zone which covers the entire city. All proposed structures will be required to comply with the ‘fuel modification area’ as provided at AMC 18.3.10.100, and a condition of approval to that effect has been included below.

The third approval criterion for Site Design Review is that “*The proposal complies with all of the applicable Site Development and Design Standards*” Chapter AMC 18.4 provides for the Site Development and Design Standards. As relevant here, this chapter regulates. 1) Building placement, 2) Parking Standards, 3) Landscaping, 4) Tree Preservation, and 5) Public Facilities (these are discussed in the fourth approval criterion below). The application materials include detailed responses to each of these standards. In brief the only buildings proposed are the bathroom and shade structures and the relevant standards for building design and placement for Site Design Review are not applicable in this application. The application notes that there are ten trees proposed for removal which are described as dead or dying. The application also includes a tree protection plan as well as extensive documentation on landscaping plant selection, irrigation, and installation.

The Parking Lot is shown to meet all standards and while not required includes pervious hard scape for the parking areas to increase rain infiltration and reduce storm water runoff. The application notes that there are “10 parking lot trees are proposed to shade 28 spaces, exceeding the ratio of 1 tree per 7 parking spaces.” Staff would note that our code has recently been updated

to be in compliance with the Climate Friendly and Equitable Communities (CFEC) rulemaking which requires compliance with American National Standards Institute (ANSI) A300 Standards and is a new component of the vehicle area design standards. They require that the trees be planted in accordance with ANSI A300 standards including having ample high-quality soil, space for root growth, and reliable irrigation according to the needs of the species. It also requires that the parking lot tree canopy plan shall be prepared by a licensed landscape architect or International Society of Arboriculture (ISA) certified arborist, and include certification that the plan is consistent with ANSI A300 standards. Conditions of approval to this effect have been included below.

The fourth approval criterion for Site Design Review is that *“The proposal complies with the applicable standards in section 18.4.6 Public Facilities, and that adequate capacity of City facilities”* The application proposes a three-foot dedication along East Main St. to accommodate the required improvements. The application indicates that 7.5’ park row and 6’ concrete sidewalk, a 5.5’ bike lane / 8’ buffered bike lane (where space allows), curb & gutter, storm drainage infrastructure, streetlights and street trees are proposed. These improvements meet or exceed the standards provided in Table 18.4.6.040.F for a two-lane avenue. (All required public improvements along the southern edge of the project are extant.) The application materials, as mentioned above, include detailed civil engineering drawings address sewer connection, storm water facilities, and electrical utilities.

The final approval criterion provides certain circumstances where the approval authority may grant exceptions to the Site Development and Design Standards. The present application requests no such exceptions so this approval criterion is not applicable.

3) Public Comment

Notice was posted at the property frontage, as well as the city web site, and mailed to all properties within 200’ on June 18, 2024. At the time of printing of this staff report there were four comments received, two were from the DLC and the Fair Housing Council. In both cases they were related to concerns about Goal-10 compliance for residential land sufficiency which was addressed in detail above.

The third and fourth were two separate emails sent from a citizen concerned with the bike pump track. The emails provided links and the full text of two articles; one in San Diego, CA, and the other in Pittsfield, Mass. The article from San Diego was about a 2020 lawsuit, and it is unclear what the outcome of the litigation was. The plaintiff alleged that the city was liable as they failed to provide supervision or post warning signs. The article from Pittsfield was dated 6/24/24 and was about fundraising and funding for a planned bike skills park, and the bureaucratic intricacies of a Memorandum of Understanding (MOU) with other local associations and bike clubs who were responsible for the fundraising. The email states that the pump track will expose the city to legal liability and concludes that it should not be built.

III. **Procedural – Approval Criteria**

1) Annexation

AMC 18.5.8.050 provides the approval criteria and standards for annexation:

An application for an annexation may be approved if the proposal meets the applicable criteria in subsections [A](#) through [H](#) below. The approval authority may, in approving the application, impose conditions of approval consistent with the applicable criteria and standards, and grant exceptions and variances to the criteria and standards in this section in accordance with subsection [I](#).

A. The annexed area is within the City's Urban Growth Boundary.

B. The annexation proposal is consistent with the Comprehensive Plan designations applicable to the annexed area, including any applicable adopted neighborhood, master, or area plan, and is an allowed use within the proposed zoning.

C. The annexed area is contiguous with the City limits.

D. Adequate City facilities for the provision of water to the annexed area as determined by the Public Works Department; the transport of sewage from the annexed area to an approved waste water treatment facility as determined by the Public Works Department; the provision of electricity to the annexed area as determined by the Electric Department; urban storm drainage as determined by the Public Works Department can and will be provided from the annexed area. Unless the City has declared a moratorium based upon a shortage of water, sewer, or electricity, it is recognized that adequate capacity exists system-wide for these facilities. All required public facility improvements shall be constructed and installed in accordance with subsection [18.4.6.030.A](#).

E. Adequate transportation can and will be provided to serve the annexed area. For the purposes of this section, "adequate transportation" for annexations consists of vehicular, bicycle, pedestrian, and transit transportation meeting the following standards:

1. For vehicular transportation a minimum 22-foot-wide paved access exists, or can and will be constructed, providing access to the annexed area from the nearest fully improved collector or arterial street. All streets bordering on the annexed area shall be improved, at a minimum, to an applicable City half-street standard. The approval authority may, after assessing the impact of the development, require the full improvement of streets bordering on the annexed area. All streets located within annexed areas shall be fully improved to City standards unless exception criteria apply. Where future street dedications are indicated on the Street Dedication Map or required by the City, provisions shall be made for the dedication and improvement of these streets and included with the application for annexation.

2. For bicycle transportation, safe and accessible bicycle facilities according to the safety analysis and standards of the governing jurisdiction of the facility or street (e.g., City of Ashland, Jackson County, Oregon Department of Transportation) exist, or can and will be constructed. Should the annexed area border an arterial street, bike lanes shall be constructed along the arterial street frontage of the annexed area. Likely bicycle destinations within a quarter of a mile from the annexed area shall be determined and the approval authority may require the construction of bicycle lanes or multiuse paths connecting the annexed area to the likely bicycle destinations after assessing the impact of the development proposed concurrently with the annexation.

3. For pedestrian transportation, safe and accessible pedestrian facilities according to the safety analysis and standards of the governing jurisdiction of the facility or street (e.g., City of Ashland, Jackson County, Oregon Department of Transportation) exist, or can and will be constructed. Full sidewalk improvements shall be provided on one side of all streets bordering on the proposed annexed area. Sidewalks shall be provided as required by ordinance on all streets within the annexed area. Where the annexed area is within a quarter of a mile of an existing sidewalk system or a location with demonstrated significant pedestrian activity, the approval authority may require sidewalks, walkways or multiuse

paths to be constructed and connect to either or both the existing system and locations with significant pedestrian activity.

4. For transit transportation, should transit service be available to the annexed area, or be likely to be extended to the annexed area in the future based on information from the local public transit provider, the approval authority may require construction of transit facilities, such as bus shelters and bus turnout lanes.

5. Timing of Transportation Improvements. All required transportation improvements shall be constructed and installed in accordance with subsection [18.4.6.030.A](#).

F. For all residential annexations, a plan shall be provided demonstrating that the development of the annexed area will ultimately occur at a minimum density of 90 percent of the base density for the zone, unless reductions in the total number of units are necessary to accommodate significant natural features, topography, access limitations, or similar physical constraints.

... *[remainder of this section deleted for clarity as N/A]*

G. Except as provided in subsection [18.5.8.050.G.7](#), below, annexations with a density or potential density of four residential units or greater and involving residential zoned lands, or commercial, employment or industrial lands with a Residential Overlay (R-Overlay) shall meet the following requirements:

... *[remainder of this section deleted for clarity as N/A]*

H. One or more of the following standards are met:

1. The annexation proposal shall meet the requirements of subsection [18.5.8.050.B](#), above.
2. A current or probable danger to public health exists within the proposed area for annexation due to lack of full City sanitary sewer or water services in accordance with the criteria in ORS chapter [222](#) or successor state statute.
3. Existing development in the proposed area for annexation has inadequate water or sanitary sewer service, or the service will become inadequate within one year.
4. The proposed area for annexation has existing City water or sanitary sewer service extended, connected, and in use, and a signed consent to annexation agreement has been filed and accepted by the City.
5. The proposed area for annexation is an island surrounded by lands within the City limits.

I. Exceptions and Variances to the Annexation Approval Criteria and Standards. The approval authority may approve exceptions to and variances from the approval criteria and standards in this section using the criteria in section [18.4.6.020.B.1](#), Exceptions to the Street Design Standards, or chapter [18.5.5](#), Variances

2) Site Design Reivew

AMC 18.5.2.050 provides the approval criteria and standards for Site Design Review:

An application for Site Design Review shall be approved if the proposal meets the criteria in subsections A, B, C, and D below. The approval authority may, in approving the application, impose conditions of approval, consistent with the applicable criteria.

A. Underlying Zone. The proposal complies with all of the applicable provisions of the underlying zone (part 18.2), including but not limited to: building and yard setbacks, lot area and dimensions, density and floor area, lot coverage, building height, building orientation, architecture, and other applicable standards.

B. Overlay Zones. The proposal complies with applicable overlay zone requirements (part 18.3).

C. Site Development and Design Standards. The proposal complies with the applicable Site Development and Design Standards of part 18.4, except as provided by subsection E, below.

D. City Facilities. The proposal complies with the applicable standards in section 18.4.6 Public Facilities, and that adequate capacity of City facilities for water, sewer, electricity, urban storm drainage, paved access to and throughout the property, and adequate transportation can and will be provided to the subject property.

E. Exception to the Site Development and Design Standards. The approval authority may approve exceptions to the Site Development and Design Standards of part 18.4 if the circumstances in either subsection 1, 2, or 3, below, are found to exist.

1. There is a demonstrable difficulty meeting the specific requirements of the Site Development and Design Standards due to a unique or unusual aspect of an existing structure or the proposed use of a site; and approval of the exception will not substantially negatively impact adjacent properties; and approval of the exception is consistent with the stated purpose of the Site Development and Design; and the exception requested is the minimum which would alleviate the difficulty;

2. There is no demonstrable difficulty in meeting the specific requirements, but granting the exception will result in a design that equally or better achieves the stated purpose of the Site Development and Design Standards; or

3. There is no demonstrable difficulty in meeting the specific requirements for a cottage housing development, but granting the exception will result in a design that equally or better achieves the stated purpose of section 18.2.3.090.

IV. Conclusion and Recommendations

Staff recommend that the Planning Commission forward a recommendation for approval of both the annexation and Site Design Review to the City Council for their consideration and approval. If the Planning Commission recommends approval of the application, staff recommends including the following conditions of approval below:

- 1) That all proposals of the applicant shall be conditions of approval unless otherwise specifically modified herein.
- 2) That permits shall be obtained from the Ashland Public Works Department prior to any additional work in the public right of way.
 - a. Infrastructure improvements including but not limited to utilities, driveways, streets and common area improvements shall be completed according to approved plans, inspected and approved.
 - b. Electric services shall be installed underground to serve the property, inspected and approved.

- c. That the sanitary sewer laterals and water services including connection with meters at the street shall be installed to serve the property.
- 3) That a final Fire Prevention and Control Plan addressing the General Fuel Modification Area requirements in AMC 18.3.10.100.A.2 of the Ashland Land Use Ordinance shall be provided prior to bringing combustible materials onto the property, and any new landscaping proposed shall comply with these standards and shall not include plants listed on the Prohibited Flammable Plant List per Resolution 2018-028.
- 4) That all tree plantings be in accordance with ANSI A300 standards.
- 5) That the parking lot tree canopy plan shall be prepared by a licensed landscape architect or International Society of Arboriculture (ISA) certified arborist, and include certification that the plan is consistent with ANSI A300 standards.
- 6) That the building permit submittals shall include the following:
 - a. Identification of all easements, including but not limited to any public and private utility easements, mutual access easements, and fire apparatus access easements.
 - b. Fuel modification area as provided at AMC 18.3.10.100.
 - c. Solar setback calculations demonstrating that all units comply with Solar Setback Standard A in the formula $[(\text{Height} - 6) / (0.445 + \text{Slope}) = \text{Required Solar Setback}]$ and elevations or cross section drawings clearly identifying the highest shadow producing point(s) and the height(s) from natural grade.
 - d. Final lot coverage calculations demonstrating how lot coverage is to comply with the applicable coverage allowances of the R-1-3.5 zoning district. Lot coverage includes all building footprints, driveways, parking areas and other circulation areas, and any other areas other than natural landscaping.
 - e. That storm water from all new impervious surfaces and runoff associated with peak rainfalls must be collected on site and channeled to the City storm water collection system through the curb or gutter at a public street, a public storm pipe, an approved public drainage way, or through an approved alternative in accordance with Ashland Building Division policy BD-PP-0029. On-site collection systems shall be detailed on the building permit submittals.

PUBLIC COMMENTS

Michael Sullivan

From: Cori Frank <jtf4cf@gmail.com>
Sent: Monday, July 01, 2024 1:13 PM
To: planning
Subject: Fwd: PITTSFIELD, Mass. — Planners of the Springside bike skills park would like more support from the city and more time but the Parks Commission is ready to see whe...

Follow Up Flag: Follow up
Flag Status: Flagged

[EXTERNAL SENDER]

FYI

----- Forwarded message -----

From: Cori Frank <jtf4cf@gmail.com>
Date: Wed, Jun 26, 2024 at 7:38 PM
Subject: PITTSFIELD, Mass. — Planners of the Springside bike skills park would like more support from the city and more time but the Parks Commission is ready to see whe...
To: Cori Frank <jtf4cf@gmail.com>, Ron Owen <rdowen6264@gmail.com>

PITTSFIELD, Mass. — Planners of the Springside bike skills park would like more support from the city and more time but the Parks Commission is ready to see whe...

Springside Pump Track Planners Want Time, City Commitment

<https://search.app/4D7w6g2Q32aMJ7sA9>

--

John & Cori Frank
email: jtf4cf@gmail.com

Springside Pump Track Planners Want Time, City Commitment

By Brittany Polito

iBerkshires Staff

05:10AM / Monday, June 24, 2024

[Print Story](#) | [Email Story](#)

PITTSFIELD, Mass. — Planners of the Springside bike skills park would like more support from the city and more time but the Parks Commission is ready to see wheels moving.

They first came to the commission in 2020 looking to donate a pump track and bike skills park to Pittsfield, citing the plot behind Reid Middle School as a great spot for accessibility to the Morningside neighborhood.

In four years, the cost of asphalt alone has doubled. The 2021 design's cost is seeing a reported increase of about 50 percent, originally quoted for \$400,000.

Recognizing the need to pivot, planners last month asked the commission for more time to re-evaluate the project and fundraise. They were expected to present a "goal for a new approach towards the same goal" and "concrete options" in July but, upon request, that was extended to August during last Tuesday's meeting.

This could include a budget or phased design.

"The process to get us to this point has been arduous, at the least, to come to an agreement on what is the best fit. To be clear, we wouldn't even be having this conversation if we didn't feel that it was a positive thing for the park but the applicant came to us with it," Commissioner Anthony DeMartino said.

"This is not the city soliciting an opportunity to put a new feature into our park."

He said the commission would like to "kick the dust" off this project because it has been treading water for so long.

"We want to see progress and movement on it because we haven't seen much for a while."

Garrett Pulley of the Berkshire Mountain Bike Training Series is "curious how invested the city is as a whole," pointing to terms in the memorandum of understanding that puts maintenance responsibilities on the biking organizations involved and expressing a want for financial support.

Commissioners expressed that they have supported the project for years.

"The way I sort of read all of this is that we're just getting permission and nothing else from the city and, again, high-level statement but it is tough," he said.

"It's tough to see how we're going to fund this, how we're going to take care of this. It's all being done by volunteer work that this is just our it's not even our second job."

Pulley said the buy-in he is hoping to regain is assistance in facilitation. He asked if the city could help the planners secure grant funding or market their fundraising efforts.

"Does the city have any way to help raise the extra funds for, frankly, like a requirement you guys really need," he said. "This is something the city needs and we want to give that to you but yeah, having a little bit of extra funds to go towards that requirement that would be a big milestone for us."

Alison McGee of the Berkshire New England Mountain Biking Association, who originally proposed the project, said looking at ways the commission and the city could potentially be invested into doesn't always need a financial investment.

Pulley would also like to "go back to the MOU," as "the responsibility that I feel like is being put on these organizations as a whole, the feeling that I got was that you really don't believe us." It was signed between the city, New England Mountain Bike Association, Shire Shredders, and Berkshire Mountain Bike Training Series.

The MOU, approved early this year, stipulates that money raised for the demolition of the park will be held in a city fund with half of the initial cost given back in a five-year period and the remaining 50 percent given back in a 10-year period if not used.

It also stipulates that the organizations maintain the park under a plan that is developed as part of the formal design process, obtain an insurance policy naming the city as an additional insured, and that either party can terminate the agreement if there are insufficient funds raised for the construction and removal.

"Revisiting that is probably — I don't want to say it's off the table, but it's not very much on the table," said DeMartino.

"Getting us to that point was an inordinate amount of work on our part, all the organizations involved, the city." He said this is an "enormous investment" of space and resources and if the bike skills park is not well maintained, it becomes a burden to the city.

McGee said a recent bicycle film festival raised about a thousand dollars and a majority of it is hoped to go to the bike skills park. She also reminded the commission that there is a matching donor interested in the project.

"I know that when I was originally bringing forward and saying that we would fund it in full, a large part of that drive and the same thing with the putting it forward as an entire project was to expedite it and that was the goal behind that was if we are able to do this and have this happen quickly while we have these this budget, that was the motivator for that," she said.

"For me and in speaking with people who are partnering with me now, that's part of why that is coming up again because the expediting didn't happen and so it changes the reality a bit and so not trying to backtrack on what was presented for sure. I do want to make sure you understand that when we said that, that was meant with full intention but it was the intention was to try to make it easier and more direct, which it hasn't really been."

Tags: [bicycling](#), [public parks](#),

Michael Sullivan

From: Cori Frank <jtf4cf@gmail.com>
Sent: Monday, July 01, 2024 12:41 PM
To: planning
Subject: [Shared Post] Lawsuit claims 'pump track' at San Diego park is dangerous

Follow Up Flag: Follow up
Flag Status: Flagged

[EXTERNAL SENDER]

I understand there is a Planning Commission meeting to determine if a Bike Pump Track should be approved for the new East Main Park.

I urge the Planning Commission to look into the lawsuits and difficulties cities are having maintaining and keeping trespassers off the track. Some issues; small motorized vehicles, skateboarders, and nonuse of helmets. Some cities have had to have staff to ensure compliance with the requirements, some have gone to waivers being signed and some have closed them. I believe the liability for the city of Ashland is extremely high and the Pump Bike tracks should not be built. I urge the commission to do your research. Thank you, Cori
<https://www.sandiegouniontribune.com/2020/02/26/lawsuit-claims-pump-track-at-san-diego-park-is-dangerous/>

LOCAL NEWS

Lawsuit claims 'pump track' at San Diego park is dangerous

Nearby resident claims he was injured because city allows bikes, skaters to use park simultaneously



Del Mar Times

The pump track at Pacific Highland Ranch Community Park



By **DAVID GARRICK** | David.Garrick@sduniontribune.com | The San Diego Union-Tribune

PUBLISHED: February 26, 2020 at 8:00 a.m. | UPDATED: February 26, 2020 at 6:04 p.m.

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The suit claims city officials were negligent when they decided to allow cyclists and skaters to simultaneously use the track but then failed to provide supervision or warning signs about the dangers that type of conflict would create.

The suit was filed in January by Vladislav Kroutik, who claims he was injured on the track just a few days after it opened last April in Pacific Highlands Ranch Park, a neighborhood just north of state Route 56 and Carmel Valley.

Kroutik's suit says he was "brutally attacked by a skateboarder while biking on the pump track." But he blames the city, not the skateboarder.

The suit says city officials failed to provide supervision at the track, failed to post warning signs, failed to tell users how to reduce injury risks and failed to establish clear standards and protocol for the track.

While the park was under construction, Kroutik complained about noise from the concrete pump track he attributed to skaters breaking in during evening and night hours. In his suit, he says the track should be rebuilt with dirt to reduce noise.



The suit says noise levels in the park exceed city standards established in the San Diego Municipal Code. It is open from 8 a.m. to 7:30 p.m. daily.

Kroutik lives in the Airoso development, which is directly adjacent to the new park.

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The suit doesn’t specify what injuries Kroutik suffered but it seeks reimbursement for medical expenses. He suffered “irreversible physical harm, mental anguish and continuous fear for his life” while using the park on April 22, the suit says.

A pump track is called that because users are encouraged by the rolling hills and banked turns to pump — make up and down movements — instead of normal pedaling.

The case has been assigned to Superior Court Judge John Meyer, who has scheduled a May 15 hearing.

A spokeswoman for City Attorney Mara Elliott said Elliott’s staff will review the complaint with city officials.

Around The Web

REVCONTENT

Barron Trump, 18,
Now Lives In
Ashland With His
Partner

OLD MONEY STYLE

Why Doctors in
the Know No
Longer Prescribe
Blood Pressure
Drugs

PRIMAL HEALTH

[Watch Now]
Bizarre "Brain
Hack" Uncovers
the Solution to
Your Ringing Ears

SIMPLY HEALTH SOLUTIONS

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https://www.sandiegouniontribune.com/2020/02/26/lawsuit-claims-pump-track-at-san-diego-park-is-dangerous/

3/4

Total Page Number: 509

Aaron Anderson

From: Mark Shay
Sent: Thursday, June 27, 2024 8:24 AM
To: Aaron Anderson
Subject: RE: E Main Park - Civil Plans

Good Morning Aaron,

After review of the plans, I'm rescinding the requirement of a fire hydrant for this project. If future development includes any additional structures on the property, I'll evaluate water supply needs and a hydrant may be required at that time.

Please let me know if you have any questions or I can help further.

Mark Shay
Fire Marshal
(541) 552-2217
Ashland Fire & Rescue
455 Siskiyou Boulevard
Ashland, OR 97520



From: Aaron Anderson <aaron.anderson@ashland.or.us>
Sent: Wednesday, June 26, 2024 3:21 PM
To: Mark Shay <mark.shay@ashland.or.us>
Subject: RE: E Main Park - Civil Plans

Hi Mark,

Thanks for your time on the phone to discuss the plan for E main Park. As we discussed the application materials cite an email that was a follow up to a 2020 pre-app where Greg Kleinberg said in part, ".....one additional fire hydrant will be required near the driveway entrance on E Main Street. Based on our phone conversation I understand that you do not believe that the fire hydrant is necessary based on the proposed shade structures, bathroom and parking area.

I have attached a selection of pages with site plan and civils for you to refresh your memory and to review. If once you have reviewed the attached plans you still believe that the fire hydrant at the driveway entrance off East Main is in fact not required please let me know.

I appreciate your time and attention to this matter.
Cheers.

Aaron Anderson CFM, Sr. Planner

Pronouns he, him



City of Ashland

Community Development

51 Winburn Way, Ashland, Oregon 97520

541.552.2052 | TTY 800.735.2900

aaron.anderson@ashland.or.us

Online ashland.or.us; social media (Facebook @CityOfAshlandOregon | Twitter @CityofAshland)

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From: Karl Johnson <karl.johnson@ashland.or.us>

Sent: Friday, June 21, 2024 10:45 AM

To: Todd Powell <todd@powellengineeringconsulting.com>

Cc: Aaron Anderson <aaron.anderson@ashland.or.us>; Kevin Caldwell <kevin.caldwell@ashland.or.us>;
piper@terrainarch.com; Scott Fleury <scott.fleury@ashland.or.us>

Subject: E Main Park - Civil Plans

Todd,

Attached are my comments on the preliminary civil plans for the E. Main Park development. Please feel free to let me know if you have any questions.



Karl Johnson, E.I.T.

Associate Engineer

City of Ashland Public Works/Engineering

20 East Main St, Ashland OR 97520

O 541.488.5587 | TTY 800.735.2900

Hours | Mon-Fri, 7:30am-4:00pm PST

Karl.johnson@ashland.or.us

Online ashland.or.us; social media (Facebook @CityOfAshlandOregon | Twitter @CityofAshland)

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May the forces of evil become confused on the way to your house - George Carlin

PAPA file PA-T3-2024-00009

Mathew Hogan from Fair Housing Counsel of Oregon <mathew.jamesfhco@gmail.com>

Wed 2024-06-26 09:41 AM

To: Derek Severson <derek.severson@ashland.or.us>

[EXTERNAL SENDER]

Good morning Derek,

My name is Mathew Hogan and I am conducting outreach for the Fair Housing Council of Oregon (FHCO). I was hoping to obtain the staff report and all corresponding attachments for PA-T3-2024-00009 the "A request to annex the property at 2228 East Main Street into the City of Ashland with Suburban Residential (R-1-3.5) zoning. The application also includes a request for Site Design Review approval to develop the annexed property as a new public park." when available. We will be reviewing the staff report predominantly for Statewide Planning Goal 10 compliance.

If we do have any commentary or concerns my colleague Sam Goldberg will be in touch to advise. We hope this can be a collaborative process. Please confirm receipt of this e-mail, and I look forward to hearing from you soon.

Very Respectfully,

Mathew Hogan

Fair Housing Council of Oregon

Phone: (406) 439 0950

E-mail: Mathew.JamesFHCO@gmail.com

For the latest on the PAPA Project and our feedback & technical advice methodology, please read the PAPAs section at our partner website, [here](#).



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Print

Close

Local File PA-T3-2024-00009; DLCD File 002-24

LEBOMBARD Josh * DLCD <Josh.LEBOMBARD@dlcd.oregon.gov>

Mon 2024-06-17 07:10 AM

To: Derek Severson <derek.severson@ashland.or.us>

[EXTERNAL SENDER]

Derek,

Kevin Young from our Department reviewed this application and had the following comment:

The findings should address how use of this property as a park will impact the city's inventory of residential lands, per Goal 10. The City must show that adequate residential lands remain to meet all identified residential land needs per the city's acknowledged HNA/HCA.

If you could add this analysis, it would be much appreciated.

Cheers,

Josh



Josh LeBombard

Southern Oregon Regional Representative

Pronouns: He/Him

Oregon Department of Land Conservation and Development

635 Capitol Street NE, Suite 150 | Salem, OR 97301-2540

Cell: 541-414-7932 | Main: 503-373-0050

josh.lebombard@dlcd.oregon.gov | www.oregon.gov/LCD

APPLICANT'S SUBMITTAL



Planning Division
51 Winburn Way, Ashland OR 97520
541-488-5305 Fax 541-488-6006

ZONING PERMIT APPLICATION

FILE # _____

DESCRIPTION OF PROJECT Annexation and Change of Zoning and Site Plan Review

DESCRIPTION OF PROPERTY

Pursuing LEED® Certification? ☐ YES ☐ NO

Street Address 2228 & 2290 E. Main Street

Assessor's Map No. 39 1E 11CB Tax Lot(s) 100 & 200

Zoning RR-5 Jackson County Comp Plan Designation Suburban Residential

APPLICANT

Name Ashland Parks & Recreation, Mary C. Desmit Phone 541-552-2256 E-Mail *leslie.eldridge*
~~michael.black~~@ashland.or.us

Address 340 S. Pioneer Street City Ashland Zip 97520

PROPERTY OWNER

Name City of Ashland, Mary C. Desmit Phone 541-488-5340 E-Mail _____

Address 340 S. Pioneer Street City Ashland Zip 97520

SURVEYOR, ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OTHER

Title Consultant Name Richard Stevens & Associates, Inc. Phone 541-773-2646 E-Mail clark@rsaoregon.com

Address PO Box 4368 City Medford Zip 97501

Title _____ Name _____ Phone _____ E-Mail _____

Address _____ City _____ Zip _____

I hereby certify that the statements and information contained in this application, including the enclosed drawings and the required findings of fact, are in all respects, true and correct. I understand that all property pins must be shown on the drawings and visible upon the site inspection. In the event the pins are not shown or their location found to be incorrect, the owner assumes full responsibility. I further understand that if this request is subsequently contested, the burden will be on me to establish:

- 1) that I produced sufficient factual evidence at the hearing to support this request;
- 2) that the findings of fact furnished justifies the granting of the request;
- 3) that the findings of fact furnished by me are adequate; and further
- 4) that all structures or improvements are properly located on the ground.

Failure in this regard will result most likely in not only the request being set aside, but also possibly in my structures being built in reliance thereon being required to be removed at my expense. If I have any doubts, I am advised to seek competent professional advice and assistance.

Leslie M. Eldridge
Applicant's Signature

4/22/24
Date

As owner of the property involved in this request, I have read and understood the complete application and its consequences to me as a property owner.

Sabrina Cotta
Property Owner's Signature (required)

4/19/2024
Date

[To be completed by City Staff]

Date Received _____ Zoning Permit Type _____ Filing Fee \$ _____

OVER ►►

ZONING PERMIT SUBMITTAL REQUIREMENTS

- ☐ APPLICATION FORM must be completed and signed by both applicant and property owner.
- ☐ PLANNING FEES FORM must be completed and signed by both applicant and property owner.
- ☐ FINDINGS OF FACT – Respond to the appropriate zoning requirements in the form of factual statements or findings of fact and supported by evidence. List the findings criteria and the evidence that supports it. Include information necessary to address all issues detailed in the Pre-Application Comment document.
- ☐ TRUE SCALE PDF DRAWINGS – Standard scale and formatted to print no larger than 11x17 inches. Include site plan, building elevations, parking and landscape details.
- ☐ FEE (Check, Charge or Cash)
- ☐ LEED® CERTIFICATION (*optional*) – Applicant's wishing to receive priority planning action processing shall provide the following documentation with the application demonstrating the completion of the following steps:
 - Hiring and retaining a LEED® Accredited Professional as part of the project team throughout design and construction of the project; and
 - The LEED® checklist indicating the credits that will be pursued.

NOTE:

- Applications are accepted on a first come, first served basis.
- Applications will not be accepted without a complete application form signed by the applicant(s) AND property owner(s), all required materials and full payment.
- All applications received are reviewed for completeness by staff within 30 days from application date in accordance with ORS 227.178.
- The first fifteen COMPLETE applications submitted are processed at the next available Planning Commission meeting. (Planning Commission meetings include the Hearings Board, which meets at 1:30 pm, or the full Planning Commission, which meets at 7:00 pm on the second Tuesday of each month. Meetings are held at the City Council Chambers at 1175 East Main St).
- A notice of the project request will be sent to neighboring properties for their comments or concerns.
- If applicable, the application will also be reviewed by the Tree and/or Historic Commissions.



Planning Division
51 Winburn Way, Ashland OR 97520
541-488-5305 Fax 541-488-6006

PLANNING ACTION FEES

DESCRIPTION OF PROPERTY

Street Address 2228 E. Main Street (E. Main Street Park)

APPLICANT

Name Ashland Park & Recreation Phone 541-552-2257 E-Mail leslie@ashland.or.us

Address 340 S. Pioneer Street City Ashland State OR Zip 97520

FEE SCHEDULE – Please Mark All That Apply

ADMINISTRATIVE ACTIONS

				Total
	Zoning Permit - FENCE			\$35.25
	Zoning Permit - HOME OCCUPATION			\$35.25
	Zoning Permit - ACCESSORY STRUCTURE			\$35.25
	Street Tree Removal			\$100.00
	Land Use Approval Extension			\$420.50
	Lot Line Adjustment			\$420.50
	Any Other Administrative Action			\$420.50
		Base Fee	# of Lots	Total
	Final Plat Review - PARTITIONS	\$165.50	+ _____ x \$13.00 per lot	\$
	Final Plat Review - SUBDIVISIONS	\$420.50	+ _____ x \$35.25 per lot	\$
		Base Fee	Per Sq. Ft.	
	Sign Permit - NEW	\$165.25	+ _____ x \$3.00 per sq.ft.	\$
	Sign Permit - REPLACEMENT	\$35.25	+ _____ x \$3.00 per sq.ft.	\$

TYPE I REVIEWS

				Total
	Tree Removal Permit (not associated with another action)			\$100.00
	Solar Setback Variance			\$1,271.25
	Amendments to Conditions			\$1,271.25
	Physical & Environmental Constraints			\$1,271.25
	Conditional Use Permit			\$1,271.25
	Variance			\$1,271.25
	Any other Type I Review			\$1,271.25
	Independent Review of Wireless Communications Facilities			\$5,000.00
		Base Fee	# of Units	Total
	Residential Site Review	\$1,271.25	+ _____ x \$84.50 per unit	\$
	Final Plan/Performance Standards Subdivision	\$1,271.25	+ _____ x \$84.50 per unit	\$
	Land Partition	\$1,271.25	+ _____ x \$84.50 per unit	\$
		Base Fee	Valuation	Total
	Commercial Site Review	\$1,271.25	+ _____ x 0.5%	\$

TYPE II REVIEWS				
				Total
	Conditional Use Permit			\$2,663.25
	Variance			\$2,663.25
	Any other Type II Review			\$2,663.25
	Independent Review of Wireless Communications Facilities			\$5,000.00
		Base Fee	# of Lots	Total
	Outline or Preliminary Plat for Subdivision	\$2,663.25	+ _____ x \$170.25 per lot	\$
	Final Plan with Outline/Performance Standards Subdivision	\$3,397.00	+ _____ x \$170.25 per lot	\$
		Base Fee	Valuation	
✓	Commercial Site Review	\$2,66.25	+ <u>4,500,000</u> x 0.5%	\$25,163.25
TYPE III REVIEWS				
				Total
	Zone/Comprehensive Plan Map Change			\$3,397.00
	Comprehensive Plan Change			\$3,397.00
✓	Annexation			\$5,110.00
	Urban Growth Boundary Amendment			\$5,110.00
	Any other Type III Review			\$3,397.00
LEGISLATIVE AMENDMENTS				
				Total
	Comprehensive Plan Map/Large Zoning Map Amendment			\$5,963.50
	Land Use Ordinance Amendment			\$5,963.50
	Comprehensive Plan Amendment			\$5,963.50
APPEALS				
				Total
	Appeal for Initial Public Hearing (Planning Commission/Building Appeals Board/Demolition Review Board)			\$150.00
	Appeal for Final Decision of the City (Planning Commission or City Council)			\$325.00
SOLAR ACCESS				
		Base Fee	# of Lots	Total
	Solar Access Permit (not a Solar Variance)	\$60.50	+ _____ x \$14.00 per lot	
TOTAL FEES:		\$30,273.25		



Digitally signed by Leslie M.
Eldridge
Date: 2024.04.23 14:57:21 -07'00'

5/13/2024

Applicant's Signature

Date



5/13/2024

Property Owner's Signature

Date

AMC 18.5.1.050.A.1 & AMC 18.5.2.060.A.1

Application Form and Fee. Applications for Type I review shall be made on forms provided by the Staff Advisor. One or more property owners of the property for which the planning action is requested, and their authorized agent, as applicable, must sign the application. The application shall not be considered complete unless the appropriate application fee accompanies it.



Planning Division
51 Winburn Way, Ashland, OR 97520
541-488-5305

Commercial Site Review Valuation Estimate

Street Address: 2228 E. MAIN STREET

Description of Project: NEW PUBLIC PARK ON 6.52 ACRES, INCLUDES PUBLIC IMPROVEMENTS, DOG PARK, PLAYGROUND, PUMP TRACK, SHADE STRUCTURES, COMMUNITY GARDEN, PARKING, FURNISHINGS, ETC

Applicant: TERRAIN LANDSCAPE ARCHITECTURE

Property Owner: ASHLAND PARKS AND RECREATION

Valuation Estimate Prepared by: TERRAIN LANDSCAPE ARCHITECTURE

Estimator Phone: 541.500.4776 Estimator Email: PIPER@TERRAINARCH.COM

DESCRIPTION:	VALUATION:
Excavation & Earthwork	\$500,000
Landscaping	\$500,000
Parking Area(s) & Driveways	\$175,000
Sidewalks/Patios/Walkways	\$1,200,000
New Construction – Materials & Labor Total*	\$2,125,000
TOTAL PROJECT VALUATION:	\$4,500,000

**Building permit valuations shall be based upon the Uniform Fee methodologies as established by OAR 918-050-0100.*



April 24, 2024

Community Development Department, Planning Division
City of Ashland
51 Winburn Way
Ashland, OR 97520

APPLICATION FOR SITE DESIGN REVIEW

For development of a new public park

FINDINGS OF FACT AND CONCLUSION

Subject Property

Applicant:	Ashland Parks & Recreation Commission, Parks Division
Property Owner:	Ashland Parks & Recreation
Mailing Address:	340 S. Pioneer St. Ashland, OR 97520
Site Address:	2228 East Main Street
Map & Tax lot:	39 1E 11CB - 200
Lot Area:	6.51 acres
Comprehensive Plan Designation:	Suburban Residential (R-1-3.5)
Current Zoning:	Jackson County Rural Residential -5 (RR-5)
Adjacent Zoning:	Ashland R-1-3.5 to East and South Jackson County RR-5 to West Jackson County EFU to North (across East Main St)

Concurrent Requests

City of Ashland: **Annexation & Zone Change**
(see separate findings document by Richard Stevens & Associates)

Jackson County: **Property Line Adjustment**
(approved with conditions February 10, 2024)

PROJECT CONTACTS

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PROJECT NARRATIVE

Property Description

The subject property consists of 6.51 acres at 2228 East Main Street. This property comprises a single, uninterrupted parcel of land created through a recent Property Line Adjustment (PLA), which was approved by Jackson County on February 10, 2024. The PLA consolidated 5.51 acres located at 2228 East Main Street (tax lot 200) with a 1-acre portion of 2290 East Main Street (tax lot 100). An application for annexation to the City of Ashland is being submitted concurrently with this application. If approved, annexation would result in a change of zoning designation to R-1-3.5, for the entire 6.51 acres. The property is inside the Urban Growth Boundary and designated as Wildfire Lands.

The property is bordered on the North side by East Main Street and by Abbott Avenue on the South side. The property is bounded by private, single family residential properties to the East and West. This portion of East Main Street is currently a County road, however this project includes annexation of a portion of East Main Street into the City of Ashland, and the city will pursue a jurisdictional transfer. The nearest surrounding roadways are Abbott Ave, Clay St, Crocker St, Brooks Ln, and Tolman Creek Road.

Taxlot 200 is currently undeveloped, and the entire 6.51 acre area is primarily open field. The site is relatively flat, sloping gradually from south to north at approximately a 4% slope toward East Main Street. Existing trees, primarily Cottonwoods, are clustered near the perimeter of the property, with the largest grouping located at the Southeast corner of the property. An on-site evaluation was conducted by an APRC Arborist on Nov. 2, 2022, and several trees were flagged for removal due to health and safety concerns.

Talent Irrigation District (TID) water infrastructure exists along the South and West sides of the property. TID water rights exist on the property, which is currently flood irrigated from a concrete valve box at the South end of the property, near the Abbott Ave driveway entrance. The City will make certain modifications to the existing infrastructure to retain water access to neighboring private properties, and access by the Clay Street residential neighbors will be maintained, while updating the system to change from flood irrigation on the park property to pressurized application of irrigation water.



Project Proposal & Summary

The property owner, Ashland Parks & Recreation, seeks to develop a public neighborhood park, with active and passive recreation opportunities. Amenities include off-street parking, a bike park with pump track and skills course, a fenced dog park, a play area with a sports court, fenced community gardens, and open space with walking trails. As a neighborhood park, this park will fit into the network of Ashland parks primarily serving the people within a quarter-mile radius. It has been noted that inclusion of a bike pump track (a unique amenity in the area) means that some visitors may also travel from outside a quarter-mile radius to visit the park.

Community Engagement:

From its beginning, this project has engaged the community and solicited input on the proposed uses and design of the park. Beginning with a community planning meeting where small groups arranged pieces of paper to diagram the park, the project has had high public interest and involvement. Community engagement has also included a survey (conducted online via Survey Monkey), presentations to the Ashland Parks and Recreation Commission and the public, meetings with stakeholder groups such as the Rogue Valley Mountain Bike Association (RVMBA), Bee City, and Ashland Community Gardeners.

Throughout the schematic design and design development phases, regular meetings were held with a focus group comprised of APRC commissioners, a representative of the East Village Homeowners Association, and a representative of RVMBA. Consultants have been engaged to assist with a range of aspects of the project, from the pump track design to surveying, civil engineering and traffic impact analysis.

Design-Build Features:

Some of the features of the park will be design-build, including the mountain bike skills course and the community garden plots. The mountain bike skills course will be design-build by a professional trail builder, with the assistance of RVMBA and the mountain bike community. The trail builder will work with the Parks Department to install a bike skills course in the area defined in the drawings, including dirt paths with ramps, bridges and other features created from logs, rocks and similar materials. As part of the general park improvements, deer fencing, a pergola, and a community garden shed, similar in size to the one at Ashland Creek Park, will be installed. The Community Garden group will be responsible for designing the interior garden layout and building the plots within that framework.

Access & Parking:

Vehicular parking will be accessed by East Main Street, with 28 total spaces provided (including 1 accessible and 1 van accessible). The drive aisle is proposed to be asphalt and the parking stalls are proposed to be permeable unit pavers for increased stormwater infiltration. A smaller, gravel paved area is proposed for loading & unloading by the community garden users, with space for six vehicles. This loading area would be accessed by a short driveway from Abbott Avenue, utilizing the existing asphalt driveway entry. Access to the garden vehicular loading area will be limited by a locked swing-arm type barrier gate. Twenty bike parking spaces are provided in the park, and three of those are sheltered.

The following narrative findings address in more detail how the proposal meets the criteria for Site Design Review.

PROJECT FINDINGS

ADDRESSING THE APPLICABLE APPROVAL CRITERIA IN ACCORDANCE WITH THE ASHLAND LAND USE ORDINANCE, CHAPTER 18 OF THE ASHLAND MUNICIPAL CODE

AMC 18.5.2.050 SITE DESIGN REVIEW CRITERIA

An application for Site Design Review shall be approved if the proposal meets the criteria in subsections A, B, C, and D below. The approval authority may, in approving the application, impose conditions of approval, consistent with the applicable criteria.

A. Underlying Zone. The proposal complies with all of the applicable provisions of the underlying zone (part [18.2](#)), including but not limited to: building and yard setbacks, lot area and dimensions, density and floor area, lot coverage, building height, building orientation, architecture, and other applicable standards.

18.2.2.030, Allowed Uses:

A. Uses Allowed in Base Zones. *Allowed uses include those that are permitted, permitted subject to special use standards, and allowed subject to approval of a conditional use permit. Where Table [18.2.2.030](#) does not list a specific use and part [18.6](#) does not define the use or include it as an example of an allowed use, the City may find that use is allowed, or is not allowed, following the procedures of section [18.1.5.040](#).*

Finding:

As part of the annexation & zone change application, the proposed base zone for the properties is R-1.3.5. 'Park, Open Space, and Recreational Facility, including playgrounds, trails, nature preserves, athletic fields, courts, swim pools, and similar uses' are listed as a Permitted Use in this zone, per Table 18.2.2.030. The City of Ashland finds that this standard is met.

18.2.5.030, Unified Standards for Residential Zones:

Table 18.2.5.030.A, Standards for Urban Residential Zones:

Standards for R-1-3.5:

Front Yard: 15 ft

Side Yard: 6 ft

Rear Yard: 10 ft (single story)

Building height max 35 ft' or 2 ½ stories, whichever is less

Max lot coverage: 55% of lot area

Landscape Area Minimum (% of developed lot area): 45% min

Open Space Minimum (% of site area): NA

Finding:

Proposed landscape area is 57.9% and proposed lot coverage is 24.5%, including park shelters, a garden shed, restrooms, parking lot and other asphalt and concrete surfaces. The City of Ashland finds that this standard has been met.

B. Overlay Zones. The proposal complies with applicable overlay zone requirements (part [18.3](#)).

Finding:

This section is not applicable; no overlay zone exists for the subject property.

C. Site Development and Design Standards. The proposal complies with the applicable Site Development and Design Standards of part [18.4](#), except as provided by subsection E, below.

18.4.3 Parking, Access and Circulation:

18.4.3.030, General Automobile Parking Requirements and Exceptions:

A. *Minimum Number of Off-Street Automobile Parking Spaces.* Off-street parking shall be provided pursuant to one of the following three methods and shall include required Disabled Person Parking.

2. *Unspecified Use.* Where automobile parking requirements for any use are not specifically listed in Table [18.4.3.040](#), such requirements shall be determined by the Staff Advisor based upon the most comparable use specified in this section, and other available data.

Finding:

The intended use as a Neighborhood Park is not specified in Table [18.4.3.040](#) - *Automobile Parking Spaces by Use*.

Parking at other local parks has been considered, however, due to the varied sizes and amenities provided in Ashland parks, parking provisions vary widely and there is not another park that matches the unique amenities proposed here. Because the proposed 6.51 acre park includes a dog park, bike pump track & skills course, community garden, sports court, play area and walking trails, the applicant proposes to provide off-street parking inside the park for visitors.

In addition to considering other similar parks, estimated auto visits to the site and parking needs are based on a consulting engineer's traffic impact analysis. The site design includes an off-street parking lot with 28 spaces, including one standard accessible stall and one van-accessible stall, accessed from East Main Street. Off Abbott Avenue, a smaller, gravel paved area is proposed for loading & unloading by the community garden users, with space for six vehicles. This gravel paved area will be gated and locked as it is intended to be used infrequently, for loading & unloading of garden materials or park maintenance & materials staging, rather than by daily park visitors.

18.4.3.070, Bicycle Parking:

A. *Applicability and Minimum Requirement.* All uses, with the exception of residential units with a garage and uses in the C-1-D zone, are required to provide a minimum of two sheltered bike parking spaces pursuant to this section. The required bicycle parking shall be constructed when an existing residential building or dwelling is altered or enlarged by the addition or creation of dwelling units, or when a non-residential use is intensified by the addition of floor space, seating capacity, or change in use.

D. *Bicycle Parking for Non-Residential Uses.* Uses required to provide off street parking, except as specifically noted, shall provide two spaces per primary use, or one bicycle parking space for every five required automobile parking spaces, whichever is greater. Fifty percent of the bicycle parking spaces required shall be sheltered from the weather. All spaces shall be located in proximity to the uses they are intended to serve.

Finding:

Because there is no off-street vehicle parking requirement, the minimum bike parking requirement is two spaces. However, 28 vehicle parking spaces are provided, so using the ratio of one bike space per five vehicle spaces, we assume a minimum of six bike parking spaces. The proposal includes a variety of amenities including a bike pump track and skills course, and the applicant expects multi-modal transportation to the park to include bicycles. The proposal includes nineteen total bike parking spaces, which includes two spaces serving the community garden, seven spaces serving the bike park and ten spaces serving the play area, dog park, and other general users. Three bike spaces (half of the required minimum six spaces) are sheltered. One of the sheltered bike parking spaces is an electric bike charging station. The City of Ashland finds that this section is in compliance.

18.4.3.080, Vehicle Area Design:

B. *Parking Area Design.* Required parking areas shall be designed in accordance with the following standards and dimensions as illustrated in Figure [18.4.3.080.B](#). See also accessible parking space requirements in section [18.4.3.050](#) and parking lot and screening standards in subsection [18.4.4.030.F](#).

4. *Parking lots with 50 or more parking spaces, and parking lots where pedestrians must traverse more than 150 feet of parking area, as measured as an average width or depth, shall be divided into separate areas by one or more of the following means: a building or group of buildings; plaza landscape areas with walkways at least five feet in width; streets; or driveways with street-like features as illustrated in Figure [18.4.3.080.B.4](#). "Street-like features," for the purpose of this section, means a raised sidewalk of at least five feet in width, with six-inch curb, accessible curb ramps, street trees in planters or tree wells and pedestrian-oriented lighting (i.e., not exceeding 14 feet typical height).*

Finding:

Vehicular parking will be accessed by East Main Street, with 28 total spaces provided (including 1 accessible and 1 van accessible). The drive aisle is proposed to be asphalt and the parking stalls are proposed to be permeable unit pavers for increased stormwater infiltration. Street-like features are provided in the form of crosswalks with accessible curb ramps, street trees in planters, and pedestrian-scale bollard lighting. One EV charging station is included in the parking lot, and will meet standards for city-owned public chargers.

The small, gravel paved area adjacent to the community garden is proposed for loading & unloading by the community garden users. Parks Department maintenance staff may also use this loading area for staging of park materials, such as bark mulch. The entrance to the community garden loading area will be gated and locked to limit access. This area is not intended to be a parking lot so parking area design standards do not apply.

5. *Parking areas shall be designed to minimize the adverse environmental and microclimatic impacts of surface parking through design and material selection as illustrated in Figure [18.4.3.080.B.5](#). Parking areas of more than seven parking spaces shall meet the following standards:*

- a. Use one or more of the following strategies for the surface parking area, or put 50 percent of parking underground. For parking lots with 50 or more spaces, the approval authority may approve a combination of strategies.*
 - i. Use light colored paving materials with a high solar reflectance (Solar Reflective Index (SRI) of at least 29) to reduce heat absorption for a minimum of 50 percent of the parking area surface.*
 - ii. Provide porous solid surfacing or an open grid pavement system that is at least 50 percent pervious for a minimum of 50 percent of the parking area surface.*
 - iii. Provide at least 50 percent shade from tree canopy over the parking area surface within five years of project occupancy.*
 - iv. Provide at least 50 percent shade from solar energy generating carports, canopies or trellis structures over the parking area surface.*
- b. Design parking lots and other hard surface areas in a way that captures and treats runoff with landscaped medians and swales.*

Finding:

A system of permeable pavers with gravel joints, installed over a graded aggregate base is proposed for the parking stalls of the parking lot, covering approximately 49% of the parking area surface. A catch basin in the asphalt drive aisle is directed to an on-site detention area which collects and treats stormwater from around the site and allows it to infiltrate through vegetation and an engineered soil profile. The City of Ashland finds that this section has been met.

C. Vehicular Access and Circulation. *The intent of this subsection is to manage access to land uses and on-site circulation and maintain transportation system safety and operations. For transportation improvement requirements, refer to chapter [18.4.6](#), Public Facilities.*

2. *Site Circulation.* *New development shall be required to provide a circulation system that accommodates expected traffic on the site. All on-site circulation systems shall incorporate street-like features as described in [18.4.3.080.B.4](#). Pedestrian connections on the site, including connections through large sites, and connections between sites and adjacent sidewalks must conform to the provisions of section [18.4.3.090](#).*

Finding:

To best serve the neighborhood community, accommodations for multi-modal transportation are planned. Sidewalks exist on the Abbott Avenue frontage of the park, and sidewalks will be added to the East Main Street frontage between Clay Street and Crocker Street. An existing concrete sidewalk between houses provides an additional pedestrian access route from the Brooks Lane and Crocker St neighborhood into the park on the East side. As shown on the site plan, this path will connect to the proposed network of walking trails that allows users to circulate through the entire park.

An eight foot wide, paved multi-use path is provided through the park, from a proposed sidewalk along East Main Street to an existing sidewalk along Abbott Avenue. This is intended for pedestrian and bicycle circulation through the park, and for occasional use by Parks Department smaller maintenance vehicles. Pedestrian-scale bollard lighting is proposed along this multi-use path and at the parking lot. The City of Ashland finds that this section is in compliance.

18.4.4.030, Landscaping and Screening:

B. Minimum Landscape Area and Coverage. All lots shall conform to the minimum landscape area standards of the applicable zoning district (see Tables [18.2.5.030.A](#) through [C](#) for residential zones and Table [18.2.6.030](#) for non-residential zones). Except as otherwise provided by this chapter, areas proposed to be covered with plant materials shall have plant coverage of not less than 50 percent coverage within one year and 90 percent coverage within five years of planting.

C. Landscape Design and Plant Selection. The landscape design and selection of plants shall be based on all of the following standards:

1. **Tree and Shrub Retention.** Existing healthy trees and shrubs shall be retained, pursuant to chapter [18.4.5](#). Consistent with chapter [18.4.5](#), Tree Preservation and Protection, credit may be granted toward the landscape area requirements where a project proposal includes preserving healthy vegetation that contribute(s) to the landscape design.
 2. **Plant Selection.**
 - a. Use a variety of deciduous and evergreen trees, shrubs, and ground covers.
 - b. Use plants that are appropriate to the local climate, exposure, and water availability. The presence of utilities and drainage conditions shall also be considered.
 - c. **Storm Water Facilities.** Use water-tolerant species where storm water retention/detention or water quality treatment facilities are proposed.
 3. **Water Conserving Landscaping.** Commercial, industrial, non-residential, and mixed-use developments that are subject to chapter [18.5.2](#), Site Design Review, shall use plants that are low water use and meet the requirements of subsection [18.4.4.030.I](#), Water Conserving Landscaping.
- D. Tree Preservation, Protection, and Removal.** See chapter [18.4.5](#) for tree protection and preservation and chapter [18.5.7](#) for tree removal permit requirements.

E. Street Trees. The purpose of street trees is to form a deciduous canopy over the street. The same effect is also desired in parking lots and internal circulation streets; rows of street trees should be included in these areas where feasible.

F. Parking Lot Landscaping and Screening. Parking lot landscaping, including areas of vehicle maneuvering, parking, and loading, shall meet the following requirements. Single-family dwellings and accessory residential units are exempt from the requirements of subsection [18.4.4.030.F.2](#) below.

1. **Landscaping.**
 - a. Parking lot landscaping shall consist of a minimum of seven percent of the total parking area plus a ratio of one tree for each seven parking spaces to create a canopy effect.
 - b. The tree species shall be an appropriate large canopied shade tree and shall be selected from the street tree list approved by the Ashland Tree Commission to avoid root damage to pavement and utilities, and damage from droppings to parked cars and pedestrians. See the Ashland Recommended Street Tree Guide.
 - c. The tree shall be planted in a landscaped area such that the tree bole is at least two feet from any curb or paved area.
 - d. The landscaped area shall be distributed throughout the parking area and parking perimeter at the required ratio.

e. That portion of a required landscaped yard, buffer strip, or screening strip abutting parking stalls may be counted toward required parking lot landscaping but only for those stalls abutting landscaping as long as the tree species, living plant material coverage, and placement distribution criteria are also met. Front or exterior yard landscaping may not be substituted for the interior landscaping required for interior parking stalls.

2. Screening.

a. Screening Abutting Property Lines. A five-foot landscaped strip shall screen parking abutting a property line. Where a buffer between zones is required, the screening shall be incorporated into the required buffer strip, and will not be an additional requirement.

b. Screening Adjacent to Residential Building. Where a parking area is adjacent to a residential building it shall be set back at least eight feet from the building, and shall provide a continuous hedge screen.

c. Screening at Required Yards.

i. Parking abutting a required landscaped front yard or exterior yard shall incorporate a sight obstructing hedge screen into the required landscaped yard.

ii. The screen shall grow to be at least 36 inches higher than the finished grade of the parking area, except within vision clearance areas (section [18.2.4.040](#)).

iii. The screen height may be achieved by a combination of earth mounding and plant materials.

iv. Elevated parking lots shall screen both the parking and the retaining walls.

H. Irrigation. *Irrigation systems shall be installed to ensure landscape success. If a landscape area is proposed without irrigation, a landscape professional shall certify the area can be maintained and survive without artificial irrigation. Irrigation plans are reviewed through a ministerial process at the time of building permit submittals.*

Finding:

Limits on natural turf and water areas do not apply to parks. However, lawn and ornamental planting areas have been limited to conserve water to the greatest extent possible, and will be located around high-traffic areas such as the parking lot and central play area. A large portion of the proposed open space will be seeded with a native meadow seed mix. The bike park will be seeded with a durable fescue and clover mix, and the dog park will be seeded with a similar durable tall fescue. Plants will be climate-appropriate, firewise and drought tolerant, in keeping with local goals of a safer and more resilient community. Large shrubs will be planted along stretches of the East and West property lines, to provide screening between the park and the neighboring residential properties. A variety of appropriate trees are also proposed within the park to provide shade, habitat, and other benefits.

All planting areas will receive amended topsoil and a minimum of three inches of mulch. Over much of the planting area, irrigation is planned for a temporary establishment period of approximately two years. Non-meadow and non-lawn planting areas will be irrigated with high-efficiency drip irrigation and bubblers to give them the best opportunity to thrive while using a minimal amount of water.

The detention pond located inside the larger portion of fenced dog park will provide 3,710 square feet of vegetated stormwater treatment area, and double as a seasonally wet area for dogs to enjoy. Water-tolerant plant species are proposed in the form of an RVSS approved seed mix.

Street trees will be planted in the park row along East Main Street at a rate of 1 tree per 30 feet of frontage, and will be selected from the Ashland Tree Commission's Recommended Street Tree Guide. Along the Abbott Avenue frontage, existing street trees are outside the project scope and will remain & be protected.

Parking lot landscape area consists of 19% of the total parking lot area, and 10 parking lot trees are proposed to shade 28 spaces, exceeding the ratio of 1 tree per 7 parking spaces. Proposed tree species will be from the Ashland Street Tree Guide.

The City of Ashland finds that this section has been met.

18.4.4.050, Outdoor Lighting:

C. Standards. As a guideline, lighting levels shall be no greater than necessary to provide for pedestrian safety, property/business identification, and crime prevention. All outdoor lighting, except streetlights, shall comply with the following standards.

1. Arrange and install artificial lighting so there is no direct illumination onto adjacent residential properties.
2. Provide light poles no greater than 14 feet in height for pedestrian facilities. (Pedestal- or bollard-style lighting is an alternative method for illuminating walkways located inside a development but not located in a public street right-of-way.)
3. Where a light standard is placed over a sidewalk or walkway, maintain a minimum vertical clearance of eight feet.
4. Install light fixtures where they will not obstruct public ways, driveways, or walkways. Where a light standard must be placed within a walkway, maintain an unobstructed pedestrian through zone per Americans with Disabilities Act (ADA) compliance.
5. Except as permitted for signs, direct outdoor light fixtures downward and have full shielding to minimize excessive light spillover onto adjacent properties.
6. For streetlight requirements, see subsection [18.4.6.040.D.18](#).

18. **Street Lights.** Install or relocate streetlights with street improvement projects. Use pedestrian scale and styles of poles that match the neighborhood. Spacing of light poles should be determined by the adjacent land uses. Place lighting at frequent intervals in busy retail and commercial areas, but lighting may be limited to intersections in residential areas. In some instances, building or fence-mounted lighting may replace the need for additional street lighting. Lighting elements should provide full-spectrum light so that colors at night are realistic. Install streetlights where they will not obstruct public ways, driveways, or walkways. Where a streetlight must be placed within a walkway, maintain an unobstructed pedestrian through zone per Americans with Disabilities Act (ADA) compliance. Streetlights shall conform to City specifications.

Finding:

Per Ashland Planning & Electric Departments, street lights are required to be Eurotique style poles, with LED bulbs, at intersections and spaced 250 apart (streetlights on opposite side of streets can be considered in spacing). See civil drawings for locations of three proposed street lights. Within the park, minimal lighting is proposed and limited to pedestrian-scale bollards along the parking lot and the multi-use path that runs from East Main Street to Abbott Avenue. These will be high-efficiency fixtures, with shields to preserve dark sky and no direct illumination onto other properties. The City of Ashland finds that this criterion has been met.

18.4.4.060, Fences and Walls:

B. Design Standards. Fences, walls, hedges, and screen planting shall meet the following standards, where height is measured pursuant to subsection [18.4.4.060.B.2](#), below. See Figure [18.4.4.060.B.1](#) for illustration of maximum fence heights.

1. Height. Fences, walls, hedges, and screen planting shall not exceed the following heights:
 - a. Front Yard. In any required front yard, not more than three and one-half feet in height.
 - b. Rear and Side Yard. In any rear or side yard, not more than six and one-half feet in height.
 - c. Street-Side Yard. In any rear or side yard abutting a public street, except alleys, not more than four feet in height where located within ten feet of said street.
 - d. Deer Fencing. See subsection [18.4.4.060.B.6](#), below.
 - e. Open Space. See maximum fence heights for common open space in section [18.4.4.070](#), and for cottage housing in section [18.2.3.090](#).

Finding:

Existing wood & wire fencing along the Abbott Ave frontage is to remain on the East side of the driveway entrance. To the West of the driveway, the fence will be replaced with a black coated chain link fence, eight foot tall and visually open, to keep deer out of the proposed community garden. Along the West property line, new six foot tall solid wood fences are proposed to provide consistent privacy and screening for the residential neighbors. At the Southeast corner of the property, six foot tall solid wood fences are proposed to provide privacy between the residential neighbors and the proposed park. At the East side of the proposed park, along the

boundaries with Taxlot 100 (2290 E Main St), five and a half foot tall replacement split rail fences are proposed, as requested by that property owner to maintain a more open character.

A four foot tall split rail fence is proposed as a visually-open buffer between the play area and the parking lot. The dog park fence is proposed as six foot tall, black coated chain link fencing with dual gated entries. A swinging barrier gate is proposed at the driveway to the community garden loading area, which will be locked to limit access. Key codes for all coded locks at the community garden shall be provided to the Fire Department for their dispatch database. The City of Ashland finds that this criterion has been met.

18.4.7.060, Residential and North Mountain Sign Regulations:

2. Conditional Uses. *Uses authorized in accordance with the chapter [18.5.4](#) Conditional Use Permits may be permitted one ground sign not exceeding an overall height of five feet and an area of 15 square feet, set back at least ten feet from property lines; or one wall sign in lieu of a ground sign. Such signs shall be approved in conjunction with the issuance of such Conditional Use Permit. Said signs shall not use plastic as part of the exterior visual effect and shall not be internally illuminated.*

Finding:

Per Ashland Planning guidance, this provision has been used previously for public parks in residential areas, and would apply to this project as well. The proposal includes one sign near the main driveway entrance on East Main Street and one sign near the community garden entrance on Abbott Avenue. In order to be visible from the street, the signs may be closer than ten feet from the property lines. Precedence for city park signs in Park Rows exists at Garfield Park and others. The City of Ashland finds that this section has been met.

Chapter 18.5.7, TREE REMOVAL PERMITS:

18.5.7.020, Applicability and Review Procedure:

C. Exempt from Tree Removal Permit. *The following activities are exempt from the requirement for a tree removal permit in subsections [18.5.7.020.A](#) and [B](#), above:*

1. Those activities associated with the establishment or alteration of any park under the Ashland Parks and Recreation Commission. However, the Parks and Recreation Department shall provide an annual plan in January to the Tree Commission outlining proposed tree removal and topping activities, and reporting on tree removal and topping activities that were carried out in the previous year.

Finding:

A Tree Disposition and Protection Plan is provided with the application. Most of the existing trees are around the perimeter of the property and shall remain and be protected. Approximately 10 dead or dying trees have been flagged for removal by an APRC Arborist, and two insignificant, seedling trees (smaller than 6" diameter) are in the path of park improvements and will be removed. Per the provision in this section, Parks Department tree removals for the establishment of parks are exempt from tree removal permits.

D. City Facilities. The proposal complies with the applicable standards in section 18.4.6 Public Facilities, and that adequate capacity of City facilities for water, sewer, electricity, urban storm drainage, paved access to and throughout the property, and adequate transportation can and will be provided to the subject property.

Chapter 18.4.6, PUBLIC FACILITIES

18.4.6.040, Street Design Standards

2. Avenue. *Avenues provide concentrated pedestrian, bicycle, transit, and motor vehicle access from neighborhoods to neighborhood activity centers and boulevards. Avenues are similar to boulevards, but are designed on a smaller scale. Design should provide an environment where walking, bicycling, using transit, and driving are equally convenient and facilitates the avenue's use as a public space. A two-lane or three-lane configuration can be used depending on the number of trips generated by surrounding existing and future land uses. See Figure [18.4.6.040.G.2](#).*

Table 18.4.6.040.F. City of Ashland Street Design Standards

TYPE OF STREET	AVERAGE DAILY TRIPS (ADT)	RIGHT-OF-WAY WIDTH	CURB-TO-CURB PAVEMENT WIDTH	WITHIN CURB-TO-CURB AREA				CURB on both sides	PARK-ROW on both sides	SIDE-WALKS on both sides
				MOTOR VEHICLE TRAVEL LANES	MEDIAN AND/OR CENTER TURN LANE	BIKE LANES on both sides	PARKING			
2-Lane Boulevard	8,000 to	61'-87'	34'	11'	none	6'	8'-9'	6"	5'-8' ¹	6'-10' ²
3-Lane Boulevard	30,000	73'-99'	46'	11'	12'	6'	8'-9'	6"	5'-8' ¹	6'-10' ²
5-Lane Boulevard		95'-121'	68'	11'	12'	6'	8'-9'	6"	5'-8' ¹	6'-10' ²
2-Lane Avenue	3,000 to	59'-86'	32'-33'	10'-10.5'	none	6'	8'-9'	6"	5'-8' ¹	6'-10' ²
3-Lane Avenue	10,000	70.5'-97.5'	43.5'-44.5'	10'-10.5'	11.5'	6'	8'-9'	6"	5'-8' ¹	6'-10' ²

Finding:

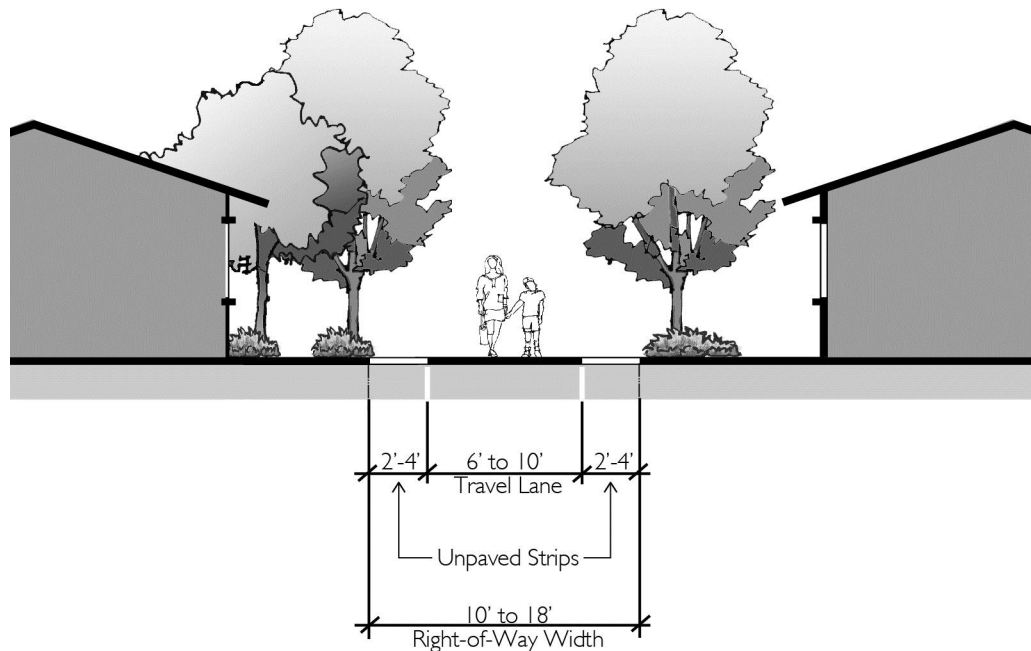
Half right of way improvements are proposed for the south frontage of East Main Street between Clay Street and Crocker Street. Per Ashland Planning Department, East Main Street is an avenue or major collector, and the requested standard in this instance is a 2-Lane Avenue. City street standards are shown in the abbreviated table above. In order to meet the street design standards, a three (3) foot dedication will be required along the frontage of 2228 East Main Street. The properties to the east and west of the proposed park are both residential lots under Jackson County jurisdiction. Therefore, modifications to the standard are required to provide sidewalk continuity along the frontage of those properties, within the bounds of the existing right of way. Sidewalks will transition to curb tight for the frontage of those neighboring residential lots, with street trees behind the sidewalk rather than in park rows. New driveway aprons will be needed at both residential lots.

The application includes a 7.5' park row and 6' concrete sidewalk, a 5.5' bike lane / 8' buffered bike lane (where space allows), curb & gutter, storm drainage infrastructure, street lights and street trees along East Main Street. No improvements are planned in the scope of this project for Clay Street (neighborhood collector street) or Abbott Avenue (residential neighborhood street).

Street trees will be added along East Main Street at a rate of 1 tree per 30 feet of frontage, and will be selected from the Ashland Tree Commission's Recommended Street Tree Guide. Along the Abbott Avenue frontage, existing street trees are outside the project scope and will remain & be protected. The City of Ashland finds that this section has been met.

7. Multi-use Path. Multi-use paths are off-street facilities used primarily for walking and bicycling. These paths can be relatively short connections between neighborhoods, or longer paths adjacent to rivers, creeks, railroad tracks, and parks and common open space. See Figure 18.4.6.040.G.7. See maximum fence heights for common open space in section 18.4.4.070, and for cottage housing in section 18.2.3.090.

Prototypical Section: Multi-Use Path



Finding:

An eight foot wide, paved multi-use path is provided through the park, from the proposed sidewalk along East Main Street to an existing sidewalk along Abbott Avenue. This is intended for pedestrian and bicycle circulation through the park, and for occasional use by Parks Department smaller maintenance vehicles. The City of Ashland finds that this section has been met.

18.4.6.070, Sanitary Sewer and Water Service Improvements:

Finding:

A sanitary sewer main exists at East Main Street, and a service connection to the park will be made. While a restroom facility is not required, a prefabricated two-stall restroom structure is proposed in a central location within the park. The restroom will provide accessible flush toilets, sinks and wall-mounted drinking fountains. A sanitary system connection will be needed for the restrooms as well as a stand-alone drinking fountain with dog bowl, located near the dog park.

Water service will be provided from the existing water main at East Main Street to serve the restrooms, drinking fountains, and hose bibs within the park. A domestic water connection will also be installed to provide a backup water source for irrigation during dry periods when TID water is not available. A designated water meter is proposed for irrigation use, off Abbott Avenue. A new fire hydrant is proposed in the East Main Street frontage, as required by Ashland Fire and Rescue, and an existing hydrant will remain near the driveway entrance on Abbott Avenue. The City of Ashland finds that this section has been met.

18.4.6.080, Storm Drainage and Surface Water Management Facilities:

Finding:

Storm Drainage improvements are planned, including new curb inlets along the East Main Street frontage, and private on-site detention for stormwater treatment and infiltration. Permeable paving materials are proposed for additional on-site stormwater infiltration and to reduce the impact of the

proposal on the City's storm drainage system. The City of Ashland finds that this section has been met.

18.4.6.090, Utilities:

Finding:

A preliminary Site Utility Plan is included in the application. As mentioned above, the power needs for the proposed park are minimal and primarily to power efficient outdoor lighting. Pedestrian scale lighting within the park and required street lighting along East Main Street are proposed. An electrical outlet is proposed at the central lawn area for potential event use, and two 50 amp outlets are proposed at the back of the restroom building for potential food truck use. Electric Bike and Electric Vehicle charging, one station for each, are also proposed. As noted on the site plan, a stub out will be provided for future roof-mounted solar panel installation at each shade structure. The City of Ashland finds that this section has been met.

E. Exception to the Site Development and Design Standards.

The approval authority may approve exceptions to the Site Development and Design Standards of part 18-4 if the circumstances in either subsection 1 or 2, below, are found to exist.

Not applicable. No exceptions are requested.

Criteria from Other Departments:

In addition to Planning review, this application is subject to review by other departments and entities. Information is provided below regarding input from Public Works, Talent Irrigation District, ODOT and Ashland Fire & Rescue.

Public Works:

As requested in 2020 Pre-App Comments, engineered plans are included for public improvements, for review by Public Works. A preliminary Site Utility Plan is also included for review by Public Works.

As requested by Public Works, a Traffic Impact Analysis (TIA) has been completed and the report is included with this application.

Per the same Pre-App Comments, *'existing wetlands, natural drainage ways, and open spaces shall be preserved from development to provide their natural flow attenuation, retention, or detention of runoff by providing a buffer.'* A statement provided by the Department of State Lands confirms that there are no jurisdictional wetlands or other waters of state within the property. That letter is included with the application.

Talent Irrigation District (TID):

There is a 10" tile pipe coming off Abbott Avenue to the TID concrete valve box. Inside the box, there are two gate valves for pipes heading to the west and east, which are private lines. The subject property for the park is currently flood irrigated and the Parks department does not want to use flood irrigation for the new park. The irrigation service can be tight-lined, but a connection would need to be made to the line from ponds off Clay Street. A TID ditch rider has recommended a 6" pressurized pipe, which could likely be run inside the existing larger pipe to deliver water to the park. It was also recommended that Hydro-Flow, Inc. be contacted to provide services. The Parks Department is coordinating with TID regarding options for supplying the park and neighboring properties that are currently supplied from within the park property.

ODOT:

Because the application involves a zone change, it is subject to review by ODOT for potential impacts to their transportation system under the Transportation Planning Rule OAR 660-012-0060. A copy of the 2020 pre-application submittal has been provided to ODOT for their review and comment, and ODOT commented *"the proposed zone change to RR 5 on 7.5 acres is off system. It will not significantly generate traffic impacting state highway system."* For any further information,

contact ODOT Region 3 Senior Planner Micah Horowitz, AICP at 541.774.6331 or micah.horowitz@odot.state.or.us.

Fire Department:

Per email correspondence dated Nov 23, 2021, Greg Kleinberg, on behalf of Fire Chief Ralph Sartain, Ashland Fire & Rescue, advised the following:

"I reviewed the plans you sent. One additional fire hydrant will be required near the driveway entrance on E Main Street. The proposed driveways incorporated in the parking lots will serve as acceptable emergency vehicle access fire lanes (full vehicular access through the park is not required). No fire department turn-arounds will be required for this project."

Per email correspondence dated April 6, 2023 from Greg Kleinberg:

"I'm assuming there will be a coded lock on the community gardens for people to use. If so, that number can be given to the Fire Department to have in the dispatch database. I see no reason to require a Fire Department key box for this project."

Relevant Criteria from 18.5.8 Annexations

18.5.8.050 Approval Criteria and Standards

E. Adequate transportation can and will be provided to serve the annexed area. For the purposes of this section, "adequate transportation" for annexations consists of vehicular, bicycle, pedestrian, and transit transportation meeting the following standards:

4. For transit transportation, should transit service be available to the annexed area, or be likely to be extended to the annexed area in the future based on information from the local public transit provider, the approval authority may require construction of transit facilities, such as bus shelters and bus turnout lanes.

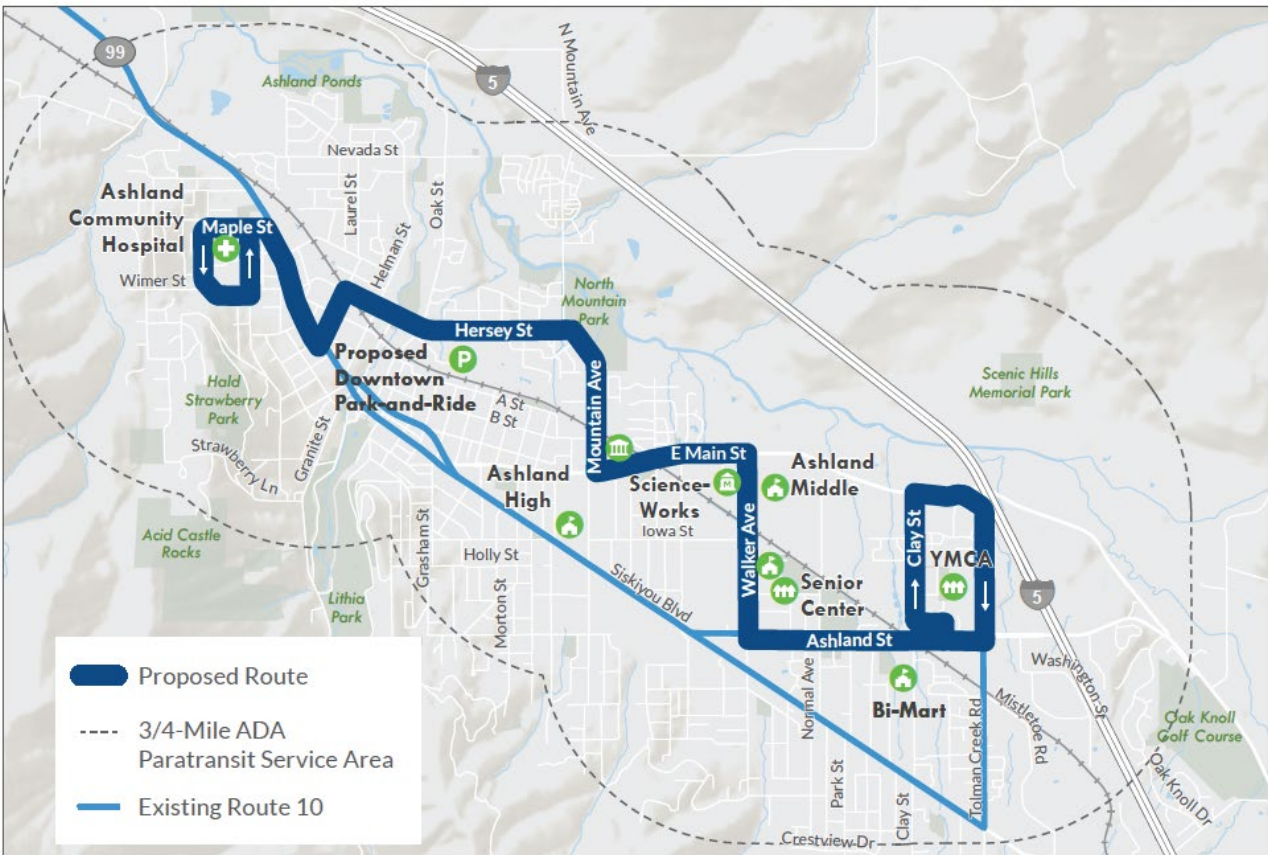
Finding:

Per RVTD Planning Department, they have plans for a future route that would serve this area. The route would pass southeast toward Tolman Creek Rd. using East Main St. The future route is included on page 11 of the [2019 City of Ashland Transit Expansion Study](#), and on page 108 of [RVTD's 2040 Transit Master Plan](#). See future route map below, included for reference only.

A concrete pad for a future RVTD bus shelter is proposed at the NE corner of the property, along East Main Street. This pad is located inside the subject park property and would require an easement for access. According to RVTD, the proposed stop is anticipated to have curb-side access (no pull off), and the application includes a pad to accommodate a 5'x12' shelter with solar lighting (no electrical requirements) and ADA standard concrete access landing through the Park Row. Once service is available to this location, RVTD will install a shelter and amenities paid for by RVTD. The City of Ashland finds that this section has been met.

See separate findings document for other Annexation criteria.

Local Transit Route Concept Map



RVTD future route map, from the 2019 City of Ashland Transit Expansion Study

Attachments:

Site Development Plans
Traffic Impact Analysis (TIA)
Wetland Delineation Statement



Oregon

Kate Brown, Governor

Department of State Lands

775 Summer Street NE, Suite 100

Salem, OR 97301-1279

(503) 986-5200

FAX (503) 378-4844

www.oregon.gov/dsl

State Land Board

January 22, 2020

City of Ashland Parks Department
Attn: Michael Back
1195 East Main Street
Ashland, OR 97520

Kate Brown
Governor

Bev Clarno
Secretary of State

Re: WD # 2019-0377 **Approved**
Wetland Delineation Report for East Main Street Park Space
Jackson County; T39S R1E S11CB, TL200
Ashland Local Wetlands Inventory, Wetland PW011

Tobias Read
State Treasurer

Dear Mr. Back:

The Department of State Lands has reviewed the wetland delineation report prepared by Northwest Biological Consulting for the site referenced above. Based upon the information presented in the report and additional information submitted upon request, we concur that there are no jurisdictional wetlands or other waters of the state within the study area, as indicated on the attached Figure 7. All prior surface ditches on the parcel have been recently placed in pipes, either underground or lying within decommissioned ditches. Please replace all copies of the preliminary wetland map with this final Department-approved map.

This concurrence is for purposes of the state Removal-Fill Law only. Federal or local permit requirements may apply as well. The U.S. Army Corps of Engineers will determine jurisdiction under the Clean Water Act, which may require submittal of a complete Wetland Delineation Report.

This concurrence is based on information provided to the agency. The jurisdictional determination is valid for five years from the date of this letter unless new information necessitates a revision. Circumstances under which the Department may change a determination are found in OAR 141-090-0045 (available on our web site or upon request). In addition, laws enacted by the legislature and/or rules adopted by the Department may result in a change in jurisdiction; individuals and applicants are subject to the regulations that are in effect at the time of the removal-fill activity or complete permit application. The applicant, landowner, or agent may submit a request for reconsideration of this determination in writing within six months of the date of this letter.

Thank you for having the site evaluated. If you have any questions, please contact the Jurisdiction Coordinator for Jackson County, Lynne McAllister, at (503) 986-5300.

Sincerely,

Peter Ryan, PWS
Aquatic Resource Specialist

Enclosures

ec: Scott English, Northwest Biological Consulting
Ashland Planning Department (Maps enclosed for updating LWI)
Andrea Wagner, Corps of Engineers
Lauren Brown, DSL

WETLAND DELINEATION / DETERMINATION REPORT COVER FORM

Fully completed and signed report cover forms and applicable fees are required before report review timelines are initiated by the Department of State Lands. Make checks payable to the Oregon Department of State Lands. To pay fees by credit card, go online at: <https://apps.oregon.gov/DSL/EPS/program?key=4>.

Attach this completed and signed form to the front of an unbound report or include a hard copy with a digital version (single PDF file of the report cover form and report, minimum 300 dpi resolution) and submit to: **Oregon Department of State Lands, 775 Summer Street NE, Suite 100, Salem, OR 97301-1279**. A single PDF of the completed cover form and report may be e-mailed to: Wetland_Delineation@dsl.state.or.us. For submittal of PDF files larger than 10 MB, e-mail DSL instructions on how to access the file from your ftp or other file sharing website.

Contact and Authorization Information			
☒ Applicant ☒ Owner Name, Firm and Address: City of Ashland Parks Department 1195 East Main St. Ashland Oregon 97520		Business phone # (541) 488-5430 Mobile phone # (optional) E-mail:	
☒ Authorized Legal Agent, Name and Address (if different): Michael Back		Business phone # Mobile phone # (optional) E-mail:	
I either own the property described below or I have legal authority to allow access to the property. I authorize the Department to access the property for the purpose of confirming the information in the report, after prior notification to the primary contact.			
Typed/Printed Name: <u>Scott English</u>		Signature: <u>[Signature]</u>	
Date: _____		Special instructions regarding site access: _____	
Project and Site Information			
Project Name: <u>East Main St. Park Space</u>		Latitude: <u>42 29 30 N</u> Longitude: <u>-122 40 30.42 W</u> decimal degree - centroid of site or start & end points of linear project	
Proposed Use: <u>City Park</u>		Tax Map # <u>391E 11cb</u> Tax Lot(s) <u>200</u> Tax Map # _____ Tax Lot(s) _____	
Project Street Address (or other descriptive location): <u>Near Corner of East Main St. and Clay St.</u>		Township <u>39S</u> Range <u>1E</u> Section <u>11cb</u> <u>QQ</u> Use separate sheet for additional tax and location information	
City: <u>Ashland</u> County: <u>Jackson</u>		Waterway: <u>Clay Creek to Bear Cree River Mile:</u>	
Wetland Delineation Information			
Wetland Consultant Name, Firm and Address: Scott English, Northwest Biological Consulting 650 Ashland St. Ashland, Oregon 97520		Phone # (541) 941-2042 Mobile phone # (if applicable) E-mail: <u>nwbiolog@gmail.com</u>	
The information and conclusions on this form and in the attached report are true and correct to the best of my knowledge.			
Consultant Signature: _____		Date: _____	
Primary Contact for report review and site access is ☐ Consultant ☐ Applicant/Owner ☐ Authorized Agent			
Wetland/Waters Present? ☐ Yes ☒ No Study Area size: <u>5.52 Acres</u> Total Wetland Acreage: <u>0.0000</u>			
Check Applicable Boxes Below			
☐ R-F permit application submitted ☐ Mitigation bank site ☐ EFSC/ODOE Proj. Mgr: _____ ☐ Wetland restoration/enhancement project (not mitigation) ☐ Previous delineation/application on parcel If known, previous DSL # _____		☒ Fee payment submitted \$ <u>454</u> ☐ Resubmittal of rejected report (\$100) ☐ Request for Reissuance. See eligibility criteria. (no fee) DSL # _____ Expiration date _____ ☐ LWI shows wetlands or waters on parcel Wetland ID code <u>0</u>	
For Office Use Only			
DSL Reviewer: <u>LM</u>		Fee Paid Date: <u>7 / 1 / 19</u>	
Date Delineation Received: <u>7 / 1 / 19</u>		Scanned: ☐ Electronic: ☒	
DSL WD # <u>2019-0337</u>		DSL App.# _____	

P# 78441

Figure 1: Location

Elevation data is 10 Meter National Elevation Dataset from USDA. All other data from Jackson County.



Northwest Biological Consulting
 Habitat Restoration,
 Environmental Planning
 CA Engineering Contractor
 OR General Contractor

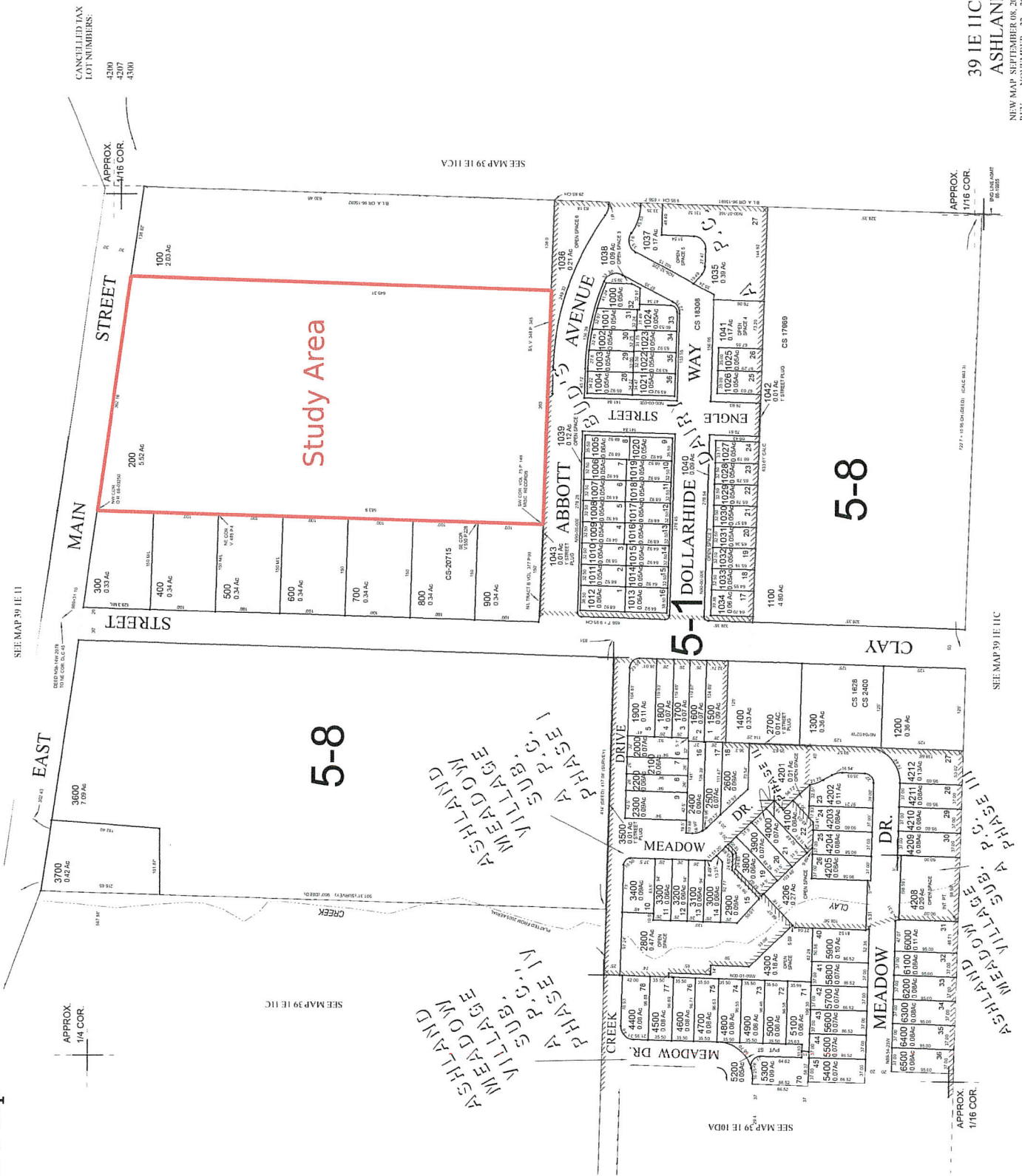
324 Terrace St. P.O. Box 671 nwbiolog.com
 Ashland, OR 97520 Ph/Fax (541) 488-1061

0 1/4 1/2 1 Miles

October 18, 2018



Figure 2: Assessor Map



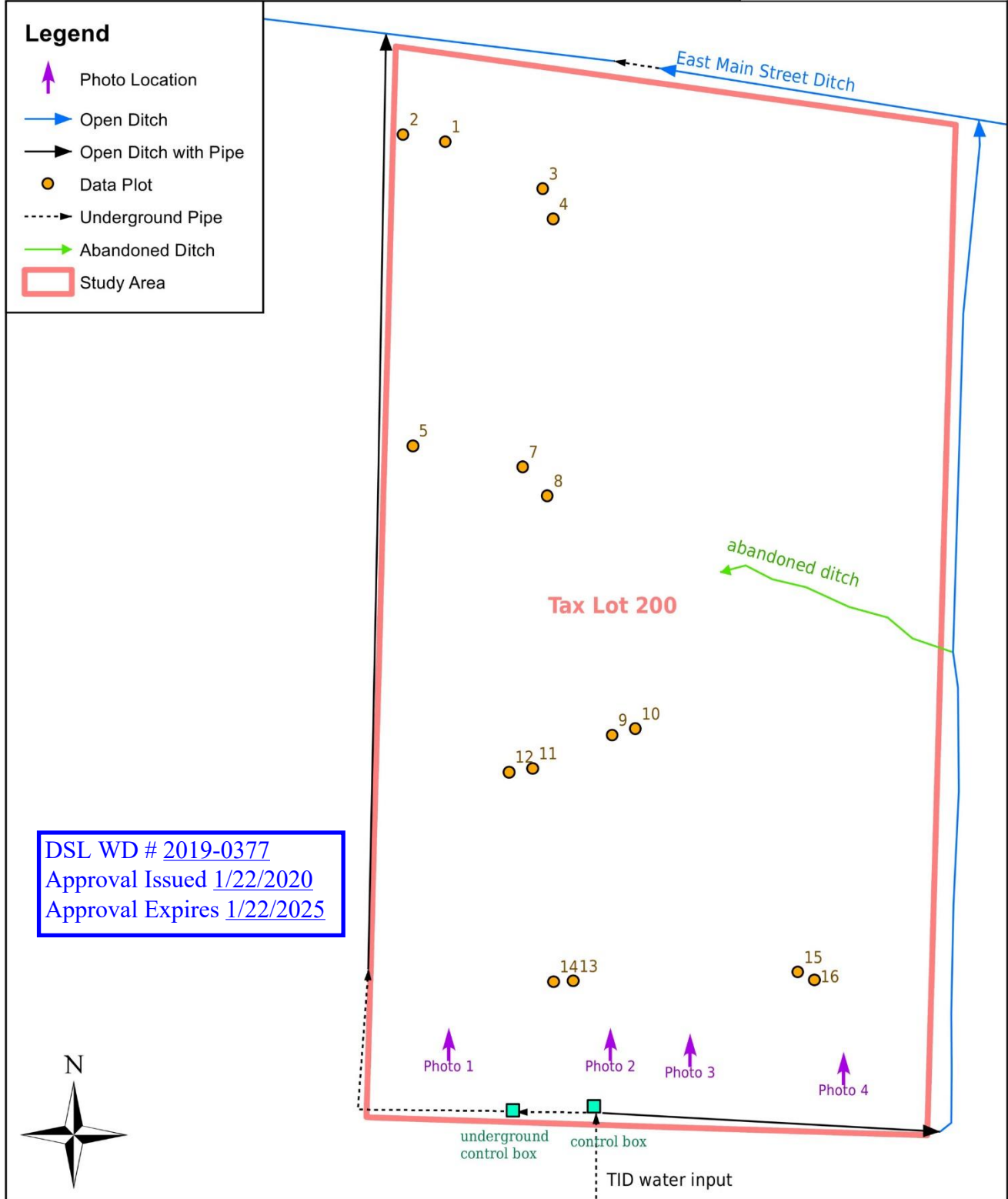
Revised Figure 7: No Wetland Indicators After TID Water Shut Off

Tax lot polygon data (Study Area) is from Jackson County. Data plots, ditches, pipes, and irrigation control boxes located to submeter accuracy with a Trimble GeoXT GPS. Photo locations estimated from correlating observations on the ground with an air photo.



Northwest Biological Consulting
Habitat Restoration,
Environmental Planning
CA Engineering Contractor
OR General Contractor
324 Terrace St. P.O. Box 671 nwbiolog.com
Ashland, OR 97520 Ph/Fax (541) 488-1061

0 50 100 200 Feet December 18, 2019



East Main Street Park Development

Traffic Impact Analysis

December 21, 2023

Prepared By:



*TRANSPORTATION
ENGINEERING, LLC*

SOUTHERN OREGON TRANSPORTATION ENGINEERING, LLC

East Main Street Park Development

Traffic Impact Analysis

December 21, 2023

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SOUTHERN OREGON TRANSPORTATION ENGINEERING, LLC



TABLE OF CONTENTS

I. EXECUTIVE SUMMARY.....	5
II. INTRODUCTION.....	6
Background	6
Project Location	6
Project Description.....	6
III. EXISTING YEAR 2023 NO-BUILD CONDITIONS	9
Site Condition.....	9
Roadway Characteristics	9
Traffic Counts	9
Pedestrian and Bicycle Accessibility.....	9
Transit Service.....	10
Intersection Capacity and Level of Service.....	12
Year 2023 No-Build Intersection Operations.....	13
Year 2023 No-Build 95 th Percentile Queuing.....	13
Crash History.....	14
IV. DESIGN YEAR 2024 NO-BUILD CONDITIONS.....	15
Design Year 2024 No-Build Description	15
Design Year 2024 No-Build Intersection Operations.....	15
Design Year 2024 No-Build 95 th Percentile Queuing	15
V. SITE TRAFFIC	17
Trip Generation	17
Trip Distribution and Assignment.....	17
VI. DESIGN YEAR 2024 BUILD CONDITIONS.....	19
Design Year 2024 Build Description	19
Design Year 2024 Build Intersection Operations.....	19
Design Year 2024 Build 95 th Percentile Queuing	19
Sight Distance	20
Access Management & Spacing Standards	22
Turn Lane Criterion.....	22
VII. CONCLUSIONS.....	24

LIST OF TABLES

Table 1: Roadway Classifications and Descriptions.....	9
Table 2: HCM Level of Service Designations for Stop-Controlled Intersections	12
Table 3: Year 2023 No-Build Intersection Operations	13
Table 4: Year 2023 No-Build 95 th Percentile Queue Lengths	13
Table 5: Design Year 2024 No-Build Intersection Operations.....	15
Table 6: Design Year 2024 No-Build 95 th Percentile Queue Lengths.....	15
Table 7: Development Trip Generations	17
Table 8: Design Year 2024 Build Intersection Operations.....	19
Table 9: Design Year 2024 Build 95 th Percentile Queues	19

FIGURES

FIGURE 1: Vicinity Map	7
FIGURE 2: Site Plan.....	8
FIGURE 3: Year 2023 No-Build Traffic Volumes, PM Peak Hour	11
FIGURE 4: Design Year 2024 No-Build Traffic Volumes, PM Peak Hour.....	16
FIGURE 5: Development Trip Assignment, PM Peak Hour.....	18
FIGURE 6: Design Year 2024 Build Traffic Volumes, PM Peak	23

APPENDICES

APPENDIX A: TRAFFIC COUNT DATA, SEASONAL ADJUSTMENT, VOLUME DEVELOPMENT
APPENDIX B: ITE AND LOCAL TRIP GENERATION
APPENDIX C: EXISTING YEAR 2023 NO-BUILD SYNCHRO AND SIMTRAFFIC OUTPUT
APPENDIX D: DESIGN YEAR 2024 NO-BUILD SYNCHRO AND SIMTRAFFIC OUTPUT
APPENDIX E: DESIGN YEAR 2024 BUILD SYNCHRO AND SIMTRAFFIC OUTPUT
APPENDIX F: TURN LANE GRAPHS
APPENDIX G: AGENCY REQUIREMENTS

I. EXECUTIVE SUMMARY

Summary

Southern Oregon Transportation Engineering, LLC prepared a traffic analysis for a proposed park located along the south side of East Main Street, east of Clay Street in Ashland, Oregon. The proposed park will include a dog park, community garden, central play area, pump track, and open space. Access to the site is proposed on East Main Street and Abbott Avenue with a pedestrian/bike path to Brooks Lane.

The proposed park is expected to draw from the local community and generate as many pedestrians/cyclists as automobile trips. It is estimated to generate 442 average daily trips (ADT) from automobiles with 20 occurring during the a.m. peak hour and 43 during the p.m. peak hour. During the p.m. peak hour, which is estimated to be the peak of the day, the park is additionally estimated to generate 16 pedestrian trips and 28 bicycle trips. Construction is estimated to begin in year 2024.

Three study area intersections and two site driveways were evaluated under existing year 2023, design year 2024 no-build, and design year 2024 build conditions during the p.m. peak hour to address development impacts.

Conclusions

The findings of the traffic impact analysis conclude that the proposed East Main Street Park can be approved without creating adverse impacts to the transportation system. Results of the analysis are as follows:

1. All study area intersections operate acceptably under existing year 2023, design year 2024 no-build, and design year 2024 build conditions during the p.m. peak hour.
2. Crash data was evaluated in the study area for the most recent five-year period. There were no reported collisions at study area intersections within that time period.
3. Turn lane criterion was evaluated on East Main Street at the proposed site driveway. Results show that neither an eastbound right turn lane nor westbound left turn lane is warranted with or without proposed development traffic during the p.m. peak hour.
4. Sight distance is shown to be adequate at proposed site access points on East Main Street and Abbott Avenue.
5. Pedestrians and cyclists are expected to use East Main Street, Clay Street, Tolman Creek Road, and streets within the local neighborhoods to access the park. Sidewalks exist on Tolman Creek Road, Clay Street, and within the local neighborhoods, but are missing in segments along East Main Street. Bike facilities (lanes or shoulders) are provided on East Main Street and Tolman Creek Road but are missing on Clay Street. The City of Ashland has plans to improve middle Clay Street to a City standard utilizing grant monies received from Jackson County. There is also a planned project in their Transportation System Plan to upgrade Clay Street to a Bicycle Boulevard.

The proposed development is shown to be in compliance with the City of Ashland Comprehensive Plan and Land Development Code. Streets that serve the subject property will accommodate projected peak hour traffic volumes while maintaining acceptable performance standards in accordance with the City of Ashland and Jackson County Transportation System Plans (TSP).

II. INTRODUCTION

Background

Southern Oregon Transportation Engineering, LLC prepared a traffic analysis for a proposed Regional Park located along the south side of East Main Street, east of Clay Street in Ashland, Oregon. The proposed park will include a dog park, community garden, central play area, pump track, and open space. Access to the site is proposed on East Main Street and Abbott Avenue with a bike/pedestrian path to Brooks Lane.

Development of the park will require annexation into the City of Ashland and Site Review Design. The property will be annexed with R-1-3.5 zoning. A traffic analysis is required by the City of Ashland and Jackson County to address development impacts on the transportation system. The study area consists of the following intersections/driveways:

- | | |
|--------------------------------------|--------------------------------|
| 1. Clay Street / E Main Street | 4. Site Access / E Main Street |
| 2. Abbott Avenue / Clay Street | 5. Site Access / Abbott Avenue |
| 3. Tolman Creek Road / E Main Street | |

Study area intersections and driveways were evaluated under existing year 2023 no-build, design year 2024 no-build, and design year 2024 build conditions during the p.m. peak hour.

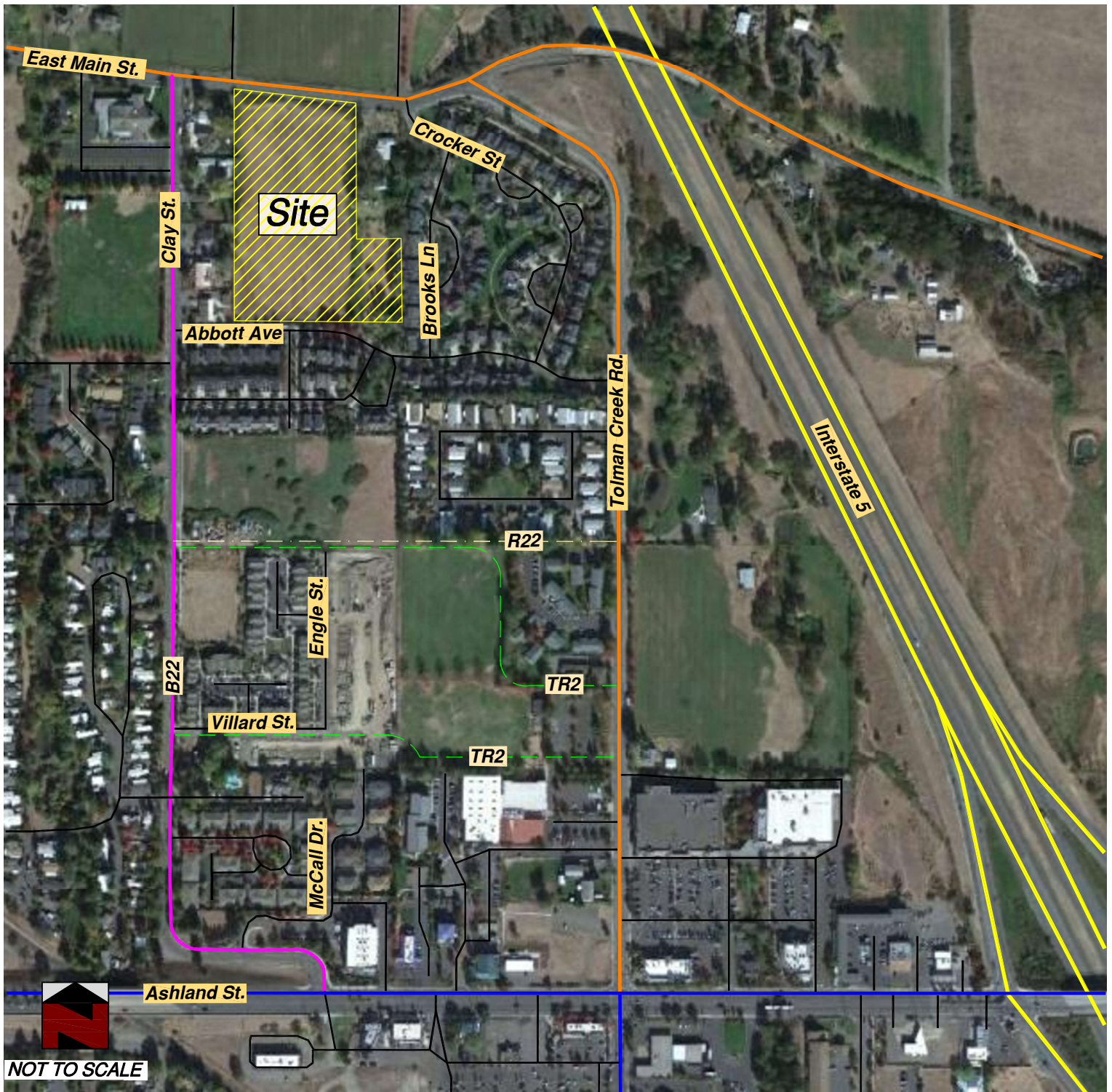
Project Location

The proposed East Main Street Park is located at Township 39S Range 1E Section 11CB on tax lots 100 and 200. The subject property is approximately 6.52 acres in size and will be developed under City of Ashland R-1-3.5 zoning. Access is proposed from East Main Street and Abbott Avenue. Refer to Figures 1 and 2 for a vicinity map and site plan.

Project Description

The proposed development includes a dog park, community garden, central play area, pump track, and open space. It is estimated to generate 442 ADT with 20 trips occurring during the a.m. peak hour and 43 during the p.m. peak hour. Additionally, the park is estimated to generate 16 pedestrian and 28 bicycle trips during the p.m. peak hour. Construction is estimated to begin in year 2024.

Figure 1: Vicinity Map

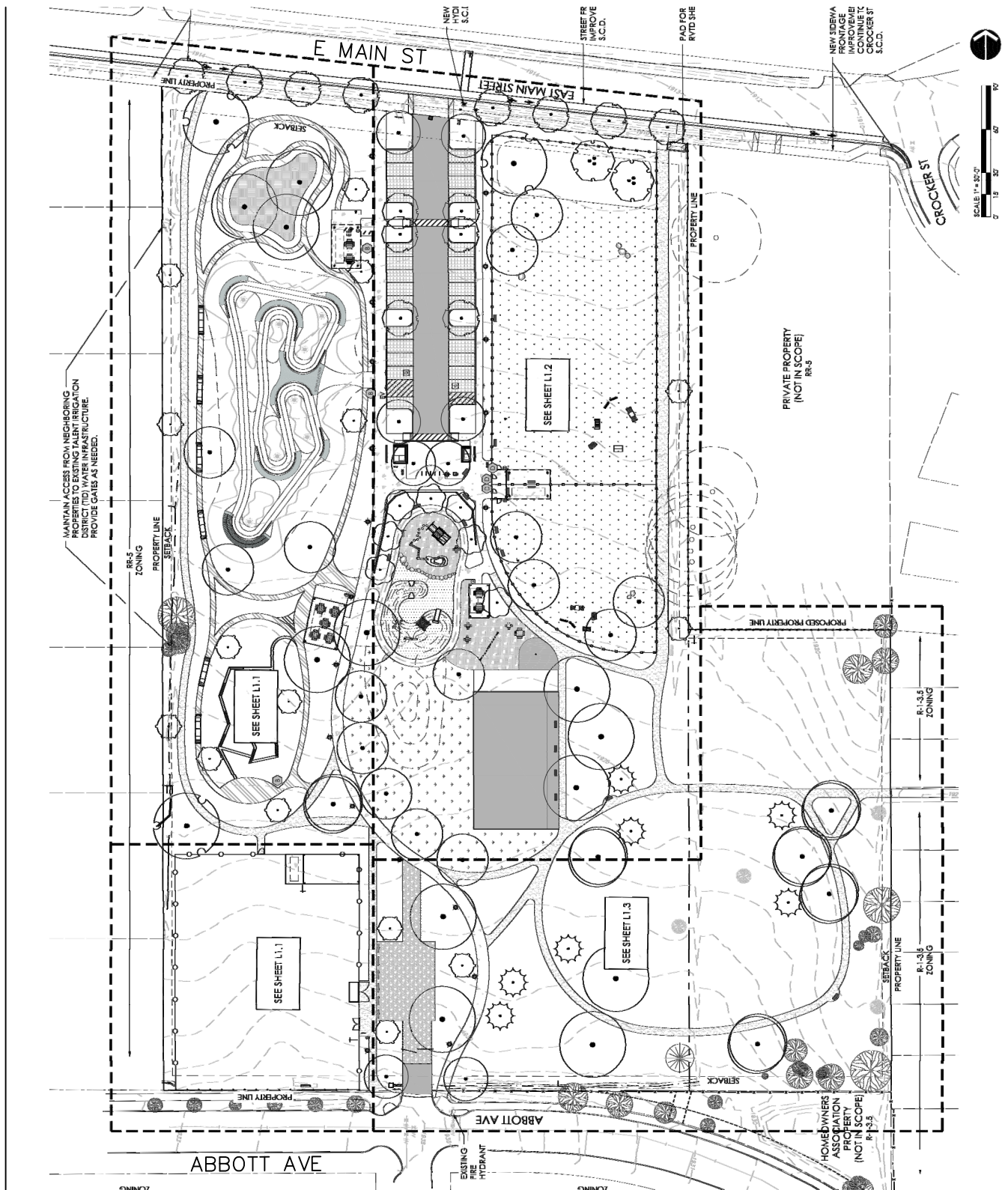


**SOUTHERN OREGON
TRANSPORTATION ENGINEERING, LLC**

Medford, Oregon 97504
ph 541.941.4148 fax 541.535.6873
Kim.parducci@gmail.com

**Ashland Parks Department
East Main Regional Park Dev
Traffic Impact Analysis
Ashland, Oregon**

Figure 2 : Site Plan



**SOUTHERN OREGON
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**Ashland Parks Department
East Main Regional Park Dev
Traffic Impact Analysis
Ashland, Oregon**

III. EXISTING YEAR 2023 NO-BUILD CONDITIONS

Site Conditions

The subject property is located along the south side of East Main Street, east of Clay Street in Ashland, Oregon. Access is proposed through private driveways on East Main Street and Abbott Avenue. The site is currently occupied by a single-family residence.

Roadway Characteristics

The project study area includes intersections along East Main Street, Clay Street and Abbott Avenue. Study area intersections and driveways are analyzed in accordance with City of Ashland and Jackson County standards.

Table 1 provides a summary of existing roadway classifications and descriptions in the study area.

Table 1 - Roadway Classifications and Descriptions						
Roadway	Jurisdiction	Functional Classification ¹	Sidewalk	Bike Lane	Number of Lanes	Posted Speed (MPH)
East Main Street	Jackson County	Major Collector	Partial	No	2	40
Clay Street	Jackson County	Minor Collector	Partial	No	2	25
Abbott Avenue	City of Ashland	Neighborhood	Yes	No	2	Not Posted
Tolman Creek Road	City of Ashland	Avenue	Partial	Yes	2	25

1. City of Ashland and Jackson County Transportation System Plans

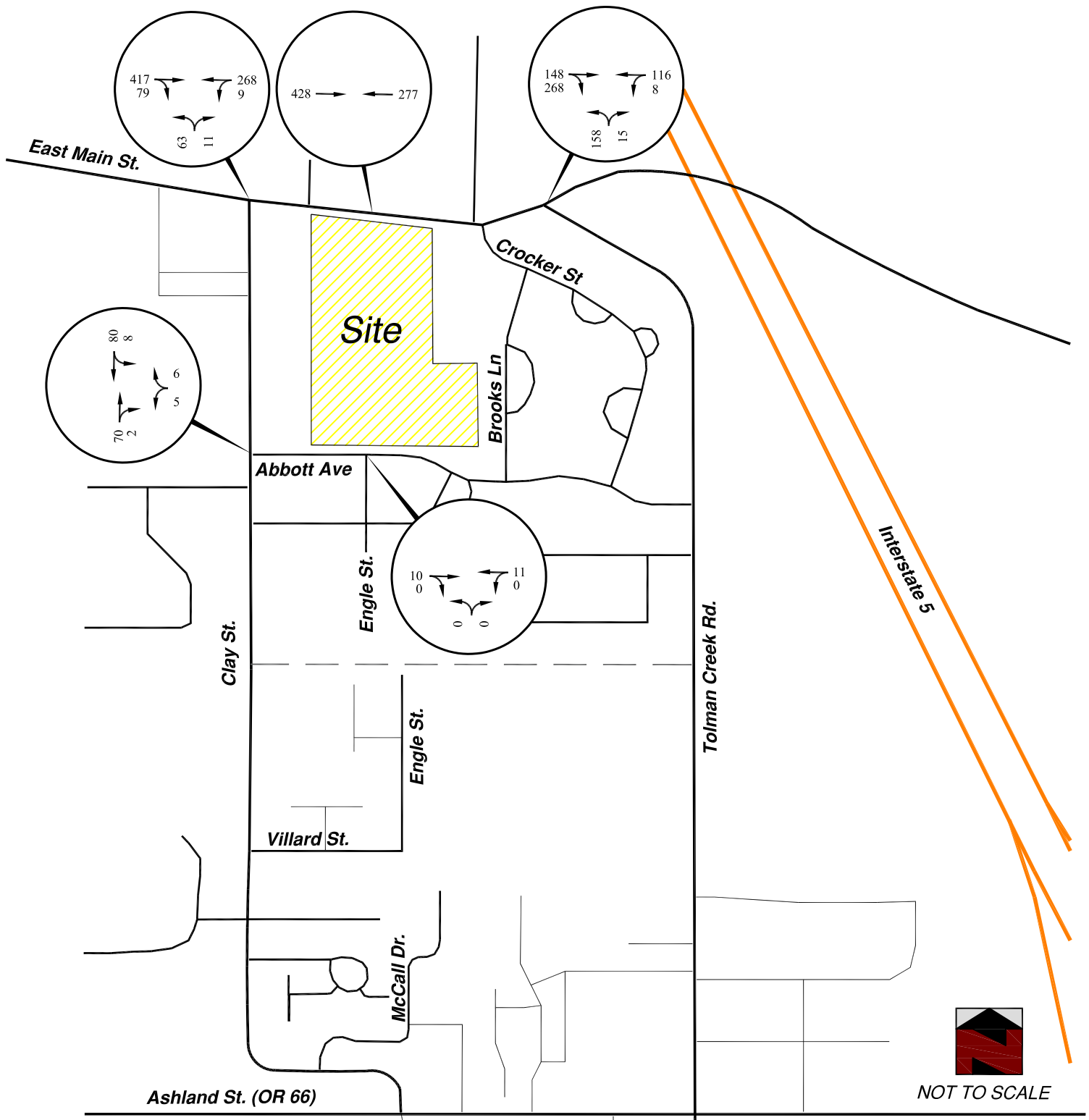
Traffic Counts

Manual traffic counts (4-6 p.m.) were collected in December of 2023 when school was still in session. Count data was seasonally adjusted in accordance with ODOT's Analysis Procedures Manual (APM) to represent peak conditions. A growth rate of 2% per year was added to year 2023 count data to develop design year 2024 no-build conditions. Growth was determined from existing and projected traffic volumes in the City of Ashland TSP. Year 2023 no-build traffic volumes at study area intersections are provided in Figure 3. Manual traffic counts are provided in Appendix A.

Pedestrian and Bicycle Accessibility

Pedestrian and bicyclist activity was observed to be low along all streets counted during p.m. peak period counts. No pedestrians were counted on East Main Street, Tolman Creek Road, or along the section of Clay Street between East Main Street and Abbott Avenue. There were three pedestrians on Clay Street south of Abbott Avenue and seven pedestrians on Abbott Avenue. Bicycle counts were equally low with none counted on any study area street. Regardless of activity, connections for pedestrians and bicyclists are decent in all but one direction. Sidewalk connectivity is poor to/from the west along East Main Street. To/from the east, sidewalk exists within 350 feet beginning at Crocker Street and continuing on Tolman Creek Road. Once frontage improvements occur, there will be continuous sidewalk along the south side of East Main Street between Tolman Creek Road and Clay Street. To/from the south, Clay Street provides continuous sidewalk on one side or the other

Figure 3: Year 2023 No-Build Traffic Volumes, PM Peak Hour



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Intersection Capacity and Level of Service

Intersection capacity calculations were conducted utilizing the methodologies presented in the *Highway Capacity Manual (HCM 6th Edition)*. Capacity and level of service calculations for unsignalized intersections were prepared using “SYNCHRO” timing software.

Level of service quantifies the degree of comfort afforded to drivers as they travel through an intersection or along a roadway section. The level of service methodology was developed to quantify the quality of service of transportation facilities. Level of service is based on total delay, defined as the total elapsed time from when a vehicle stops at the end of a queue until the vehicle departs from the stop line. Level of service ranges from “A” to “F”, with “A” indicating the most desirable condition and “F” indicating an unsatisfactory condition. The HCM LOS designations for stop-controlled intersections are provided in Table 2.

Table 2 – HCM Level of Service Designations for Stop-Controlled Intersections	
Level of Service	Delay Range
A	< 10
B	>10 – 15
C	>15 – 25
D	>25 – 35
E	>35 – 50
F	> 50

Volume-to-capacity (v/c) ratios are decimal representations of used capacity and range between 0.00-1.00, or zero to 100%. Lane movements with low v/c ratios have an excess of available capacity, while movements with high v/c ratios are shown to be near or at capacity.

Streets within the study area are under City of Ashland and Jackson County. The City of Ashland performance standard for stop-controlled intersections is a LOS “D”. The Jackson County performance standard is a v/c ratio of 0.95 for the critical movement. Mitigation is required at study area intersections where operational standards are not met, and it can be shown that proposed development trips make conditions significantly worse (beyond target compliance) than they would have otherwise been under no-build conditions.

Year 2023 No-Build Intersection Operations

Study area intersections were evaluated under existing year 2023 no-build conditions during the p.m. peak hour. Results are summarized in Table 3.

Table 3 - Year 2023 No-Build Intersection Operations			
Intersection	Performance Standard	Traffic Control	PM Peak Hour
Clay St. / E Main St.	LOS D, V/C 0.95	TWSC	C, 0.29, NB
Clay St. / Abbott Ave.	LOS D	TWSC	A, WB
Tolman Creek Rd. / E Main St.	LOS D, V/C 0.95	TWSC	C, 0.36, NB

LOS = level of service, TWSC = two-way stop control, NB = northbound, WB = westbound
Note: Exceeded performance standards are shown in bold, italic

Results of the analysis show all study area intersections operate acceptably (within performance standards) under existing year 2023 no-build conditions during the p.m. peak hour. Refer to Appendix C for synchro output sheets.

Year 2023 No-Build 95th Percentile Queuing

Queue lengths are reported as the average, maximum, or 95th percentile queue length. The 95th percentile queue length is used for design purposes and is the queue length reported in this analysis. Five simulations were run and averaged in SimTraffic to determine 95th percentile queue lengths. Queues were evaluated at study area intersections under existing year 2023 no-build conditions during the p.m. peak hour. Queue lengths were rounded up to the nearest 25 feet (single vehicle length) and reported in Table 4.

Table 4 – Year 2023 No-Build 95 th Percentile Queue Lengths			
Intersection / Movement	Available Link Distance (Ft)	PM Peak Hour	Exceeded Roadway
<u>Clay St. / E Main St.</u>			
Westbound Left/Through	675	25	None
Northbound Left/Right	725	75	None
<u>Clay St. / Abbott Ave.</u>			
Westbound Left/Right	325	25	None
Southbound Left/Through	725	0	None
<u>Tolman Creek Rd. / E Main St.</u>			
Westbound Left/Through	1550	25	None
Northbound Left/Right	1125	75	None

Note: Exceeded performance standards are shown in bold, italic

Results of the queuing analysis show all study area queue links are shown to stay within available link distances under existing conditions during the p.m. peak hour. The longest reported queues occur northbound on Clay Street and on Tolman Creek Road at East Main Street. Refer to Appendix C for a full queuing and blocking report.

Crash History

Crash data for the most recent five-year period was provided from ODOT's crash analysis unit and TransGIS website. Results were provided within the study area for the period of January 1, 2017 through December 31st, 2021 and showed no reported collisions. No further investigation is shown to be necessary.

IV. DESIGN YEAR 2024 NO-BUILD CONDITIONS

Design Year 2024 No-Build Description

Design year 2024 no-build conditions represent development build year conditions for a study area without consideration of proposed development trips. This condition is evaluated to determine how a study area will be impacted by area background growth. Background growth in the analysis was 2% per year to be consistent with estimated growth along East Main Street in the City of Ashland TSP. Refer to Figure 4 for design year 2024 no-build traffic volumes during the p.m. peak hour.

Design Year 2024 No-Build Intersection Operations

Study area intersections were evaluated under design year 2024 no-build conditions during the p.m. peak hour. Results are summarized in Table 5.

Table 5 – Design Year 2024 No-Build Intersection Operations			
Intersection	Performance Standard	Traffic Control	PM Peak Hour
Clay St. / E Main St.	LOS D, V/C 0.95	TWSC	C, 0.30, NB
Clay St. / Abbott Ave.	LOS D	TWSC	A, WB
Tolman Creek Rd. / E Main St.	LOS D, V/C 0.95	TWSC	C, 0.37, NB

LOS = level of service, TWSC = two-way stop control, NB = northbound, WB = westbound
Note: Exceeded performance standards are shown in bold, italic

Results of the analysis show study area intersections continue to operate acceptably (within performance standards) under design year 2024 no-build conditions during the p.m. peak hour. Small increases in delay and v/c ratios occur at intersections but intersection level of service remains the same with background growth. Refer to Appendix D for synchro output sheets.

Design Year 2024 No-Build 95th Percentile Queuing

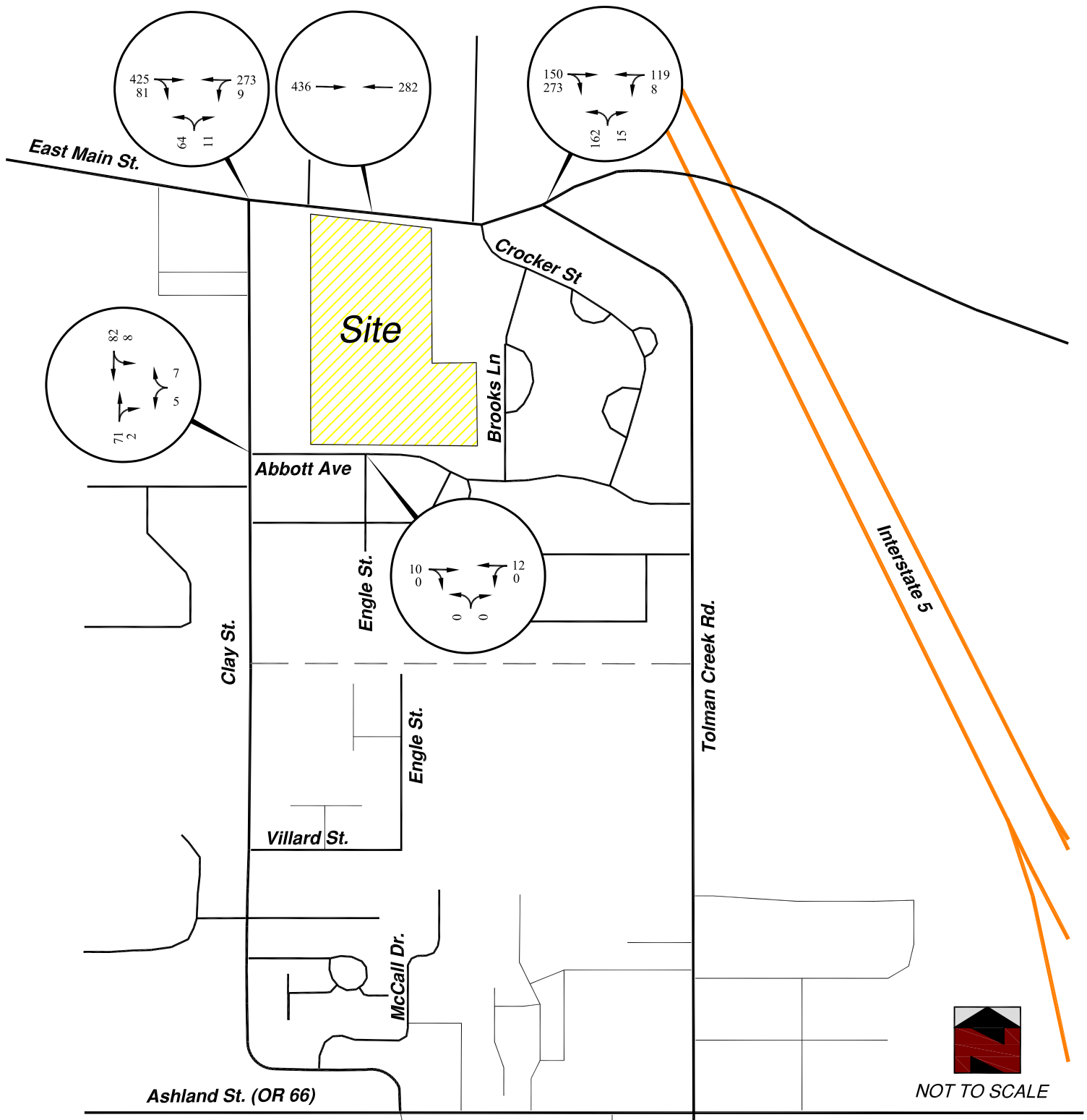
Five simulations were run and averaged in SimTraffic to determine 95th percentile queue lengths within the study area under design year 2024 no-build conditions. Queue lengths were rounded up to the nearest 25 feet (single vehicle length) and reported in Table 6 for the p.m. peak hour.

Table 6 – Design Year 2024 No-Build 95 th Percentile Queue Lengths			
Intersection / Movement	Available Link Distance (Ft)	PM Peak Hour	Exceeded Roadways
<u>Clay St. / E Main St.</u>			
Westbound Left/Through	675	25	None
Northbound Left/Right	725	75	None
<u>Clay St. / Abbott Ave.</u>			
Westbound Left/Right	325	50	None
Southbound Left/Through	725	25	None
<u>Tolman Creek Rd. / E Main St.</u>			
Westbound Left/Through	1550	25	None
Northbound Left/Right	1125	100	None

Note: Exceeded performance standards are shown in bold, italic

Results of the queuing analysis show slight changes in queuing at study area intersection due to background growth. Refer to Appendix D for a full queuing and blocking report.

Figure 4: Design Year 2024 No-Build Traffic Volumes, PM Peak Hour



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V. SITE TRAFFIC

Trip Generation

Trip generation calculations for the proposed park were prepared utilizing the Institute of Transportation Engineers (ITE) *Trip Generation*, 11th Edition and local data. The proposed park will include a dog park, community garden, play area, pump track, and open space. Only one of these uses has adequate data in the ITE, which includes land use 411 – Public Park. This land use was used to generate trips for the open space and play area on the site plan. For uses that don't have adequate data provided in the ITE, the ITE recommends gathering local data. Local data was gathered for the dog park, community garden, and pump track. Manual counts were taken at existing facilities in Ashland for the dog park and community garden. For the pump track, traffic generations were developed from estimations provided by the Redmond Public Work Director for a similar pump track constructed two years ago. Estimations were based on the maximum number of users at one time on the pump track and the average duration of each user.

A summary of vehicular trip generations for the proposed East Main Street Park is provided in Table 7. ITE graphs and local data is provided in Appendix B.

Table 7 – Development Trip Generations									
Data Reference	Unit	Size	Daily Trips	Weekday AM Peak Hour			Weekday PM Peak Hour		
				Total	In	Out	Total	In	Out
Local – Dog Park	NA	NA	290 ¹	17	10	7	30	17	13
Local – Community Garden	NA	NA	30 ¹	3	2	1	0	0	0
Local – Pump Track	NA	NA	120 ¹	0	0	0	12	6	6
ITE 411 – Public Park	Acres	2	2	0	0	0	1	0	1
Total Trips			442	20			43		

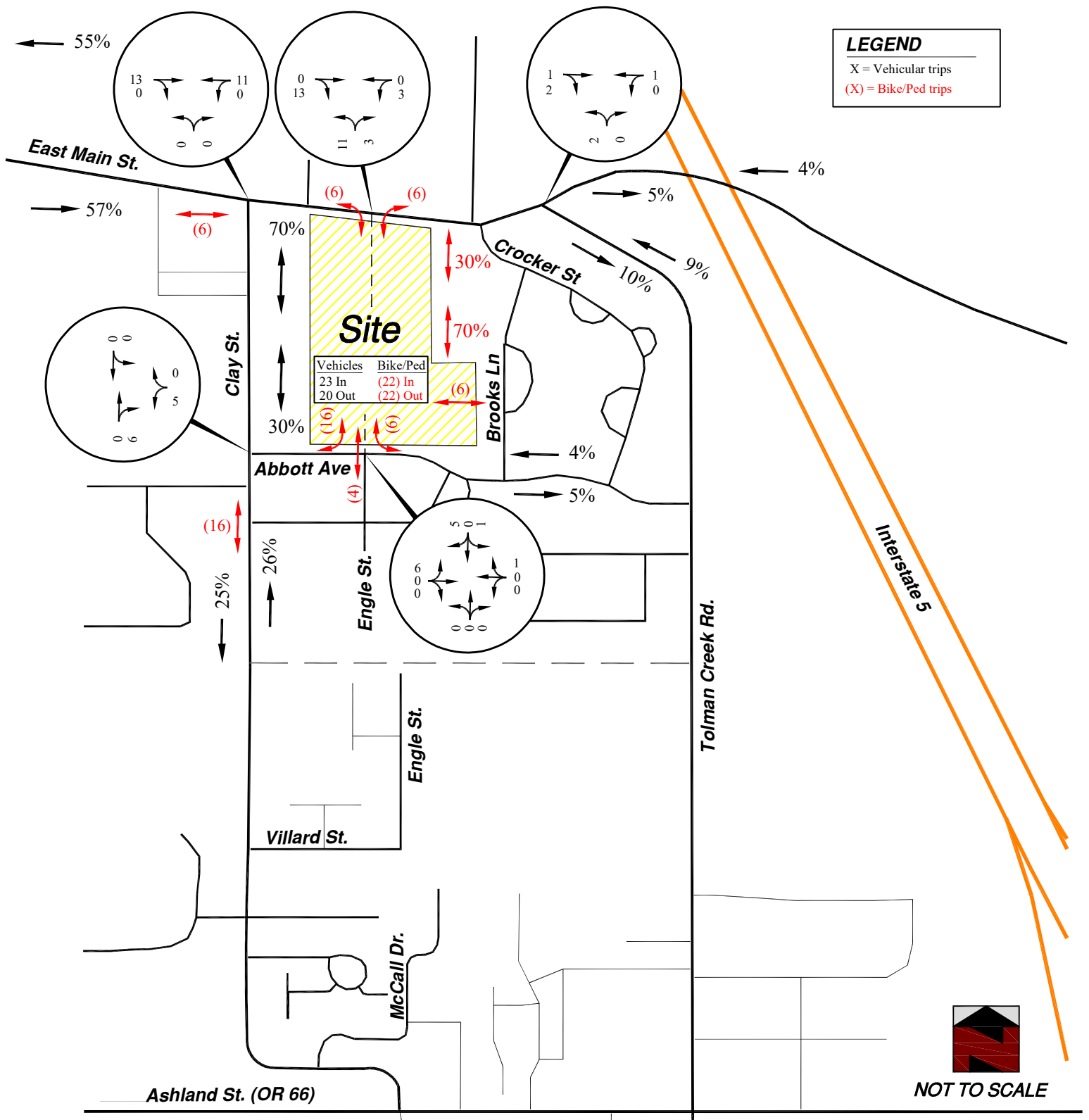
NA = not applicable

1. Daily trips estimated based on 10 times the highest peak hour

Trip Distribution and Assignment

Vehicular development trips were distributed in accordance with existing traffic splits at study area intersections and engineering judgement. An initial assumption was that 70% of vehicular development trips would use the East Main Street access and 30% the Abbott Avenue access. From the access point on East Main Street, approximately 55% of trips were distributed to/from the west and 5% to/from the east. From the access point on Abbott Avenue, approximately 5% was distributed within the residential subdivision surrounding the park and the remaining 25% to/from the south on Clay Street. The majority of bike and pedestrian trips were assumed to come through the Abbott Avenue access and pedestrian/bicycle path to Brooks Lane (70%). It is only estimated that a small amount (30%) will walk or ride to the park using East Main Street. This is based on the proximity of residential areas to the site and average walking/riding distances. All trips were considered new trips on the transportation system. Distributions for multi-modal trips are provided in Figure 5 during the p.m. peak hour.

Figure 5: Development Trip Distributions, PM Peak Hour



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VI. DESIGN YEAR 2024 BUILD CONDITIONS

Design Year 2024 Build Description

Build conditions represent no-build conditions for a study area with the addition of proposed development trips considered. Build conditions are compared to no-build conditions to determine what impacts and/or mitigation measures will result from proposed development. Build conditions in year 2024 are considered for the East Main Street Regional Park.

Design Year 2024 Build Intersection Operations

Design year 2024 build traffic volumes were evaluated at study area intersections during the p.m. peak hour to compare build conditions to no-build conditions. Results are summarized in Table 8.

Table 8 – Design Year 2024 Build Intersection Operations			
Intersection	Performance Standard	Traffic Control	PM Peak Hour
Clay St. / E Main St.	LOS D, V/C 0.95	TWSC	C, 0.31, NB
Clay St. / Abbott Ave.	LOS D	TWSC	A, WB
Tolman Creek Rd. / E Main St.	LOS D, V/C 0.95	TWSC	C, 0.38, NB
Site Access / E Main St.	LOS D, V/C 0.95	TWSC	C, 0.05, NB
Site Access / Abbott Ave.	LOS D	TWSC	A, SB

LOS = level of service, TWSC = two-way stop control, SB = southbound, NB = northbound, WB = westbound

Note: Exceeded performance standards are shown in bold, italic

Results of the analysis show all study area intersections and site driveways continue to operate acceptably (within performance standards) under design year 2024 build conditions during the p.m. peak hour. Small changes are shown to occur at study area intersections as a result of development trips. Synchro output sheets are provided in Appendix E for further reference.

Design Year 2024 Build 95th Percentile Queuing

Five simulations were run and averaged in SimTraffic to determine 95th percentile queue lengths at study area intersections under design year 2024 build conditions. Queue lengths were rounded up to the nearest 25 feet (single vehicle length) and reported in Table 9 for the p.m. peak hour.

Table 9 – Design Year 2024 Build 95 th Percentile Queue Lengths			
Intersection / Movement	Available Link Distance (Ft)	PM Peak Hour	Exceeded Roadways
<u>Clay St. / E Main St.</u>			
Westbound Left/Through	675	50	None
Northbound Left/Right	725	75	None
<u>Clay St. / Abbott Ave.</u>			
Westbound Left/Right	325	50	None
Southbound Left/Through	725	25	None
<u>Tolman Creek Rd. / E Main St.</u>			
Westbound Left/Through	1550	25	None
Northbound Left/Right	1125	100	None

Note: Exceeded performance standards are shown in bold, italic

Table 9 Continued – Design Year 2024 Build 95th Percentile Queue Lengths			
Intersection / Movement	Available Link Distance (Ft)	PM Peak Hour	Exceeded Roadways
<u>Site Access / E Main St.</u>			
Westbound Left/Through	325	25	None
Northbound Left/Right	250	50	None
<u>Site Access / Abbott Ave.</u>			
Eastbound Left/Through/Right	325	0	None
Westbound Left/Through/Right	250	0	None
Northbound Left/Through/Right	175	0	None
Southbound Left/Through/Right	100	25	None

Note: Exceeded performance standards are shown in bold, italic

Results of the queuing analysis show little to no change in queue lengths at study area intersections, but small queues are created at site access points on East Main Street and Abbott Avenue. Refer to Appendix E for a full queuing and blocking report.

Sight Distance

Sight distance was measured in the field on East Main Street and on Abbott Avenue at proposed access points. Sight distance is provided at intersections to allow drivers adequate time to perceive other vehicles approaching the intersection and react in time to avoid collisions. The driver of a vehicle approaching an intersection should have an unobstructed view of the entire intersection. Likewise, stopped vehicles at intersections should have a sufficient view of the intersecting roadway to decide when to enter or cross without colliding with on-coming vehicles. Minimum sight distances are provided by the American Association of State Highways and Transportation Officials (AASHTO) and Jackson County within the study area.

Departure sight triangles are considered for left, through, and right turn movements. The length of the leg of the departure sight triangle along the major road for all stop-controlled movements is dependent upon the speed of the major roadway and perception-reaction times of drivers. The minimum stopping sight distance (SSD) represents the minimum sight distance required by AASHTO. The intersection sight distance (ISD) is the desirable sight distance by AASHTO. Jackson County additionally has sight distance standards for urban streets.

East Main Street is a County Urban Major Collector in the Jackson County TSP, which requires a minimum sight distance of 315 feet. Abbott Avenue is a Neighborhood Street in the Ashland TSP, which requires a minimum SSD of 155 feet, in accordance with AASHTO standards.

East Main Street in the project vicinity is fairly flat with horizontal curves to the east (beginning approximately 240 feet away) and west (beginning approximately 600 feet away). Sight distance was measured to be approximately 450 feet to the east and over 700 feet to the west past Clay Street. The AASHTO and Jackson County minimum sight distance is shown to be met in both directions. Pictures are provided below.

From East Main St Access – looking west



From East Main St Access – looking east



Abbott Avenue is flat and straight with no horizontal curves. Sight distance was measured to be 325 feet to the west to Clay Street and approximately 315 feet to the east past Dollarhide Way. The AASHTO minimum SSD of 155 feet is shown to be met in both directions. Parked cars along the north side of Abbott Avenue may limit sight distance at times throughout the day. Pictures are provided below.

From Abbott Ave, looking east



From Abbott Ave, looking west



Access Management & Spacing Standards

The Jackson County access management guidelines in the County TSP are hierarchically prioritized according to three priority levels. Priority Level 1 is to avoid negative effects on intersection operations. Priority Level 2 is to minimize access points, align road approaches when feasible, and utilize shared access points. Priority Level 3 is to maintain access spacing standards depending on the functional classification and purpose of a given roadway. Where an access request would support a higher priority guideline at the expense of a lower priority guideline, the access that accomplishes the higher priority should be promoted.

Under Priority Level 2, one access point is allowed for each parcel or parcels under the same ownership. When a property has frontage on two or more roadways, access is provided from the roadway with the lower functional classification. More than one access may be granted, however, if it can be determined that it will not negatively affect the safety and efficiency of the roadway and the additional access is reasonably necessary for circulation. Two access points are proposed at the East Main Street Park with no connection through the site for vehicular traffic. The site is designed this way to provide access for most of the vehicular traffic (70%) on East Main Street with secondary access on Abbott Avenue. Similarly, most of the pedestrian and bicycle traffic (80%) is expected to use the Abbott Avenue access as the main access and East Main Street as a secondary access. Both access points are integral to the site. No vehicular connection through the site is proposed to prohibit cut-through traffic and provide a higher level of safety within the park and central play area. Having an access on East Main Street additionally benefits the transportation system by reducing out of direction trips, preserves capacity at the intersection of Clay Street / East Main Street, and reducing vehicular congestion within the local neighborhood to the south. It will not negatively affect the safety and efficiency of East Main Street and is reasonably necessary for circulation.

Under Priority Level 3, the minimum access spacing for all driveways and private roads on an Urban Major Collector is 250 feet. The proposed access on East Main Street is approximately 340 feet east of Clay Street (measured centerline to centerline) and 355 feet to Crocker Street. Jackson County minimum access spacing standards are shown to be met.

Turn Lane Criterion

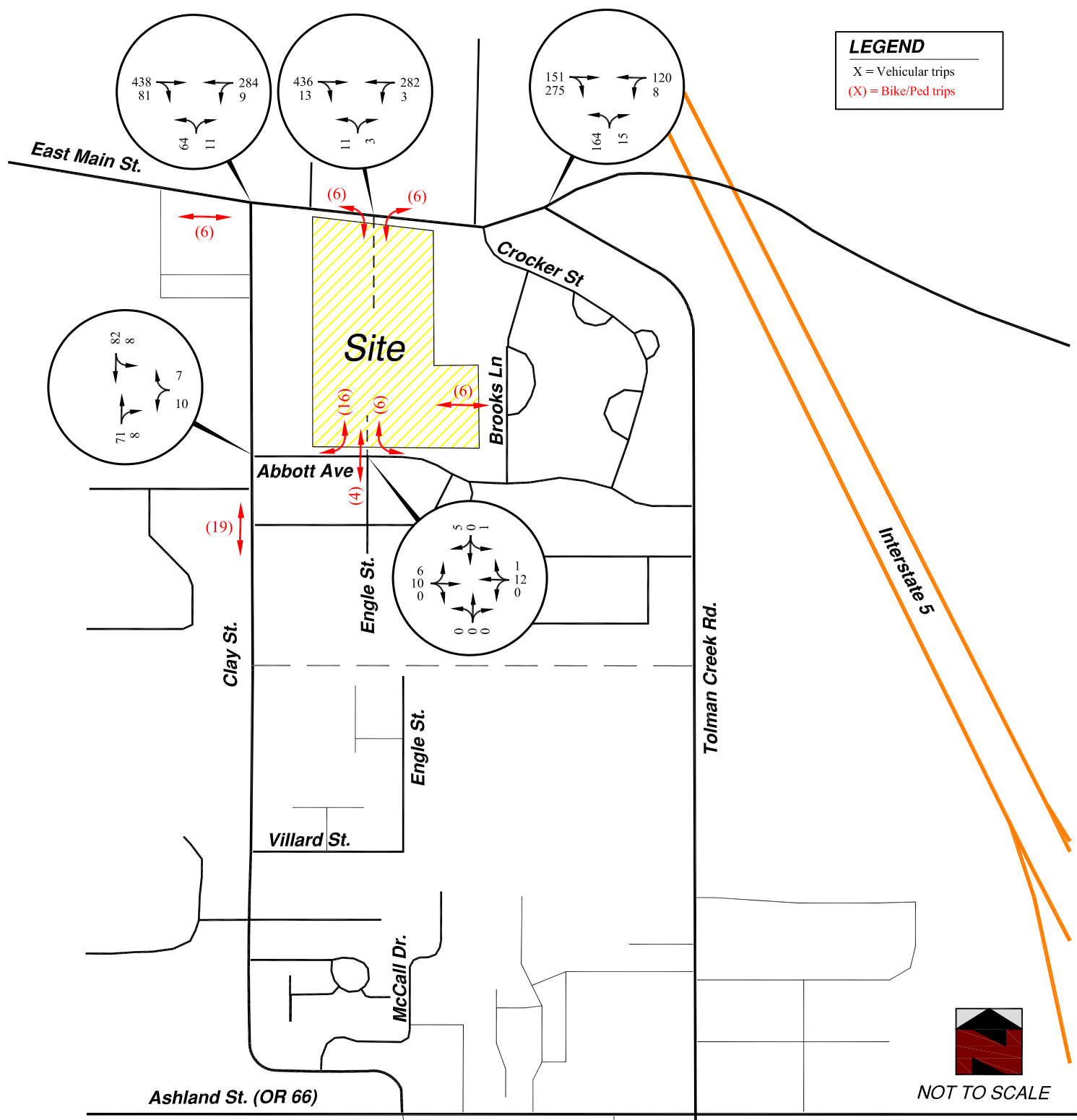
Right Turn Lane Criterion

Right turn lane criterion was evaluated on East Main Street at the proposed site access during the p.m. peak hour to determine whether right turn lane criterion is met under design year 2024 build conditions. Results of the analysis show that criterion is not met for an eastbound right turn lane as a result of development. Refer to turn lane graphs in Appendix F for further reference.

Left Turn Lane Criterion

Left turn lane criterion was evaluated on East Main Street at the proposed site access during the p.m. peak hour to determine whether left turn lane criterion is met under design year 2024 build conditions. Results of the analysis show that criterion is not met for a westbound left turn lane as a result of development. No turn lane is, therefore, shown to be warranted on East Main Street at the site access. Refer to turn lane graphs in Appendix F for further reference.

Figure 6: Design Year 2024 Build Traffic Volumes, PM Peak Hour



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VII. CONCLUSIONS

Conclusions

The findings of the traffic impact analysis conclude that the proposed East Main Street Park can be approved without creating adverse impacts to the transportation system. Results of the analysis are as follows:

1. All study area intersections operate acceptably under existing year 2023, design year 2024 no-build, and design year 2024 build conditions during the p.m. peak hour.
2. Crash data was evaluated in the study area for the most recent five-year period. There were no reported collisions at study area intersections within that time period.
3. Turn lane criterion was evaluated on East Main Street at the proposed site driveway. Results show that neither an eastbound right turn lane nor westbound left turn lane is warranted with or without proposed development traffic during the p.m. peak hour.
4. Sight distance is shown to be adequate at proposed site access points on East Main Street and Abbott Avenue.
5. Pedestrians and cyclists are expected to use East Main Street, Clay Street, Tolman Creek Road, and streets within the local neighborhoods to access the park. Sidewalks exist on Tolman Creek Road, Clay Street, and within the local neighborhoods, but are missing in segments along East Main Street. Bike facilities (lanes or shoulders) are provided on East Main Street and Tolman Creek Road but are missing on Clay Street. The City of Ashland has plans to improve middle Clay Street to a City standard utilizing grant monies received from Jackson County. There is also a planned project in their Transportation System Plan to upgrade Clay Street to a Bicycle Boulevard.

The proposed development is shown to be in compliance with the City of Ashland Comprehensive Plan and Land Development Code. Streets that serve the subject property will accommodate projected peak hour traffic volumes while maintaining acceptable performance standards in accordance with the City of Ashland and Jackson County Transportation System Plans (TSP).

APPENDICES A-G

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Appendix A

Traffic Counts, Seasonal Adjustment,
Volume Development

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North-South: Tolman Creek
 East-West: E Main
 Weather: Overcast, Mild
 All Vehicles

File Name : E-Main-Tolman
 Site Code : 00000000
 Start Date : 12/6/2023
 Page No : 1

Groups Printed- All Vehicles

Start Time	From North					E Main From East					Tolman Creek From South					E Main From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	1	9	0	0	10	3	0	0	0	3	0	8	6	0	14	27
07:15 AM	0	0	0	0	0	1	10	0	0	11	9	0	0	0	9	0	9	8	0	17	37
07:30 AM	0	0	0	0	0	2	16	0	0	18	12	0	1	0	13	0	12	17	0	29	60
07:45 AM	0	0	0	0	0	1	22	0	0	23	25	0	0	0	25	0	12	29	0	41	89
Total	0	0	0	0	0	5	57	0	0	62	49	0	1	0	50	0	41	60	0	101	213
08:00 AM	0	0	0	0	0	1	38	0	0	39	18	0	2	0	20	0	19	33	0	52	111
08:15 AM	0	0	0	0	0	0	51	0	0	51	45	0	6	0	51	0	37	71	0	108	210
08:30 AM	0	0	0	0	0	0	26	0	0	26	26	0	0	0	26	0	43	42	0	85	137
08:45 AM	0	0	0	0	0	1	21	0	0	22	22	0	1	0	23	0	27	47	1	75	120
Total	0	0	0	0	0	2	136	0	0	138	111	0	9	0	120	0	126	193	1	320	578
*** BREAK ***																					
03:00 PM	0	0	0	0	0	2	32	0	0	34	45	0	1	0	46	0	41	61	0	102	182
03:15 PM	0	0	0	0	0	2	25	0	0	27	38	0	8	0	46	0	40	66	0	106	179
03:30 PM	0	0	0	0	0	1	27	0	0	28	28	0	4	0	32	0	25	61	0	86	146
03:45 PM	0	0	0	0	0	2	19	0	0	21	29	0	0	0	29	0	25	49	0	74	124
Total	0	0	0	0	0	7	103	0	0	110	140	0	13	0	153	0	131	237	0	368	631
04:00 PM	0	0	0	0	0	2	28	0	0	30	49	0	0	0	49	0	34	60	0	94	173
04:15 PM	0	0	0	0	0	0	25	0	0	25	38	0	4	0	42	0	23	48	0	71	138
04:30 PM	0	0	0	0	0	2	14	0	0	16	39	0	5	0	44	0	36	41	0	77	137
04:45 PM	0	0	0	0	0	4	31	0	0	35	40	0	2	0	42	0	22	61	0	83	160
Total	0	0	0	0	0	8	98	0	0	106	166	0	11	0	177	0	115	210	0	325	608
05:00 PM	0	0	0	0	0	0	25	0	0	25	33	0	3	0	36	0	25	47	0	72	133
05:15 PM	0	0	0	0	0	0	16	0	0	16	39	0	5	0	44	0	31	45	0	76	136
05:30 PM	0	0	0	0	0	1	29	0	0	30	25	0	0	0	25	0	19	40	0	59	114
05:45 PM	0	0	0	0	0	1	15	0	0	16	36	0	1	0	37	0	22	35	0	57	110
Total	0	0	0	0	0	2	85	0	0	87	133	0	9	0	142	0	97	167	0	264	493
Grand Total	0	0	0	0	0	24	479	0	0	503	599	0	43	0	642	0	510	867	1	1378	2523
Apprch %	0	0	0	0	0	4.8	95.2	0	0	93.3	93.3	0	6.7	0	23.7	0	37	62.9	0.1	62.9	
Total %	0	0	0	0	0	1	19	0	0	19.9	23.7	0	1.7	0	25.4	0	20.2	34.4	0	54.6	

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North-South: Tolman Creek
 East-West: E Main
 Weather: Overcast, Mild
 All Vehicles

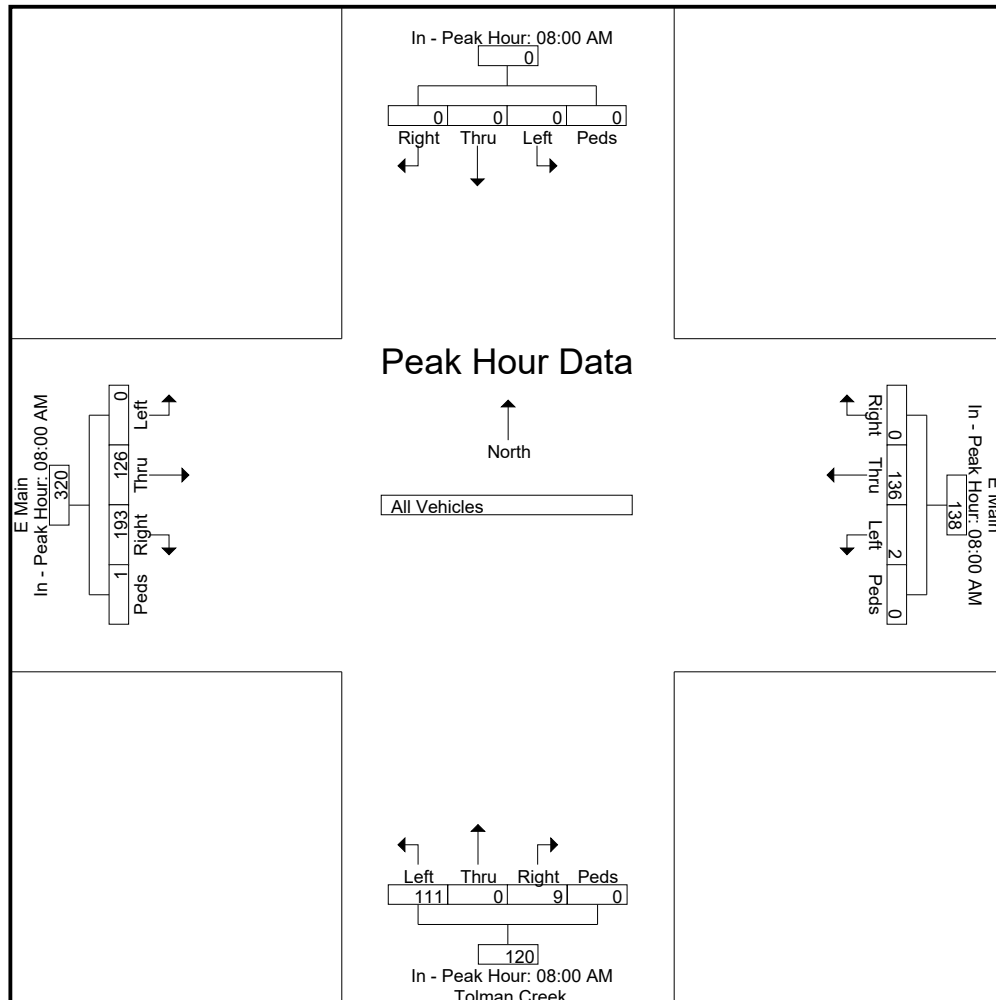
File Name : E-Main-Tolman
 Site Code : 00000000
 Start Date : 12/6/2023
 Page No : 2

	From North					E Main From East					Tolman Creek From South					E Main From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00 AM					08:00 AM					08:00 AM					08:00 AM				
+0 mins.	0	0	0	0	0	1	38	0	0	39	18	0	2	0	20	0	19	33	0	52
+15 mins.	0	0	0	0	0	0	51	0	0	51	45	0	6	0	51	0	37	71	0	108
+30 mins.	0	0	0	0	0	0	26	0	0	26	26	0	0	0	26	0	43	42	0	85
+45 mins.	0	0	0	0	0	1	21	0	0	22	22	0	1	0	23	0	27	47	1	75
Total Volume	0	0	0	0	0	2	136	0	0	138	111	0	9	0	120	0	126	193	1	320
% App. Total	0	0	0	0	0	1.4	98.6	0	0	0	92.5	0	7.5	0	0	0	39.4	60.3	0.3	0
PHF	.000	.000	.000	.000	.000	.500	.667	.000	.000	.676	.617	.000	.375	.000	.588	.000	.733	.680	.250	.741



SOUTHERN OREGON

TRANSPORTATION ENGINEERING

Medford, Oregon 97504 | Kim.parducci@gmail.com | (541) 941-4148 Cell

North-South: Tolman Creek
 East-West: E Main
 Weather: Overcast, Mild
 All Vehicles

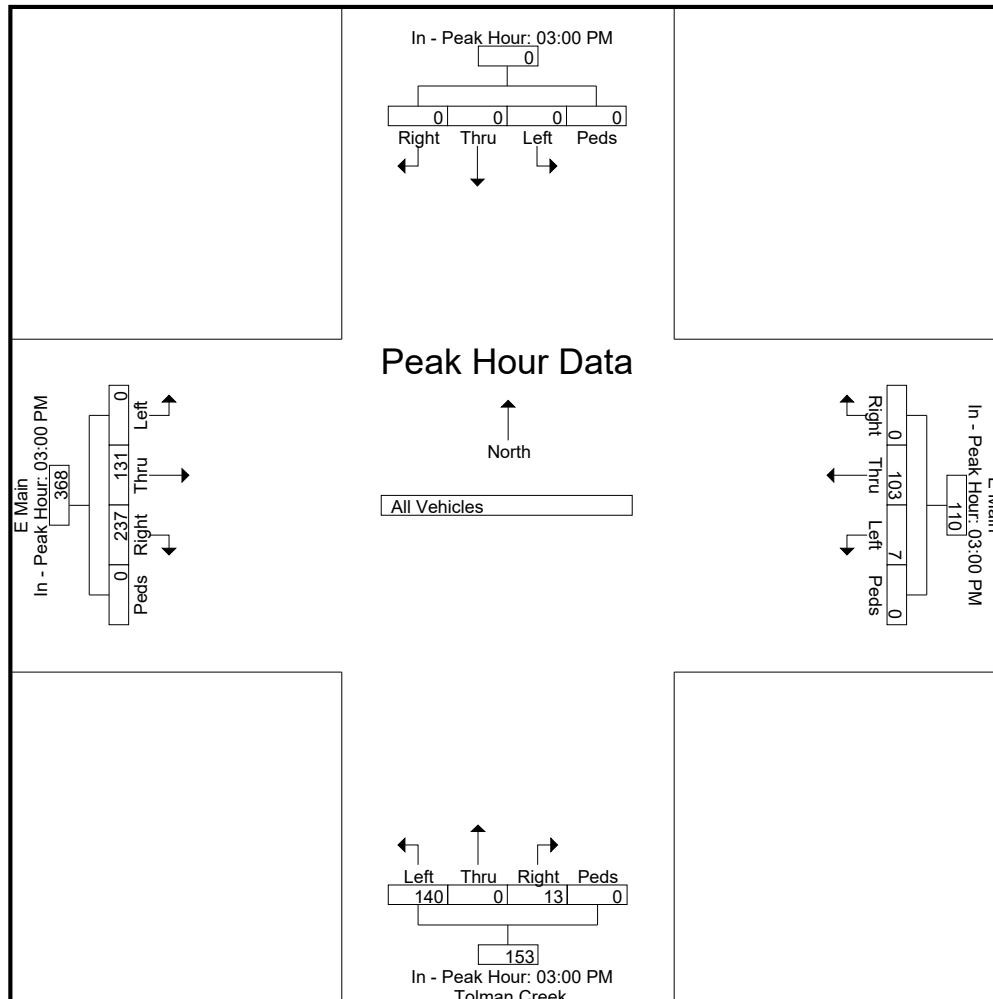
File Name : E-Main-Tolman
 Site Code : 00000000
 Start Date : 12/6/2023
 Page No : 3

	From North					E Main From East					Tolman Creek From South					E Main From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total

Peak Hour Analysis From 03:00 PM to 03:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	03:00 PM					03:00 PM					03:00 PM					03:00 PM				
+0 mins.	0	0	0	0	0	2	32	0	0	34	45	0	1	0	46	0	41	61	0	102
+15 mins.	0	0	0	0	0	2	25	0	0	27	38	0	8	0	46	0	40	66	0	106
+30 mins.	0	0	0	0	0	1	27	0	0	28	28	0	4	0	32	0	25	61	0	86
+45 mins.	0	0	0	0	0	2	19	0	0	21	29	0	0	0	29	0	25	49	0	74
Total Volume	0	0	0	0	0	7	103	0	0	110	140	0	13	0	153	0	131	237	0	368
% App. Total	0	0	0	0	0	6.4	93.6	0	0		91.5	0	8.5	0		0	35.6	64.4	0	
PHF	.000	.000	.000	.000	.000	.875	.805	.000	.000	.809	.778	.000	.406	.000	.832	.000	.799	.898	.000	.868



SOUTHERN OREGON

TRANSPORTATION ENGINEERING

Medford, Oregon 97504 | Kim.parducci@gmail.com | (541) 941-4148 Cell

North-South: Clay St
 East-West: E Main St
 Weather: Overcast, mild
 All Vehicles

File Name : E-Main-Clay
 Site Code : 00000000
 Start Date : 12/6/2023
 Page No : 1

Groups Printed- All Vehicles

Start Time	Clay St From North					E Main From East					Clay St From South					From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	0	13	0	0	13	3	0	1	0	4	0	12	1	0	13	30
07:15 AM	0	0	0	0	0	0	20	0	0	20	4	0	1	0	5	0	15	2	0	17	42
07:30 AM	0	0	0	0	0	2	27	0	0	29	2	0	2	0	4	0	27	1	0	28	61
07:45 AM	0	0	0	0	0	2	48	0	0	50	12	0	2	0	14	0	38	3	0	41	105
Total	0	0	0	0	0	4	108	0	0	112	21	0	6	0	27	0	92	7	0	99	238
08:00 AM	0	0	0	0	0	2	59	0	0	61	22	0	1	0	23	0	54	4	0	58	142
08:15 AM	0	0	0	0	0	0	101	0	0	101	18	0	2	0	20	0	109	13	0	122	243
08:30 AM	0	0	0	0	0	0	54	0	0	54	8	0	3	0	11	0	93	10	0	103	168
08:45 AM	0	0	0	0	0	0	46	0	0	46	17	0	0	0	17	0	63	9	0	72	135
Total	0	0	0	0	0	2	260	0	0	262	65	0	6	0	71	0	319	36	0	355	688
*** BREAK ***																					
03:00 PM	0	0	0	0	0	2	76	0	0	78	22	0	3	0	25	0	105	20	0	125	228
03:15 PM	0	0	0	0	0	2	61	0	0	63	11	0	2	0	13	0	102	19	0	121	197
03:30 PM	0	0	0	0	0	0	56	0	0	56	10	0	4	0	14	0	87	20	0	107	177
03:45 PM	0	0	0	0	0	4	44	0	0	48	12	0	1	0	13	0	75	11	0	86	147
Total	0	0	0	0	0	8	237	0	0	245	55	0	10	0	65	0	369	70	0	439	749
04:00 PM	0	0	0	0	0	3	72	0	0	75	13	0	4	0	17	0	94	15	0	109	201
04:15 PM	0	0	0	0	0	3	65	0	0	68	13	0	1	0	14	0	73	13	0	86	168
04:30 PM	0	0	0	0	0	1	50	0	0	51	9	0	5	0	14	0	76	10	0	86	151
04:45 PM	0	0	0	0	0	2	72	0	0	74	10	0	3	0	13	0	83	9	0	92	179
Total	0	0	0	0	0	9	259	0	0	268	45	0	13	0	58	0	326	47	0	373	699
05:00 PM	0	0	0	0	0	0	54	0	0	54	13	0	1	0	14	0	73	17	0	90	158
05:15 PM	0	0	0	0	0	1	60	0	0	61	10	0	2	0	12	0	70	12	0	82	155
05:30 PM	0	0	0	0	0	3	50	0	0	53	4	0	3	0	7	0	58	11	0	69	129
05:45 PM	0	0	0	0	0	0	56	0	0	56	9	0	2	0	11	0	55	9	0	64	131
Total	0	0	0	0	0	4	220	0	0	224	36	0	8	0	44	0	256	49	0	305	573
Grand Total	0	0	0	0	0	27	1084	0	0	1111	222	0	43	0	265	0	1362	209	0	1571	2947
Apprch %	0	0	0	0	0	2.4	97.6	0	0		83.8	0	16.2	0		0	86.7	13.3	0		
Total %	0	0	0	0	0	0.9	36.8	0	0	37.7	7.5	0	1.5	0	9	0	46.2	7.1	0	53.3	

SOUTHERN OREGON TRANSPORTATION ENGINEERING

Medford, Oregon 97504 | Kim.parducci@gmail.com | (541) 941-4148 Cell

North-South: Clay St
East-West: E Main St
Weather: Overcast, mild
All Vehicles

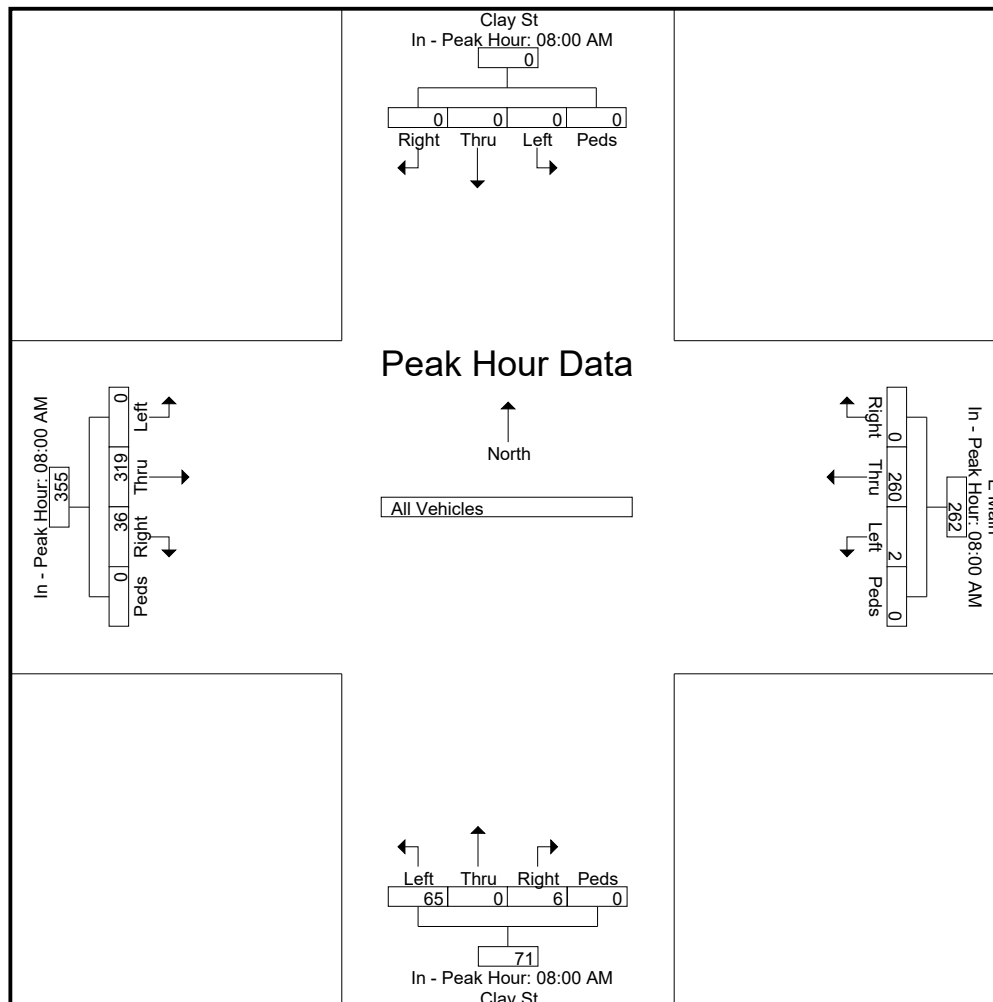
File Name : E-Main-Clay
Site Code : 00000000
Start Date : 12/6/2023
Page No : 2

	Clay St From North					E Main From East					Clay St From South					From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00 AM					08:00 AM					08:00 AM					08:00 AM				
+0 mins.	0	0	0	0	0	2	59	0	0	61	22	0	1	0	23	0	54	4	0	58
+15 mins.	0	0	0	0	0	0	101	0	0	101	18	0	2	0	20	0	109	13	0	122
+30 mins.	0	0	0	0	0	0	54	0	0	54	8	0	3	0	11	0	93	10	0	103
+45 mins.	0	0	0	0	0	0	46	0	0	46	17	0	0	0	17	0	63	9	0	72
Total Volume	0	0	0	0	0	2	260	0	0	262	65	0	6	0	71	0	319	36	0	355
% App. Total	0	0	0	0	0	0.8	99.2	0	0		91.5	0	8.5	0		0	89.9	10.1	0	
PHF	.000	.000	.000	.000	.000	.250	.644	.000	.000	.649	.739	.000	.500	.000	.772	.000	.732	.692	.000	.727



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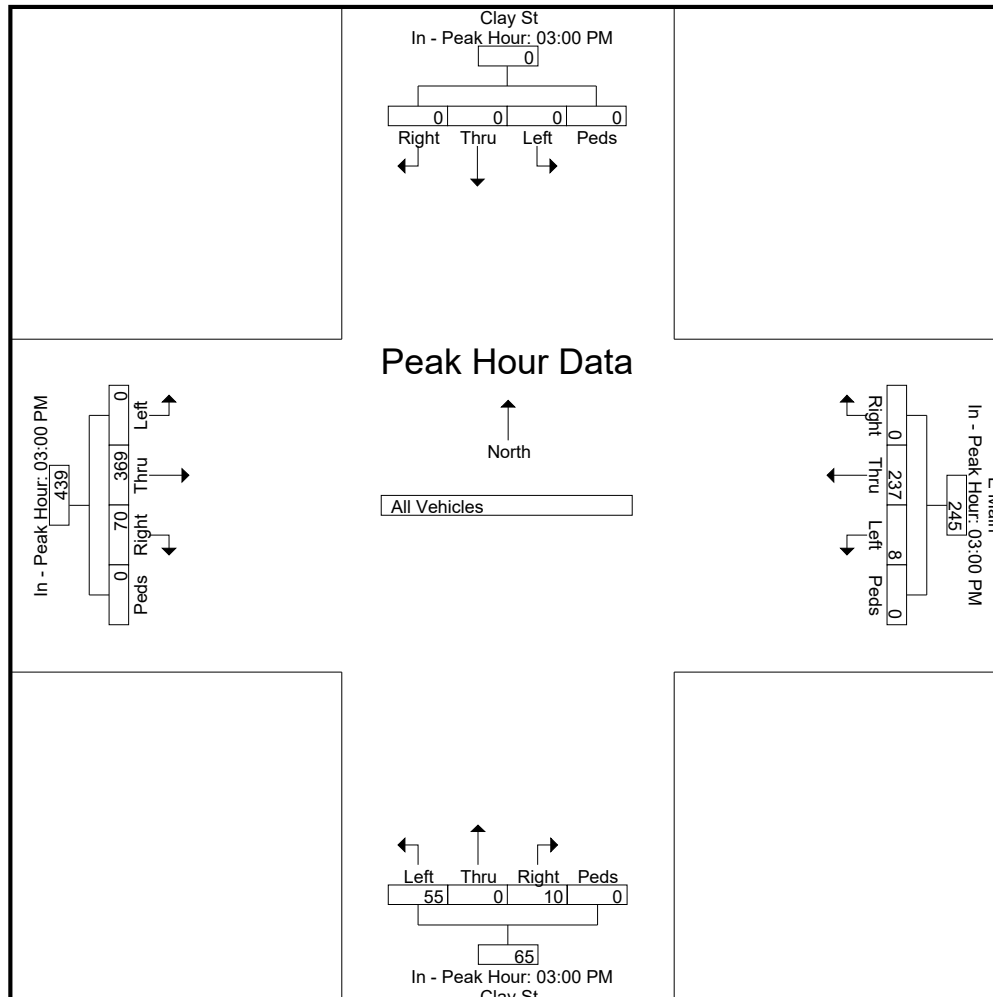
File Name : E-Main-Clay
Site Code : 00000000
Start Date : 12/6/2023
Page No : 3

	Clay St From North					E Main From East					Clay St From South					From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total

Peak Hour Analysis From 03:00 PM to 03:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	03:00 PM					03:00 PM					03:00 PM					03:00 PM				
+0 mins.	0	0	0	0	0	2	76	0	0	78	22	0	3	0	25	0	105	20	0	125
+15 mins.	0	0	0	0	0	2	61	0	0	63	11	0	2	0	13	0	102	19	0	121
+30 mins.	0	0	0	0	0	0	56	0	0	56	10	0	4	0	14	0	87	20	0	107
+45 mins.	0	0	0	0	0	4	44	0	0	48	12	0	1	0	13	0	75	11	0	86
Total Volume	0	0	0	0	0	8	237	0	0	245	55	0	10	0	65	0	369	70	0	439
% App. Total	0	0	0	0	0	3.3	96.7	0	0		84.6	0	15.4	0		0	84.1	15.9	0	
PHF	.000	.000	.000	.000	.000	.500	.780	.000	.000	.785	.625	.000	.625	.000	.650	.000	.879	.875	.000	.878



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North-South: Clay St
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Weather: Overcast, Mild
All Vehicles

File Name : Abbott-Clay
Site Code : 00000000
Start Date : 12/6/2023
Page No : 1

Groups Printed- All Vehicles

Start Time	Clay St From North					Abbott Ave From East					Clay St From South					From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	1	0	0	1	0	0	0	0	0	0	4	1	1	6	0	0	0	0	0	7
07:15 AM	0	1	0	0	1	0	0	0	0	0	0	4	0	1	5	0	0	0	1	1	7
07:30 AM	0	4	0	0	4	0	0	0	0	0	0	6	0	1	7	0	0	0	3	3	14
07:45 AM	0	5	0	0	5	1	0	0	0	1	0	14	2	1	17	0	0	0	0	0	23
Total	0	11	0	0	11	1	0	0	0	1	0	28	3	4	35	0	0	0	4	4	51
08:00 AM	0	7	0	0	7	1	0	4	0	5	0	20	2	1	23	0	0	0	0	0	35
08:15 AM	1	12	0	0	13	3	0	3	0	6	0	15	1	0	16	0	0	0	0	0	35
08:30 AM	1	9	0	0	10	1	0	0	0	1	0	13	1	1	15	0	0	0	1	1	27
08:45 AM	0	9	0	0	9	3	0	1	0	4	0	16	1	1	18	0	0	0	2	2	33
Total	2	37	0	0	39	8	0	8	0	16	0	64	5	3	72	0	0	0	3	3	130
*** BREAK ***																					
03:00 PM	1	19	0	0	20	0	0	1	0	1	0	25	1	1	27	0	0	0	4	4	52
03:15 PM	3	18	0	0	21	2	0	2	0	4	0	12	1	0	13	0	0	0	1	1	39
03:30 PM	3	18	0	0	21	2	0	2	1	5	0	14	0	1	15	0	0	0	2	2	43
03:45 PM	0	16	0	0	16	1	0	1	0	2	0	11	0	1	12	0	0	0	0	0	30
Total	7	71	0	0	78	5	0	6	1	12	0	62	2	3	67	0	0	0	7	7	164
04:00 PM	2	17	0	0	19	2	0	0	0	2	0	17	1	1	19	0	0	0	0	0	40
04:15 PM	2	13	0	0	15	6	0	0	0	6	0	14	1	1	16	0	0	0	1	1	38
04:30 PM	1	10	0	0	11	0	0	0	0	0	0	13	0	2	15	0	0	0	1	1	27
04:45 PM	0	10	0	0	10	2	0	3	0	5	0	13	1	6	20	0	0	0	0	0	35
Total	5	50	0	0	55	10	0	3	0	13	0	57	3	10	70	0	0	0	2	2	140
05:00 PM	1	18	0	0	19	2	0	1	0	3	0	12	3	0	15	0	0	0	0	0	37
05:15 PM	2	11	0	0	13	0	0	2	0	2	0	9	2	0	11	0	0	0	0	0	26
05:30 PM	1	12	0	0	13	1	0	0	0	1	0	6	1	0	7	0	0	0	0	0	21
05:45 PM	0	10	0	0	10	2	0	2	0	4	0	9	1	0	10	0	0	0	0	0	24
Total	4	51	0	0	55	5	0	5	0	10	0	36	7	0	43	0	0	0	0	0	108
Grand Total	18	220	0	0	238	29	0	22	1	52	0	247	20	20	287	0	0	0	16	16	593
Apprch %	7.6	92.4	0	0		55.8	0	42.3	1.9		0	86.1	7	7		0	0	0	100		
Total %	3	37.1	0	0	40.1	4.9	0	3.7	0.2	8.8	0	41.7	3.4	3.4	48.4	0	0	0	2.7	2.7	

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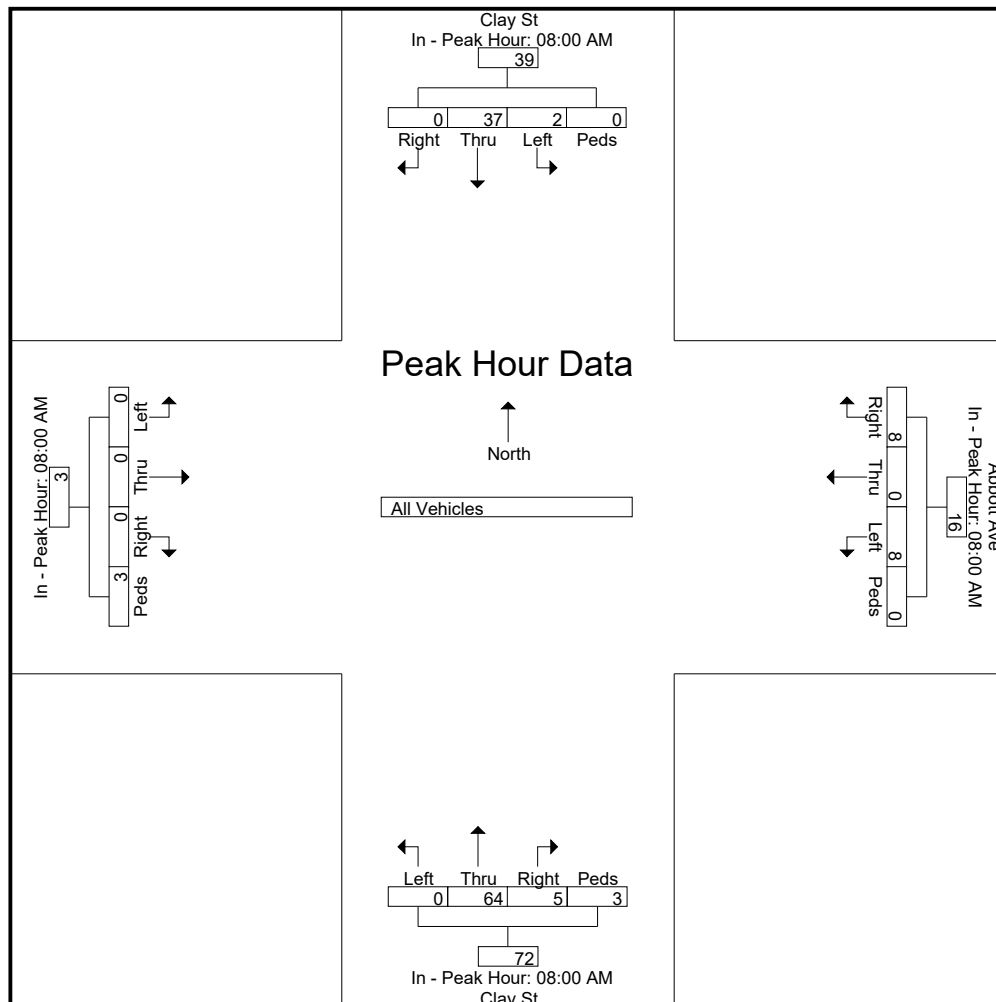
File Name : Abbott-Clay
Site Code : 00000000
Start Date : 12/6/2023
Page No : 2

	Clay St From North					Abbott Ave From East					Clay St From South					From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00 AM					08:00 AM					08:00 AM					08:00 AM				
+0 mins.	0	7	0	0	7	1	0	4	0	5	0	20	2	1	23	0	0	0	0	0
+15 mins.	1	12	0	0	13	3	0	3	0	6	0	15	1	0	16	0	0	0	0	0
+30 mins.	1	9	0	0	10	1	0	0	0	1	0	13	1	1	15	0	0	0	1	1
+45 mins.	0	9	0	0	9	3	0	1	0	4	0	16	1	1	18	0	0	0	2	2
Total Volume	2	37	0	0	39	8	0	8	0	16	0	64	5	3	72	0	0	0	3	3
% App. Total	5.1	94.9	0	0		50	0	50	0		0	88.9	6.9	4.2		0	0	0	100	
PHF	.500	.771	.000	.000	.750	.667	.000	.500	.000	.667	.000	.800	.625	.750	.783	.000	.000	.000	.375	.375



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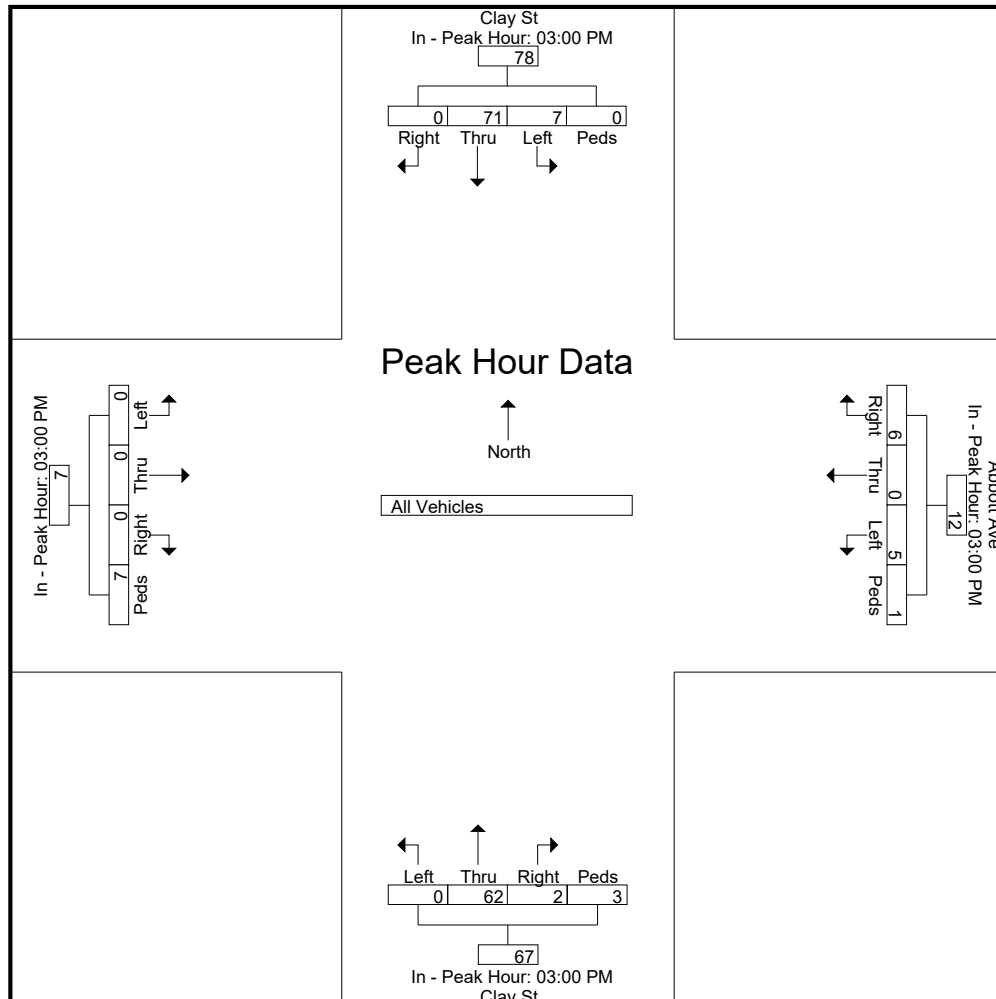
File Name : Abbott-Clay
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 Page No : 3

	Clay St From North					Abbott Ave From East					Clay St From South					From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total

Peak Hour Analysis From 03:00 PM to 03:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	03:00 PM					03:00 PM					03:00 PM					03:00 PM				
+0 mins.	1	19	0	0	20	0	0	1	0	1	0	25	1	1	27	0	0	0	4	4
+15 mins.	3	18	0	0	21	2	0	2	0	4	0	12	1	0	13	0	0	0	1	1
+30 mins.	3	18	0	0	21	2	0	2	1	5	0	14	0	1	15	0	0	0	2	2
+45 mins.	0	16	0	0	16	1	0	1	0	2	0	11	0	1	12	0	0	0	0	0
Total Volume	7	71	0	0	78	5	0	6	1	12	0	62	2	3	67	0	0	0	7	7
% App. Total	9	91	0	0		41.7	0	50	8.3		0	92.5	3	4.5		0	0	0	100	
PHF	.583	.934	.000	.000	.929	.625	.000	.750	.250	.600	.000	.620	.500	.750	.620	.000	.000	.000	.438	.438



SEASONAL TREND TABLE (Updated: 1/10/2023)																									
TREND	1-Jan	15-Jan	1-Feb	15-Feb	1-Mar	15-Mar	1-Apr	15-Apr	1-May	15-May	1-Jun	15-Jun	1-Jul	15-Jul	1-Aug	15-Aug	1-Sep	15-Sep	1-Oct	15-Oct	1-Nov	15-Nov	1-Dec	15-Dec	Seasonal Trend Peak Period Factor
INTERSTATE URBANIZED	1.0869	1.1041	1.0888	1.0335	1.0182	1.0028	0.9995	0.9662	0.9901	0.9840	0.9641	0.9443	0.9502	0.9562	0.9510	0.9458	0.9575	0.9692	0.9791	0.9891	1.0107	1.0324	1.0532	1.0739	0.9443
INTERSTATE NONURBANIZED	1.2459	1.2915	1.2286	1.1657	1.0907	1.0158	1.0059	0.9660	0.9728	0.9496	0.9128	0.8760	0.8650	0.8540	0.8612	0.8684	0.8905	0.9126	0.9488	0.9850	1.0336	1.0822	1.1717	1.2612	0.8540
COMMUTER	1.0905	1.0986	1.0636	1.0285	1.0162	1.0038	0.9959	0.9679	0.9874	0.9748	0.9631	0.9512	0.9614	0.9717	0.9608	0.9500	0.9548	0.9595	0.9634	0.9673	1.0090	1.0507	1.0733	1.0858	0.9500
COASTAL DESTINATION	1.2064	1.1715	1.1234	1.0753	1.0545	1.0337	1.0372	1.0407	1.0216	1.0024	0.9686	0.9147	0.8760	0.8371	0.8370	0.8370	0.8678	0.8885	0.9578	1.0170	1.0730	1.1290	1.1823	1.2357	0.8370
COASTAL DESTINATION ROUTE	1.3837	1.2897	1.2245	1.1594	1.1247	1.0901	1.0911	1.0921	1.0516	1.0111	0.9493	0.8875	0.8772	0.7469	0.7455	0.7440	0.7916	0.8391	0.9274	1.0158	1.1126	1.2094	1.3193	1.4291	0.7440
AGRICULTURE	1.4537	1.4624	1.3705	1.2786	1.2139	1.1462	1.1207	1.0923	1.0075	0.9226	0.8742	0.8258	0.8348	0.8439	0.8422	0.8405	0.7976	0.7547	0.8073	0.8598	1.0041	1.1484	1.3339	1.5194	0.7547
RECREATIONAL SUMMER	1.6049	1.5814	1.4524	1.4034	1.3208	1.2382	1.2380	1.2377	1.0939	0.9500	0.8689	0.7839	0.7392	0.6945	0.7065	0.7185	0.7404	0.7624	0.8468	0.9311	1.1270	1.3230	1.5054	1.6879	0.6945
RECREATIONAL SUMMER WINTER	1.0075	0.9570	0.9184	0.8789	0.9701	0.9803	0.9675	0.9747	1.0843	1.0939	1.0045	0.9151	0.8244	0.7336	0.7795	0.8254	0.9368	1.0462	1.1794	1.3105	1.4969	1.6833	1.8470	0.7336	
RECREATIONAL WINTER**	1.0559	0.9710	0.9475	0.9240	0.7462	0.6885	0.9307	0.9928	1.2838	1.3064	1.2713	1.1282	0.9996	0.8709	0.9526	1.0342	1.1225	1.2103	1.4081	1.6013	1.9826	2.3639	3.3392	3.9026	0.6240
WINTER	1.2374	1.2352	1.1733	1.1114	1.0768	1.0459	1.0330	1.0202	0.9851	0.9500	0.9161	0.8819	0.8609	0.8501	0.8561	0.8620	0.8681	0.9161	0.9430	0.9698	1.0525	1.1352	1.2002	1.2653	0.8501
SUMMER ~ 2500	1.2536	1.2576	1.1943	1.1310	1.1011	1.0712	1.0448	1.0184	0.9633	0.9082	0.8681	0.8641	0.8608	0.8578	0.8695	0.8813	0.8874	0.8936	0.9165	0.9384	1.0500	1.1607	1.2535	1.3463	0.8578

* Seasonal Trend Table factors are based on previous year ATR data. The table is updated yearly.

* Grey shading indicates months where seasonal factor is greater than or less than 30%.

**Use Recreation Winter Trend with Caution! ATR site was down for most of 2022 due to loop issues and was estimated while the site was down

Commuter	1.0733
Dec 6th	0.9500
Peak	1.1300
Adj	

(2023 Raw Data)

The diagram illustrates the traffic volume and pedestrian activity at the East Main Regional Park Site. The site is represented by a large grey polygon. The following table summarizes the traffic data for each approach:

Approach	Volume	Pedestrian Count
12/6/2023 E Main / Clay	292, 369, 439, 70, 55, 78, 71, 62, 76	0, 0, 0, 0, 0, 0, 0, 7, 0
12/6/2023 E Main / Site	0, 245, 243, 131, 245, 379, 368, 237	0, 0, 0, 0, 0, 0, 0, 0
12/6/2023 Abbott / Clay	6, 11, 11, 0, 0, 9, 5, 9, 9, 0	1, 0, 0, 0, 0, 0, 0, 0, 0, 0
7/7/2021 Abbott / Engle St	0, 11, 9	0, 0, 0
12/6/2023 E Main / Site (Right)	0, 110, 103, 7, 144	0, 0, 0, 0, 0

(Year 2023 No-Build Traffic Volumes - PM) *balanced*

The map illustrates the proposed trail network for the East Main Regional Park Site. The central area is shaded gray and labeled "East Main Regional Park Site". Surrounding this central area are several trail segments, each with stationing numbers and pedestrian count indicators.

Trail Segments and Stationing:

- E Main / Clay:** Stationing 0, 0.82, 11, 74, 88, 80, 72.
- E Main / Site:** Stationing 0, 0.87, 15, 173, 276.
- Abbott / Clay:** Stationing 0, 0.79, 2, 72.
- Abbott / Engle St:** Stationing 0, 11, 10, 10, 10.

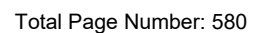
Pedestrian Counts:

- 0 ped (multiple locations)
- 1 ped (near Abbott / Clay)
- 3 ped (near Abbott / Engle St)
- 7 ped (near Abbott / Clay)

(Design Yr 2024 No-Build Traffic Volumes - PM)

Figure 10-10: East Main Street Corridor Design. This diagram illustrates the proposed design for the East Main Street Corridor, showing the layout of the street, the location of the East Main Regional Park Site, and the proposed signalized intersections. The diagram includes a plan view of the street layout, showing the intersection of East Main Street with various streets including 337th, 425th, 506th, 64th, 90th, 82nd, 71st, 87th, 282nd, 436th, 281st, 150th, 119th, 8th, 165th, 12th, and 10th. The East Main Regional Park Site is shown as a large shaded area. The diagram also includes a cross-section view of the street, showing the proposed signalized intersection and the proposed signalized intersection. The diagram includes a table of proposed signalized intersections, showing the proposed signalized intersection and the proposed signalized intersection. The diagram includes a table of proposed signalized intersections, showing the proposed signalized intersection and the proposed signalized intersection.

(East Main Regional Park Development)



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Appendix B

ITE and Local Trip Generation

Land Use: 411

Public Park

Description

A public park is owned and operated by a municipal, county, state, or federal agency. The parks surveyed vary widely as to location, type, and number of facilities, including boating or swimming facilities, beaches, hiking trails, ball fields, soccer fields, campsites, and picnic facilities. Seasonal use of the individual sites differs widely as a result of the varying facilities and local conditions, such as weather. For example, some of the sites are used primarily for boating or swimming; others are used for softball games. Soccer complex (Land Use 488) is a related use.

Additional Data

The percentage of the park area that is used most intensively varies considerably within the studies contained in this land use. Therefore, caution should be used when using acres as an independent variable.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (<https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Arizona, California, New Jersey, New York, North Carolina, and Oregon.

Source Numbers

186, 392, 407, 709, 729, 852, 905

Public Park (411)

Vehicle Trip Ends vs: Acres
On a: Weekday

Setting/Location: General Urban/Suburban

Number of Studies: 5

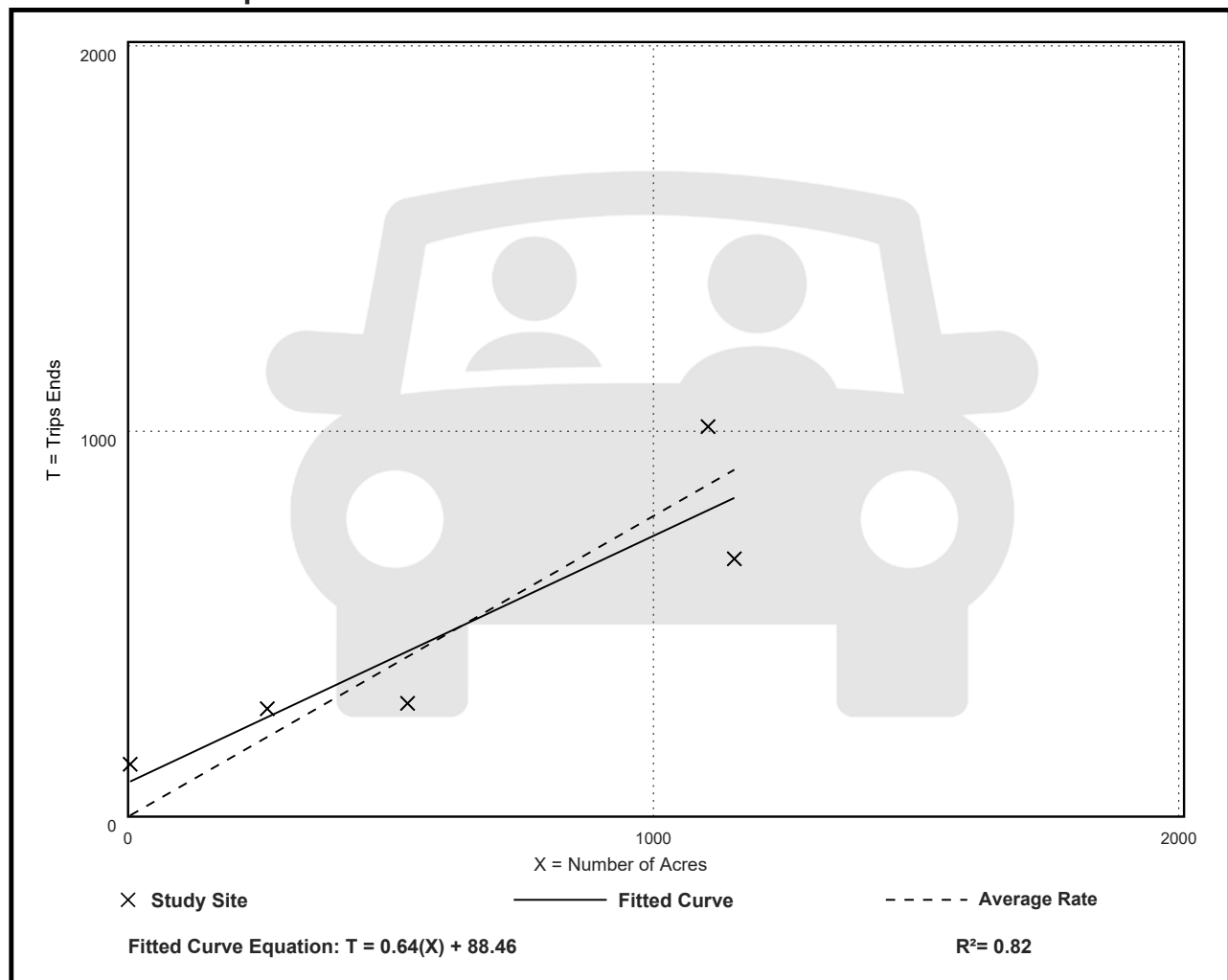
Avg. Num. of Acres: 612

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Acre

Average Rate	Range of Rates	Standard Deviation
0.78	0.55 - 34.00	1.36

Data Plot and Equation



Public Park (411)

Vehicle Trip Ends vs: Acres

On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 5

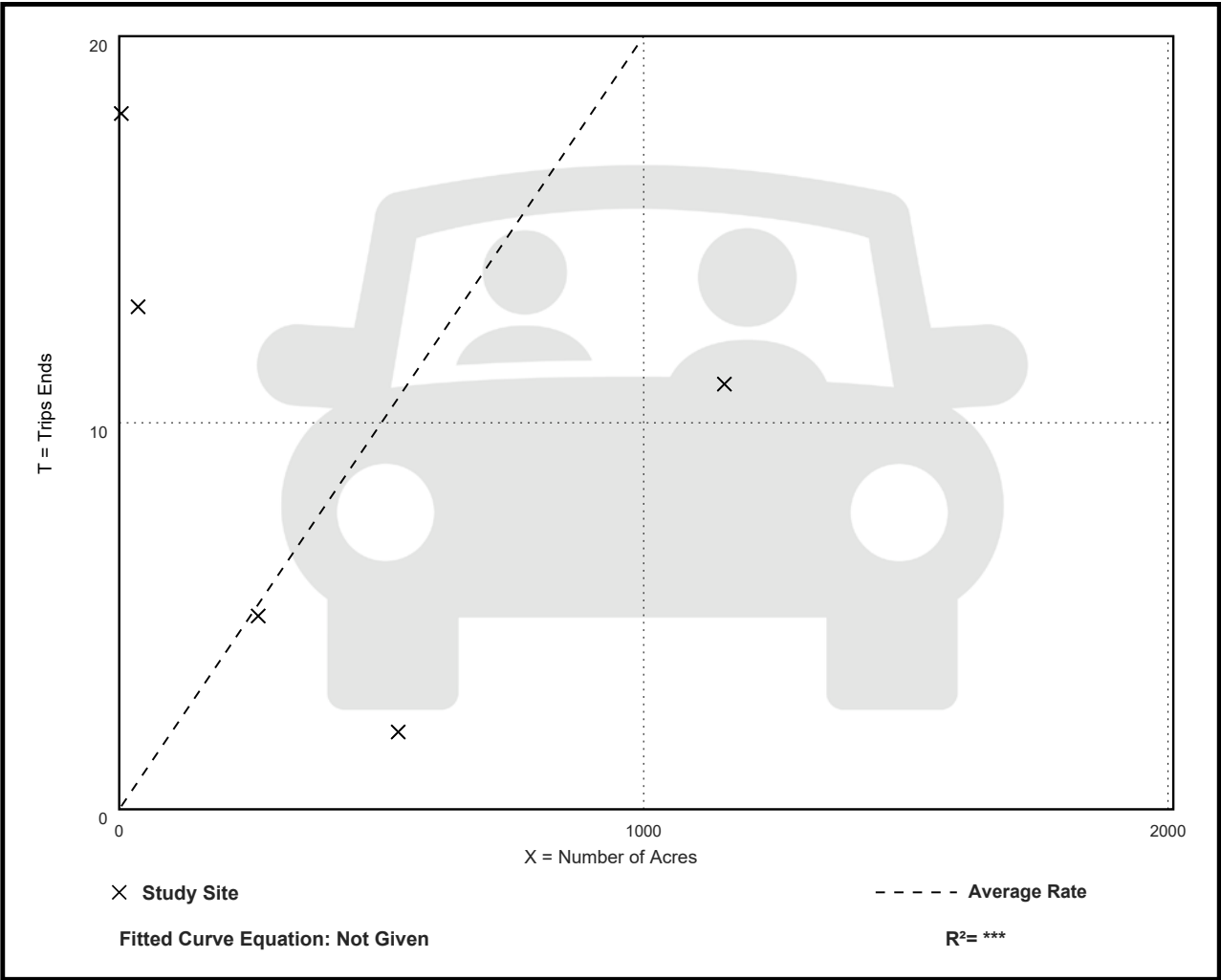
Avg. Num. of Acres: 398

Directional Distribution: 59% entering, 41% exiting

Vehicle Trip Generation per Acre

Average Rate	Range of Rates	Standard Deviation
0.02	0.00 - 4.50	0.23

Data Plot and Equation



Public Park (411)

Vehicle Trip Ends vs: Acres

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 6

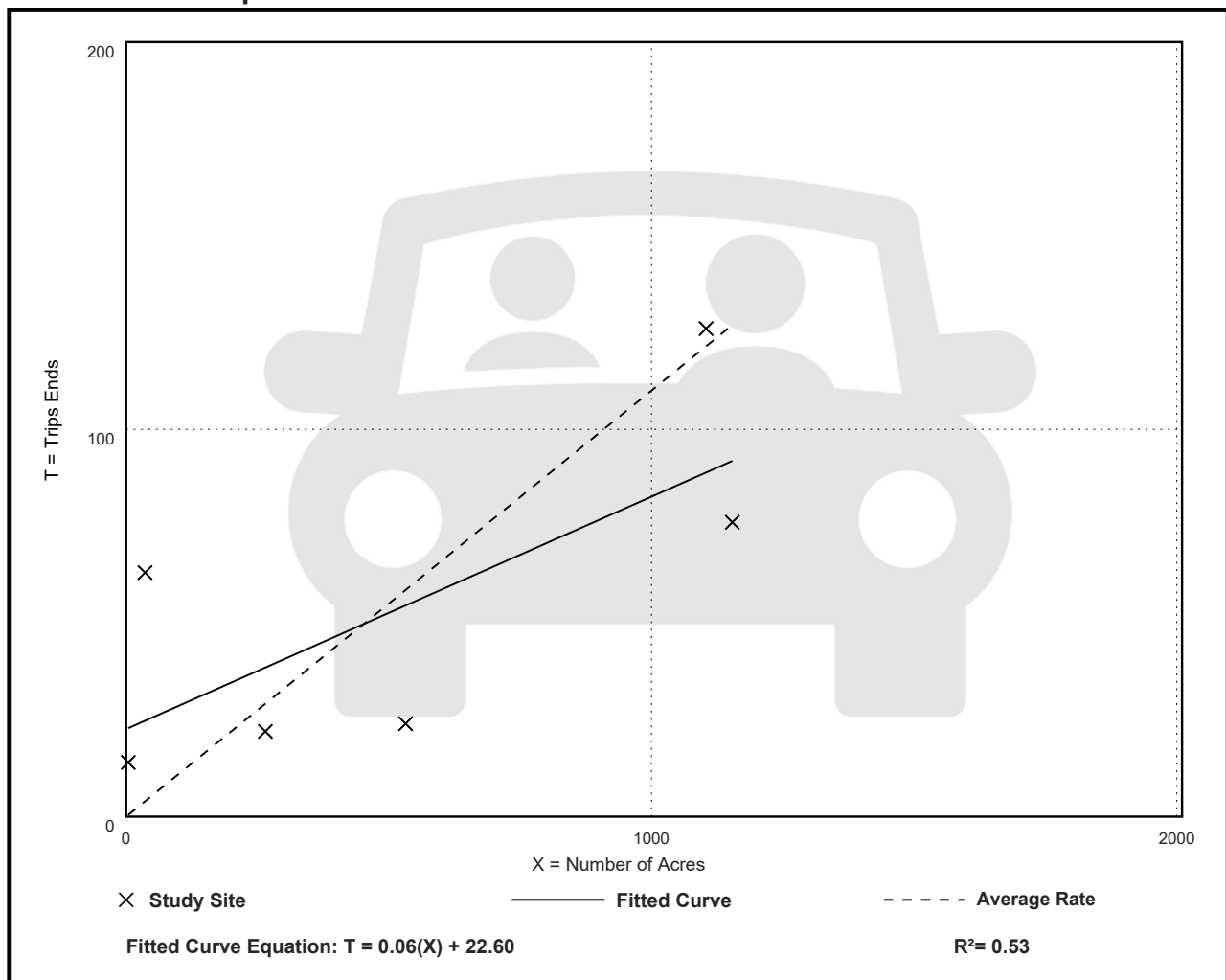
Avg. Num. of Acres: 516

Directional Distribution: 55% entering, 45% exiting

Vehicle Trip Generation per Acre

Average Rate	Range of Rates	Standard Deviation
0.11	0.05 - 3.50	0.24

Data Plot and Equation



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North-South: Perozzi Street
 East-West: NA
 Weather: Clear, 90 deg
 Vehicle: All Vehicles

File Name : Ashland Dog Park_NevadaSt_2021
 Site Code : 00000005
 Start Date : 6/23/2021
 Page No : 1

Groups Printed- All

Start Time	Perozzi St From North					From East					Perozzi Street From South					From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	4	0	1	5	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	7
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	1	3	0	0	0	0	0	3
07:30 AM	0	3	0	3	6	0	0	0	0	0	0	4	0	1	5	0	0	0	0	0	11
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
Total	0	7	0	4	11	0	0	0	0	0	0	9	0	2	11	0	0	0	0	0	22
08:00 AM	0	4	0	1	5	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	8
08:15 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
08:30 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
08:45 AM	0	3	0	0	3	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	7
Total	0	9	0	1	10	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	17
*** BREAK ***																					
03:00 PM	0	1	0	1	2	0	0	0	0	0	0	4	0	1	5	0	0	0	0	0	7
03:15 PM	0	4	0	0	4	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	8
03:30 PM	0	3	0	0	3	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	6
03:45 PM	0	6	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Total	0	14	0	1	15	0	0	0	0	0	0	11	0	1	12	0	0	0	0	0	27
04:00 PM	0	4	0	0	4	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	7
04:15 PM	0	5	0	2	7	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	9
04:30 PM	0	4	0	0	4	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	9
04:45 PM	0	0	0	2	2	0	0	0	0	0	0	4	0	2	6	0	0	0	0	0	8
Total	0	13	0	4	17	0	0	0	0	0	0	14	0	2	16	0	0	0	0	0	33
05:00 PM	0	4	0	1	5	0	0	0	0	0	0	3	0	2	5	0	0	0	0	0	10
05:15 PM	0	5	0	0	5	0	0	0	0	0	0	4	0	4	8	0	0	0	0	0	13
05:30 PM	0	5	0	5	10	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	12
05:45 PM	0	5	0	1	6	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	7
Total	0	19	0	7	26	0	0	0	0	0	0	10	0	6	16	0	0	0	0	0	42
Grand Total	0	62	0	17	79	0	0	0	0	0	0	51	0	11	62	0	0	0	0	0	141
Apprch %	0	78.5	0	21.5		0	0	0	0		0	82.3	0	17.7		0	0	0	0		
Total %	0	44	0	12.1	56	0	0	0	0	0	0	36.2	0	7.8	44	0	0	0	0	0	

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North-South: Perozzi Street
 East-West: NA
 Weather: Clear, 90 deg
 Vehicle: All Vehicles

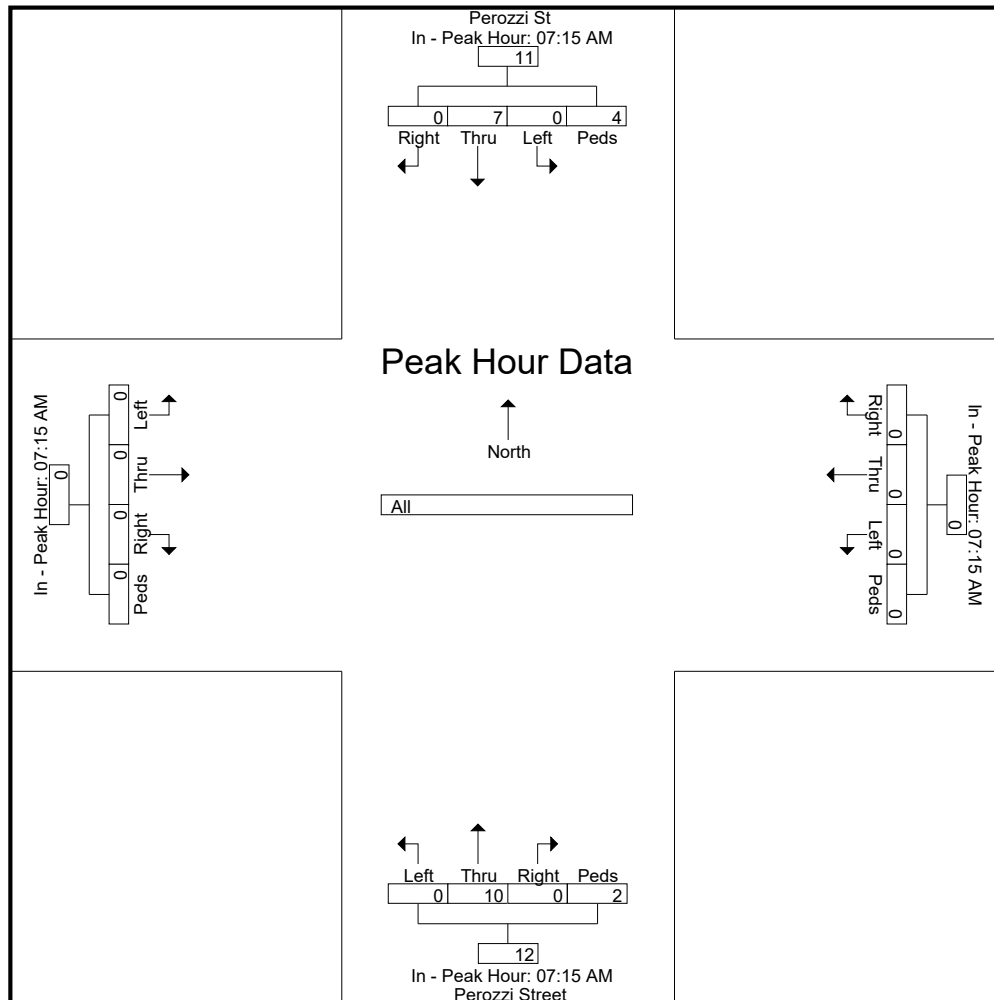
File Name : Ashland Dog Park_NevadaSt_2021
 Site Code : 00000005
 Start Date : 6/23/2021
 Page No : 2

	Perozzi St From North					From East					Perozzi Street From South					From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM					07:15 AM					07:15 AM					07:15 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	2	0	1	3	0	0	0	0	0
+15 mins.	0	3	0	3	6	0	0	0	0	0	0	4	0	1	5	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0
+45 mins.	0	4	0	1	5	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0
Total Volume	0	7	0	4	11	0	0	0	0	0	0	10	0	2	12	0	0	0	0	0
% App. Total	0	63.6	0	36.4		0	0	0	0		0	83.3	0	16.7		0	0	0	0	
PHF	.000	.438	.000	.333	.458	.000	.000	.000	.000	.000	.000	.625	.000	.500	.600	.000	.000	.000	.000	.000



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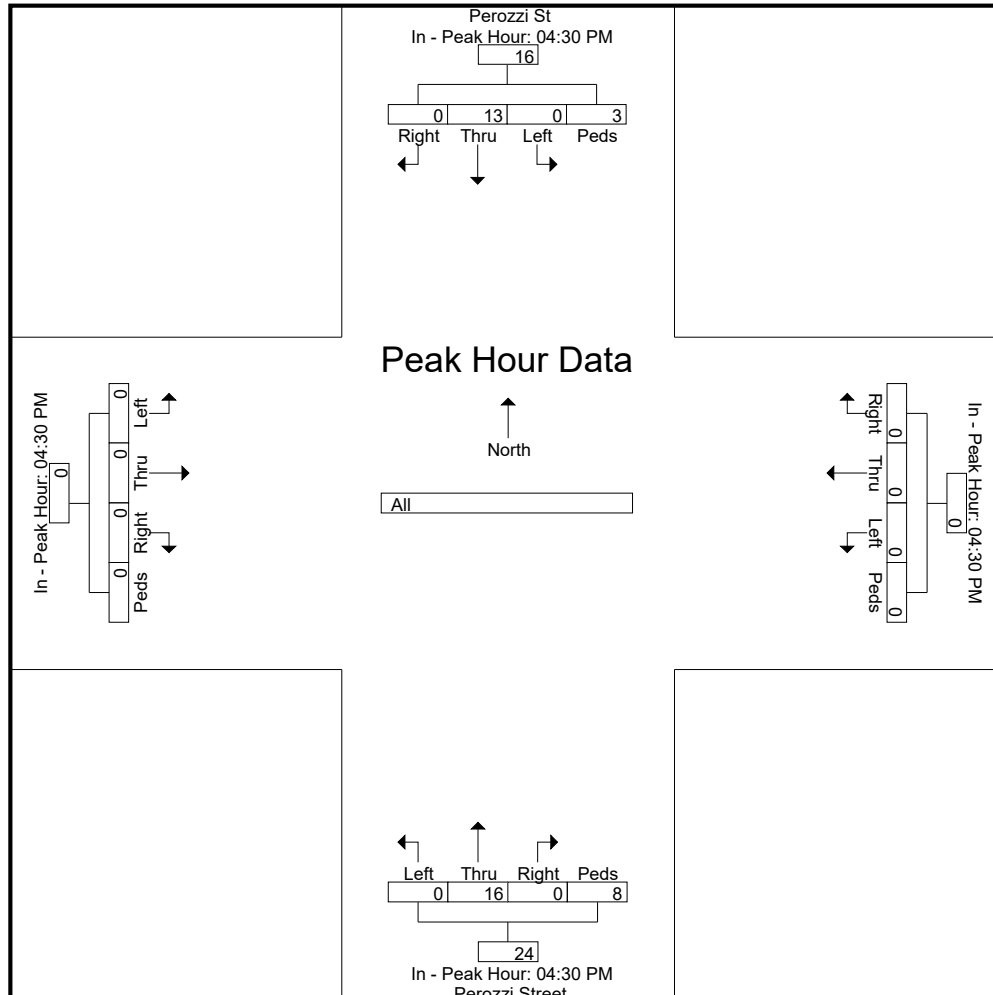
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North-South: Perozzi Street
 East-West: NA
 Weather: Clear, 90 deg
 Vehicle: All Vehicles

File Name : Ashland Dog Park_NevadaSt_2021
 Site Code : 00000005
 Start Date : 6/23/2021
 Page No : 3

	Perozzi St From North					From East					Perozzi Street From South					From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	04:30 PM					04:30 PM					04:30 PM					04:30 PM					
+0 mins.	0	4	0	0	4	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0
+15 mins.	0	0	0	2	2	0	0	0	0	0	0	4	0	2	6	0	0	0	0	0	0
+30 mins.	0	4	0	1	5	0	0	0	0	0	0	3	0	2	5	0	0	0	0	0	0
+45 mins.	0	5	0	0	5	0	0	0	0	0	0	4	0	4	8	0	0	0	0	0	0
Total Volume	0	13	0	3	16	0	0	0	0	0	0	16	0	8	24	0	0	0	0	0	0
% App. Total	0	81.2	0	18.8		0	0	0	0	0	0	66.7	0	33.3		0	0	0	0	0	0
PHF	.000	.650	.000	.375	.800	.000	.000	.000	.000	.000	.000	.800	.000	.500	.750	.000	.000	.000	.000	.000	.000



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North-South: Community Garden Center
 East-West: Hersey Street
 Weather: Clear, 90 deg
 Vehicle: All Vehicles

File Name : Community Garden_HerseySt_2021
 Site Code : 00000005
 Start Date : 6/24/2021
 Page No : 1

Groups Printed- All

	Community Garden OUT From North					Hersey St From East					INBOUND From South					Hersey St From West					
Start Time	Left	Thru	Right	Ped	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
07:45 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
Total	0	0	0	1	1	0	0	0	0	0	0	1	0	1	2	0	0	0	0	0	3
08:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	2	4	0	0	0	0	0	4
Total	0	1	0	0	1	0	0	0	0	0	0	2	0	3	5	0	0	0	0	0	6
Grand Total	0	1	0	1	2	0	0	0	0	0	0	3	0	4	7	0	0	0	0	0	9
Apprch %	0	50	0	50		0	0	0	0		0	42.9	0	57.1		0	0	0	0		
Total %	0	11.1	0	11.1	22.2	0	0	0	0	0	0	33.3	0	44.4	77.8	0	0	0	0	0	

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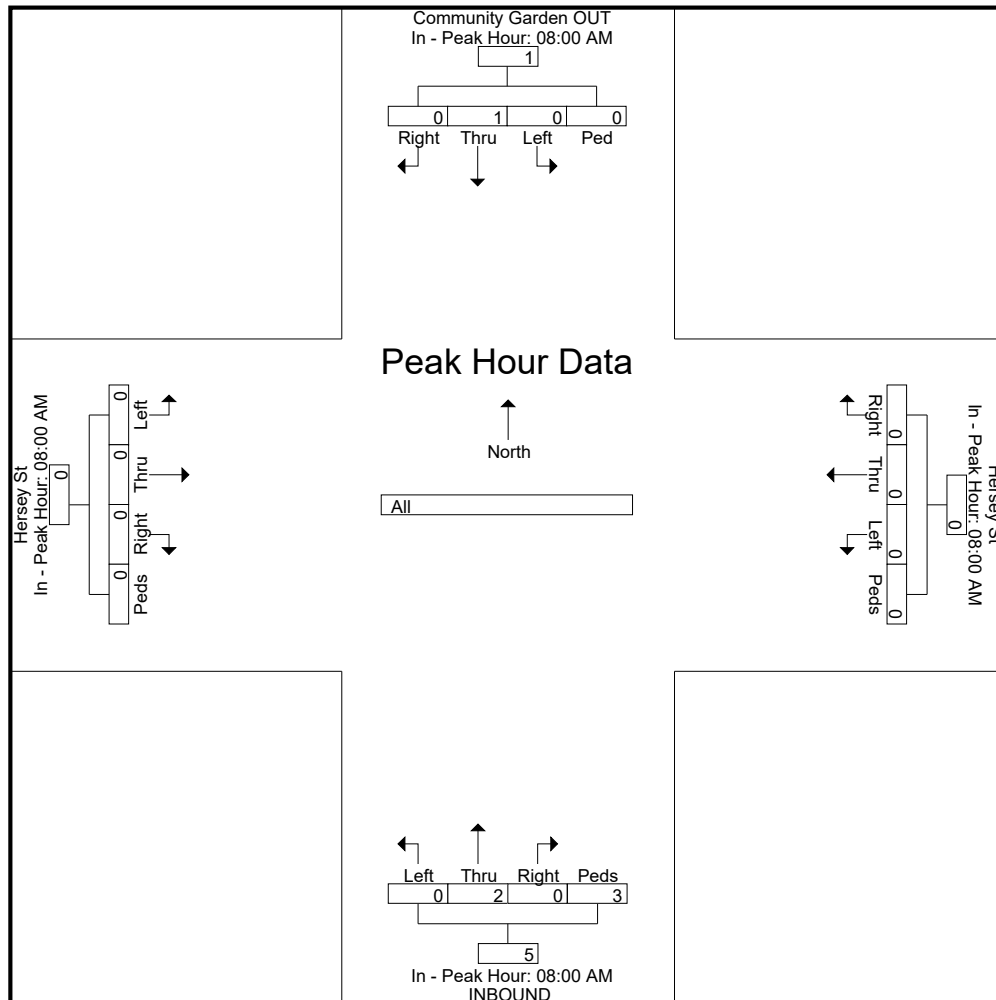
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North-South: Community Garden Center
 East-West: Hersey Street
 Weather: Clear, 90 deg
 Vehicle: All Vehicles

File Name : Community Garden_HerseySt_2021
 Site Code : 00000005
 Start Date : 6/24/2021
 Page No : 2

	Community Garden OUT From North					Hersey St From East					INBOUND From South					Hersey St From West					
Start Time	Left	Thru	Right	Ped	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	08:00 AM					08:00 AM					08:00 AM					08:00 AM					
+0 mins.	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	2	0	2	4	0	0	0	0	0	0
Total Volume	0	1	0	0	1	0	0	0	0	0	0	2	0	3	5	0	0	0	0	0	0
% App. Total	0	100	0	0		0	0	0	0		0	40	0	60		0	0	0	0		
PHF	.000	.250	.000	.000	.250	.000	.000	.000	.000	.000	.000	.250	.000	.375	.313	.000	.000	.000	.000	.000	.000



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North-South: Community Garden Center
 East-West: Hersey Street
 Weather: Clear, 90 deg
 Vehicle: All Vehicles

File Name : Community Garden_HerseySt_PM
 Site Code : 00000005
 Start Date : 6/24/2021
 Page No : 1

Groups Printed- All

	Community Garden OUT From North					Hersey St From East					INBOUND From South					Hersey St From West					
Start Time	Left	Thru	Right	Ped	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

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TRANSPORTATION ENGINEERING

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North-South: Community Garden Center
 East-West: Hersey Street
 Weather: Clear, 90 deg
 Vehicle: All Vehicles

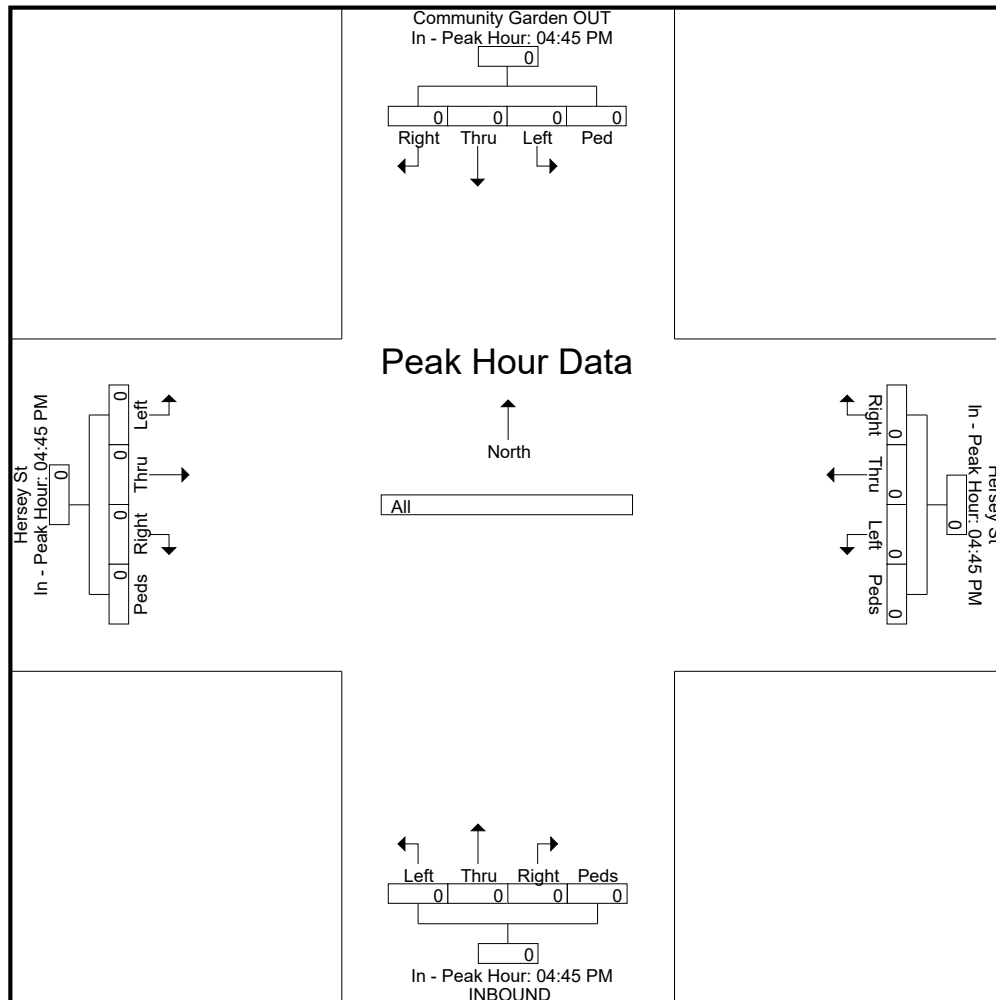
File Name : Community Garden_HerseySt_PM
 Site Code : 00000005
 Start Date : 6/24/2021
 Page No : 2

	Community Garden OUT From North					Hersey St From East					INBOUND From South					Hersey St From West					
Start Time	Left	Thru	Right	Ped	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total

Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM					04:45 PM					04:45 PM					04:45 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000



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Appendix C

Year 2023 No-Build
Synchro and SimTraffic Output

Intersection						
Int Delay, s/veh	1.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	417	79	9	268	63	11
Future Vol, veh/h	417	79	9	268	63	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	- None		- None		- None	
Storage Length	-	-	-	-	0	-
Veh in Median Storage	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	2	0	0	2	8	18
Mvmt Flow	509	96	11	327	77	13

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	605
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.1
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.2
Pot Cap-1 Maneuver	-	-	983
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	983
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	21
HCM LOS			C

Minor Lane/Major Mvm	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	314	-	-	983	-
HCM Lane V/C Ratio	0.287	-	-	0.011	-
HCM Control Delay (s)	21	-	-	8.7	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1.2	-	-	0	-

Intersection						
Int Delay, s/veh	1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W	R	T	R	T	T
Traffic Vol, veh/h	5	6	70	2	8	80
Future Vol, veh/h	5	6	70	2	8	80
Conflicting Peds, #/hr	0	3	0	3	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	- None		- None		- None	
Storage Length	0	-	-	-	-	-
Veh in Median Storage	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	0	0	11	0	0	3
Mvmt Flow	6	8	89	3	10	101

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	215	97	0	0	95	0
Stage 1	94	-	-	-	-	-
Stage 2	121	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	778	965	-	-	1512	-
Stage 1	935	-	-	-	-	-
Stage 2	909	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	771	960	-	-	1508	-
Mov Cap-2 Maneuver	771	-	-	-	-	-
Stage 1	933	-	-	-	-	-
Stage 2	903	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.2	0	0.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	864	1508	-
HCM Lane V/C Ratio	-	-	0.016	0.007	-
HCM Control Delay (s)	-	-	9.2	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection						
Int Delay, s/veh	3.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↑	
Traffic Vol, veh/h	148	268	8	116	158	15
Future Vol, veh/h	148	268	8	116	158	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	- None		- None		- None	
Storage Length	-	-	-	-	0	-
Veh in Median Storage	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	3	2	0	4	2	7
Mvmt Flow	170	308	9	133	182	17

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	478
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.1
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.2
Pot Cap-1 Maneuver	-	-	1095
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	1095
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	15.1
HCM LOS			C

Minor Lane/Major Mvm	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	554	-	-	1095	-
HCM Lane V/C Ratio	0.359	-	-	0.008	-
HCM Control Delay (s)	15.1	-	-	8.3	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1.6	-	-	0	-

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	2:55	2:55	2:55	2:55	2:55	2:55
End Time	3:25	3:25	3:25	3:25	3:25	3:25
Total Time (min)	30	30	30	30	30	30
Time Recorded (min)	25	25	25	25	25	25
# of Intervals	3	3	3	3	3	3
# of Recorded Intervals	2	2	2	2	2	2
Vehs Entered	393	382	406	402	404	397
Vehs Exited	392	387	418	399	410	402
Starting Vehs	13	19	26	22	26	20
Ending Vehs	14	14	14	25	20	17
Travel Distance (mi)	204	196	213	201	208	204
Travel Time (hr)	7.6	7.2	8.0	7.5	7.7	7.6
Total Delay (hr)	0.6	0.6	0.7	0.6	0.6	0.6
Total Stops	118	109	125	109	119	118
Fuel Used (gal)	6.5	6.3	6.8	6.5	6.7	6.6

Interval #0 Information Seeding

Start Time	2:55
End Time	3:00
Total Time (min)	5
Volumes adjusted by PHF, Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	3:00
End Time	3:10
Total Time (min)	10
Volumes adjusted by PHF, Growth Factors.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	174	180	187	177	176	179
Vehs Exited	164	174	198	181	185	180
Starting Vehs	13	19	26	22	26	20
Ending Vehs	23	25	15	18	17	20
Travel Distance (mi)	85	89	99	87	92	91
Travel Time (hr)	3.2	3.4	3.8	3.3	3.5	3.4
Total Delay (hr)	0.3	0.4	0.4	0.3	0.3	0.3
Total Stops	40	62	68	48	56	53
Fuel Used (gal)	2.7	2.9	3.2	2.9	3.0	2.9

Interval #2 Information Recording

Start Time 3:10

End Time 3:25

Total Time (min) 15

Volumes adjusted by Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	219	202	219	225	228	217
Vehs Exited	228	213	220	218	225	221
Starting Vehs	23	25	15	18	17	20
Ending Vehs	14	14	14	25	20	17
Travel Distance (mi)	119	107	114	114	116	114
Travel Time (hr)	4.5	3.8	4.2	4.2	4.2	4.2
Total Delay (hr)	0.3	0.3	0.3	0.3	0.3	0.3
Total Stops	78	47	57	61	63	61
Fuel Used (gal)	3.9	3.3	3.6	3.7	3.7	3.6

Intersection: 1: Clay St & E Main St

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	33	79
Average Queue (ft)	5	37
95th Queue (ft)	24	72
Link Distance (ft)	289	700
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 2: Clay St & Abbott Ave

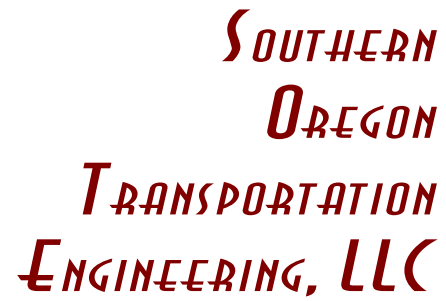
Movement	WB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	7
95th Queue (ft)	28
Link Distance (ft)	288
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 3: Tolman Creek & E Main St

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	21	83
Average Queue (ft)	3	52
95th Queue (ft)	19	81
Link Distance (ft)	602	735
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 0



Appendix D

Design Year 2024 No-Build Synchro and SimTraffic Output

Intersection						
Int Delay, s/veh	2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↑	
Traffic Vol, veh/h	425	81	9	273	64	11
Future Vol, veh/h	425	81	9	273	64	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	- None		- None		- None	
Storage Length	-	-	-	-	0	-
Veh in Median Storage	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	2	0	0	2	8	18
Mvmt Flow	518	99	11	333	78	13
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	617	0	923	568
Stage 1	-	-	-	-	568	-
Stage 2	-	-	-	-	355	-
Critical Hdwy	-	-	4.1	-	6.48	6.38
Critical Hdwy Stg 1	-	-	-	-	5.48	-
Critical Hdwy Stg 2	-	-	-	-	5.48	-
Follow-up Hdwy	-	-	2.2	-3.57	23.46	2
Pot Cap-1 Maneuver	-	-	973	-	292	493
Stage 1	-	-	-	-	555	-
Stage 2	-	-	-	-	697	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	973	-	288	493
Mov Cap-2 Maneuver	-	-	-	-	288	-
Stage 1	-	-	-	-	555	-
Stage 2	-	-	-	-	687	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0.3		21.6		
HCM LOS	C					
Minor Lane/Major Mvm	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	307	-	-	973	-	
HCM Lane V/C Ratio	0.298	-	-	0.011	-	
HCM Control Delay (s)	21.6	-	-	8.7	0	
HCM Lane LOS	C	-	-	A	A	
HCM 95th %tile Q(veh)	1.2	-	-	0	-	

Intersection						
Int Delay, s/veh	1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W	R	T	R	T	T
Traffic Vol, veh/h	5	7	71	2	8	82
Future Vol, veh/h	5	7	71	2	8	82
Conflicting Peds, #/hr	0	3	0	3	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	0	0	11	0	0	3
Mvmt Flow	6	9	90	3	10	104

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	219	98	0	0	96	0
Stage 1	95	-	-	-	-	-
Stage 2	124	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	774	963	-	-	1510	-
Stage 1	934	-	-	-	-	-
Stage 2	907	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	767	958	-	-	1506	-
Mov Cap-2 Maneuver	767	-	-	-	-	-
Stage 1	932	-	-	-	-	-
Stage 2	901	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.2	0	0.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	868	1506	-
HCM Lane V/C Ratio	-	-	0.017	0.007	-
HCM Control Delay (s)	-	-	9.2	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection						
Int Delay, s/veh	3.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↱			↰	↰	
Traffic Vol, veh/h	150	273	8	119	162	15
Future Vol, veh/h	150	273	8	119	162	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	- None		- None		- None	
Storage Length	-	-	-	-	0	-
Veh in Median Storage	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	3	2	0	4	2	7
Mvmt Flow	172	314	9	137	186	17
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	486	0	484	329
Stage 1	-	-	-	-	329	-
Stage 2	-	-	-	-	155	-
Critical Hdwy	-	-	4.1	-	6.42	6.27
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.2	-	3.518	3.363
Pot Cap-1 Maneuver	-	-	1087	-	542	701
Stage 1	-	-	-	-	729	-
Stage 2	-	-	-	-	873	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1087	-	537	701
Mov Cap-2 Maneuver	-	-	-	-	537	-
Stage 1	-	-	-	-	729	-
Stage 2	-	-	-	-	865	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.5		15.4	
HCM LOS	C					
Minor Lane/Major Mvm	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	548	-	-	1087	-	
HCM Lane V/C Ratio	0.371	-	-	0.008	-	
HCM Control Delay (s)	15.4	-	-	8.3	0	
HCM Lane LOS	C	-	-	A	A	
HCM 95th %tile Q(veh)	1.7	-	-	0	-	

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	2:55	2:55	2:55	2:55	2:55	2:55
End Time	3:25	3:25	3:25	3:25	3:25	3:25
Total Time (min)	30	30	30	30	30	30
Time Recorded (min)	25	25	25	25	25	25
# of Intervals	3	3	3	3	3	3
# of Recorded Intervals	2	2	2	2	2	2
Vehs Entered	366	421	430	392	410	404
Vehs Exited	370	420	437	405	412	407
Starting Vehs	20	19	24	24	21	18
Ending Vehs	16	20	17	11	19	16
Travel Distance (mi)	188	216	221	209	209	209
Travel Time (hr)	7.0	8.2	8.5	7.8	7.8	7.9
Total Delay (hr)	0.6	0.8	0.9	0.7	0.7	0.7
Total Stops	111	129	140	132	120	124
Fuel Used (gal)	6.0	7.1	7.1	6.8	6.8	6.7

Interval #0 Information Seeding

Start Time	2:55
End Time	3:00
Total Time (min)	5
Volumes adjusted by PHF, Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	3:00
End Time	3:10
Total Time (min)	10
Volumes adjusted by PHF, Growth Factors.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	154	185	197	172	195	180
Vehs Exited	154	186	203	173	191	182
Starting Vehs	20	19	24	24	21	18
Ending Vehs	20	18	18	23	25	22
Travel Distance (mi)	77	91	103	88	95	91
Travel Time (hr)	2.9	3.5	4.0	3.4	3.5	3.5
Total Delay (hr)	0.2	0.4	0.5	0.3	0.4	0.4
Total Stops	49	53	68	61	49	55
Fuel Used (gal)	2.5	3.0	3.3	2.9	3.1	2.9

Interval #2 Information Recording

Start Time 3:10

End Time 3:25

Total Time (min) 15

Volumes adjusted by Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	212	236	233	220	215	222
Vehs Exited	216	234	234	232	221	227
Starting Vehs	20	18	18	23	25	22
Ending Vehs	16	20	17	11	19	16
Travel Distance (mi)	111	124	118	121	114	118
Travel Time (hr)	4.1	4.7	4.4	4.5	4.3	4.4
Total Delay (hr)	0.4	0.4	0.3	0.4	0.3	0.4
Total Stops	62	76	72	71	71	69
Fuel Used (gal)	3.5	4.1	3.8	3.9	3.7	3.8

Intersection: 1: Clay St & E Main St

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	9	22	72
Average Queue (ft)	1	4	40
95th Queue (ft)	7	21	78
Link Distance (ft)	841	289	700
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Clay St & Abbott Ave

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	31	10
Average Queue (ft)	14	1
95th Queue (ft)	39	12
Link Distance (ft)	288	700
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 3: Tolman Creek & E Main St

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	4	28	89
Average Queue (ft)	0	4	55
95th Queue (ft)	5	21	86
Link Distance (ft)	494	602	735
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Zone Summary

Zone wide Queuing Penalty: 0

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Appendix E

Design Year 2024 Build
Synchro and SimTraffic Output

Intersection						
Int Delay, s/veh	2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↑	↑
Traffic Vol, veh/h	438	81	9	284	64	11
Future Vol, veh/h	438	81	9	284	64	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	- None		- None		- None	
Storage Length	-	-	-	-	0	-
Veh in Median Storage	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	2	0	0	2	8	18
Mvmt Flow	534	99	11	346	78	13

Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	633	0	952	584
Stage 1	-	-	-	-	584	-
Stage 2	-	-	-	-	368	-
Critical Hdwy	-	-	4.1	-	6.48	6.38
Critical Hdwy Stg 1	-	-	-	-	5.48	-
Critical Hdwy Stg 2	-	-	-	-	5.48	-
Follow-up Hdwy	-	-	2.2	-3.57	23.46	2
Pot Cap-1 Maneuver	-	-	960	-	281	483
Stage 1	-	-	-	-	546	-
Stage 2	-	-	-	-	687	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	960	-	277	483
Mov Cap-2 Maneuver	-	-	-	-	277	-
Stage 1	-	-	-	-	546	-
Stage 2	-	-	-	-	677	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	22.6
HCM LOS			C

Minor Lane/Major Mvm	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	295	-	-	960	-
HCM Lane V/C Ratio	0.31	-	-	0.011	-
HCM Control Delay (s)	22.6	-	-	8.8	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1.3	-	-	0	-

Intersection						
Int Delay, s/veh	1.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W	R	T	R	T	T
Traffic Vol, veh/h	10	7	71	8	8	82
Future Vol, veh/h	10	7	71	8	8	82
Conflicting Peds, #/hr	0	3	0	6	6	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	- None		- None		- None	
Storage Length	0	-	-	-	-	-
Veh in Median Storage	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	0	0	11	0	0	3
Mvmt Flow	13	9	90	10	10	104

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	225	104	0	0	106	0
Stage 1	101	-	-	-	-	-
Stage 2	124	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	768	956	-	-	1498	-
Stage 1	928	-	-	-	-	-
Stage 2	907	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	759	949	-	-	1491	-
Mov Cap-2 Maneuver	759	-	-	-	-	-
Stage 1	923	-	-	-	-	-
Stage 2	901	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.5	0	0.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	827	1491	-
HCM Lane V/C Ratio	-	-	0.026	0.007	-
HCM Control Delay (s)	-	-	9.5	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection						
Int Delay, s/veh	3.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↱			↰		↰
Traffic Vol, veh/h	151	275	8	120	164	15
Future Vol, veh/h	151	275	8	120	164	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	- None		- None		- None	
Storage Length	-	-	-	-	0	-
Veh in Median Storage	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	3	2	0	4	2	7
Mvmt Flow	174	316	9	138	189	17
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	490	0	488	332
Stage 1	-	-	-	-	332	-
Stage 2	-	-	-	-	156	-
Critical Hdwy	-	-	4.1	-	6.42	6.27
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.2	-	3.518	3.363
Pot Cap-1 Maneuver	-	-	1084	-	539	698
Stage 1	-	-	-	-	727	-
Stage 2	-	-	-	-	872	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1084	-	534	698
Mov Cap-2 Maneuver	-	-	-	-	534	-
Stage 1	-	-	-	-	727	-
Stage 2	-	-	-	-	864	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.5		15.6	
HCM LOS	C					
Minor Lane/Major Mvm	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	545	-	-	1084	-	
HCM Lane V/C Ratio	0.378	-	-	0.008	-	
HCM Control Delay (s)	15.6	-	-	8.3	0	
HCM Lane LOS	C	-	-	A	A	
HCM 95th %tile Q(veh)	1.7	-	-	0	-	

Intersection						
Int Delay, s/veh	0.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↱ ↻ ↻ ↻ ↻ ↻					
Traffic Vol, veh/h	436	13	3	282	11	3
Future Vol, veh/h	436	13	3	282	11	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	- None		- None		- None	
Storage Length	-	-	-	-	0	-
Veh in Median Storage	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	2	0	0	2	0	0
Mvmt Flow	532	16	4	344	13	4
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	548	0	892	540
Stage 1	-	-	-	-	540	-
Stage 2	-	-	-	-	352	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1032	-	315	546
Stage 1	-	-	-	-	588	-
Stage 2	-	-	-	-	716	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1032	-	313	546
Mov Cap-2 Maneuver	-	-	-	-	313	-
Stage 1	-	-	-	-	588	-
Stage 2	-	-	-	-	712	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.1		16	
HCM LOS					C	
Minor Lane/Major Mvm	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	345	-	-	1032	-	
HCM Lane V/C Ratio	0.049	-	-	0.004	-	
HCM Control Delay (s)	16	-	-	8.5	0	
HCM Lane LOS	C	-	-	A	A	
HCM 95th %tile Q(veh)	0.2	-	-	0	-	

Intersection												
Int Delay, s/veh	2.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	10	0	0	12	1	0	0	0	1	0	5
Future Vol, veh/h	6	10	0	0	12	1	0	0	0	1	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	- None		-	- None		-	- None		-	- None	
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	-	0	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	8	13	0	0	15	1	0	0	0	1	0	6

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	16	0	0	13	0	0	50	45	15	47	45	18
Stage 1	-	-	-	-	-	-	29	29	-	16	16	-
Stage 2	-	-	-	-	-	-	21	16	-	31	29	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1615	-	-	1619	-	-	955	851	1070	959	851	1066
Stage 1	-	-	-	-	-	-	993	875	-	1009	886	-
Stage 2	-	-	-	-	-	-	1003	886	-	991	875	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1615	-	-	1619	-	-	944	847	1068	954	847	1064
Mov Cap-2 Maneuver	-	-	-	-	-	-	944	847	-	954	847	-
Stage 1	-	-	-	-	-	-	988	871	-	1004	886	-
Stage 2	-	-	-	-	-	-	995	886	-	984	871	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.7	0	0	8.5
HCM LOS			A	A

Minor Lane/Major Mvm	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1615	-	-	1619	-	-	1044
HCM Lane V/C Ratio	-	0.005	-	-	-	-	-	0.007
HCM Control Delay (s)	0	7.2	0	-	0	-	-	8.5
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	0

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	2:55	2:55	2:55	2:55	2:55	2:55
End Time	3:25	3:25	3:25	3:25	3:25	3:25
Total Time (min)	30	30	30	30	30	30
Time Recorded (min)	25	25	25	25	25	25
# of Intervals	3	3	3	3	3	3
# of Recorded Intervals	2	2	2	2	2	2
Vehs Entered	388	399	428	400	404	402
Vehs Exited	393	404	428	397	399	403
Starting Vehs	23	22	15	14	15	17
Ending Vehs	18	17	15	17	20	17
Travel Distance (mi)	195	202	219	197	205	204
Travel Time (hr)	7.3	7.5	8.2	7.4	7.8	7.7
Total Delay (hr)	0.7	0.7	0.8	0.7	0.8	0.7
Total Stops	121	125	133	125	137	130
Fuel Used (gal)	6.4	6.5	7.1	6.4	6.8	6.6

Interval #0 Information Seeding

Start Time	2:55
End Time	3:00
Total Time (min)	5
Volumes adjusted by PHF, Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	3:00
End Time	3:10
Total Time (min)	10
Volumes adjusted by PHF, Growth Factors.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	187	186	196	174	180	183
Vehs Exited	196	191	191	171	176	185
Starting Vehs	23	22	15	14	15	17
Ending Vehs	14	17	20	17	19	16
Travel Distance (mi)	94	95	96	86	89	92
Travel Time (hr)	3.6	3.6	3.7	3.2	3.4	3.5
Total Delay (hr)	0.4	0.4	0.4	0.3	0.4	0.4
Total Stops	56	58	61	46	62	56
Fuel Used (gal)	3.0	3.1	3.2	2.8	3.0	3.0

Interval #2 Information Recording

Start Time 3:10

End Time 3:25

Total Time (min) 15

Volumes adjusted by Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	201	213	232	226	224	220
Vehs Exited	197	213	237	226	223	219
Starting Vehs	14	17	20	17	19	16
Ending Vehs	18	17	15	17	20	17
Travel Distance (mi)	102	107	123	111	116	112
Travel Time (hr)	3.8	4.0	4.6	4.2	4.4	4.2
Total Delay (hr)	0.3	0.3	0.4	0.4	0.4	0.4
Total Stops	65	67	72	79	75	70
Fuel Used (gal)	3.3	3.4	4.0	3.6	3.8	3.6

Intersection: 1: Clay St & E Main St

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	64	75
Average Queue (ft)	8	39
95th Queue (ft)	43	74
Link Distance (ft)	289	700
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 2: Clay St & Abbott Ave

Movement	WB
Directions Served	LR
Maximum Queue (ft)	35
Average Queue (ft)	11
95th Queue (ft)	36
Link Distance (ft)	288
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 3: Tolman Creek & E Main St

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	32	106
Average Queue (ft)	5	56
95th Queue (ft)	23	95
Link Distance (ft)	602	735
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 4: Site & E Main St

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	11	40
Average Queue (ft)	1	15
95th Queue (ft)	9	42
Link Distance (ft)	494	221
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: Engle St/Site & Abbott Ave

Movement	SB
Directions Served	LTR
Maximum Queue (ft)	24
Average Queue (ft)	3
95th Queue (ft)	18
Link Distance (ft)	122
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 0

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OREGON
TRANSPORTATION
ENGINEERING, LLC*

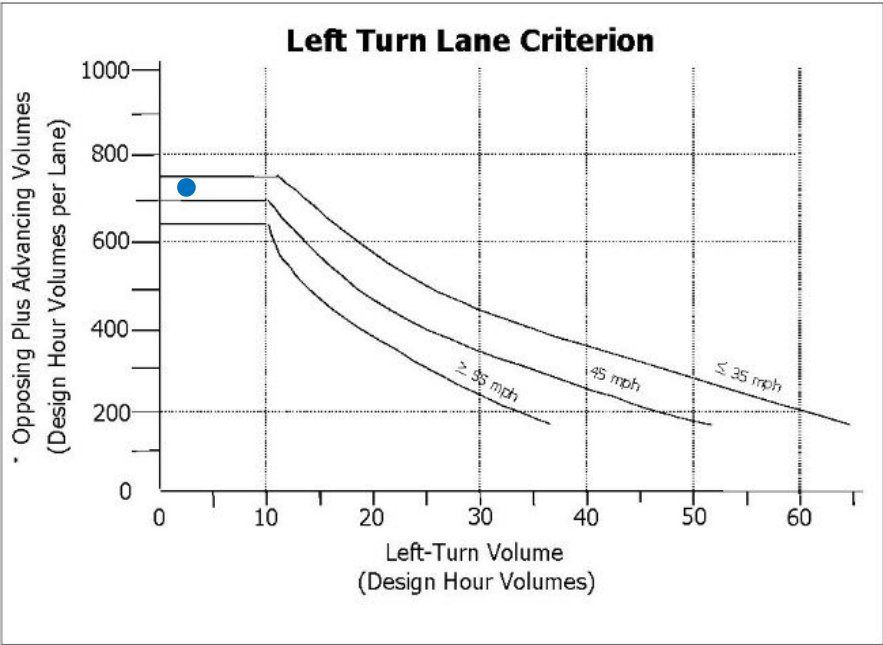
Appendix F

Turn Lane Graphs

East Main Street / Site Access

Exhibit 7-1 Left Turn Lane Criterion (TTI)

Year 2024 Build, PM Peak Hour



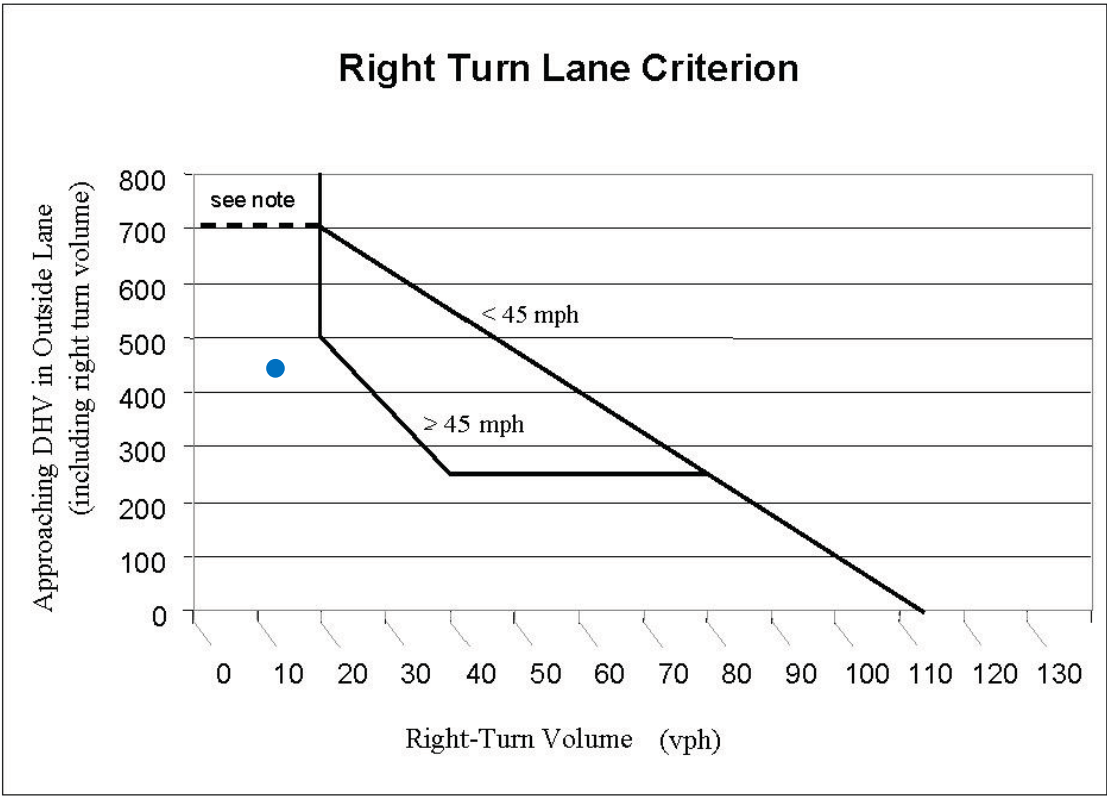
*(Advancing Volume/Number of Advancing Through Lanes) + (Opposing Volume/Number of Opposing Through Lanes)

PM Peak Hour ●
X = 3 VPH
Y = 734 VPH
Criterion: Not Met

East Main Street / Site Access

Exhibit 7-2 Right Turn Lane Criterion

Year 2024 Build, PM Peak Hour



Note: If there is no right turn lane, a shoulder needs to be provided. If this intersection is in a rural area and is a connection to a public street, a right turn lane is needed.

PM Peak Hour ●
X = 13 VPH
Y = 449 VPH
Criterion: Not Met

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ENGINEERING, LLC*

Appendix G

Agency Requirements

City of Ashland TIA Requirement

TIA (Transportation Impact Analysis) – All land use actions that either propose direct or indirect access to a State highway or a boulevard will need to provide the City of Ashland with the information outlined below. The governing jurisdiction will then inform ODOT of the intended land use action and provide pertinent review material. These guidelines are intended to ensure that developments do not negatively impact the operation and/or safety of the roadway.

- A. Applicants must submit a preliminary site plan for review to the City of Ashland, prior to the pre-application conference. At a minimum, the site plan shall illustrate:
 1. The location of existing access point(s) on both sides of the road within 500 feet in each direction for Category 4 segments or 5 lane boulevards, and 300 feet for Category 5 segments and 3 lane arterials;
 2. Distances to neighboring constructed public access points, median openings, traffic signals, intersections, and other transportation features on both sides of the property (this should include the section of roadway between the nearest upstream and downstream collector);
 3. Number and direction of site access driveway lanes to be constructed, as well as an internal signing and striping plan;
 4. All planned transportation features on the State highway/boulevard (such as auxiliary lanes, signals, etc.);
 5. Trip generation data or appropriate traffic studies (See the following section for the state's traffic impact study requirement thresholds.);
 6. Parking and internal circulation plan;
 7. Plat map showing property lines, right of way, and ownership of abutting properties;
 8. A detailed description and justification of any requested access variances;
- B. Proposed land use actions, new developments, and/or redevelopment accessing a State highway/boulevard, directly or indirectly (via collector or local streets), will need to provide traffic impact studies to the respective local reviewing jurisdiction(s) and ODOT, if the proposed land use meets one or more of the following traffic impact study thresholds. A traffic impact study will not be required of a development that does not exceed the stated thresholds.
 1. **Trip Generation Threshold:** 50 newly generated vehicle trips (inbound and outbound) during the adjacent street peak hour;
 2. **Mitigation Threshold:** Installation of any traffic control device and/or construction of any geometric improvements that will affect the progression or operation of traffic traveling on, entering, or exiting the highway;
 3. **Heavy Vehicle Trip Generation Threshold:** 20 newly generated heavy vehicle trips (inbound and outbound) during the day;
 4. All traffic impact studies will need to be prepared by a registered professional engineer in accordance with ODOT's development review guidelines.

C. Traffic Impact Study Requirements

1. The following is a summary of the Oregon State Highway minimum requirements for a traffic report. ODOT views the following requirements as the minimum considerations to be dealt with by Professional Traffic Engineering Consultants in their analysis of traffic impacts resulting from new developments adjacent to State highways.
2. The analysis shall include alternates other than what the developer originally submits as a proposal for access to state highways, city streets, and county roads.
3. The analysis of alternate access proposals shall include:
 - (a) Existing daily and appropriate design peak hour counts by traffic movements, at intersections which would be affected by traffic generated by the development (use traffic flow diagrams).
 - (b) Projected daily and appropriate design peak hour volumes for these same intersections, and at the proposed access points after completion of the development. If the development is to be constructed in phases, projected traffic volumes at the completion of each phase should be determined.
 - (c) Trip Generation shall be calculated using the Institute of Transportation Engineers' manual "TRIP GENERATION 5th Edition" or other, more current, and/or applicable information.
 - (d) A determination of the need for a traffic signal based on warrants in the "Manual on Uniform Traffic Control Devices."
4. The recommendations made in the report should be specific and shall be based on a minimum level of service "D" when the development is in full service. As an example, if a traffic signal is recommended, the recommendations should include the type of traffic signal control and what movements should be signalized. If a storage lane for right turns or left turns is needed, the recommendations should include the amount of storage needed. If several intersections are involved for signalization, and an interconnect system is considered, specific analysis should be made concerning progression of traffic between intersections.
5. The internal circulation of parking lots must be analyzed to the extent that it can be determined whether the points of access will operate properly.
6. The report shall include an analysis of the impacts to neighboring driveway access points and adjacent streets affected by the proposed new development driveways.
7. The report should include a discussion of bike and pedestrian usage and the availability of mass transit to serve the development.

Karl Johnson, E.I.T.
Assistant Engineer
City of Ashland

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f. (541) 488-6006
e. johnsonk@ashland.or.us

Mike Kuntz <KuntzM@jacksoncounty.org>

Thu, Oct 14,
2021,
3:38 PM

to me

Kim,

I find this proposed trip distribution to be acceptable.

Mike

From: Kim Parducci <kim.parducci@gmail.com>

Sent: Thursday, October 14, 2021 3:05 PM

To: Mike Kuntz <KuntzM@jacksoncounty.org>

Subject: EXT: Rev Figure 5

Hi Mike,

See attached revised Figure 5. I changed the site distribution to a 30/70 split between driveways and then I also changed the distribution at Abbott / Clay to reflect traffic coming from and going to the south. Previously, I distributed according to the existing splits there but I agree that it makes more sense to assume those trips are all coming from and going to the south.

Let me know if this looks more accurate to you.

Thanks.

Kim

Kim Parducci <kim.parducci@gmail.com>

Thu, Oct 14,
2021,
12:47 PM

to Mike

Hi Mike,

Attached are trip distributions for the East Main Park. I've included the counts too so you can see how we determined splits. I looked at the splits at both Clay / Main and Tolman Creek / Main. The Clay St / Main St distributions seemed more applicable to the site so those are what I used.

My first assumption was that 80% of trips would use the East Main access and 20% the Abbott access. Then, at the East Main access I assumed the same splits from Clay, which resulted in 92% from the west and 8% from the east (of 80%), 82% to the west and 18% to the east (of 80%). At the Abbott access I assumed 1 trip to/from the east and the rest to/from the west (of 20%) because the site is much closer to Clay Street than Tolman Creek but I was thinking that the 1 trip to/from the west could be within the subdivision maybe. If you think any of these assumptions should be changed I'm open to that. Traffic volumes on Clay Street were 15-20% of traffic volumes on East Main, which is how I arrived at the initial 20/80 split between access points.

Thanks. You can look at Figure 3 (Year 2021 NB) and see that I adjusted the traffic volumes at both Clay / Abbott and Tolman Creek / Main because we counted all three intersections in July and then I counted Clay / Main again in October with school in session. This area has higher traffic when school is in session so I had to increase traffic to balance with our October count at Clay / Main.

Kim

--

KIMBERLY PARDUCCI, PE PTOE

SOUTHERNOREGON TRANSPORTATION ENGINEERING

Medford, Oregon 97504 | (541) 941-4148 Cell

Kim.parducci@gmail.com | Oregon DBE/WBE/ESB Certified: No. 5726

Mike Kuntz <KuntzM@jacksoncounty.org>

Tue, Oct 5,
2021,
1:08 PM

to Tara, Piper, me, Michael, James

Tara,

Now that you mention it, James Philp, who stood in for me at the original meeting would like to join us. I forwarded the Doodle Poll to him.

Mike

From: Tara Kiewel <tara.kiewel@ashland.or.us>

Sent: Tuesday, October 5, 2021 1:04 PM

To: Mike Kuntz <KuntzM@jacksoncounty.org>; Piper von Chamier <piper@terrainarch.com>; Kim Parducci <kim.parducci@gmail.com>
Cc: Michael Black <michael.black@ashland.or.us>
Subject: EXT: Re: Ashland East Main Park - Traffic

Hi Mike,

Yes, Scott shared your concerns with us. Please let me know if there is anyone else you would like to have attend this meeting.

Tara

Tara Kiewel

Administrative Analyst
Ashland Parks & Recreation Commission
340 S. Pioneer St., Ashland, OR 97520
Tel: 541-552-2257 Fax 541-488-5314
www.ashlandparksandrec.org

This email transmission is official business of the City of Ashland, and it is subject to Oregon Public Records law for disclosure and retention. If you have received this message in error, please contact me at 541-552-2257. Thank you.

From: Mike Kuntz <KuntzM@jacksoncounty.org>
Sent: Tuesday, October 5, 2021 11:28 AM
To: Tara Kiewel <tara.kiewel@ashland.or.us>; Piper von Chamier <piper@terrainarch.com>; Kim Parducci <kim.parducci@gmail.com>
Cc: Michael Black <michael.black@ashland.or.us>
Subject: RE: Ashland East Main Park - Traffic

[EXTERNAL SENDER]

Tara,

I just completed the Doodle. I presume Scott shared my concerns with you?

Mike

From: Tara Kiewel <tara.kiewel@ashland.or.us>
Sent: Tuesday, October 5, 2021 11:00 AM
To: Piper von Chamier <piper@terrainarch.com>; Kim Parducci <kim.parducci@gmail.com>; Mike Kuntz <KuntzM@jacksoncounty.org>
Cc: Michael Black <michael.black@ashland.or.us>
Subject: EXT: Ashland East Main Park - Traffic

Hi all,

We would like to set up a meeting regarding the County traffic concerns regarding East Main Park. Please let me know availability here https://doodle.com/poll/bgm3ssv5uhfqspgm?utm_source=poll&utm_medium=link

Tara

Tara Kiewel

Administrative Analyst

Ashland Parks & Recreation Commission

340 S. Pioneer St., Ashland, OR 97520

Tel: 541-552-2257 Fax 541-488-5314

www.ashlandparksandrec.org



LETTER OF TRANSMITTAL

PROJECT	EAST MAIN STREET PARK
DATE	MAY 14, 2024
ATTENTION	ASHLAND PLANNING DIVISION
RE:	SITE DESIGN REVIEW & ANNEXATION SUBMITTAL
TRANSMITTAL #	01

CONTENTS

ITEM #	DESCRIPTION
01	• ZONING PERMIT APPLICATION FOR ZONE CHANGE, ANNEXATION & SITE DESIGN REVIEW • PLANNING ACTION FEE ESTIMATE FOR ANNEXATION & SITE DESIGN REVIEW
02	APR ANNEXATION PACKET: • ANNEXATION AGREEMENT • IRREVOCABLE CONSENT TO ANNEXATION, NOTARIZED • FINDINGS OF FACT AND CONCLUSION • ANNEXATION LEGAL DESCRIPTION • ANNEXATION EXHIBIT MAPS • COMPREHENSIVE PLAN SECTION 8 • ¼ MILE RADIUS MAP • PRE-APP CONFERENCE COMMENT SHEET SEPT. 6, 2023
03	APR SITE PLAN REVIEW PACKET: • COMMERCIAL SITE REVIEW VALUATION ESTIMATE • FINDINGS OF FACT AND CONCLUSION • LOCAL TRANSIT ROUTE CONCEPT MAP • WETLAND DELINEATION REPORT DATED 01/22/2020 • TRAFFIC IMPACT ANALYSIS DATED 12/21/2023
04	EAST MAIN PARK SITE PLAN REVIEW DRAWING SET

On behalf of the Ashland Parks Department, we are submitting concurrent applications for Annexation and Site Design Review for the East Main Street Park project. The above documentation is being submitted electronically, as requested by the Planning Department. Please reach out with any questions.

Sincerely,

Erin Gambacorta
erin@terrainarch.com

Terrain Landscape Architecture
541-500-4776

**ANNEXATION AGREEMENT
TO DEPOSIT AN AMOUNT SUFFICIENT TO RETIRE ANY OUTSTANDING
INDEBTEDNESS OF SPECIAL DISTRICTS**

Between

City of Ashland, ~~APRC~~
and

CITY OF ASHLAND

THIS AGREEMENT entered into by and between City of Ashland, ~~APRC~~
hereinafter referred to as "APPLICANT" and the CITY OF ASHLAND, hereinafter referred to
as "CITY",

WITNESSETH:

WHEREAS, pursuant to ORS 222.520(2)(b), the CITY elects to pay the bonds of the
special districts when such property subject to special district indebtedness is annexed by the
CITY.

WHEREAS, Ashland Municipal Code, Sections 4.14.020, 14.08.030(F) and
18.106.020(B), require that an applicant for annexation must agree to deposit an amount
sufficient to retire any outstanding indebtedness of special districts defined in ORS 222.510 as
part of an annexation application.

NOW, THEREFORE, as part of the annexation application for the property described in
APPENDIX "A", APPLICANT agrees to deposit an amount sufficient to retire any outstanding
indebtedness of special district defined in ORS 222.510. In the event that no special district
requests from the CITY an amount to be paid to retire indebtedness within one (1) year from the
date of annexation, the full amount deposited to the CITY shall be returned to the APPLICANT.
In the event that a special district requires an amount less than the amount deposited, the CITY
shall return the remainder to the APPLICANT.

APPLICANT FOR ANNEXATION:

Signed

Date

Philip M. Eldridge
4/23/24

CITY OF ASHLAND:

Signed

Date

AC
4/24/24



IRREVOCABLE CONSENT TO ANNEXATION

The undersigned, referred to in this document as "Owner" whether singular or plural, owns or is the purchaser under a recorded land sale contract of real property in Jackson County, Oregon, described below and referred to in this document as "the property":

See attached Exhibit "A"

In consideration of the application for annexation and subsequent connections from the property to City of Ashland services, Owner declares and agrees that the property shall be held, sold, and conveyed subject to the following covenants, conditions, and restrictions which shall constitute covenants running with the land and shall be binding on all parties, their heirs, successors and assigns, having any right, title, or interest in the property or any part thereof:

Whenever a proposal to annex the property is initiated by the City of Ashland or otherwise, Owner shall consent and does consent to the annexation of the property to the City of Ashland. Owner agrees this consent to annexation is irrevocable.

Dated this 30 day of April, 2024.

Signature: [Signature]

Owner: Sabrina Cotte

State of Oregon)

County of Jackson)

ss:

**CITY OF
ASHLAND**
Community Development Department
20 East Main Street
Ashland, OR 97520

Personally appeared the above named Sabrina Cotte and acknowledged the foregoing instrument to be his voluntary act and deed.

[Signature]
Notary Public for Oregon

My Commission expires: 11/27/27

City of Ashland
20 E. Main Street
Ashland, Oregon 97520
www.ashland.or.us

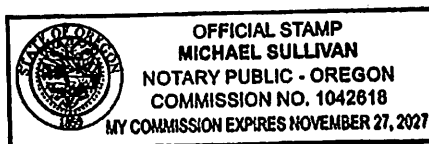


EXHIBIT "A"

Real property in the County of Jackson, State of Oregon, described as follows:

Beginning at a point on the East line of the West half of the Southwest quarter of section 11, township 39 South, range 1 East of the Willamette Meridian, Jackson County, Oregon, which point bears 29.85 chains North of the Southeast corner thereof; thence North along the East line thereof, 630.48 feet to the Southerly line of the East Main Street; thence along said street, North 83° 45' West 138.82 feet to the true point of beginning; thence South, parallel with the East line of the West half of the Southwest quarter of said section, 645.31 feet to the South line of land described in volume 348, page 345, Jackson County, Oregon, deed records; thence North 89° 53' West, along the South line of said premises, 360 feet; thence North parallel to and 150 feet distant from the East line of Clay Street, a distance of 683.90 feet to the Southerly line of East Main Street; thence South 83° 45' East, 362.16 feet to the true point of beginning. Together with that portion of property lying North of the boundary line described in boundary line agreement recorded October 22, 2003 as no. 03-72760, official records, Jackson County, Oregon. Excepting therefrom that portion of property lying South of the boundary line described in boundary line agreement recorded October 22, 2003 as no. 03-72760, official records, Jackson County, Oregon.

PAGE 1 - EXHIBIT A TO STATUTORY WARRANTY DEED

43197-00001;195277.docx

ANNEXATION AGREEMENT
TO DEPOSIT AN AMOUNT SUFFICIENT TO RETIRE ANY OUTSTANDING
INDEBTEDNESS OF SPECIAL DISTRICTS

Between
Mary C. Desmit, Trustee under the Mary C. Desmit Living Trust dated May 14, 2018

and

CITY OF ASHLAND

THIS AGREEMENT entered into by and between Mary C. Desmit, Trustee under the Mary C. Desmit Living Trust Dated May 14, 2018 hereinafter referred to as "APPLICANT" and the CITY OF ASHLAND hereinafter referred to as "CITY",

WITNESSETH:

WHEREAS, pursuant to ORS 222.520(2)(b), the CITY elects to pay the bonds of the special districts when such property subject to special district indebtedness is annexed by the CITY.

WHEREAS, Ashland Municipal Code, Sections 4.14.020, 14.08.030(F) and 18.106.020(B), require that an applicant for annexation must agree to deposit an amount sufficient to retire any outstanding indebtedness of special districts defined in ORS 222.510 as part of an annexation application.

NOW, THEREFORE, as part of the annexation application for the property described in APPENDIX "A", APPLICANT agrees to deposit an amount sufficient to retire any outstanding indebtedness of special district defined in ORS 222.510. In the event that no special district requests from the CITY an amount to be paid to retire indebtedness within one (1) year from the date of annexation, the full amount deposited to the CITY shall be returned to the APPLICANT. In the event that a special district requires an amount less than the amount deposited, the CITY shall return the remainder to the APPLICANT.

APPLICANT FOR ANNEXATION:

Signed



Date

7-14-2023

CITY OF ASHLAND:

Signed

Sabrina Cotta

Date

4/19/2024

IRREVOCABLE CONSENT TO ANNEXATION

The undersigned, referred to in this document as "Owner" whether singular or plural, owns or is the purchaser under a recorded land sale contract of real property in Jackson County, Oregon, described below and referred to in this document as "the property":

See attached Exhibit "A"

In consideration of the application for annexation and subsequent connections from the property to City of Ashland services, Owner declares and agrees that the property shall be held, sold, and conveyed subject to the following covenants, conditions, and restrictions which shall constitute covenants running with the land and shall be binding on all parties, their heirs, successors and assigns, having any right, title, or interest in the property or any part thereof:

Whenever a proposal to annex the property is initiated by the City of Ashland or otherwise, Owner shall consent and does consent to the annexation of the property to the City of Ashland. Owner agrees this consent to annexation is irrevocable.

Dated this 14 day of July, 2023.

Signature: Mary C. Desmit

Owner: Mary C. Desmit, Trustee under the Mary C. Desmit Living Trust

Dated May 14, 2018

State of Oregon)

ss:

County of Jackson)

Personally appeared the above named See Attached
foregoing instrument to be his voluntary act and deed.

and acknowledged the

Notary Public for Oregon

My Commission expires: 12/31/2024

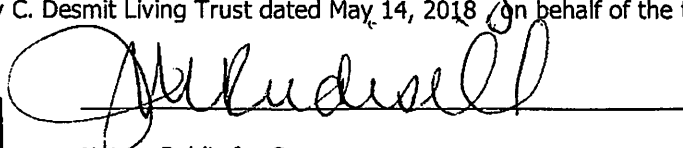
City of Ashland
20 E Main Street
Ashland, Oregon 97520
www.ashland.or.us



STATE OF Oregon)
County of Jackson)ss.

This instrument was acknowledged before me on this 14 day of July, 2023
by Mary C. Desmit as Trustee of Mary C. Desmit Living Trust dated May 14, 2018 on behalf of the trust.




Notary Public for Oregon
My commission expires: 1-11-2026

BEFORE THE CITY COUNCIL
FOR THE CITY OF ASHLAND, OREGON:

IN THE MATTER OF AN APPLICATION FOR	)	
	)	
ANNEXATION AND ZONING DESIGNATION	)	
	)	
FOR 6.51 ACRES OF LAND, LOCATED ON	)	
	)	
THE SOUTH SIDE OF EAST MAIN STREET,	)	FINDINGS OF FACT
	)	AND
EAST OF CLAY ST.; CITY OF ASHLAND &	)	CONCLUSIONS
	)	
MARY DESMIT, APPLICANTS; RICHARD	)	
	)	
STEVENS & ASSOCIATES, INC., AGENTS	)	
	)	

I. RECITALS PERTAINING TO THE PROPERTY:

Property Owners/ Applicants-	Mary C. Desmit, Trustee Mary C. Desmit Living Trust 2290 E. Main Street Ashland, OR 97520 Ashland Parks & Recreation Commission City of Ashland 20 E. Main Street Ashland, OR 97520
Designer/ Landscape Architect-	Piper von Chamier Terrain Landscape Architecture 310 Oak Street, Ste 3 Ashland, OR 97520 (541) 500-4776
Surveyor-	Polaris Land Surveying, LLC PO Box 459 Ashland, OR 97520
Agents-	Richard Stevens & Associates, Inc. P.O. Box 4368 Medford, OR 97501 (541) 773-2646

Property Description-	T.39S-R.1E-S.11CB, Tax Lots 100 (portion) & 200
Situs Address-	2228 & 2290 E. Main Street
Acreage-	6.51 net acres 7.48 gross acres (includes public Right-of-Way)
Comprehensive Plan Designation-	Suburban Residential (SR)
Existing Zoning-	RR-5, Jackson County
Proposed Zoning-	City of Ashland R-1-3.5

PURPOSE OF APPLICATION:

The applicants are requesting annexation and zoning designation for approximately 6.51 acres, currently on two properties located on the south side of East Main Street, near the southwest corner with Crocker Street. The property owners have submitted a property line adjustment application with Jackson County to reconfigure Tax Lot 200 for public park purposes, this application has County Staff approval, and is still pending with Jackson County for completion, as of this writing. The remaining portion of Tax Lot 100, which contains the dwelling and accessory structures, is not a part of this annexation application before the City.

The subject properties have a residential Comprehensive Plan designation (Suburban Residential) and the applicants are requesting the R-1-3.5 zoning designation, consistent with the Comprehensive Plan Map. This requested zoning will be harmonious with the majority of the properties adjacent to the subject properties towards the south and east within the City Limits, and to the west within the Urban Growth Boundary (UGB). The subject properties are located within the UGB of the City of Ashland and are bordered by the Ashland city limits along the eastern and southern boundaries. The abutting properties to the west are also located within the UGB; however, outside the Ashland City Limits. The property to the north, across E. Main Street, is located outside of the Ashland UGB and zoned Exclusive Farm Use (EFU) in Jackson County.

The following discussions and findings will address the subject property as the reconfigured Tax Lot 200 containing 6.51 acres. The information herein will demonstrate compliance with the applicable statutes and consistency with the City of Ashland's annexation and concurrent zone change provisions and criteria.

II. APPLICABLE CRITERIA:

The Ashland Land Use Ordinance (LUO) Chapter 18.5.8 requires annexation applications for the City of Ashland, must provide the following information as listed within Section 18.5.8.020:

- A. Consent to annexation, which is non-revocable for a period of one year from its date.
- B. Agreement to deposit an amount sufficient to retire any outstanding indebtedness of special districts defined in ORS 222.510.
- C. Boundary description and map prepared in accordance with ORS 308.225. Such description and map shall be prepared by a registered land surveyor...
- D. Written findings addressing the criteria and standards in Section 18.5.8.050.
- E. Written request by the property owner for a zone change...
- F. For annexation applications not initiated by the City, a concurrent filing of a planning application (e.g., site design review, subdivision, or land division) for the development of the annexed area.

Annexations to incorporated cities are specifically governed by Oregon state law via the Oregon Revised Statutes (ORS 222.111 *et seq.*) and the applicable provisions of the various communities as they apply to annexation requests. In this application before the City of Ashland, annexation criteria and concurrent zoning are provided for by the City of Ashland Land Use Ordinance (LUO), which provides specific standards for annexation of property, including a public hearing process, and requires that the application for annexation be consistent with the provisions of the Revised Statutes for such actions.

Zoning of lands upon annexation is provided for in Chapter 18.5.9 LUO. Subsection 18.5.9.020(A) notes that:

"The Type II procedure is used for applications involving zoning map amendments consistent with the Comprehensive Plan map, and minor map amendments or corrections. Amendments under this section may be approved if in compliance with the Comprehensive Plan and the application demonstrates one or more of the following:"

- 1. The change implements a public need supported by the Comprehensive Plan.
- 2. A substantial change in circumstances has occurred since the existing zoning or Plan designation was proposed, necessitating the need to adjust to the changed circumstances.
- 3. Circumstances relating to the general public welfare exist that require such an action.
- 4. Proposed increases in residential zoning density resulting from a change from one zoning district to another zoning district will provide 25 percent of the proposed

base density as affordable housing consistent with the approval standards set forth in section 18.5.8.050.G.

5. Increases in residential zoning density of four units or greater on commercial, employment, or industrial zoned lands (i.e. Residential Overlay) will not negatively impact the City's commercial and industrial land supply as required in the Comprehensive Plan, and will provide 25 percent of the proposed base density as affordable housing consistent with the approval standards set forth in section 18.5.8.050.G.
6. The total number of affordable units described in subsection 18.5.9.020.A.4 or 18.5.9.020.A.5, above, shall be determined by rounding down fractional answers to the nearest whole unit.
7. A deed restriction, or similar legal instrument, shall be used to guarantee compliance with affordable criteria for a period or not less than 60 years for units qualified as affordable rental housing, or 30 years for units qualified as affordable for purchase housing...

III. FINDINGS IN COMPLIANCE WITH APPLICABLE CRITERIA:

The following "Findings of Fact" are presented to the City of Ashland to demonstrate compliance with the applicable provisions of law, which, as noted above, are contained in the Oregon Revised Statutes, specifically, the provisions of ORS 222.111 *et seq.*, which provide the basis for annexation; and the applicable criteria contained within the Ashland LUO for both annexation and zone change procedures. The Findings are based upon information contained in the application and the attached supporting documentation.

Property and Project Details:

1. Location of the subject property and a description of the surrounding area:

The subject property, reconfigured Tax Lot 200, is located on the south side of E. Main Street, approximately 150 feet east of Clay Street. The property is located within the UGB of the City of Ashland and is bordered by the Ashland city limits along the southerly and eastern boundaries. The properties to the north are zoned Jackson County Exclusive Farm Use (EFU) and are located outside of the Ashland UGB. The adjacent properties to the west are zoned Jackson County Rural Residential, and are located inside of the UGB; however, they are not located within the city limits of Ashland. These properties, outside the city limits, are allowed to have one dwelling per parcel.

Generally, the subject property is located in an area that is designated for suburban residential density for duplexes and single-family residential developments to the R-1-3.5 standards. The current Comprehensive Plan identifies all of the lands within the UGB and outside the city limits, south of E. Main Street between Clay Street and Crocker Street, as Suburban Residential, for the R-1-3.5 zoning district.

2. Previous land use history:

The subject property is currently vacant of any development or structures. There are no sufficient records detailing past uses of the property. Based on historic aerials and given the appearance and nature of the property, it is assumed the property was used for irrigated grass hay and/or grazing in the past. The subject property is zoned for residential purposes in Jackson County with the Rural Residential – 5 (RR-5) zoning district.

3. Description of the proposal:

Currently, the applicant, Ashland Parks & Recreation, is requesting to annex into the City of Ashland, and concurrently receive the R-1-3.5 zoning designation. The subject property has a Suburban Residential Comprehensive Plan designation, and the applicant requests the R-1-3.5 zoning designation, consistent with the majority of the properties within the city limits adjacent to the subject property. In addition, the applicant is submitting a formal site plan review application for a public park concurrently with this annexation request.

FINDING:

The City of Ashland finds that the required property and project details have been provided for review, concurrently with this annexation request.

CHAPTER 18.5.8, ANNEXATION REQUIREMENTS:

SECTION 18.5.8.050: Approval Criteria and Standards.

18.5.8.050(A): *The annexed area is within the City's Urban Growth Boundary.*

Discussion:

As demonstrated on the Comprehensive Plan Map and the Official Zoning Map for the City of Ashland, the subject 6.51-acre property requesting annexation is within the City of Ashland UGB.

FINDING:

The City of Ashland finds that based on the Official Zoning Map, the subject property is located within the City's UGB, in compliance with Section 18.5.8.050(A) LUO.

18.5.8.050(B): *The annexation proposal is consistent with the Comprehensive Plan designations applicable to the annexed area, including any applicable adopted neighborhood, master, or area plan, and is an allowed use within the proposed zoning.*

Discussion:

The Comprehensive Plan designation for the subject area is Suburban Residential, where the R-1-3.5 zoning is the appropriate district upon approval and completion of the annexation request. There were no adopted neighborhood or master plans found, or identified with the Pre-Application Conference, on the subject property. The use of the subject property for public park purposes is listed as a permitted use, per Table 18.2.2.030.

FINDING:

The City of Ashland finds that the requested R-1-3.5 zoning district is consistent with the Suburban Residential, Comprehensive Plan designation. In addition, Table 18.2.2.030 LUO identifies public parks as a permitted use within the R-1-3.5 district, in compliance with Section 18.5.8.050(B) LUO.

18.5.8.050(C): *The annexed area is contiguous with the City limits.*

Discussion:

As demonstrated on the attached Comprehensive Plan Map and the Official Zoning Map for the City of Ashland, the subject property requesting annexation is abutting the City of Ashland city limits along the southern boundary and eastern boundary.

FINDING:

The City of Ashland finds that based on the Official Zoning Map, the subject property is contiguous to the existing City limits along the southern boundary and eastern boundary, in compliance with Section 18.5.8.050(C) LUO.

18.5.8.050(D): *Adequate City facilities for the provision of water to the annexed area as determined by the Public Works Department; the transport of sewage from the annexed area to an approved waste water treatment facility as determined by the Public Works Department; the provision of electricity to the annexed area as determined by the Electric Department; urban storm drainage as determined by the Public Works Department can and will be provided from the annexed area...*

Discussion:

The applicant is proposing to use potable water for the 2 stall restroom, drinking fountains, hand wash station and hose bibs for the park occupants via the City of Ashland Water Department. Irrigation water will be primarily provided by Talent Irrigation District (TID) for all lawns and vegetation. A connection to city water will also be established as a back-up for irrigation purposes when TID is unavailable during periodic hot/dry conditions, where feasible. Irrigation water in portions of the park is planned to be discontinued after the establishment period of the drought tolerant landscaping is achieved. Therefore, minimal water usage is needed for the development on the subject property for a public park. Sufficient water capacity is existing to provide for 2 restrooms, drinking fountains, a hand washing sinks, hose bibs and back-up irrigation supply within the proposed park. In addition, a new fire hydrant is required to be installed near the proposed driveway along E. Main Street, as requested by the Ashland Fire Department.

There are two drinking fountains and a hand wash station proposed adjacent to the restrooms, which will produce minimal wastewater that will be connected to the sanitary sewer system. Therefore, there will be a minimal increase of waste water produced into the sanitary sewer lines to be treated at the Waste Water Treatment Plant.

The applicant's engineer, Powell Engineering, has designed the stormwater drainage plan for the subject property. The engineered plans have considered the impervious surface areas, which provides the drainage calculations and identify the collection, storage and treatment of storm water prior to discharging into the storm sewer system. Based on the metered discharge of storm water, there will be no significant adverse impact to the urban storm water drainage system.

There will be minimal lights provided on the subject property. The light fixtures will predominately be located along the walking paths for pedestrians and within the parking lot. The proposed light fixtures will be shielded to protect the night sky to the greatest extent. Additional lighting may be warranted with anticipated street lights along E. Main Street, which will be city standard fixtures with efficient LED bulbs. The proposed RVTB bus stop shelter will also have lighting; however, RVTB uses solar panels for lighting their bus shelters, that does not require connection to an electrical power supply. In addition, the applicant is proposing solar panels on the shade structure, which will generate electrical power back into the electrical grid for the City of Ashland. Therefore, based on the minimal usage of electrical power and the solar generation, there should be no significant loss of electrical power supply within the grid for the City of Ashland.

FINDINGS:

The City of Ashland finds that the applicant's proposal to provide a public park with low/minimal utility impacts, will not have a significant adverse impact on the extension of water lines to serve the proposed restrooms, drinking fountains, hand wash station and hose bibs, to not have a

significant impact on the sanitary sewer system and the treatment plant. The applicant's engineer has designed and provided a stormwater drainage plan that is consistent with the urban stormwater drainage plan.

The City of Ashland also finds that minimal use of light fixtures are proposed within the park area. Shielded lights will be provided along the pedestrian paths and within the parking lot of the park for security and safety purposes. Solar panels are also proposed on the shade structure to generate electrical power that will go back into the grid for the City of Ashland, which will not have an adverse impact on the system. This application is in compliance with Section 18.5.8.050(D) LUO.

18.5.8.050(E): Adequate transportation can and will be provided to serve the annexed area. For the purposes of this section, "adequate transportation" for annexations consists of vehicular, bicycle, pedestrian, and transit transportation meeting the following standards:

Discussion:

- (1) A 24-foot driveway road approach will be constructed to provide access to the parking area, meeting the 22-foot wide minimum from E. Main Street. E. Main Street is classified as a major collector street with the City of Ashland with an existing 60-foot Right-of-Way. The site plan for the proposed park, identifies the half street improvements needed along the full frontage of the subject property. No additional dedication of Right-of-Way is anticipated or proposed for the half street improvements on E. Main Street. In addition, the applicant will be providing full frontage improvements, including sidewalks from Clay Street to Crocker Street, which will enhance pedestrian and bicycle facilities as an off-site improvement. Further, a Traffic Impact Analysis (TIA) was performed by Ms. Kim Parducci with Southern Oregon Transportation Engineering, which concluded that all intersections within the study area will function within acceptable street performance standards with the full buildout of the park facilities.
- (2) With the proposed use as a public park, improvements for bicycle transportation are provided. Again, street frontage improvements along the south side of E. Main Street from Clay Street to Crocker Street will be constructed by the applicant. Numerous shared paths are proposed from E. Main Street, Brooks Lane and Abbott Avenue, to provide safe and accessible bicycle facilities.
- (3) Pedestrian facilities will also be improved with the development of a public park. Sidewalk facilities will be constructed along the south side of E. Main Street from Clay Street to Crocker Street to enhance the safety for pedestrian facilities. In addition, shared accessways are proposed from E. Main Street, Brooks Lane and Abbott Avenue. There is an existing concrete sidewalk within an easement,

providing a pedestrian connection from Brooks Lane to the proposed accessways at the east side of the park property.

- (4) Transit transportation is anticipated to be available in the future. The applicant is providing a concrete pad for a future RVTB bus stop shelter.

FINDINGS:

The City of Ashland finds that the applicant is proposing full street frontage improvements along the south side of E. Main Street from Clay Street to Crocker Street, which will include a 24-foot road approach/driveway for the parking area.

The City of Ashland also finds that both bicycle and pedestrian transportation facilities will be improved to provide safe and accessible routes to the park facilities from the neighborhood.

Further, the City of Ashland finds that a concrete pad is proposed to provide for a future RVTB shelter and bus stop. This application is in compliance with Section 18.5.8.050(E) LUO.

18.5.8.050(F): *For all residential annexations, a plan shall be provided demonstrating that the development of the annexed area will ultimately occur at a minimum density of 90 percent of the base density for the zone... For purposes of computing maximum density, portions of the annexed area containing unbuildable lots, parcels, or portion of the annexed area... or land area dedicated as a public park, shall not be included.*

Discussion:

The subject property in its entirety is proposed as a public park; therefore, minimum density is not required and is not applicable with this application.

FINDING:

The City of Ashland finds that residential density is not applicable with this annexation application.

18.5.8.050(G): *Except as provided in subsection 18.5.8.050.G.7, below, annexations with a density or potential density of four residential units or greater and involving residential zoned lands, or commercial, employment or industrial lands with a Residential Overlay (R-Overlay) shall meet the following requirements:*

Discussion:

The applicant is requesting the R-1-3.5 zoning district, which can result in greater than four residential dwelling units; however, as demonstrated with the Site Plan Review application for a new public park, no dwellings or accessory structures with residential occupancy are proposed. Per Subsection 18.5.8.050(G)(1) minimum density and affordable housing provisions are exempt for lands dedicated as a public park; therefore, this standard is not applicable.

FINDING:

The City of Ashland finds that due to the property being proposed for public park uses, the dedicated park lands are exempt from the minimum density and affordable housing requirements. This standard is not applicable.

18.5.8.050(H): *One or more of the following standards are met:*

Discussion:

The subject area is designated as Suburban Residential on the Comprehensive Plan map, where the R-1-3.5 zoning is the appropriate district upon approval and completion of the annexation request. Adopted neighborhood or master plans were not found, or identified with the Pre-Application Conference by Staff. The use of the subject property for public park purposes is listed as a permitted use, per Table 18.2.2.030. These standards are consistent with Section 18.5.8.050(B), which is in compliance with Subsection 18.5.8.050(H)(1) LUO.

FINDING:

The City of Ashland finds that the requested R-1-3.5 zoning district is consistent with the Suburban Residential, Comprehensive Plan designation. In addition, Table 18.2.2.030 LUO identifies public parks as a permitted use within the R-1-3.5 district, in compliance with Section 18.5.8.050(B) and Subsection 18.5.8.050(H)(1) LUO.

CONCLUSIONS:

The City of Ashland concludes that the subject 6.51-acre property is within the Ashland UGB, is contiguous with the existing city limit boundary and the requested R-1-3.5 zoning district is consistent with the Suburban Residential, Comprehensive Plan designation, in compliance with Section 18.5.8.050(A), (B) & (C) LUO.

The City of Ashland also concludes that due to the low impact to the urban public facilities and minimal services needed for the public

facilities and utilities, no significant impacts are found to the water supply, sanitary sewer system, electrical supply and urban transportation facilities, in compliance with Section 18.5.8.050(D) & (E) LUO.

The City of Ashland further concludes that the subject property is being proposed as a public park; therefore, the minimum density and affordable housing requirements in Section 18.5.8.050(F) & (G) are not applicable. There were no master plans, no neighborhood plan or area plans identified that are applicable to the subject property. The proposed use for a public park within the R-1-3.5 zoning district is a permitted use, in compliance with Section 18.5.8.050(H) LUO.

SECTION 18.5.8.070: Statutory Procedures.

The applicant for the annexation shall also declare which procedure under ORS chapter 222 the applicant proposes that the Council use, and supply evidence that the approval through this procedure is likely.

Compliance with ORS 222.111 - Petition Required:

The statutory requirements for annexation of real property to the City of Ashland are provided by the standards and criteria contained in ORS 222.111(2), which allows cities to review a request to annex territory that is requested by either:

"A proposal for annexation of territory to a city may be initiated by the legislative body of the city, on its own motion, or by a petition to the legislative body of the city by owners of real property in the territory to be annexed."

Discussion:

The scope of this application is to annex a parcel of 6.51 acres, with a concurrent request to zone the subject property to the R-1-3.5 district consistent with the City of Ashland Comprehensive Plan Map.

In this case, the applicant, Ashland Parks & Recreation, who is the record owner of the territory to be annexed has provided information from the Jackson County Assessor's records, has executed a "*Petition to Annex*" form and the same, that has been filed with the appropriate application, fee, legal description and these findings with the City of Ashland, demonstrating compliance with ORS 222.111.

FINDING:

The City of Ashland finds that the owner of the real property, as noted above, who owns all of the territory proposed to be annexed, and who represents all of the assessed value of the tract, has petitioned the City of Ashland for annexation by filing a Consent to Annex form for all of the property located within the territory to be annexed, along with the appropriate application, fee, and supporting documentation (findings and legal description) and have met the requirements for annexation as contained in ORS 222.111 et seq.

Compliance with ORS 222.125 - Procedure:

ORS 222.125 provides that a city need not call or hold an election in the city or hold a hearing otherwise required under ORS 222.120...

"...when all of the owners of land in the territory, and not less than 50 percent of the electors, if any, residing in the territory, consent in writing to the annexation of the land in the territory and file a statement of their consent with the legislative body. Upon receiving written consent to annexation by owners and electors under this section, the legislative body of the city, by resolution or ordinance, may set the final boundaries of the area to be annexed by a legal description and proclaim the annexation."

Discussion:

The property (territory) proposed to be annexed consists of a single tax lot/parcel, consisting of approximately 6.51 acres. Tax Lot 100 was created with the recording of Land Sale Agreement in 1962 prior Jackson County zoning, Deed record Vol. 532 Pg. 483. Tax Lot 200 was lawfully created by warranty deed in 1968 (OR 68 03251), also prior to Jackson County zoning. The subject properties were lawfully created prior to Jackson County zoning and have a pending property line adjustment application with Jackson County to reconfigure and increase the size of the park property, as proposed on the site plan review application, which is submitted concurrently with this annexation application.

The owner of the land in the territory, with no electors present, controls the entirety of the assessed valuation within the territory to be annexed, has signed a petition and consent to annex, and has submitted the same to the City of Ashland, consistent with ORS 222.111 and ORS 222.125. The application for annexation is consistent with these standards.

The City of Ashland can, by resolution or ordinance, set the final boundaries of the area to be annexed by legal description (see attached metes and bounds prepared by the surveyor), and proclaim the annexation without a hearing, consistent with this statute. The

Ashland Land Use Ordinance, however, does require a public hearing for all annexations, and this information should be entered into the record of that proceeding.

FINDING:

The City of Ashland finds that the applicant has demonstrated, with the filing of a consent to annex form, that the application is consistent with the provisions of ORS 222.125.

Compliance with ORS 222.170 - The Triple Majority Standard:

ORS 222.170 provides for what is commonly referred to as the "*triple majority*" test. In essence, this statute requires that:

"...if more than half of the owners of land in the territory, who also own more than half of the land in the contiguous territory and of real property therein representing more than half of the assessed value of all real property in the contiguous territory consent in writing to the annexation of their land..."

Discussion:

As noted above, this tract is owned wholly by the applicant, with no elector present on site. The applicant represents (a) all of the ownership, (b) all of the residents, and (c) all of the assessed valuation of the territory to be annexed. In cases such as this, they automatically meet the requirements for a "triple majority" review under ORS 222.170.

FINDING:

The City of Ashland finds that the provisions of ORS 222.170 are applicable to this project, as the applicant represents 100 percent of the ownership, with no electors, and 100 percent of the assessed valuation of the territory to be annexed, and has agreed by written consent to the annexation. The application is consistent with the provisions of ORS 222.170, "the triple majority" criteria.

CONCLUSIONS:

The City of Ashland concludes that the applicant has addressed the applicable provisions of ORS 222 regarding annexation requests. The property owner/applicant has consented in writing for the annexation. The subject property is located within the Ashland UGB and is abutting the current city limits along the southern and eastern boundaries. Therefore, the City of Ashland concludes that this application for annexation is in compliance with ORS 222.111, for

having a single parcel with a single consenting owner, which is the most appropriate procedure for review.

CHAPTER 18.5.9: Zoning Amendments:

SECTION 18.5.9. Applicability and Review Procedure:

18.5.9.020(A): *The Type II procedure is used for applications involving zoning map amendments consistent with the Comprehensive Plan map, and minor map amendments or corrections. Amendments under this section may be approved if in compliance with the Comprehensive Plan and the application demonstrates one or more of the following:*

The applicant is requesting the R-1-3.5 zoning district which is consistent with the Suburban Residential designation on the Comprehensive Plan map. Therefore, the Type II review procedures and criterion are applicable. The proposed use of the subject property is for a public park and does not include any housing to consider density and affordability. The applicable subsections demonstrating compliance are:

A.1 The change implements a public need supported by the Comprehensive Plan.

A.3 Circumstances relating to the general public welfare exist that require such an action.

Discussion:

The Ashland Comprehensive Plan, Section 8.06, New Park Areas, identifies the public need for additional park lands within the City of Ashland. The Comprehensive Plan identifies a need for additional park land for the existing and future residents of the city, based on a survey conducted in 1989, which is still true and applicable today.

The proposed E. Main Street Park may be classified as a community public park based on the size of the area, the proposed facilities and anticipated occupants. The City of Ashland currently has only 2 community parks, Hunter Park and YMCA Park, along with joint use with Southern Oregon University fields and the Ashland School district facilities.

The Comprehensive Plan, Section 8.06 also identifies criteria for community parks, which are:

- 1) There should be 2.5 acres per 1,000 population of city-wide active community parks.
- 2) Every neighborhood should have a park within one-quarter mile of most homes, i.e., within easy walking distance and accessible to most children.
- 3) The park sites must be relatively flat, without significant natural features requiring preservation.

- 4) The park sites should be located so that traffic flow and parking can be accommodated by using arterial, collector, and through streets whenever possible.
- 5) The parks should be easily accessible by foot and by bicycle.
- 6) In addition to filling the need for community parks, they should also function as neighborhood parks where they are located.
- 7) The City should not rely on land it does not own for long term park needs.

Based on the discussions and findings above, including the site plan review application reviewed concurrently with this application, the proposed E. Main Street Park meets all of the criteria for a public community park. Satisfying these criteria will also enhance the general public welfare in the immediate neighborhood and surrounding community.

FINDING:

The City of Ashland finds that the proposed use of the subject property is for public park purposes, with no housing provided; therefore, density and affordability is not applicable. The City also finds that the Comprehensive Plan does identify a need for public community parks within the City for the existing and future residents. In addition, the City finds that providing public parks promotes general public welfare for the neighborhood and community, to be in compliance with Section 19.5.9.020(A) LUO.

CONCLUSION:

The City of Ashland concludes that the proposed use of the subject property for a public park, is a needed public facility as identified within the Comprehensive Plan, which will also enhance the general public welfare for the citizens of Ashland and the community. This application is in compliance with Section 18.5.9.020(A) LUO for the requested R-1-3.5 zoning district.

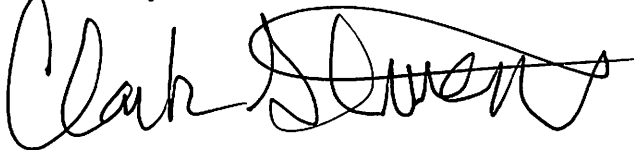
IV. SUMMARY AND CONCLUSIONS:

Based upon the information submitted with this application, including the appropriate legal descriptions, attachments and these findings, the City of Ashland can adopt the findings and conclusions outlined herein, and concludes that:

1. The property is located within the Urban Growth Boundary of the City of Ashland as demonstrated on the attached maps.
2. The territory to be annexed is contiguous to the Ashland City Limits, as shown on the attached maps.
3. The proposal can be found to have adequate public City facilities to serve the subject property for public park purposes, and there are adequate transportation facilities to serve the proposed park.
4. The proposal is consistent with the provisions of ORS 222.111, 222.125 and 222.170, with ORS 222.111 being the most applicable for review.
5. The application for a change of zoning from Jackson County RR-5 to City of Ashland R-1-3.5 zoning district is consistent with the Comprehensive Plan Map, Suburban Residential designation, and is in compliance with the approval criteria for a needed public park.

The purpose of the application is to provide for a legislative methodology to adequately address the land use and urban needs of the City of Ashland and carry out the urban form of the City in concert with the Comprehensive Plan. As such, the annexation and appropriate zoning of the property will allow the City to maintain and control the urban form in this area while providing a needed community public park consistent with the Comprehensive Plan and the Ashland Land Use Ordinance.

Submitted by,

A handwritten signature in black ink, appearing to read "Clark Stevens", written over a horizontal line.

RICHARD STEVENS & ASSOCIATES, INC.

EXHIBIT "A"

**LEGAL DESCRIPTION—CITY OF ASHLAND EAST MAIN STREET ANNEXATION
ASHLAND PARKS & RECREATION DEPARTMENT - 2290 EAST MAIN STREET
ASSESSOR'S MAP NO. 39 1E 11 CB, TAX LOTS 100 & 200**

An Annexation of that tract of land described within Document No. 2018-037280, along with the south one acre of that tract described within Document No. 2018-025387 of the Official Records in Jackson County, Oregon, as well as a 701.78 foot long and 60.00 foot wide portion of East Main Street, lying situate within the Southwest Quarter of Section 11, Township 39 South, Range 1 East of the Willamette Meridian in the City of Ashland, Jackson County, Oregon, being more particularly described and bounded as follows;

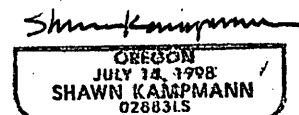
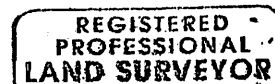
BEGINNING at an iron pin at the northeast corner of Bud's Dairy, a Planned Community in the City of Ashland, Oregon, purportedly as also being the Southeast Corner of the Northeast Quarter of the Northwest Quarter of the Southwest Quarter of Section 11 in Township 39 South, Range 1 East of the Willamette Meridian in Jackson County, Oregon; thence North 00°06'40" West, along the East line of said Northeast Quarter of the Northwest Quarter of the Southwest Quarter, common with the west line of Chautauqua Trace, Phase 3, a Planned Community in said City, a distance of 315.73 feet, to an iron pin along the east line of that tract of land described within Document No. 2018-025387 of the Official Records in said County; thence North 89°56'20" West, leaving said described east line, 137.97 feet to an iron pin on the west line of said described tract; thence North 00°06'40" West, along said west line, 332.08 feet, to an iron pin on the southerly line of East Main Street; thence South 83°45'00" East, along said southerly line, 138.82 feet, to an iron pin at the northeast corner of said Document No. 2018-025387; thence North 00°06'40" West, 30.18 feet to a brass capped iron pipe at centerline P.I. Station 996+02.6, per the 1910 County Road Survey of East Main Street, formerly known as the Jacksonville to Klamath Falls Market Road; thence North 08°38'35" West, 31.11 feet to an iron pin at the point of intersection on the northerly line of East Main Street; thence North 83°45'00" West, along said northerly line of East Main Street, 697.15 feet to an iron pin at a point intersecting the northerly-most projection of the west line of Clay Street; thence South 00°06'55" East, along said projected east line of Clay Street, 60.55 feet to an iron pin at the intersection of Clay Street with the south line of East Main Street; thence South 83°45'00" East, along the southerly line of East Main Street, 201.31 feet, to an iron pin at the northwest corner of that tract of land described within Document No. 2018-037280 of the Official Records of Jackson County, Oregon; thence South 00°06'55" East, leaving East Main Street and along the west line of said Document No. 2018-037280, a distance of 666.78 feet, to the north line of Abbott Avenue, from which an iron pin bears South 89°58'20" East, 2.68 feet therefrom; thence South 89°56'13" East, along the north line of Abbott Avenue, 497.32 feet, to the POINT OF BEGINNING.

Containing 7.48 acres, more or less.

Prepared by:

Shawn Kampmann
Professional Land Surveyor

Polaris Land Surveying LLC
P.O. Box 459
Ashland, Oregon 97520



Renewal Date: 6/30/25

Date: April 16, 2024

S:\surveys\1426-22\CoA East Main Street Annexation Legal.docx

EXHIBIT "B" ANNEXATION EXHIBIT MAP

LYING SITUATE IN
SOUTHWEST QUARTER OF SECTION 11
TOWNSHIP 39 SOUTH, RANGE 1 EAST, W.M.
JACKSON COUNTY, OREGON

FOR
Ashland Parks & Recreation Dept.
340 South Pioneer Street
Ashland, Oregon 97520



SCALE: 1" = 100'

REGISTERED
PROFESSIONAL
LAND SURVEYOR

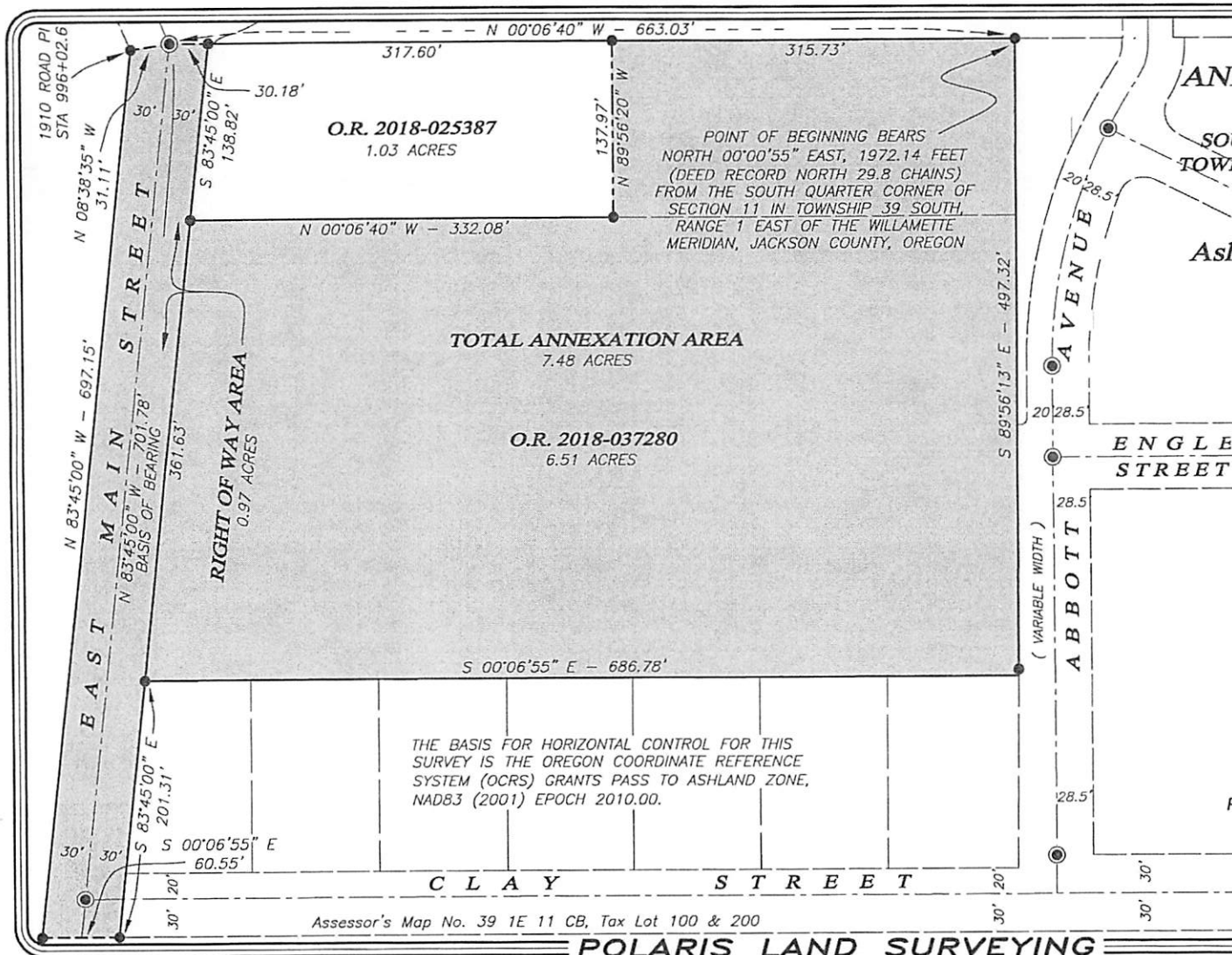
Shawn Kampmann

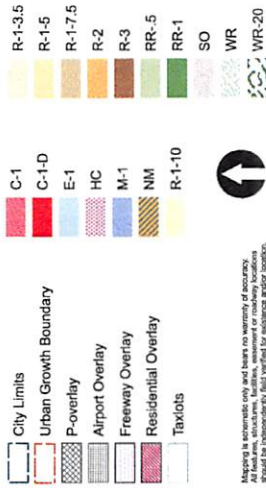
OREGON
JULY 14, 1998
SHAWN KAMPMANN
2883 LS

RENEWAL DATE: 6/30/2025

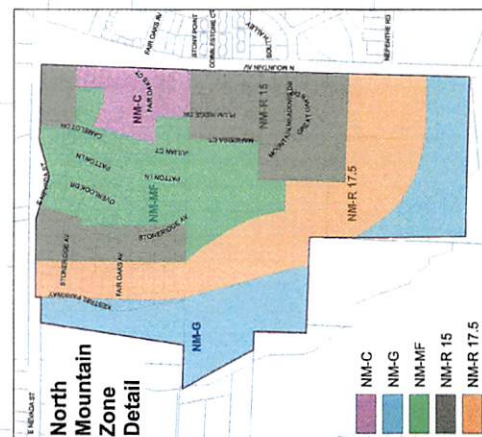
SURVEYED BY:
POLARIS LAND SURVEYING LLC
P.O. BOX 459
ASHLAND, OREGON 97520
(541) 482-5009

DATE: APRIL 16, 2024
PROJECT NO. 1426-22





Mapping is schematic only and bears no warranty of accuracy. All features, structures, facilities, easement or roadway locations should be independently field verified for existence and/or location.



This is to certify that this is the Original Learning Map signed by the Supervisor 16.12.2009 of title 16.12.2 of the National Minimum Code, Modified as Ordinance No. 2502

Signed: [Signature] Date: July 1, 2008
 Day: Monday Month: June Year: 2008



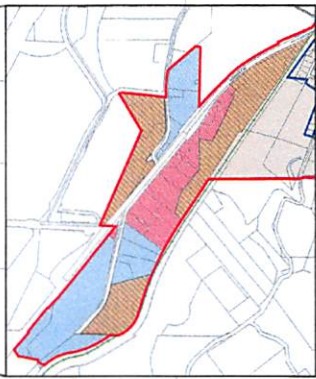
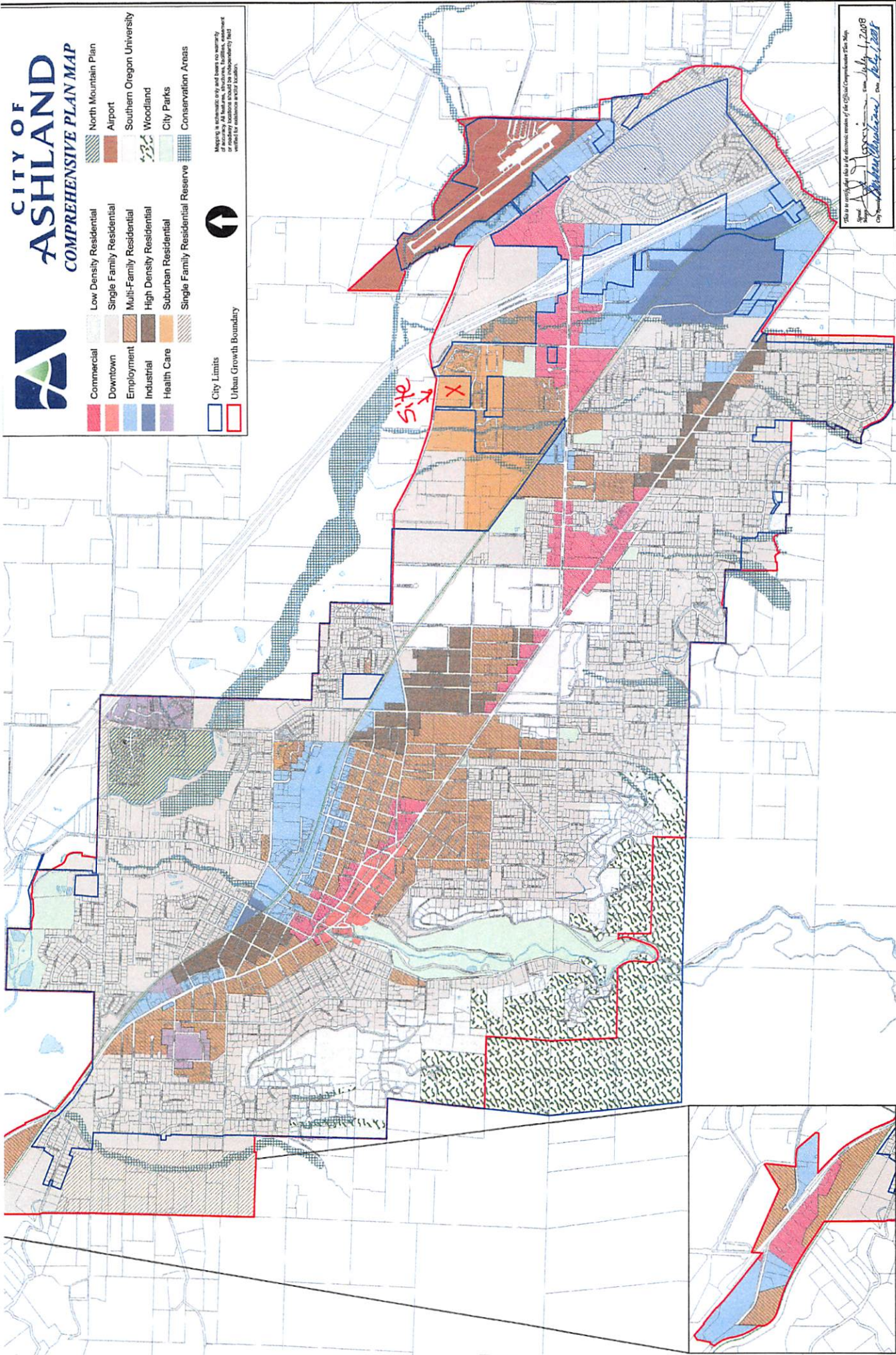
CITY OF ASHLAND COMPREHENSIVE PLAN MAP

- Commercial
- Downtown
- Employment
- Industrial
- Health Care
- Low Density Residential
- Single Family Residential
- Multi-Family Residential
- High Density Residential
- Suburban Residential
- Single Family Residential Reserve
- North Mountain Plan
- Airport
- Southern Oregon University
- Woodland
- City Parks
- Conservation Areas



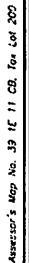
- City Limits
- Urban Growth Boundary

Mapping is schematic only and does not warranty of accuracy. All features, boundaries, facilities, easements and other information shown on this map are for reference only and should not be relied upon for any other purpose.



This is a schematic map of the City of Ashland, Oregon. It is not a warranty of accuracy. All features, boundaries, facilities, easements and other information shown on this map are for reference only and should not be relied upon for any other purpose.

Prepared by: [Signature]
Date: July 1, 2008
City of Ashland, Oregon





parks, open space, and aesthetics

Printed July 2005

City of ASHLAND, OREGON
COMPREHENSIVE PLAN

*Parks are not a luxury,
but a necessary ingre-
dient in a successful
urban environment.*

8.01 Introduction

Ashland’s character is intimately linked to its aes-
thetic resources, including its vistas, trees, parks and
open space lands. Early settlers appreciated the natu-
ral beauty of Ashland’s setting, and local scenic sites
evolved as community gathering places. As the town
grew, traditional use of these sites was gradually for-
malized. Roper’s Grove, a popular 19th century recre-
ation area in the Ashland Creek Canyon, was absorbed
into Lithia Park when community ownership of that
resource evolved. As Ashland developed, its formal
park lands expanded as well.

Because cities are inherently crowded places, park
planning has long been a traditional and essential part
of urban planning. Landmarks of American city plan-
ning such as William Penn’s 1680 Philadelphia town
plan, Fredrick Law Olmstead’s New York City’s 1856
Central Park plan, and Daniel Burnham’s 1909 Chi-
cago plan, all used parks and open spaces as central
elements to alleviate the pressures of urban life. Parks
are not a luxury, but a necessary ingredient in a suc-
cessful urban environment. One of the reasons Ash-
land is such a beautiful and unique city is because of
past efforts at park planning.

Today Ashland park planning faces new challenges.
Many traditional uses of private, vacant lands have
been lost in the past few decades. More will soon

be lost without a program to acquire and preserve
significant lands for both traditional parks and open
space. Ashland’s urban forest, comprised of both
native and imported species, must also be preserved
and enhanced.

Successful city planning reflects people’s values in
the changes that take place over time. In consider-
ing Ashland’s future, our plans must include both
traditional parks and preserved natural areas, and
reflect what most citizen’s treasure: a community at
the base of the Siskiyou Mountains, that works with
rather than fights with nature. Preserving this value
challenges us to develop a program that will preserve
important open space and park land, while accommo-
dating Ashland’s continuing urbanization.

This element of Ashland’s Comprehensive Plan pres-
ents four programs: Parks, Open Space, Urban
Forestry, and Visual Resources, introduces implemen-
tation strategy and defines policies.

8.02 Parks

Ashland has an elected, five-member Parks and Rec-
reation Commission which controls all lands owned
by the City of Ashland that have been dedicated for
park or open space purposes. This commission is
created by city charter and is empowered to levy tax
funds for park maintenance and improvements from

TABLE VIII-1	
CITY OF ASHLAND PARK AND OPEN SPACE ACERAGE	
CITY OWNED PARKS	
Developed Parks	
Bear Creek Park	40.71
Calle Guanajuato	1.05
Clay Street Park	3.54
Garden Way Park	1.79
Glenwood Park	2.32
Hunter Park	9.03
Lithia Park	95.34
Sherwood Park	0.50
Triangle Park	0.35
YMCA Park	8.58
Subtotal	163.21
Undeveloped Parks	
Lithia Mills	3.09
Strawberry Lane Park	10.00
Total Parks	176.30
OTHER CITY OWNED OPEN SPACE	
Oak Knoll Golf Course	58.0
Ashland Cemetary	5.0
Mountain View Cemetary	8.0
Hargadine Cemetary	2.0
Lithia Springs	57.0
Total Open Space	130.06
OTHER OPEN SPACE PUBLICALLY OWNED	
Public School Playgrounds	
Bellview School	4.00
Briscoe School	1.50
Helman School	8.50
Lincoln School	4.50
Walker School	6.50
Middle School	18.00
Total	43.00
SOSC Fields	15.20
Grand Total	364.56

an annual budget. While they can use the levy to maintain lands, the Parks and Recreation Commission has no authority to purchase or acquire new land. This must be accomplished by the City Council, and the lands then dedicated to the Parks Commission by mutual agreement.

Ashland now has 176 acres of parkland, another 1.30 acres of City owned land that is in open space use, such as cemeteries and the golf course, and an additional 58 acres of land used by the community as open space but owned by other public agencies such as the School District or Southern Oregon State College. Fifty-seven acres of City owned land are in the city-owned Lithia Springs property outside the city limits. This currently is leased to the Ashland Gun Club and, serving no other public use, should be discounted in an analysis of park land.

Of the 122 acres of developed park land, 95 acres are in Lithia Park. There are 17.5 acres in developed active parks, 9 acres at Hunter Park, and 8.5 acres at YMCA park. Two small urban parks Calle Guanajuato, and Bluebird Park, total a little more than an acre. Five neighborhood parks range in size from one-half acre to two-and-one-half acres, with a total acreage of seven-and-one half-acres. There are currently thirteen acres of undeveloped parkland in two sites.

Lithia Park is used partly as a regional park—a fact not clearly reflected in acreage comparisons.



parks, open space, and aesthetics

Printed July 2005

City of ASHLAND, OREGON

COMPREHENSIVE PLAN

Park types can be classified as follows: regional, urban, community, neighborhood, pocket, and open space.

Fifteen acres of land at Southern Oregon State College are used by the community for active recreation, and another 43 acres of land in six school sites are used for neighborhood recreation--a total of 58 acres.

In addition to fulfilling its primary function, the municipally owned 58 acre Oak Knoll Golf Course provides a large open space area for the surrounding neighborhood.

Lithia Park is used partly as a regional park—a fact not clearly reflected in acreage comparisons. A 1981 park usage study concluded that in the summer, one-half of park users were tourists, one-sixth were regional users, that is, from Jackson County other than Ashland, and one-third were Ashland residents. A 1989 Parks Department survey confirmed that these numbers remain applicable today.

8.03 Ashland and Other Cities

In 1989 Rick Landt of the Citizen's Advisory Planning Committee (CPAC) conducted a survey of 23 other cities in Oregon to determine how Ashland ranked in available park land relative to these other cities. Interestingly, Ashland's parkland inventory at 10.5 acres per 1,000 population was below the average of the cities surveyed, which was 12.3 acres per 1,000. While Ashland ranked ahead of some suburban cities such as Gresham (1.8 acres per 1,000) and

Hillsboro (2.7 acres per 1,000), it ranked far behind our neighboring cities of Medford (46.3 acres per 1,000) and Klamath Falls (31.3 acres per 1,000). In the latter cases, the cities have purchased large areas that include a significant natural feature, such as Medford's Roxy Ann Mountain. Less urbanized areas like southern Oregon, have more opportunities to find an acquire park land, due to the availability of undeveloped land and generally lower land values. This fact helps explain the large amount of park land found in Medford, Roseburg and Klamath Falls.

**TABLE VIII-2
PARK LAND INVENTORY
ASHLAND AND OTHER SELECTED OREGON CITIES**

Category	Acerage	# of Parks	Acres/1,000
Ashland	176	12	10.5
Albany	385	22	13.7
Astoria	69	17	6.9
Beaverton	512	38	12.2
Corvallis	839	30	20.9
Eugene	1715	82	15.7
Gresham	115	16	1.8
Hillsboro	85	9	2.7
Klamath Falls	533	25	31.3
McMinnville	243	13	14.3
Medford	2085	28	46.3
Pendelton	58	26	4.0
Portland	9416	200	22.4
Roseburg	282	25	16.6
Tigard	207	9	8.1
Woodburn	82	14	7.0

The conclusion that can be drawn is that while Ashland is slightly below average in all the cities

in this survey, the City also would have a very long way to go to preserve as much land as our southern Oregon neighbors. Since cities with significant natural features and a high degree of community amenities tend to have more park land than cities which are located in homogenous environments, Ashland should be near the top of the list. However, we find ourselves below average.

8.04 New Parks Since 1980

During the 1980's Ashland has been active in purchasing new land for parks. Three sites, totaling 56 acres, have been acquired. One, the Bear Creek Greenway park is a natural park and is not planned for further development except for the extension of the Bear Creek Greenway. The other two sites have not been developed. In addition, the YMCA Park and two neighborhood parks, Clay Street and Glenwood, have been developed. In 1984 a public pool was added at Hunter Park. The development of school-park sites in cooperation with the Ashland School Board has increased the amount of effective park land. The development of fifteen acres of community playing fields at Southern Oregon State College has greatly enhanced the city's ability to provide an active recreation site.

8.05 Types of Parks

Park types can be classified as follows: regional,

urban, community, neighborhood, pocket, and open space. A regional park serves a county area, emphasizes an outdoor setting, and usually has facilities for activities such as picnicking, swimming. Emigrant Lake Park is a regional park and is heavily used by county residents.

AN URBAN PARK (8.05.01) emphasizes passive recreation, may have picnic and zoo areas, and serves a population of 10,000 to 30,000 people. Lithia Park is an urban park, but use by people outside Ashland lends it a regional character. A community park emphasizes active recreation, sport fields and tennis courts, and should be within three miles of the area it serves. Hunter Park is a community park.

NEIGHBORHOOD PARKS (8.05.02) are designed to be within a one-quarter-mile radius of the area they serve, and are related to the neighborhood's character. Neighborhood parks include school parks which utilize facilities in off hours. The school parks have advantages. They may be used during summer months and non-school hours; they provide facilities for all age groups, thus eliminating duplication of facilities, and they cut operating and maintenance costs for both the Parks Department and School District.

POCKET PARKS AND SPECIAL AREAS (8.05.03) are small areas which satisfy special



parks, open space, and aesthetics

Printed July 2005

City of ASHLAND, OREGON
COMPREHENSIVE PLAN

Every neighborhood should have a park within one-quarter mile of most homes, i.e., within easy walking distance and accessible to most children.

needs—a place for relaxation in a dense urban area; a spot for a specific recreational activity; an outdoor urban space; or they simply afford visual pleasure. Triangle Park is a pocket park; the Plaza is a special area.

8.06 New Park Areas

The survey conducted of cities around the state indicated that Ashland has 10.5 acres of parkland per 1000 people substantially less than the national ideal of fifteen acres per 1000 population. The simple comparison of acreage and population, however, does not reveal the entire situation. Population demands, local values, and the unique attributes of the local setting are more important than per capita targets. Per capita land needs, therefore, should be used only in assessing the need for city-wide facilities such as community parks.

NEED FOR NEW PARKS (8.06.01)

As Ashland grows, it will need to add parkland to accommodate new population and to increase recreational opportunities to the existing population. This section deals with the community parks and neighborhood parks that are to be developed.

These parks are generally known as active parks. They differ from open space parks because they involve a significant amount of development. Grading, removal

of native vegetation, installation of irrigation and parking, and construction of tennis courts and restrooms have a significant impact on the environment and neighborhood. Active parks can be prodigious traffic generators and can create high parking demands. While necessary for a successful city, they are relatively expensive to develop and maintain.

Ashland now has two active community parks, Hunter Park and YMCA Park. Nine acres and 8.5 respectively, in sum they total 17.5 acres. The city and Southern Oregon State College have developed jointly 15 acres of ball fields that are used both by the college and the community. Several Ashland School District properties are occasionally used as community parks, most notably Walker School and Ashland Junior High School.

Ashland has four neighborhood parks, Clay Street, Garden Way, Glenwood, and Sherwood Parks, totaling over seven acres. Triangle Park, about one-half acre in size and an attractive open space, functions as a pocket park. In addition, the five Ashland elementary schools function as neighborhood parks. The Parks Commission and the Ashland School District have developed community school-park sites at each of the elementary schools. The area acquired by the City on East Main and California Streets will also be developed as a neighborhood park.

The following criteria have been used in assessing the need for future active parks:

Community parks:

- 1) There should be 2.5 acres per 1,000 population of city-wide active community parks.
- 2) Every neighborhood should have a park within one-quarter mile of most homes. i.e., within easy walking distance and accessible to most children.
- 3) The park sites must be relatively flat, without significant natural features requiring preservation.
- 4) The park sites should be located so that traffic flow and parking can be accommodated by using arterial, collector, and through streets whenever possible.
- 5) The parks should be easily accessible by foot and by bicycle.
- 6) In addition to filling the need for community parks, they should also function as neighborhood parks where they are located.
- 7) The City should not rely on land it does not own for long term park needs.

Based on these criteria, the city will need 50 acres of land in community parks by the year 2005, when the population will reach 20,000 people. Today, the city has seventeen acres of land in Hunter Park and YMCA park, and also uses fifteen acres of land from SOSC, for about 2 acres per 1,000 capita. The use of SOSC

land, however, is based on a lease agreement, and when the lease expires 1995, SOSC may choose not to renew the lease.

This plan identifies two areas for potential new community parks. One, Clay Street Park, is an extension of the existing YMCA Park and would add 15 acres to the 8.5 acres existing, and provide an open space connection between Clay Street and Tolman Creek Road. The second are two parcels of vacant pasture in the Bear' Creek floodplain, adjacent to Mountain Street. These two parcels would provide an additional 24 acres of active park with excellent access. This would give the city slightly more than 2.5 acres per 1,000 when the population reaches 20,000.

NEIGHBORHOOD PARKS (8.06.02)

Consideration of both existing and proposed park areas reveals that several neighborhoods will be more than one-quarter mile from any park. All but four areas will be served either by the new large proposed active parks or by new open space parks. Four parks are planned to accommodate the remaining neighborhoods that would need park for casual, pedestrian use. The new parks are small, from one-half to one acre in size, and located on currently vacant parcels. The neighborhoods are the Oak Knoll area, the Guthrie Street area, the Railroad District, and the Wimer Street area.

Open space provides buffers between development, preserves important riparian areas and wildlife habitat, creates scenic vistas, and contributes to Ashland's character.



parks, open space, and aesthetics

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City of ASHLAND, OREGON
COMPREHENSIVE PLAN

the City cannot make the necessary funds available, the property can develop according to the underlying zoning. However, some of the property can be set aside as a Conservation Area in this process, as long as the effect of the reduction in the number of units is no more than 20%.

Obviously, it is in the City's interest to negotiate with the property owner and purchase the land before it is ripe for development. In any case, land shall be purchased without resorting to direct condemnation. The only exception to this rule would be to acquire access to a City owned parcel. The area where this may be necessary would be to gain access to the Siskiyou Mountain Park.

8.15 Goal

To provide the people of Ashland with a variety, quantity and quality of parks, park facilities, open spaces, trails, and visual resources sufficient for their needs.

8.16 Policies

1) Develop a parkland acquisition and development plan in accordance with community growth and projected park demand. Accomplish acquisition according to a plan developed by the City and the Parks and Recreation Commission;

- 2) Assist in the development of the Bear Creek Greenway, including the Ashland Creek portion of the city park system.
- 3) Encourage school-park joint developments.
- 4) Coordinate parkland acquisition and design with other agencies involved with park usage. Agencies should include Jackson County and the public school system.
- 5) Encourage the development of private common open space areas in new residential developments to offset the demand for additional public parks.
- 6) The City shall adopt an official map that will identify the planned areas for parks, new natural areas, conservation areas and trails. Where only a portion of the property is required for park or open space use, development can occur on the remainder of the property. When only a small portion of the property is required for a public purpose, and the new development will benefit from the public area, dedication may be required. Otherwise, the City will purchase the property, paying fair compensation. When development is possible, if the City does not have the funds available for the intended purchase within a reasonable amount of

- time, the City shall release the land from the Parks designation and allow the development consistent with other plan policies.
- 7) Develop the system of corridors, linear park routes and trails outlined in the Park and Open Space map. Encourage interconnections between parks, open spaces, bicycle paths, easements, irrigation ditches, scenic roadway routes, railroad rights-of-way, etc. Require that commonly used trails across private property be preserved when developed.
- 8) Establish, where possible, trails along non-urbanized sections of stream corridors, ensuring that stream ecology and any residences are protected. Prohibit development that would prohibit stream corridors from being utilized for trails.
- 9) Require all new residential, commercial and industrial developments to be designed and landscaped to a high standard to complement the proposed site and the surrounding area.
- 10) Encourage improvement programs for existing areas with consideration to such items as exterior maintenance, landscaping, signs, and underground placement of utilities.
- 11) Require high standards of design and landscaping for development adjacent to major arterials, and encourage dividers in any new access routes into Ashland.
- 12) Require, where possible, that the original vegetation be retained and require the restoration of new vegetation if it is removed.
- 13) Require street trees in all new residential, commercial and industrial developments.
- 14) Views of Pompadour Bluff, Van Dyke's Cliffs, Mt. Ashland, Grizzly Peak, and the surrounding ridges are irreplaceable assets to Ashland and should be protected through cooperation with Jackson County.
- 15) Insure that the Tree Commission has an opportunity to review and comment on all significant landscaping in the city, public or private.
- 16) Develop an urban forest plan for the City including a street tree and a non-street tree section, a



parks, open space, and aesthetics

Printed July 2005

City of ASHLAND, OREGON
COMPREHENSIVE PLAN

tree resource inventory, a plan for preservation and renewal of trees of stature and native species, long range maintenance plan, a plan to promote the greater use of trees and shrubs on both public and private land, and plan to educate the public regarding benefits of trees on public right-of-ways.

17)Take necessary steps to annually be a Tree City, USA.

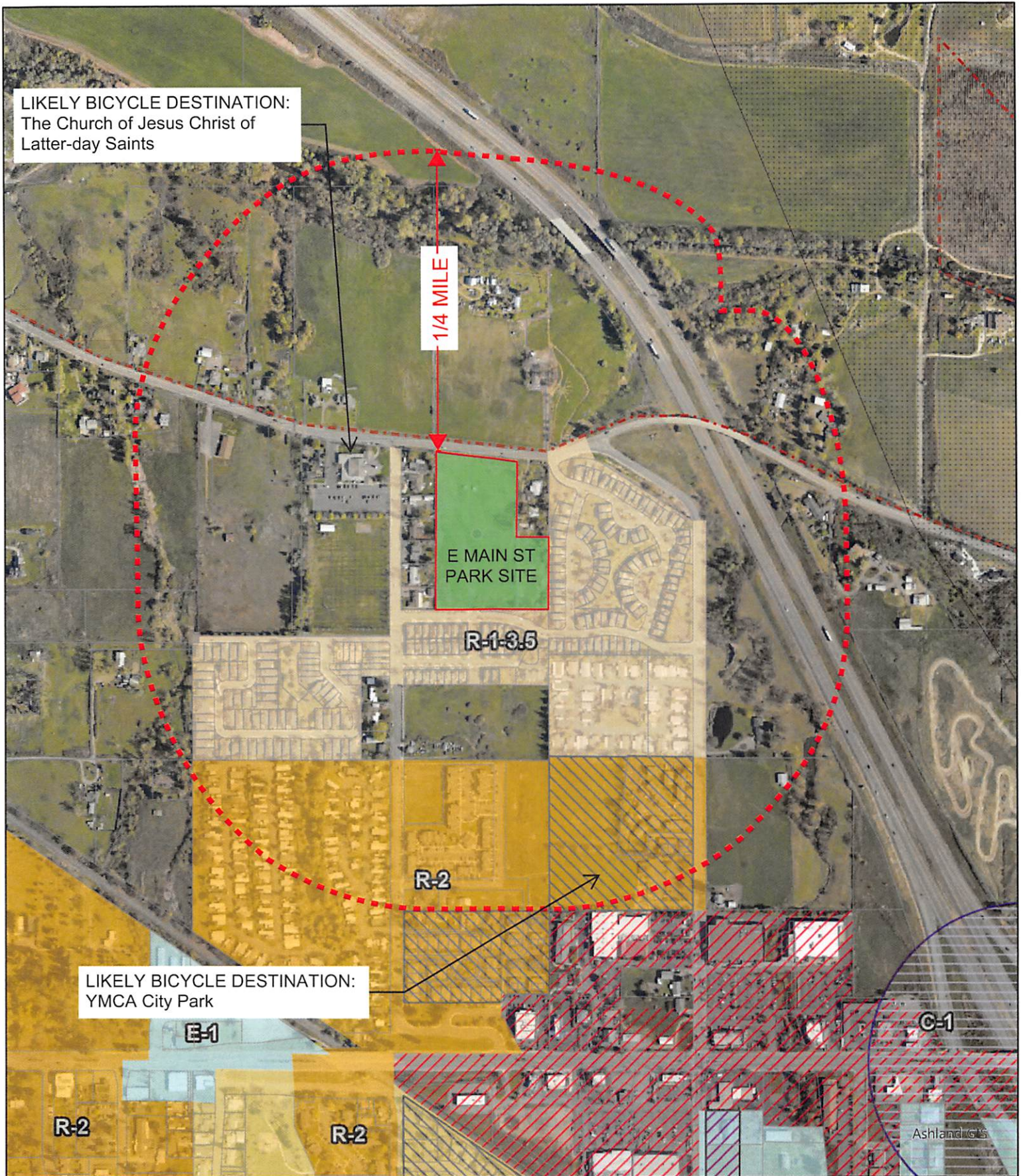
18)Establish a Plant Arboretum and/or a directory of notable trees in the City.

19)Increase the portion of the city covered by a tree canopy, especially parking lots and other paved areas.

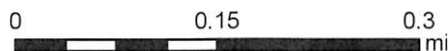
20)Develop an urban forest interface plan to enhance the aesthetic and recreational opportunities created by this resource. The plan will also include wild-life enhancement measures and a fire control plan.

21)Establish criteria and map the visual resources of Ashland, from selected points outside the city looking in, and from strategic points within the city looking out.

22)The City will cooperate and when necessary, negotiate with the county, USFS and BLM concerning activities within the view shed that would impact the visual integrity of the area.



1/4 MILE RADIUS FROM PROPOSED E MAIN ST PARK SITE



City of Ashland

1:9,028

Date Printed: 2/14/2024

The comments of this pre-app are preliminary in nature and subject to change based upon the submittal of additional or different information. The Planning Commission or City Council are the final decision making authority of the City, and are not bound by the comments made by the Staff as part of this pre-application.

**ASHLAND PLANNING DEPARTMENT
PRE-APPLICATION CONFERENCE
COMMENT SHEET**
September 6, 2023

SITE: 2228 and 2290 E. Main St.
APPLICANT: Ashland Parks Department
and Mary C. Desmit
REQUEST: Annexation and Site Design
Review

PLANNING STAFF COMMENTS

Summary This pre-application conference was conducted previously for a very similar proposal in March of 2020. The bulk of this document is the same with new comments on county process for the proposed PLA.

The proposal requires planning applications and approvals for Annexation and Site Design Review. Typically, the Annexation and Site Design Review are processed concurrently. While a concurrent application isn't required, in staff's experience demonstrating compliance with the annexation approval criteria requires some level of site planning. *What is most important is the configuration of the property line prior to the annexation application.*

Annexation of residential property requires minimum density as well as requirement to provide affordable housing, however land dedicated as a public park is exempt from this requirement. Staff considered the possibility of proposing that the park potentially develop under County jurisdiction, but the necessity of urban facilities requires annexation.

For this process to work smoothly, prior to the application for annexation a property line adjustment needs to be conducted as a separate type 1 land use action with the county so that tax lot 200 is reconfigured to include the southernly half of the Desmit property.

Per conversations with county staff on 8/31 doing such an adjustment (which will increase the non-conformity in terms of further reducing the size of the Desmit property), is specifically allowed per Section 3.4.3 of the LDO. (see below). Once the property has been reconfigured then the city will be able to process an application for annexation for the park land and there will not be a requirement for residential development or affordable housing.

LDO 3.4.3 Approval Criteria

In nonresource districts, a property line adjustment may be approved if it complies with (A through F) below. In resource districts, a property line adjustment may be approved if it complies with all of the following:

- A) All properties were lawfully created;*
- B) No new parcels will result from the adjustment;*
- C) Except as provided by (F) and (G) below, and provided the standards of*

2228 and 2290 E. Main St.
September 6, 2023
Page 1

Section 10.4.4 are met, for properties located entirely outside the corporate limits of a city:

- 1) *Where one or both of the abutting properties are smaller than the minimum lot or parcel size for the applicable zone before the property line adjustment, after the adjustment one is as large as or larger than the minimum lot or parcel size for the applicable zone; or*
- 2) *Both abutting properties are smaller than the minimum lot or parcel size for the applicable zone before and after the property line adjustment. [2008 HB 3629]*
- D) *All buildings and improvements (e.g., septic systems, wells, etc.) will comply with the minimum setback requirements from the adjusted property line, unless a building or improvement does not currently comply with the minimum setback, in which case such building or improvement will not be made more nonconforming by the adjustment. Additionally, conforming on-site characteristics (e.g., landscaping or access) will not be made nonconforming;*
- E) *The adjustment will not result in parcel(s) that overlap a city limit, urban growth boundary, county, or State line;*
- F) *The adjustment will not result in a parcel being made buildable that was not capable of being developed prior to the adjustment for reasons such as being too small or narrow. However, a parcel that cannot be developed for residential purposes because it lacks access may acquire road frontage and be made buildable through a property line adjustment;*

Other potential issues:

Staff has very serious concerns with the proposed gravel parking area on the north side of the park. Additionally, while the fire department did not address it in their comments staff has concerns with lack of a hammer head turn around on the larger parking area.

City may require additional ROW dedication along east Main.

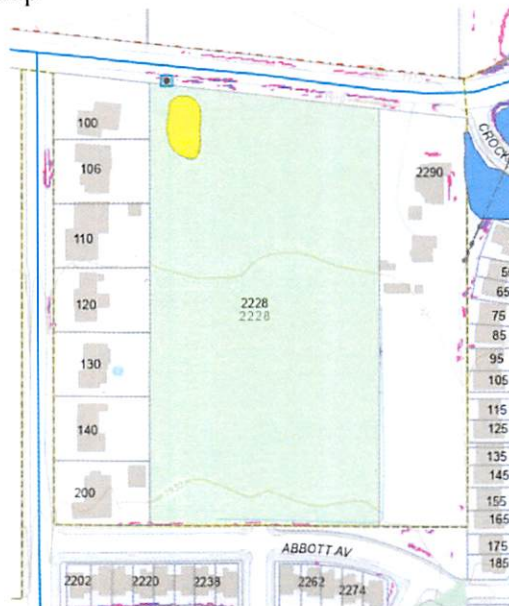
Staff would like to recommend that APRC consider working with the adjacent HOA and inquire about purchasing / obtaining the 0.21 acers of open space in the southeast corner of the project which would allow for a cohesive plan and maintenance to the ROW.

Possible wetlands: from AMC 18.3.11.040.B.2

2. Possible Wetlands. For wetlands not classified as Locally Significant on the Water Resources map, the Wetland Protection Zone shall consist of all lands identified to have a wetland presence on the wetland delineation, plus all lands within 20 feet of the upland-wetland edge as illustrated in Figure [18.3.11.040.B.2](#). Possible Wetlands includes all areas designated as such on the Water Resources map and any unmapped wetlands discovered on site. A wetland delineation prepared by a qualified wetland specialist shall be submitted to the City that graphically represents the location of wetlands on a site plan map in accordance with subsection [18.3.11.100.A.3](#). An average buffer width of 20 feet may be utilized around the perimeter of a

possible wetland upon submission of evidence and a detailed plan by a natural resources professional demonstrating that equal or better protection of the functions and values of the resource will be ensured.

From city GIS of adopted map



2020 Preapplication comments (lightly edited).

Annexation (Legislative Decision)

- The properties are designated as Suburban Residential (R-1-3.5) on the Ashland Comprehensive Plan. Pubic parks are a permitted use in the R-1-3.5 zone.
- **Five-Year Supply** (AMC 18.5.8.050.H.1): The proposal would meet annexation approval criteria 18.5.8.050.H.1 because there is less than a five-year supply of R-1-3.5 inside the city limits according to the 2019 Buildable Lands Analysis (BLI). The 2019 BLI identifies a .2 Ac/year demand in Table 11 and .1 Ac net buildable in city limits in Table 8.
 - 2019 BLI http://www.ashland.or.us/SIB/files/2019_BLI_11082019_final.pdf
- **Adequate Transportation** (AMC 18.5.8.050.E): see summary below.
- **Adequate Public Facilities:** Annexation approval will require a demonstration that adequate capacity of public facilities can and will be provided to and through the development by the developer with annexation.
 - **Storm Drain Facilities:** The application will need to address requirements that post development peak storm water flows are less than or equal to pre-development levels and address any necessary water quality mitigation requirements. See Public Works comments below.
- **Street Classifications:** E. Main St. is an avenue (major collector), Clay St. is a neighborhood collector and Abbott Ave. is a neighborhood street.
- **Traffic Impact Analysis (TIA):** Given the park is likely to include citywide attractions, staff believes a Traffic Impact Analysis is necessary (see comments below about existing dog park). This sentiment is also reflected in the Public Works Department comments. The TIA should address vehicular turning movements, site distances and safety, especially for the proposed access on E. Main St.
 - **Existing Dog Park:** The Verde Village planning application included a TIA by JRH and an addendum dated 6/7/2007. The addendum included existing traffic counts, before the subdivision was developed. JRH counted 46 peak hour trips at the intersection of the dog park access and Nevada St. and these were attributed to the dog park.
- **Parking:** *Due to new state law (CFEC) we can no longer enforce parking minimums.*
- **Pedestrian, Bicycle and Transit Improvements:** The annexation criteria emphasize providing a variety of ways to travel to and from property that is annexed into the city limits. Staff believes the expectation will be for the proposed park to make key nonautomotive connections so that park visitors have alternatives for reaching the park.
 - **Sidewalks:** Installation of sidewalk is required on the E. Main frontage of the site to connect to Crocker and also to the west to connect to Clay St. The annexation criteria require full sidewalk improvements to be provided on one side of the street for all streets adjacent to the proposed annexed area and for the sidewalks to connect to

2228 and 2290 E. Main St.

September 6, 2023

Page 4

existing sidewalk systems with a quarter of a mile to existing sidewalks (AMC 18.5.8.050.E.3).

- **Bicycle Facilities:** Bike lanes are in place on E. Main St. and Tolman Creek Road. A bicycle boulevard is identified in the Ashland Transportation System Plan for Clay St. – see Figure 8-1 and Project B22.
- **Transit:** The two RVTD routes in Ashland, Route 10 and Route 1X, do not currently serve the site. The application should address any planned future transit per AMC 18.5.8.050.E.4. See RVTD contact information below under Other Departments.
- **Streets:** The block length between Clay St. and Crocker St. is approximately 650 feet and the block perimeter of E. Main/Crocker/Abbott/Clay is approximately 2,900 feet. The Ashland Street Standards require block lengths to be a maximum of 400 feet and perimeters of 1,600 feet (AMC 18.4.5.0340.E.9). A typical residential or commercial/employment annexation would require the installation of a public street in accordance with the Ashland Street Standards to provide access and multiple routes for vehicles, pedestrians and bicycles (AMC 18.5.8.050.E.1). In lieu of a public street, staff suggests designing the parking areas as a “street-like feature” (see below) and providing through and fairly direct route for pedestrians and bicycles. Also, the TIA should review if a through vehicle access would benefit the level of service and nearby intersections, as well as potential traffic safety and turning movement issues.

18.5.8.050 Approval Criteria and Standards

An application for an annexation may be approved if the proposal meets the applicable criteria in subsections [A](#) through [H](#) below. The approval authority may, in approving the application, impose conditions of approval consistent with the applicable criteria and standards, and grant exceptions and variances to the criteria and standards in this section in accordance with subsection [I](#).

- A.** The annexed area is within the City's Urban Growth Boundary.
- B.** The annexation proposal is consistent with the Comprehensive Plan designations applicable to the annexed area, including any applicable adopted neighborhood, master, or area plan, and is an allowed use within the proposed zoning.
- C.** The annexed area is contiguous with the City limits.
- D.** Adequate City facilities for the provision of water to the annexed area as determined by the Public Works Department; the transport of sewage from the annexed area to an approved waste water treatment facility as determined by the Public Works Department; the provision of electricity to the annexed area as determined by the Electric Department; urban storm drainage as determined by the Public Works Department can and will be provided from the annexed area. Unless the City has declared a moratorium based upon a shortage of water, sewer, or electricity, it is recognized that adequate capacity exists system-wide for these facilities. All required public facility improvements shall be constructed and installed in accordance with subsection [18.4.6.030.A](#).
- E.** Adequate transportation can and will be provided to serve the annexed area. For the purposes of this section, “adequate transportation” for annexations consists of vehicular, bicycle, pedestrian, and transit

transportation meeting the following standards:

1. For vehicular transportation a minimum 22-foot-wide paved access exists, or can and will be constructed, providing access to the annexed area from the nearest fully improved collector or arterial street. All streets bordering on the annexed area shall be improved, at a minimum, to an applicable City half-street standard. The approval authority may, after assessing the impact of the development, require the full improvement of streets bordering on the annexed area. All streets located within annexed areas shall be fully improved to City standards unless exception criteria apply. Where future street dedications are indicated on the Street Dedication Map or required by the City, provisions shall be made for the dedication and improvement of these streets and included with the application for annexation.
 2. For bicycle transportation, safe and accessible bicycle facilities according to the safety analysis and standards of the governing jurisdiction of the facility or street (e.g., City of Ashland, Jackson County, Oregon Department of Transportation) exist, or can and will be constructed. Should the annexed area border an arterial street, bike lanes shall be constructed along the arterial street frontage of the annexed area. Likely bicycle destinations within a quarter of a mile from the annexed area shall be determined and the approval authority may require the construction of bicycle lanes or multiuse paths connecting the annexed area to the likely bicycle destinations after assessing the impact of the development proposed concurrently with the annexation.
 3. For pedestrian transportation, safe and accessible pedestrian facilities according to the safety analysis and standards of the governing jurisdiction of the facility or street (e.g., City of Ashland, Jackson County, Oregon Department of Transportation) exist, or can and will be constructed. Full sidewalk improvements shall be provided on one side of all streets bordering on the proposed annexed area. Sidewalks shall be provided as required by ordinance on all streets within the annexed area. Where the annexed area is within a quarter of a mile of an existing sidewalk system or a location with demonstrated significant pedestrian activity, the approval authority may require sidewalks, walkways or multiuse paths to be constructed and connect to either or both the existing system and locations with significant pedestrian activity.
 4. For transit transportation, should transit service be available to the annexed area, or be likely to be extended to the annexed area in the future based on information from the local public transit provider, the approval authority may require construction of transit facilities, such as bus shelters and bus turnout lanes.
 5. Timing of Transportation Improvements. All required transportation improvements shall be constructed and installed in accordance with subsection [18.4.6.030.A](#).
- F.** For all residential annexations, a plan shall be provided demonstrating that the development of the annexed area will ultimately occur at a minimum density of 90 percent of the base density for the zone, unless reductions in the total number of units are necessary to accommodate significant natural features, topography, access limitations, or similar physical constraints. The owner or owners of the annexed area shall sign an agreement, to be recorded with the County Clerk after approval of the annexation, ensuring that future development will occur in accord with the minimum density indicated in the development plan. For purposes of computing maximum density, portions of the annexed area containing unbuildable lots, parcels, or portions of

the annexed area such as existing streets and associated rights-of-way, railroad facilities and property, wetlands, floodplain corridor lands, slopes greater than 35 percent, or land area dedicated as a public park, shall not be included.

G. Except as provided in subsection [18.5.8.050.G.7](#), below, annexations with a density or potential density of four residential units or greater and involving residential zoned lands, or commercial, employment or industrial lands with a Residential Overlay (R-Overlay) shall meet the following requirements:

1. The total number of affordable units provided to qualifying buyers, or to qualifying renters, shall be equal to or exceed 25 percent of the base density as calculated using the unit equivalency values set forth herein. The base density of the annexed area for the purpose of calculating the total number of affordable units in this section shall exclude any unbuildable lots, parcels, or portions of the annexed area such as existing streets and associated rights-of-way, railroad facilities and property, wetlands, floodplain corridor lands, water resource areas, slopes greater than 35 percent, or land area dedicated as a public park.

a. Ownership units restricted to households earning at or below 120 percent of the area median income shall have an equivalency value of 0.75 unit.

b. Ownership units restricted to households earning at or below 100 percent of the area median income shall have an equivalency value of 1.0 unit.

c. Ownership or rental units restricted to households earning at or below 80 percent of the area median income shall have an equivalency value of 1.25 unit.

2. As an alternative to providing affordable units per section [18.5.8.050.G.1](#), above, the applicant may provide title to a sufficient amount of buildable land for development complying with subsection [18.5.8.050.G.1.b](#), above, through transfer to a non-profit (IRC 501(3)(c)) affordable housing developer or public corporation created under ORS [456.055](#) to [456.235](#).

a. The land to be transferred shall be located within the project meeting the standards set forth in sections [18.5.8.050.G.5](#) and [18.5.8.050.G.6](#).

b. All needed public facilities shall be extended to the area or areas proposed for transfer.

c. Prior to commencement of the project, title to the land shall be transferred to the City, an affordable housing developer which must either be a unit of government, a non-profit 501(c)(3) organization, or a public corporation created under ORS [456.055](#) to [456.235](#).

d. The land to be transferred shall be deed restricted to comply with Ashland's affordable housing program requirements.

e. Transfer of title of buildable land in accordance with this subsection shall exempt the project from the development schedule requirements set forth in subsection [18.5.8.050.G.4](#).

3. The affordable units shall be comparable in bedroom mix with the market rate units in the development.

a. The number of bedrooms per dwelling unit in the affordable units within the residential development shall be in equal proportion to the number of bedrooms per dwelling unit in the market rate units within the residential development. This provision is not intended to require the same floor area in affordable units as compared to market rate units. The minimum square footage of each affordable unit shall comply with the minimum required floor area based as set forth in Table

[18.5.8.050.G.3](#), or as established by the U.S. Department of Housing and Urban Development (HUD) for dwelling units developed under the HOME program.

Table 18.5.8.050.G.3. Minimum Required Floor Area for Affordable Units

Unit Type	Minimum Required Unit Floor Area (Square Feet)
Studio	350
1 bedroom	500
2 bedroom	800
3 bedroom	1,000
4 bedroom	1,250

4. A development schedule shall be provided that demonstrates that the affordable housing units per subsection [18.5.8.050.G](#) shall be developed, and made available for occupancy, as follows:
 - a. That 50 percent of the affordable units shall have been issued building permits prior to issuance of a certificate of occupancy for the last of the first 50 percent of the market rate units.
 - b. Prior to issuance of a building permit for the final ten percent of the market rate units, the final 50 percent of the affordable units shall have been issued certificates of occupancy.
5. That affordable housing units shall be constructed using comparable building materials and include equivalent amenities as the market rate units.
 - a. The exterior appearance of the affordable units in any residential development shall be visually compatible with the market rate units in the development. External building materials and finishes shall be substantially the same in type and quality for affordable units as for market rate units.
 - b. Affordable units may differ from market rate units with regard to floor area, interior finishes and materials, and housing type; provided, that the affordable housing units are provided with comparable features to the market rate units, and shall have generally comparable improvements related to energy efficiency, including plumbing, insulation, windows, appliances, and heating and cooling systems.
6. Exceptions to the requirements of subsections [18.5.8.050.G.2](#) through [18.5.8.050.G.5](#), above, may be approved by the City Council upon consideration of one or more of the following:
 - a. That an alternative land dedication as proposed would accomplish additional benefits for the City, consistent with the purposes of this chapter, than would development meeting the on-site dedication requirement of subsection [18.5.8.050.G.2](#).
 - b. That the alternative phasing proposal not meeting subsection [18.5.8.050.G.4](#) provided by the applicant provides adequate assurance that the affordable housing units will be provided in a timely fashion.
 - c. That the materials and amenities applied to the affordable units within the development, that are not equivalent to the market rate units per subsection [18.5.8.050.G.5](#), are necessary due to local, state, or federal affordable housing standards or financing limitations.
7. The total number of affordable units described in this subsection shall be determined by rounding up

fractional answers to the nearest whole unit. A deed restriction or similar legal instrument shall be used to guarantee compliance with affordable criteria for a period of not less than 60 years for units qualified as affordable rental housing, or 30 years for units qualified as affordable for-purchase housing.

H. One or more of the following standards are met:

1. The annexation proposal shall meet the requirements of subsection [18.5.8.050.B](#), above.
2. A current or probable danger to public health exists within the proposed area for annexation due to lack of full City sanitary sewer or water services in accordance with the criteria in ORS chapter [222](#) or successor state statute.
3. Existing development in the proposed area for annexation has inadequate water or sanitary sewer service, or the service will become inadequate within one year.
4. The proposed area for annexation has existing City water or sanitary sewer service extended, connected, and in use, and a signed consent to annexation agreement has been filed and accepted by the City.
5. The proposed area for annexation is an island surrounded by lands within the City limits.

I. Exceptions and Variances to the Annexation Approval Criteria and Standards. The approval authority may approve exceptions to and variances from the approval criteria and standards in this section using the criteria in section [18.4.6.020.B.1](#), Exceptions to the Street Design Standards, or chapter [18.5.5](#), Variances. (Ord. 3204 § 3, amended, 12/21/2021)

Site Design Review

- **Parking Area Design**

- **Street-Like Features:** The parking area is required to be divided into separate areas and a street or driveway with street-like features and a continuous pedestrian circulation system is required, see AMC 18.4.3.080.B.4, AMC 18.4.3.080.C.2 and AMC 18.4.3.090.
- **Bio-swales and Reducing Microclimatic Impacts:** Parking lots of seven or more spaces must include bio-swales to capture and treat runoff and incorporate one of four strategies to reduced microclimatic impacts – see AMC 18.4.3.080.B.5.

- **Tree Protection and Removal:** Site Design Review applications require a tree preservation/protection plan to ensure that trees (including street trees, parking lot trees and trees on adjacent properties within 15 feet of the property line) are protected during all site disturbance (including demolition, staging, construction, driveway/parking installation, staging of materials, etc.) This plan needs to address all trees on the property over six-inches in diameter at breast height (d.b.h.) and all trees that are located on adjacent properties within 15 feet of the property line as well, as well as any trees including street trees that are within 15-feet of any off-site disturbances. The Parks Department is exempt from tree removal permit activities involving the establishment or alteration of a park (AMC 18.5.7.020.C.1). However, staff suggests describing any necessary tree removals as part of the project descriptions.

- **Outdoor Lighting:** Staff suggests addressing this in the annexation application and specifically the standards in AMC 18.4.4.050.
- **Signs:** Signs in residential zones are limited to ground signs meeting the requirements of AMC 18.4.7.060. In the past, the provision for one ground sign 15 square feet in size and not greater than five feet in overall height has been used for public parks – this would apply to the public street frontages on E. Main St. and Abbott Ave.

18.5.2.050 Approval Criteria

An application for Site Design Review shall be approved if the proposal meets the criteria in subsections A, B, C, and D below. The approval authority may, in approving the application, impose conditions of approval, consistent with the applicable criteria.

A. Underlying Zone. The proposal complies with all of the applicable provisions of the underlying zone (part [18.2](#)), including but not limited to: building and yard setbacks, lot area and dimensions, density and floor area, lot coverage, building height, building orientation, architecture, and other applicable standards.

B. Overlay Zones. The proposal complies with applicable overlay zone requirements (part [18.3](#)).

C. Site Development and Design Standards. The proposal complies with the applicable Site Development and Design Standards of part [18.4](#), except as provided by subsection E, below.

D. City Facilities. The proposal complies with the applicable standards in section 18.4.6 Public Facilities, and that adequate capacity of City facilities for water, sewer, electricity, urban storm drainage, paved access to and throughout the property, and adequate transportation can and will be provided to the subject property.

E. Exception to the Site Development and Design Standards. The approval authority may approve exceptions to the Site Development and Design Standards of part [18.4](#) if the circumstances in either subsection 1, 2, or 3, below, are found to exist.

1. There is a demonstrable difficulty meeting the specific requirements of the Site Development and Design Standards due to a unique or unusual aspect of an existing structure or the proposed use of a site; and approval of the exception will not substantially negatively impact adjacent properties; and approval of the exception is consistent with the stated purpose of the Site Development and Design; and the exception requested is the minimum which would alleviate the difficulty;
2. There is no demonstrable difficulty in meeting the specific requirements, but granting the exception will result in a design that equally or better achieves the stated purpose of the Site Development and Design Standards; or
3. There is no demonstrable difficulty in meeting the specific requirements for a cottage housing development, but granting the exception will result in a design that equally or better achieves the stated purpose of section [18.2.3.090](#). (Ord. 3147 § 9, amended, 11/21/2017)

OTHER DEPARTMENTS

BUILDING DEPT: Contact the Building Division for any Building Codes-related information at (541) 488-5305.

ENGINEERING/PUBLIC WORKS/STREETS/TRANSPORTATION/STORMWATER: See comments at the end of this document and contact Karl Johnson in the Engineering Division for any further information at (541) 488-5347 or e-mail karl.johnson@ashland.or.us.

ENERGY CONSERVATION: For more information, contact Dan Cunningham in Conservation at cunningd@ashland.or.us or (541) 552-2063.

FIRE DEPARTMENT: See comments at the end of this document and contact Fire Marshal Ralph Sartain of Ashland Fire at Rescue for Fire Codes-related information for this project at (541) 552-2229 or e-mail ralph.sartain@ashland.or.us.

WATER AND SEWER SERVICE: Contact Steve Walker of the Water Quality Division for service requirement and fee information at (541) 552-2326 or via e-mail to walkers@ashland.or.us.

ELECTRIC SERVICE: Contact Dave Tygerson in the Electric Department at (541) 552-2389 or e-mail tygersod@ashland.or.us for service requirements and fee information.

OREGON DEPARTMENT OF TRANSPORTATION (ODOT): Because the application involves a zone change, it is subject to review for ODOT for potential impacts to their system under the Transportation Planning Rule OAR 660-012-0060. A copy of the pre-application submittal has been provided to ODOT for their review and comment, and ODOT commented “the proposed zone change to RR 5 on 7.5 acres is off system. It will not significantly generate traffic impacting state highway system.” For any further information, contact ODOT Region 3 Senior Planner Micah Horowitz, AICP at 541.774.6331 or micah.horowitz@odot.state.or.us.

ROGUE VALLEY TRANSPORTATION DISTRICT (RVTD): In addressing requirements for adequate transportation facilities, which include provisions for transit, the applicants will need to coordinate transit provisions (i.e. a future bus stop/shelter on Ashland Street) with the Rogue Valley Transit District. A copy of the pre-application submittal has been provided to RVTD for their review and comment. For any further information, contact RVTD Senior Planner Paige Townsend at (541) 608-2429 e-mail p.townsend@rvtd.org.

TALENT IRRIGATION DISTRICT (TID): See attached comments. For further information, contact Talent Irrigation District, PO Box 467, 104 West Valley View Road, Talent OR 97540, Phone: 541-535-1529, Fax: 541-535-4108, Email: tid@talentid.org, Website: www.talentid.org

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PROCEDURE: Type III – Public hearing at the Planning Commission with a recommendation to the City Council followed by a public hearing at the City Council and final decision by the City Council. The final decision must be adopted by Ordinance, which requires two separate readings at City Council meetings.

APPLICATION MATERIALS: The application is required to include drawings of the proposal (i.e. plan requirements) as well as written findings addressing the applicable approval criteria in accordance with the Ashland Land Use Ordinance (ALUO), Chapter 18 of the Ashland

Municipal Code. The following section includes the requirements for plans and approval criteria which are applicable to the proposal as described in the pre-application submittals. When more than one planning approval is required for the proposal, multiple sections of the ALUO may apply. *The burden of proof is on the applicant(s) to ensure that all applicable criteria are addressed in writing and that all required plans, written findings, and other materials are submitted* even if those items were not discussed in specific, itemized detail during this initial pre-application conference.

The current land use ordinance is available on-line at: <https://ashland.municipal.codes/LandUse>

Plan Requirements

- Two (2) copies of the plan submittals required for an Annexation in Chapter 18.5.8.020 “Applicability and Application Submission Requirements”
- Two (2) scalable copies of the plans required for Site Design Review approval as detailed in AMC 18.5.2.040
- Two (2) scalable copies of a Tree Protection and Preservation Plan as required in AMC 18.4.5.030.
- Two (2) scalable copies of all of the above on paper no larger than 11” x 17” in addition to any full-sized copies. NOTE – These 11” x 17” copies are used for the Planning Commission packet and for the notices mailed to neighbors. Please submit clear, reproducible copies.

Approval Criteria

Applicants are advised that in addition to required plans, written findings addressing how the ordinance criteria are satisfied in narrative format are required. The applicable criteria are included below.

- Two (2) copies of written findings addressing the criteria for Annexation from AMC 18.5.8.050.
- Two (2) copies of written findings addressing the criteria from AMC Chapter 18.5.2.050 for Site Design Review approval, and tree removal

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APPLICATION DEADLINE: *At least 45 days before the first public hearing at the Planning Commission.*

TREE COMMISSION: Thursday before Planning Commission, 6:00 p.m.

PLANNING COMMISSION*: Second Tuesday of each month, 7:00 p.m.

COUNCIL MEETING: First and Third Tuesday of each month, 7:00 p.m.

FEES:

Annexation (Type III):	\$5,110.00
Site Design Review (Type II)	\$2,663.25 + ½ % valuation

NOTES:

- *Applications are accepted on a first come-first served basis.*
- *All applications received are reviewed by staff, and must be found to be complete before being scheduled for a Planning Commission meeting.*
- *Applications will not be accepted without a complete application form signed by the applicant(s) and property owner(s), all required materials and full payment.*

2228 and 2290 E. Main St.

September 6, 2023

Page 12

- *Applications are reviewed for completeness in accordance with ORS 227.178. Annexations, Comprehensive Plan Map Amendment & Zone Changes requests are not subject to the "120-Day Rule" under state law.*

For further information, please contact:

Aaron Anderson, Senior Planner

City of Ashland, Department of Community Development

Phone (541) 552-2052 or e-mail aaron.anderson@ashland.or.us

September 6, 2023

Date

2228 and 2290 E. Main St.

September 6, 2023

Page 13

Public Works Conditions of Approval

1. Engineered Plans - Where public improvements are required or proposed, the applicant's engineer shall submit design plans for approval of all public improvements identified on the approved plan or as specified in conditions of approval. One set of these civil plans MUST be submitted DIRECTLY to the Public Works/Engineering Department. All design plans must meet the City of Ashland Public Works Standards. Engineered construction plans and specifications shall be reviewed and signed by the Public Works Director, prior to construction. All public facilities within the development will be designed to the City of Ashland Engineering Design Standards for Public Improvements. The engineered plans shall also conform to the following:
 - If drawings are submitted to the City of Ashland digitally, they shall be true scale PDF drawings. If AutoCAD drawings are also submitted, they shall be compatible with the AutoCAD release being used by the City at that time and shall be located and oriented within the Oregon State Plain Coordinate System (NAD83-89).
 - Drawings sizes shall comply with ANSI-defined standards for page width and height. Review drawings may be submitted in B size (11x17). Bidding and construction documents may also be printed at B size; however, all final as-constructed drawings must be submitted to scale on D-size (24x36) Mylar. Digital files of the as-constructed drawings shall also be submitted. Drawings shall be drawn such that reduction of plans from full size (D sized) to half size (B sized) can be done to maintain a true scale on the half-sized plans.
2. TIA (Transportation Impact Analysis) – No TIA will be required for this project.
3. Street Improvement – No additional street improvements, beyond those necessary to comply with City Street Standards, will be required at this time. The applicant proposed improvements must be reviewed and permitted by the City of Ashland Engineering Department.
4. Right of Way – No additional right of way dedication, beyond that necessary to comply with City Street Standards, will be required at this time.
5. Sanitary Sewer - The property is currently served by a 12-in sanitary sewer main in E. Main Street. The applicant proposed improvements must be reviewed, approved and permitted by the City of Ashland Engineering Department.
6. Water - The property is currently served by a 8-in water main in Abbott Avenue. City of Ashland Water Department shall tap existing water main and install any new water services and water meter boxes that are proposed by development. City of Ashland Water Department must be contacted for availability, placement and costs associated with the installation of the new water service. Service & Connection Fees will also be required for any new water services installed as part of this project.
7. Storm Drainage - The property is currently served by a road side ditch along E. Main Street. City of Ashland Engineering Department must review an engineered storm drainage plan.

Storm Water Facility Design Requirements

Applicant MUST follow the guidance and requirements set forth in the current Rogue Valley Stormwater Quality Design Manual which can be found at the following website:

<https://www.rvss.us/stormwater-quality-documents-information>

All stormwater calculations, reports, drawings, etc. shall be submitted to the City of Ashland Engineering Department for review.

8. Erosion & Sediment Control - The following requirements shall be met:

- All ground disturbances exceeding 1,000 square feet shall implement an Erosion and Sediment Control Plan (ESCP).
 - A 1200-C permit will be secured by the developer where required under the rules of the Oregon State DEQ. City of Ashland Engineering Department must receive a copy of this permit before any construction shall begin.
 - Erosion Prevention and Sediment control measures that meet the minimum standards set forth by the City of Ashland Public Works/Engineering Standard Drawing CD282 must be in place before any construction related to the project begins.
 - Pollution, track out, and sediment dumping into storm water are strictly prohibited per AMC 9.08.060.
 - Drainage from automotive use areas shall be limited to oil concentrations of 10 mg/l by a pre-approved means.
 - Trash storage areas shall be covered or provide additional storm water treatment by an approved means.
 - Off street parking areas shall conform to Ashland Municipal Code 18.4.3.080.B.5, including provisions to minimize adverse environmental and microclimatic impacts.
9. Driveway Access – No additional improvements/requirements will be requested at this time, but the applicant proposed improvements must be reviewed and permitted by the City of Ashland Engineering Department.
10. Permits – Any construction or closure within the public right of way will require a Public Works permit and before any work in the right of way commences all necessary permits MUST be obtained
- Jackson County Roads will need to review and approve any improvements in the Jackson County right-of-way. City of Ashland must obtain a copy of any Jackson County approvals and/or permits that are granted before any work in the Jackson County right-of-way begins.
 - A 1200-C permit will be secured by the developer where required under the rules of the Oregon State DEQ. City of Ashland Engineering Department must receive a copy of this permit before any construction shall begin.
11. As-Built - Where public improvements are required or completed, the developer shall submit to the City of Ashland, reproducible as-built drawings and an electronic file of all public improvements constructed during and in conjunction with this project. Field changes made during construction shall be drafted to the drawings in the same manner as the original plans with clear indication of all modifications (strike out old with new added beside). As-built drawings shall be submitted prior to final acceptance of the construction, initiating the one-year maintenance period.
12. Addresses – Any new addresses must be assigned by City of Ashland Engineering Department.
13. Sign & Traffic Control Devices– Sign installation and visibility must be maintained to the requirements of the Manual of Uniform Traffic Control Devices (MUTCD). The applicant proposed signage must be reviewed and approved by the City of Ashland Engineering Department.



Ashland Fire & Rescue Pre-Application Report

Conditions Descriptions

Reviewed By: Sartain, Ralph; Kleinberg Tech, Admin

Date Completed: 08/11/2023

LD File #: PreApp-2023-00379

Date Scheduled:

Applicant: Ashland Parks & Recreation Commission

Site Name: East Main Street Park

LD Description: New 6.52 acre park

Location: 2228/2290 East Main Street

Status

Approved with Yes
Conditions Noted
Below?:

Specific Development Requirements for Access & Water Supply

Fire department comments are based upon the 2019 Oregon Fire Code as adopted by the Ashland Municipal Code, and Ashland Land Use Laws:

Conditions

Code Set

Code Reference

Agency Defined Code

Approved

Conditions Descriptions

Code Reference

Description

Approved

Approved as submitted with no additional conditions or requirements.

Construction General Information/Requirements

Development shall comply with access and water supply requirements in accordance with the Oregon Fire Code in affect at the time of development submittal. Fire apparatus access roads are required to be installed prior to the time of construction. The approved water supply for fire protection (fire hydrants) is required to be installed prior to construction when combustible material arrives at the site.

Specific fire protection systems may be required in accordance with the Oregon Fire Code. This plan review shall not prevent the correction of errors or violations that are found to exist during construction. This plan review is based on information provided only. This plan review shall not prevent the correction of errors or violations that are found to exist during construction. This plan review is based on information provided only.

Design and installation shall meet the Oregon requirements of the International Fire, Building, Mechanical Codes and applicable NFPA Standards.

Final determination of fire hydrant distance, fire flow, and fire apparatus access requirements will be based upon plans submitted for Building Permit review. Changes from plans submitted with this application can result in further requirements. Any future construction must meet fire code requirements in effect at that time. The fire department contact for this project is Fire Marshal Ralph Sartain. He may be contacted at (541) 552-2229 or ralph.sartain@ashland.or.us.

If work will be completed during fire season, check fire season fire prevention requirements found at www.ashland.or.us/fireseason.

Ashland Fire & Rescue, 455 Siskiyou Blvd, Ashland OR 97520



RENDERING BY TERRAIN LANDSCAPE ARCHITECTURE

PROJECT TEAM

PROPERTY OWNER

Ashland Parks & Recreation Commission
Leslie Eldridge, Interim Director
340 S. Pioneer St.
Ashland, OR 97520
541.552.2257
leslie.eldridge@ashland.or.us

LANDSCAPE ARCHITECT / APPLICANT

Terrain Landscape Architecture
Piper von Chamier, RLA
310 Oak St. Suite 3
Ashland, OR 97520
541.500.4776
piper@terrainarch.com

CIVIL ENGINEER

POWELL engineering + consulting
Todd D. Powell, P.E.
100 E. Main St., Suite O
Medford, OR 97501
541.613.0723
todd@powellengineeringconsulting.com

SURVEYOR

Polaris Land Surveying LLC
Shawn Kampmann, PLS
PO Box 459
Ashland, OR 97520
541.601.3000
shawn@polarissurvey.com

TRANSPORTATION ENGINEER

Southern Oregon Transportation Engineering, LLC
Kimberly Parducci, PE PTOE
Medford, OR 97504
541.941.4148
kim.parducci@gmail.com

LAND USE CONSULTANT

Richard Stevens & Associates, Inc.
Clark Stevens
PO Box 4368,
Medford, OR 97501
541.773.2646
clark@rsaoregon.com

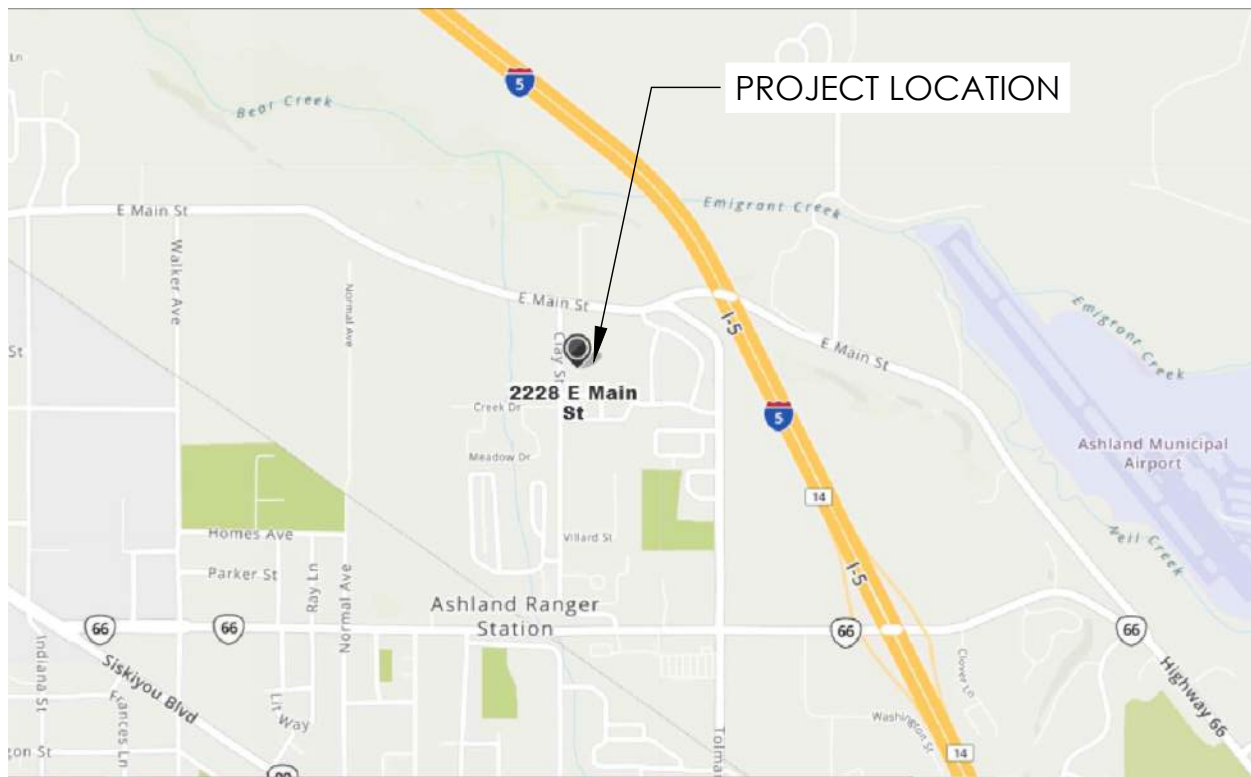
PUMP TRACK DESIGNER

American Ramp Company / Velosolutions
Blake Robinson, Action Sports Development Specialist
601 McKinley Ave
Joplin, MO 64801
417.206.6816 x 124
blake@americanrampcompany.com

PROJECT NARRATIVE

East Main Street Park is a park that will be teaming with dogs, dog owners, children of all ages, bike riders of all ages, neighbors, and community gardens. The park offers options for multiple park activities for the entire community to enjoy. Passive verses active recreation sets the tone for each area with common spaces creating boundaries between the different program elements. The park functions for multiple generations and user types and is grounded by the environment through material changes, signage, and sensory cues. Maintenance and longevity of the park is being explored and will continue to be researched throughout the remainder of the design process.

PROJECT LOCATION MAP
NTS



PROJECT DATA	
ADDRESS	2228 East Main Street
ASSESSORS MAP NO. / TAXLOT(S)	39 1E 11 CB / 200
ACREAGE	6.51 Acres
ZONING	RR-5, Rural Residential (Jackson County)
PARKING SPACES	28 Total Vehicular Spaces (1 Accessible) (1 Van Accessible) (1 EV Charging) 19 Total Bike Spaces (3 Sheltered, including 1 EBike Charging)

LOT COVERAGE		
	AREA (SQ FT)	PERCENTAGE OF LOT COVERED (%)
STRUCTURES	2,560	0.9%
STREETS & ROADS	0	0%
PARKING AREAS / DRIVEWAYS	13,993	4.9%
RECREATION AREAS (PUMP TRACK, SKILLS COURSE PATH, SPORTS COURT, TETHER BALL SURFACE, TURF PLAY MOUND)	31,670	11.1%
STORMWATER DETENTION AREA	3,710	1.3%
LANDSCAPE AREA (MIN. 45% OF DEVELOPED LOT AREA)	163,815	57.9%
TOTAL LOT COVERAGE (MAX. 55% OF SITE AREA)	69,560	24.5%

SHEET INDEX	
L0.0	COVER
L0.1	NOTES, SYMBOLS & ABBREVIATIONS
L0.2	MATERIALS LEGEND
L0.3	MATERIALS LEGEND
L0.4	MATERIALS LEGEND
L0.5	EXISTING SITE PHOTOS
L0.6	TREE DISPOSITION & PROTECTION PLAN
L0.7	DEMOLITION PLAN
L1.0	OVERALL LANDSCAPE SITE PLAN
L1.1	MATERIALS PLAN
L1.2	MATERIALS PLAN
L1.3	MATERIALS PLAN
L1.4	MATERIALS PLAN ENLARGEMENT - DOG PARK
L1.5	MATERIALS PLAN ENLARGEMENT - DOG PARK
L1.6	MATERIALS PLAN ENLARGEMENT - CENTRAL PLAY AREA
L1.7	MATERIALS PLAN ENLARGEMENT - PUMP TRACK
L2.0	LAYOUT PLAN
L3.0	PRELIMINARY GRADING PLAN
L4.0	PLANT PALETTE
L4.1	PLANTING PLAN
L4.2	PLANTING DETAILS
L5.0	IRRIGATION NOTES & LEGENDS
L5.1	WATER USE PLAN DIAGRAM
L5.2	IRRIGATION DETAILS
L5.3	IRRIGATION DETAILS
L7.0	LANDSCAPE DETAILS
L7.1	LANDSCAPE DETAILS
L7.2	LANDSCAPE DETAILS
L7.3	LANDSCAPE DETAILS
L7.4	LANDSCAPE DETAILS
L7.5	LANDSCAPE DETAILS
L7.6	LANDSCAPE DETAILS
L9.0	MATERIALS BOARD
L9.1	CONCEPT RENDERINGS
L9.2	PUMP TRACK CONCEPT RENDERINGS
C1.1	EXISTING CONDITIONS
C2.0	ESCP - COVER SHEET
C2.1	ROUGH GRADING & DEMO PHASE
C2.2	ESCP - STREET & UTILITY PHASE
C2.3	VERTICAL CONSTRUCTION & STABILIZATION
C2.4	BMP DETAILS
C3.0	CIVIL SITE PLAN
C4.0	GRADING & DRAINAGE PLAN
C5.0	SITE UTILITY PLAN
C7.1	FRONTAGE IMPROVEMENTS

TERRAIN
LANDSCAPE ARCHITECTURE
310 Oak Street, Suite 3
Ashland, Oregon 97520
541.500.4776
TERRAINARCH.COM

EAST MAIN STREET PARK
2228 EAST MAIN STREET
ASHLAND, OREGON 97520

REVISIONS
DATE DESCRIPTION

SITE DESIGN REVIEW

COVER
L0.0
PROJECT NO. 2102
03/06/24
TEAM: Pvc, CG, EG, ZW

ABBREVIATIONS:

ADJ	ADJACENT	MDL	MODEL
AL	ALIGN	MECH	MECHANIC
ALT	ALTERNATE	MFR	MANUFACTURER
BLDG	BUILDING	MIN	MINIMUM
BNB	BOARD AND BATTEN	MISC	MISCELLANEOUS
BO	BOTTOM OF	MTL	METAL
BOS	BOTTOM OF STRUCTURE	NIC	NOT IN CONTRACT
BOW	BOTTOM OF WALL	O/	OVER
BS	BOTTOM STEP	OC	ON CENTER
CFCI	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED	OD	OUTSIDE DIAMETER
CIVIL	CIVIL ENGINEER	OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
CJ	CONTROL JOINT	OFOI	OWNER FURNISHED, OWNER INSTALLED
CL	CENTERLINE	OPNG	OPENING
CLR	CLEAR	OVHG	OVERHANG
CMU	CONCRETE MASONRY UNIT	PT	PAINT(ED)
COL	COLUMN	PTW	PRESSURE TREATED WOOD
CONC	CONCRETE	PWD	PLYWOOD
CONT	CONTINUOUS	RECT	RECTANGULAR
CTSK	COUNTERSUNK	REINF	REINFORCED
DBL	DOUBLE	RO	ROUGH OPENING
DIA	DIAMETER	SD	STORM DRAIN
DIM	DIMENSIONS	SF	SQUARE FEET
DWG	DRAWING	SIM	SIMILAR
EJ	EXPANSION JOINT	SPECS	SPECIFICATIONS
EA	EACH	SQ	SQUARE
EQ	EQUAL(LY)	SS	SANITARY SEWER
EXG	EXISTING	SSTL	STAINLESS STEEL
EXT	EXTERIOR	STL	STEEL
FF	FINISH FLOOR / FINISH FACE	STRUCT	STRUCTURAL/STRUCTURE
FG	FINISH GRADE	SW	STORMWATER
FIN	FINISH(ED)	TNG	TONGUE AND GROOVE
FOW	FACE OF WALL	TO	TOP OF
GS	GALVANIZED STEEL	TOW	TOP OF WALL
GA	GAUGE	TS	TOP STEP
GALV	GALVANIZED	TYP	TYPICAL
HDR	HEADER	UNO	UNLESS NOTED OTHERWISE
HDWD	HARDWOOD	UTIL	UTILITY
HGT	HEIGHT	VERT	VERTICAL
HORIZ	HORIZONTAL	VIF	VERIFY IN FIELD
INT	INTERIOR	W/	WITH
IR	INSIDE RADIUS	WD	WOOD
JST	JOIST	WP	WATERPROOF
JTS	JOINTS	WWM	WELDED WIRE MESH
MAX	MAXIMUM		

PLANTING NOTES:

- ALL PLANT GROUPS ARE DESIGNED FOR LOW TO MODERATE WATER USE, AND LAID OUT BY WATER ZONES DEPENDING ON WATER NEEDS. ALL PLANTING IS WATERED BY DRIP, BUBBLERS OR SUB-SURFACE IRRIGATION.
- PLANT MATERIAL LOCATIONS SHOWN ARE DIAGRAMMATIC AND MAY BE SUBJECT TO CHANGE IN THE FIELD BY THE LANDSCAPE ARCHITECT. PLANT LOCATIONS ARE TO BE ADJUSTED IN THE FIELD AS NECESSARY TO SCREEN UTILITIES BUT NOT TO BLOCK WINDOWS, SIGNS, NOR IMPEDE ACCESS.
- TREE PLANTING AND INSTALLATION WITHIN RIGHT OF WAY IS SUBJECT TO CITY OF ASHLAND / JACKSON COUNTY CODES AND STANDARDS.
- INSTALL STREET TREES WITH ROOT BARRIERS AS REQUIRED BY THE CITY OF ASHLAND.
- TREES ARE MEANT TO ALIGN WITH EACH OTHER UNLESS INDICATED OTHERWISE.
- TREES NEED TO BE STAKED IN LOCATION AND APPROVED BY LANDSCAPE ARCHITECT BEFORE PLANTING. TREES AT BUILDING FACADE ARE NOT TO BLOCK WINDOWS AND MAY BE ADJUSTED IN THE FIELD.
- ALL GROUNDCOVER PLANTING AREAS ARE EXPECTED TO UNIFORMLY COVER THE PLANTING AREA IN TWO (2) YEARS. ALL SHRUB PLANTING AREAS ARE EXPECTED TO UNIFORMLY COVER THE PLANTING AREA IN FIVE (5) YEARS.
- FINISH GRADE OF ALL SHRUB AREAS ON SITE SHALL BE 1-1/2 INCHES BELOW ADJACENT PAVING OR HEADER.
- ALL NEW PLANTING AREA SHALL HAVE A MINIMUM OF 3" DEPTH LAYER OF ORGANIC MULCH APPLIED. STABILIZING MULCH PRODUCTS SHALL BE APPLIED TO SLOPES OF 3 TO 1 OR GREATER.
- A SOIL ANALYSIS SHOULD BE PERFORMED DETERMINING THE SOIL TEXTURE, ORGANIC MATTER, ESSENTIAL NUTRIENTS, SOIL INFILTRATION RATE, MEASURE OF PH AND TOTAL SOLUBLE SALTS. ALL AMENDMENT RECOMMENDATIONS SHALL BE ORGANIC AND NON-SYNTHETIC AND BASED ON RECYCLED WATER USE. TOP SOIL SHALL BE STOCKPILED ON SITE AS SPACE ALLOWS, SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- PLANT MATERIAL LOCATED WITHIN VEHICULAR SIGHT TRIANGLES SHALL BE LESS THAN 3 FEET ABOVE GRADE. TREE CANOPY SHALL BE MAINTAINED AT 6 FEET ABOVE GRADE. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- SEE CIVIL DRAWINGS FOR STREETScape, STORMWATER AND GRADING INFORMATION.

WATER USE/IRRIGATION NOTES:

- ALL PLANT GROUPS ARE LAID OUT BY WATER ZONES DEPENDING ON WATER NEEDS. ALL PLANTING IS WATERED BY DRIP, BUBBLERS OR SUB-SURFACE IRRIGATION. TIE TO EXISTING IRRIGATION CONTROL SYSTEM. CONNECT TO WEATHER BASED CONTROLLER AND BACKFLOW PREVENTOR. COORDINATE WITH CLIENT REPRESENTATIVE.
- ALLOW ONE VALVE MINIMUM PER HYDRO ZONE IN EACH PLANTER. THERE ARE ??? TYPES OF WATER ZONE GROUPINGS FOR THIS WORK.
- ALLOW ONE OVERFLOW DRAIN AND DRAIN PER PLANTER. COORDINATE WITH PLUMBER AND ASSOCIATED TRADES.
- CONTROLLER SYSTEM TO BE WEATHERTRAK OR EQUAL WITH RAIN SENSOR. SUPPLY 2-YEAR SUBSCRIPTION. LOCATION TO BE DETERMINED.
- USE NETAFIM PRESSURE COMPENSATING DRIP LINES WITH EMITTERS AT 12" O.C. AND 0.9 GPH FOR IRRIGATION OR APPROVED EQUAL. ALL IRRIGATION LINES AND HEADS SHALL BE INSTALLED PER MANUFACTURER SPECIFICATIONS ENSURING EQUIPMENT & INSTALLATION MEETS OR EXCEEDS STATE CODES.
- IRRIGATION LINES UNDER PAVING SHALL BE PLACED IN A SLEEVE THAT IS AT LEAST 2 SIZES LARGER THAN PIPE.
- CONTRACTOR TO VERIFY PRESSURE ON SITE BEFORE BEGINNING ANY IRRIGATION WORK.
- ALL THREADED JOINTS SHALL BE COATED WITH TEFLON TAPE.
- CONDUCT PRESSURE TEST OF SYSTEM.

GENERAL NOTES:

- DESIGN SHALL MEET ALL APPLICABLE STATE AND LOCAL CODES.
- SEE CIVIL PLANS FOR GRADES, STORMWATER MANAGEMENT, AND ADA PATH OF TRAVEL.
- PROVIDE WRITTEN NOTIFICATION OF ALL DISCREPANCIES BETWEEN EXISTING AND PROPOSED SITE IMPROVEMENTS.
- VERIFY EXISTING SITE INFORMATION, INCLUDING GRADES, UTILITIES, PROPERTY LINES, SETBACKS, EASEMENTS, LIMITS OF ROADWAYS, CURBS AND GUTTERS.
- ALL MATERIALS, FINISHES, MANUFACTURED ITEMS AND EQUIPMENT SHALL BE INSTALLED IN FULL ACCORDANCE WITH THE SUPPLIER'S OR MANUFACTURER'S WRITTEN RECOMMENDATIONS OR THESE DOCUMENTS, WHICHEVER IS MOST STRINGENT.
- PROVIDE CONSTRUCTION BARRIERS AS REQUIRED. PROTECT ADJACENT PROPERTY.
- INFORMATION ON THE DRAWINGS RELATIVE TO EXISTING CONDITIONS IS APPROXIMATE ONLY. DRAWINGS ARE GENERALLY DIAGRAMMATIC AND INDICATIVE OF THE WORK TO BE INSTALLED. BEFORE PROCEEDING WITH ANY WORK, THE CONTRACTOR SHALL CHECK AND VERIFY ALL EXISTING CONDITIONS AND INFORM THE LANDSCAPE ARCHITECT OF ANY DISCREPANCY BETWEEN THE DRAWINGS AND ACTUAL CONDITIONS. THE CONTRACTOR SHALL EXERCISE CARE IN EXCAVATING AND WORKING NEAR EXISTING UTILITIES AND STRUCTURES.
- ALL DRAIN LINES, IRRIGATION SUPPLY LINES, CONDUIT, SLEEVES, POWER AND WATER SERVICE POINTS SHALL BE IN PLACE PRIOR TO INSTALLATION OF SITE LANDSCAPE CONSTRUCTION.
- CONTRACTOR SHALL COORDINATE WALL AND CURB PENETRATIONS FOR INSTALLATION OF WATERPROOFING, SLEEVES CONDUIT AND ANCHOR BOLTS.
- SEE ARCHITECTURAL DRAWINGS FOR WATERPROOFING.
- SEE ELECTRICAL (MEP) PLANS FOR ELECTRICAL INFORMATION.
- SEE PLUMBING (MEP) PLANS FOR DRAIN INFORMATION.
- SEE STRUCTURAL DRAWING (SSD) FOR STRUCTURAL INFORMATION.
- SCALE APPLIES TO FULL-SIZED DRAWINGS ONLY. DO NOT SCALE FROM REDUCED DRAWINGS.

LAYOUT NOTES:

- WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS, GRADES AND CONDITIONS PRIOR TO COMMENCING WORK AND SHALL NOTIFY OWNER'S REPRESENTATIVE OF DISCREPANCIES.
- WHERE 'VERIFY' OR 'FIELD VERIFY' IS USED IN CONJUNCTION WITH A DIMENSION, THE CONTRACTOR SHALL VERIFY THE MEASUREMENT PRIOR TO BEGINNING THE WORK. IMMEDIATELY BRING DISCREPANCIES TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE.
- DIMENSIONS ARE TAKEN FROM FACE OF BUILDING. COLUMN GRID LINE, BACK OF CURB OR WALL UNLESS OTHERWISE NOTED.
- ALL CURVES SHALL BE SMOOTH AND CONTINUOUS WITH NO ABRUPT CHANGES IN DIRECTION.
- CONTRACTOR TO VERIFY EXISTING FINISH GRADES WHERE PLANTER WALLS ARE LOCATED. FINAL GRADES MAY BE DIFFERENT THAN DESIGN GRADES SHOWN. SEE CIVIL DRAWINGS FOR GRADING INFORMATION. CONTRACTOR TO BRING ANY GRADE DISCREPANCIES TO THE ATTENTION OF THE LANDSCAPE ARCHITECT AND/OR CIVIL ENGINEER FOR REVIEW, AS IT AFFECTS WALL HEIGHTS.
- CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE ON ALL PAVED SURFACES AND ENSURE THAT NO PONDING OF WATER OCCURS.
- ALL UTILITY HATCHES, COVERS AND BOXES SHALL RESIDE IN PLANTING AREAS OR PAVING AREAS, NOT IN BOTH. ALIGN HATCHES AND CENTER UTILITIES IN PAVING SCORE PATTERNS.



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2228 EAST MAIN STREET
ASHLAND, OREGON 97520

REVISIONS
DATE DESCRIPTION

SITE DESIGN
REVIEW

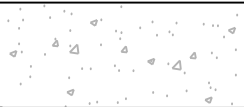
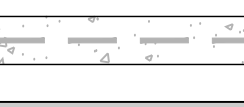
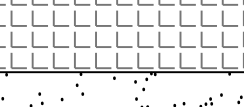
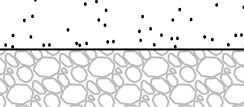
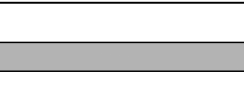
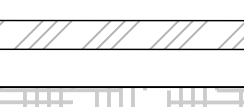
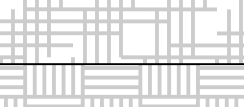
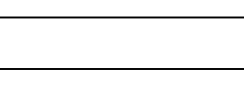
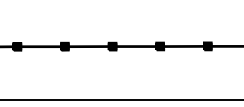
NOTES, SYMBOLS &
ABBREVIATIONS

L0.1

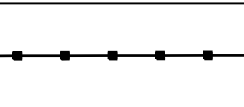
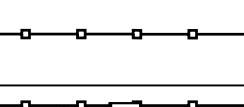
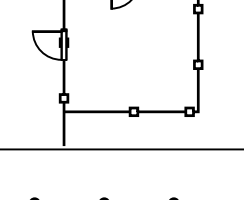
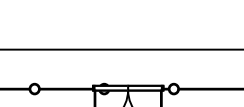
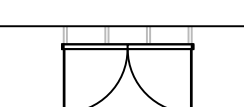
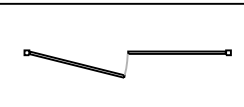
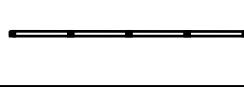
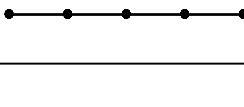
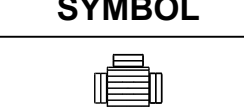
PROJECT NO. 2102
03/06/24
TEAM: Pvc, CG, EG, ZW

MATERIALS LEGEND

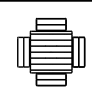
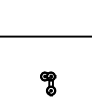
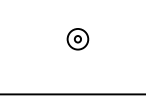
PAVING + EDGING

CALLOUT	SYMBOL	DESCRIPTION	DETAIL	MANUFACTURER	PRODUCT	MATERIAL / COLOR / FINISH	SIZE	QTY.	NOTES
PV-1		CONCRETE PAVING	1/L7.0	POURED IN PLACE, DAYTON OR EQUAL	POURED IN PLACE CONCRETE	CONCRETE / NATURAL GRAY / TOPCAST 05 FINISH	4" THICK	12,413 SF	NOTE: R.O.W. IMPROVEMENTS NOT INCLUDED IN QTY.
PV-2		CONCRETE PAVING W/ PLAY STRIPING	2/L7.0	POURED IN PLACE, DAYTON OR EQUAL WITH BRITTANIA PLAYGROUND PAINT OR EQUAL	POURED IN PLACE CONCRETE / PLAYGROUND PAINT	CONCRETE / NATURAL GRAY / TOPCAST 05 FINISH / NON-TOXIC PAINT STRIPING	4" THICK	1,352 SF	
PV-3		ASPHALT PAVING	3/L7.0	BY CONTRACTOR	ASPHALT PAVING	ASPHALT	3" THICK	11,685 SF	
PV-4		PERMEABLE PAVER	4/L7.0	BELGARD OR EQUAL	SF RIMA	CONCRETE / COLOR TBD	8 X 8 X 80MM THICK	4,920 SF	PAVERS TO BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS FOR PERMEABLE PAVING
PV-5		DECOMPOSED GRANITE (DG) PAVING	5/L7.0	HILTON FUEL SUPPLY	STABILIZED DECOMPOSED GRANITE	DECOMPOSED GRANITE / GOLD COLOR / ORGANIC STABILIZER	3" THICK	13,937 SF	
PV-6		VEHICULAR GRAVEL PAVING	6/L7.0	HILTON FUEL SUPPLY	CLASS II BASE ROCK, COMPACTED	CLASS II	3" THICK	3,375 SF	PROVIDE WHEEL STOPS AT COMMUNITY GARDEN LOADING AREA
PV-7		SYNTHETIC TURF	7/L7.0	FOREVERLAWN PLAYGROUND GRASS & US GREENTECH ENVIROFILL	PLAY ULTRA W/ 1" SAFETY FOAM PAD / ENVIROFILL 12-20 NON-TOXIC SILICA INFILL	POLYETHYLENE & NYLON / OLIVE GREEN, TURF GREEN, TAN / SILICA INFILL / GREEN	1 1/2" H	2,574 SF	PLAYGROUNDGRASS.COM; CONTACT LEN FRANSEN, ROSS RECREATION EQUIP., 503.407-4890 <LENF@ROSSREC.COM> ANTI-STATIC & ANTI-MICROBIAL
PV-8		PUMP TRACK SURFACING	-	BY OTHERS	BY OTHERS	BY OTHERS	N/A	-	BY VELOSOLUTIONS
PV-9		SKILLS COURSE SURFACING	-	BY OTHERS - DESIGN / BUILD BY TRAIL BUILDER & MOUNTAIN BIKE COMMUNITY	COMPACTED DIRT TRACK, BY OTHERS	BY OTHERS	N/A	-	SKILLS COURSE WILL BE A DESIGN-BUILD PROJECT
PV-10		PLAYGROUND BARK	8/L7.0	HILTON FUEL SUPPLY	CERTIFIED PLAYGROUND CHIPS	ENGINEERED WOOD FIBER	SEE DETAIL	3,236 SF	AVAILABLE AT HILTON FUEL, (541) 664-3374
PV-11		BARK MULCH	8/L7.0	HILTON FUEL SUPPLY	BARK MULCH	WALK ON BARK	SEE DETAIL	2,161 SF	AVAILABLE AT HILTON FUEL, (541) 664-3374
E-1		METAL EDGING	9/L7.0	PERMALOC OR EQUAL	ASPHALTEDGE OR SIMILAR	ALUMINUM / BLACK / DURAFLEX	3" X 3"	240 LF	HTTPS://PERMALOC.COM/EDGING/ASPHALTEDGE/
E-2		ROLL-TOP METAL EDGING	9/L7.0 (SIM)	PERMALOC OR EQUAL	CLEANLINE XL OR SIMILAR	ALUMINUM / BLACK / DURAFLEX	6" X 1/8"	TBD	HTTPS://PERMALOC.COM/EDGING/CLEANLINE-XL/

FENCES + GATES + WALLS

CALLOUT	SYMBOL	DESCRIPTION	DETAIL	MANUFACTURER	PRODUCT	MATERIAL / COLOR / FINISH	SIZE	QTY.	NOTES
F-1		OPEN NEIGHBOR FENCE	1/L7.1	BY CONTRACTOR	CUSTOM SPLIT RAIL WOOD FENCE	CEDAR / SPLIT	5'-6" H	470 LF	TYPICAL AT BOUNDARY WITH 2290 E MAIN ST ONLY
F-2		DOG PARK FENCE	2/L7.1	TBD	6 FT COATED CHAIN LINK FENCE	CHAIN LINK / BLACK / VINYL COATED STEEL POST & RAIL / BLACK / POWDERCOAT	6' H	1020 LF	INSTALL ON CONCRETE MOW BAND / FLUSH CURB
F-3		DOG PARK GATES	3/L7.1	TBD	6 FT COATED CHAIN LINK GATE	CHAIN LINK / BLACK / VINYL COATED STEEL FRAME / BLACK / POWDERCOAT	6' H	5	CONTRACTOR TO CONFIRM THE REQUIRED GATE WIDTH W/ PARKS DEPARTMENT
F-4		COMMUNITY GARDEN FENCE - NON-STREET FACING SIDES	5/L7.1	BY CONTRACTOR	8 FT WIRE MESH DEER FENCE	PT WOOD POSTS / WELDED WIRE MESH / GALVANIZED	2" X 4" GRID / 8' H	448 LF	FENCE IS INTENDED TO KEEP DEER OUT OF GARDEN. FENCE SHALL BE HIGHER THAN 8' WHERE ADJACENT GRADE SLOPES STEEPLY DOWN TOWARD GARDEN
F-5		COMMUNITY GARDEN GATE	6/L7.1	BY CONTRACTOR	8 FT WIRE MESH GATE	TUBE STEEL FRAME / WELDED WIRE MESH FILL / GALVANIZED	2" X 4" GRID / 8' H	3	ONE DOUBLE LEAF GATE FOR MAIN ENTRY, ONE SINGLE LEAF GATE FOR SIDE ENTRY
F-6		GARDEN MATERIALS ACCESS GATES	6/L7.1	BY CONTRACTOR	ACCESS GATES / PANELS FOR MAINTENANCE	TUBE STEEL FRAME / WELDED WIRE MESH FILL / GALVANIZED	2" X 4" GRID / 8' H	2	LARGE, DOUBLE LEAF GATE FOR PARKS MAINTENANCE STAFF TO ACCESS MATERIALS STORAGE AREA
F-7		VEHICLE GATE AT GARDEN LOADING AREA	7/L7.1	TBD	BARRIER SWING ARM VEHICULAR GATE	STEEL / COLOR TBD / POWDERCOAT	DOUBLE LEAF ±20' TOTAL SPAN	1	
F-8		PLAY AREA FENCE	4/L7.1	BY CONTRACTOR	CUSTOM WOOD SPLIT RAIL FENCE	CEDAR / SPLIT	4' H	138 LF	TYPICAL AT PLAY AREA ONLY
F-9		COMMUNITY GARDEN FENCE - STREET FACING SIDE	5/L7.1	BY CONTRACTOR	8 FT COATED CHAIN LINK DEER FENCE	CHAIN LINK / BLACK / VINYL COATED STEEL POST & RAIL / BLACK / POWDERCOAT	8' H	126 LF	TYPICAL AT STREET-FACING SIDE ONLY; 8 FT HEIGHT MEASURED FROM FINISH GRADE INSIDE GARDEN
F-10		SOLID NEIGHBOR FENCE	9/L7.1	BY CONTRACTOR	CUSTOM SOLID WOOD FENCE	CEDAR BOARDS / PT POSTS	6' H		TYPICAL AT BOUNDARY WITH EAST AND WEST NEIGHBORS

SITE FURNITURE + AMENITIES

CALLOUT	SYMBOL	DESCRIPTION	DETAIL	MANUFACTURER	PRODUCT	MATERIAL / COLOR / FINISH	SIZE	QTY.	NOTES
A-1		PICNIC TABLE	1/L7.2	TIMBERFORM	PARKWAY COLLECTION - MODEL NO 2056-8484 ADA MODEL: 2057-ADA	WOOD TOP / STEEL FRAME / COLOR BLACK / POWDERCOAT	6'-11" X 6'-11"	10	SEAT QUANTITIES WILL VARY - NUMBER OF ACCESSIBLE TABLES TO BE REVIEWED WITH PARKS DEPT. CONTACT <HQ@TIMBERFORM.COM> (503) 223-1157
A-2		BENCH	2/L7.2	TIMBERFORM	GREENWAY COLLECTION - MODEL NO 2141-6	WOOD SLATS / STEEL FRAME / COLOR BLACK / POWDERCOAT	5'-10" X 1'-8"	23	CONTACT <HQ@TIMBERFORM.COM> (503) 223-1157
A-3		BIKE RACK A	3/L7.2	DERO BY PLAYFORM	ARC BIKE RACK	STEEL / COLOR TBD / POWDERCOAT	40" X 2" X 35" H	5	
A-4		BIKE RACK B	3/L7.2	DERO BY PLAYFORM	CUSTOM SHAPED BIKE RACKS	STEEL / COLOR TBD / POWDERCOAT	APPROX 48" X 2" X 35" H	4	NUMBER AND LOCATION OF CUSTOM RACKS TO BE REVIEWED WITH PARKS DEPT.
A-5		BIKE REPAIR STATION	3/L7.5	DERO OR EQUAL	FIX IT WITH AIR KIT PRIME	STEEL / COLOR TBD / POWDERCOAT	12.75" X 20" X 59" H	1	ATTACH AIR KIT PRIME TO FIXIT; MINIMUM FOOTPRINT FOR USE: 45" X 90" W/ 36" AISLE
A-6		DRINKING FOUNTAIN W/ DOG BOWL	4/L7.2	MOST DEPENDABLE FOUNTAINS	MULTI-LEVEL ADA FOUNTAIN W/ PET BOWL	STEEL / COLOR TBD / POWDERCOAT	40" TALL X 36" WIDE	1	CONTRACTOR TO COORDINATE WATER SUPPLY AND SANITARY SEWER CONNECTION
A-7		BOULDER PLAY MOUND	6/L7.2	HILTON LANDSCAPE SUPPLY	GRANITE BOULDERS	GRANITE / SALT & PEPPER / MORTARED IN PLACE	MOUND APPROX. 15' X 7' X 5' H	1	BOULDERS TO BE SELECTED AND PLACED WITH LANDSCAPE ARCHITECT
A-8		TRASH RECEPTACLE	5/L7.2	WABASH VALLEY SITE FURNISHINGS	CLASSIC 32 GAL W/ STEEL SLATS MODEL LR300R	STEEL / BLACK / PLASTISOL	32 GALLON	4	HTTPS://WWW.WABASHVALLEY.COM/PRODUCT/PLASTISOL-COATED-OUTDOOR-TRASH-RECEPTACLES-CLASSIC-COLLECTION/
A-9		TETHER BALL	3/L7.4	PLAYCRAFT SYSTEMS	TETHER BALL POLE MODEL 3449-360	STEEL POLE / GALVANIZED	2.5" X 10' H POLE	1	EMBED POLE 24" MIN, PROVIDE 20' Ø CLEAR PLAY AREA.



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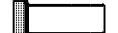
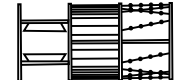
MATERIALS LEGEND

L0.2

PROJECT NO. 2102

03/06/24

TEAM: Pvc, CG, EG, ZW

SITE FURNITURE + AMENITIES (CONTINUED)									
CALLOUT	SYMBOL	DESCRIPTION	DETAIL	MANUFACTURER	PRODUCT	MATERIAL / COLOR / FINISH	SIZE	QTY.	NOTES
A-10		PARK ENTRY SIGN	1/L7.7	CUSTOM	CUSTOM WOOD SIGN	WOOD / PAINTED	TBD	2	15 SQ FT MAX. SIZE / 5 FT MAX HEIGHT PER LAND USE ORDINANCE; ONE SIGN EACH AT E. MAIN ST AND ABBOTT AVE
A-11		DOG SPRAY FIRE HYDRANT	7/L7.2	DOG-ON-IT-PARKS OR EQUAL	7280 TOP SPRAY HYDRANT	RED	2'8 X 1'3 X 1'3	2	HTTPS://WWW.DOG-ON-IT-PARKS.COM/
A-12		DOG BALANCE LOG	8/L7.2	DOG-ON-IT-PARKS OR EQUAL	N7103 DOG LEG WALK	CONCRETE	48" X 16" X 12"	4	HTTPS://WWW.DOG-ON-IT-PARKS.COM/
A-13		DOG TUNNEL	9/L7.2	DOG-ON-IT-PARKS OR EQUAL	N7101 TERRIER TUNNEL	STEEL AND FIBERGLASS	36" X 24" X 24"	2	HTTPS://WWW.DOG-ON-IT-PARKS.COM/
A-14		DOG HILL CLIMB	1/L7.3	DOG-ON-IT-PARKS OR EQUAL	R7601 ECO A-FRAME LARGE	ALUMINUM	168" X 38" X 36" H	2	HTTPS://WWW.DOG-ON-IT-PARKS.COM/
A-15		DOG PARK WASTE STATION	2/L7.3	WOOF WASTE STATION	PER PARKS DEPT. STANDARD	N/A	N/A	2	CONTACT ASHLAND PARKS FOR PRICING & INSTALLATION INFORMATION
A-16		DOG PARK BOULDERS	3/L7.3	HILTON LANDSCAPE SUPPLY	GRANITE BOULDERS	GRANITE / SALT & PEPPER	24"-48"	6	AVAILABLE AT HILTON LANDSCAPE SUPPLY, (541) 664-3374
A-17		DOG HOUSE	4/L7.3	GYMS FOR DOGS OR EQUAL	TUNNEL HOUSE, LARGE	RECYCLED MATERIALS	54" X 46" X 46" H	1	HTTPS://WWW.GYMSFORDOGS.COM/DOG-PARK/TUNNEL-HOUSE-LX/
A-18		DOG WALK RAMP	5/L7.3	DOG-ON-IT-PARKS OR EQUAL	CC5402 WHIPPET WALK	ALUMINUM	159" X 15.5" X 25" H	2	
A-19		LOG SCRAMBLE	6/L7.3	TIMBERFORM	MODEL NO 4500-305-W1	WOOD / NON-TOXIC PRESERVATIVE	8'-11" X 16'	1	CONTACT <HQ@TIMBERFORM.COM> (503) 223-1157
A-20		EMBANKMENT SLIDE	7/L7.3	TIMBERFORM	WIDE EMBANKMENT SLIDE W/ RAISED PLATFORM MODEL 1643-41-EMB	STEEL / EVERGREEN / POWDERCOAT	3' X 9'-6" X 4' H AT PLATFORM	1	SLIDE PLATFORM IS 12" ABOVE FINISH GRADE FOR ACCESSIBLE TRANSFER. CONTACT <HQ@TIMBERFORM.COM>
A-21		EMBANKMENT LOG LADDER	8/L7.3	TIMBERFORM	TIMBERCRAFT EMBANKMENT LOG LADDER MODEL 1673-EMB	WOOD / NON-TOXIC PRESERVATIVE	APPROX 6' X 8'	1	CONTACT <HQ@TIMBERFORM.COM> (503) 223-1157
A-22		EMBANKMENT STEPPERS	9/L7.3	TIMBERFORM	TIMBERCRAFT EMBANKMENT STEPPERS MODEL 1501-5-EMB	WOOD / NON-TOXIC PRESERVATIVE	12" - 18" Ø X HT VARIES	5	CONTACT <HQ@TIMBERFORM.COM> (503) 223-1157
A-23		BALANCE LOG	1/L7.4	TIMBERFORM	CLASSIC TIMBERFORM BALANCE LOG MODEL TBD	LATHE-TURNED WOOD / NON-TOXIC PRESERVATIVE	11" Ø X 9' LONG	1	CONTACT <HQ@TIMBERFORM.COM> (503) 223-1157
A-24		LINEAR TUNNEL CLIMBER	2/L7.4	TIMBERFORM	CLASSIC TIMBERFORM MODEL 4500-603-TF	WOOD / NON-TOXIC PRESERVATIVE	16'-1" X 8' X 7'-2 1/4" H	1	CONTACT <HQ@TIMBERFORM.COM> (503) 223-1157
A-25		PLAY AREA EDGE BOULDERS	3/L7.3	HILTON LANDSCAPE SUPPLY	GRANITE BOULDERS	GRANITE / SALT & PEPPER	APPROX 24"-48"	25+	CONTACT HILTON LANDSCAPE SUPPLY (541) 664-3374. BOULDERS WILL BE SELECTED BY LANDSCAPE ARCHITECT.
A-26		FULL ROUND STEPPERS	6/L7.3	TIMBERFORM	TIMBERCRAFT FULL ROUND STEPPERS MODEL 1501	WOOD / NON-TOXIC PRESERVATIVE	16" Ø X 6" H 16" Ø X 12" H 16" Ø X 18" H	16 TOTAL	
A-27		HILLSIDE TUNNEL	4/L7.4	QCP OR EQUAL	CUSTOM PREFAB CONCRETE TUNNEL	CONCRETE / NATURAL GRAY / SANDSTONE FINISH	3' X 12' X 3' H	1	
A-28		KIDS TABLE	8/L7.1	TIMBERFORM	PARKWAY - MODEL A2056	WOOD SLATS / STEEL FRAME / COLOR BLACK / POWDERCOAT	5'-1" X 5'-1"	7	CONTACT <HQ@TIMBERFORM.COM> (503) 223-1157
A-29		SWINGSET	6/L7.4	TIMBERFORM	DOUBLE BELT DOUBLE TOT SWING: MODEL 1563-4	DOUGLAS FIR FRAME / STEEL FASTENERS / TAN RUBBER SEATS / HARDENED CHAIN	22'-10 1/2" X 1'-4" X 9'-5 1/2" H	1	CONTACT <HQ@TIMBERFORM.COM> (503) 223-1157
A-30		BIKE PARK SIGNS	4/L7.6	TBD	TBD	TBD	TBD	3	SEE DETAIL SHEETS FOR SIGN CONCEPTS, INCLUDING INFORMATIONAL SIGNS AND COMMUNITY BULLETIN BOARD
A-31		DOG PARK SIGNS	2/L7.6	TBD	TBD	TBD	TBD	3	SEE DETAIL SHEETS FOR SIGN CONCEPTS, INCLUDING INFORMATIONAL SIGNS AND COMMUNITY BULLETIN BOARD



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EAST MAIN STREET PARK

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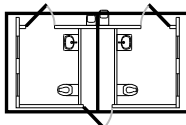
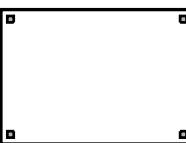
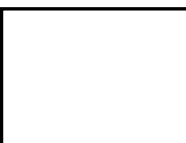
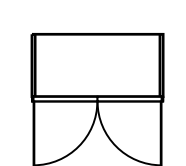
ASHLAND, OREGON 97520

REVISIONS
DATE DESCRIPTION

SITE DESIGN
REVIEW

MATERIALS LEGEND

L0.3
PROJECT NO. 2102
03/06/24
TEAM: Pvc, CG, EG, ZW

STRUCTURES									
CALLOUT	SYMBOL	DESCRIPTION	DETAIL	MANUFACTURER	PRODUCT	MATERIAL / COLOR / FINISH	SIZE	QTY.	NOTES
S-1		RESTROOMS	7/L7.4 8/L7.4	CXT CONCRETE BUILDINGS	CORTEZ TWO USER MODEL OR EQUAL W/ WALL-MOUNTED DRINKING FOUNTAINS	PREFAB CONCRETE / COLOR & FINISH TBD	9'-5" X 17'-0" X 9'-4 3/8" H PEAK	1	FINAL MODEL, OPTIONS AND FINISHES TBD. NOTE: FLOOR IS INTEGRAL WITH PRECAST BUILDING. PROVIDE UTILITY CONNECTIONS AS REQUIRED.
S-2		PLAY AREA SHADE STRUCTURE	7/L7.5	CLASSIC RECREATION SYSTEMS OR EQUAL	NORTHWEST MODEL	TBD	23' X 14'	1	FINAL SIZE AND MATERIALS TBD
S-3		GARDEN TOOL SHED	1/L7.5	BY CONTRACTOR	CUSTOM STRUCTURE - SEE DETAILS FOR CONCEPT	TBD	12' X 20' X 10' H	1	NOTE: INTERIOR OF SHED TO INCLUDE STORAGE CUBBIES, SIMILAR TO SHED AT ASHLAND CREEK PARK
S-4		GARDEN PERGOLA	5/L7.5	BY CONTRACTOR	CUSTOM PERGOLA - DESIGN-BUILD BY CONTRACTOR	TBD	20' X 30'	1	
S-5		GREEN WASTE BIN	2/L7.5	BY OTHERS	CUSTOM BIN TO CONTAIN GARDEN WASTE - COMMUNITY GARDEN DESIGN / BUILD	TBD	6'-6" X 13'-4"	1	NOTE: GREEN WASTE BIN SHOULD BE MOVABLE WITH A FORKLIFT. VERIFY SIZE AND LOCATION WITH PARKS DEPT. PRIOR TO CONSTRUCTION.
S-6		MAIN PICNIC SHELTER	4/L7.5	CLASSIC RECREATION SYSTEMS OR EQUAL	NORTHWEST MODEL	TBD	31'-6" X 23'-6"	1	FINAL SIZE AND MATERIALS TBD
S-7		DOG PARK SHADE STRUCTURE	5/L7.5	CLASSIC RECREATION SYSTEMS OR EQUAL	NORTHWEST MODEL	TBD	20' X 30'	1	FINAL SIZE AND MATERIALS TBD
S-8		BIKE PARK SHADE STRUCTURE	6/L7.5	CLASSIC RECREATION SYSTEMS OR EQUAL	NORTHWEST MODEL	TBD	20' X 30'	1	FINAL SIZE AND MATERIALS TBD
LIGHTING & POWER									
CALLOUT	SYMBOL	DESCRIPTION	DETAIL	MANUFACTURER	PRODUCT	MATERIAL / COLOR / FINISH	SIZE	QTY.	NOTES
L-1		STREET LIGHT	7/L7.5	CITY OF ASHLAND STANDARD RESIDENTIAL STREET LIGHT	EUROTIQUE SERIES W/ LED LAMPS	PER CITY STD	16'-8" H PER CITY STD	3	LOCATED ALONG EAST MAIN STREET. FINAL LOCATION AND QUANTITIES TO BE VERIFIED WITH CITY REP.
L-2		BOLLARD LIGHT	6/L7.5	STERNBERG OR EQUAL	RIALTA LED BOLLARD MODEL RT442	ALUMINUM / BLACK / POWDERCOAT	8" X 42" H	20	HTTPS://WWW.STERNBERGLIGHTING.COM/PRODUCTS/347/RT4XX-RIALTA-BOLLARD
L-3		EV CHARGING STATION	TBD	TBD	TBD	TBD	TBD	1	ELECTRIC VEHICLE CHARGING
L-4		EBIKE CHARGING STATION	TBD	TBD	TBD	TBD	TBD	1	ELECTRIC BIKE CHARGING

NOTE: SEE CIVIL DRAWINGS FOR ELECTRICAL OUTLET LOCATIONS



EAST MAIN STREET PARK

2228 EAST MAIN STREET

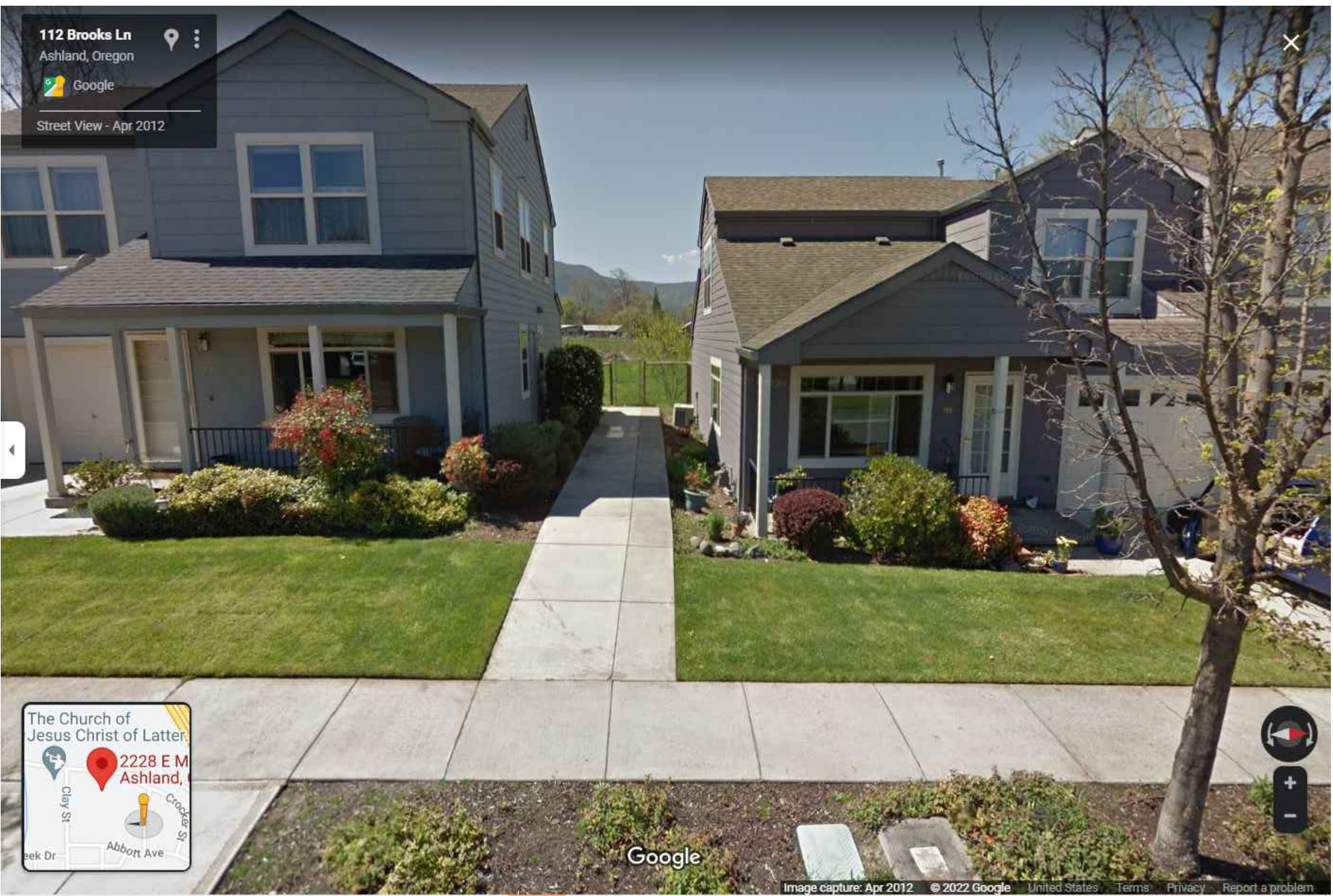
ASHLAND, OREGON 97520

REVISIONS
DATE DESCRIPTION

SITE DESIGN
REVIEW

MATERIALS LEGEND

L0.4
PROJECT NO. 2102
03/06/24
TEAM: Pvc, CG, EG, ZW



6 EXISTING IRRIGATION INFRASTRUCTURE TO REMAIN OR BE REPLACED
Scale: NTS

0.5 existing site photos.dwg

3 EXISTING PUBLIC ACCESS PATH FROM BROOKS LANE
Scale: NTS

0.5 existing site photos.dwg



5 THIS PORTION OF EXISTING SOUTH FENCE TO BE REPLACED WITH COMMUNITY GARDEN DEER FENCE
Scale: NTS

0.5 existing site photos.dwg



2 ABBOTT AVENUE FRONTAGE AT EXISTING CURB CUT
Scale: NTS

0.5 existing site photos.dwg



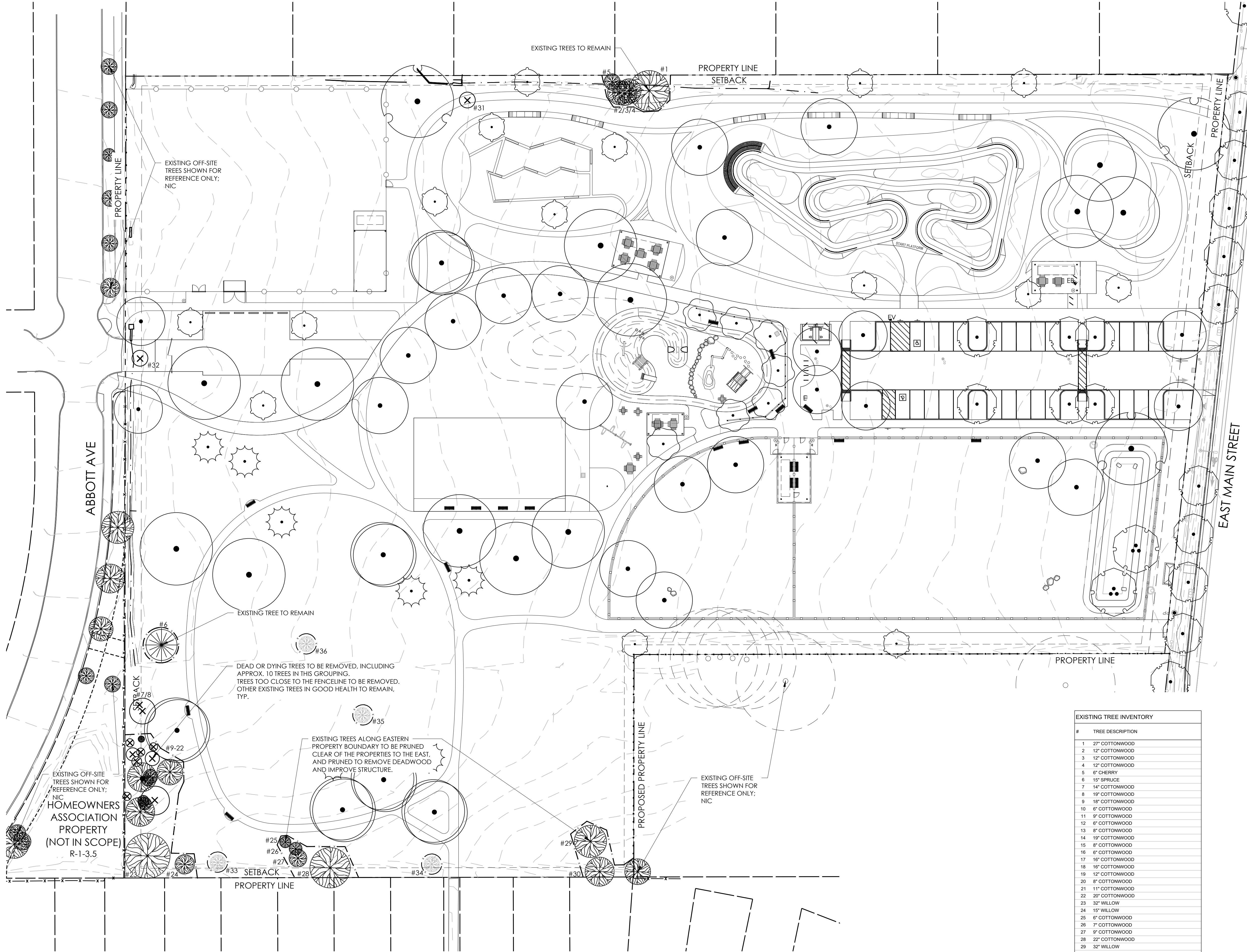
4 EXISTING TREES AT SOUTHEAST CORNER OF SITE
Scale: NTS

0.5 existing site photos.dwg



1 EAST MAIN STREET FRONTAGE AT EXISTING GATE
Scale: NTS

0.5 existing site photos.dwg



- TREE PROTECTION AND REMOVAL NOTES**
- PRIOR TO DELIVERING EXCAVATION EQUIPMENT OR COMMENCING ANY CONSTRUCTION ACTIVITIES ON THE SITE, THE GENERAL CONTRACTOR SHALL CONTACT THE LANDSCAPE ARCHITECT FOR A PRE-CONSTRUCTION MEETING WITH THE LANDSCAPE ARCHITECT AND EXCAVATION SUPERVISOR PRIOR TO COMMENCING ANY WORK ON THE SITE. THE LANDSCAPE ARCHITECT SHALL BE NOTIFIED BY THE CONTRACTOR 48 HRS. IN ADVANCE FOR ALL TREE VISTS REQUESTED. CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL FROM THE OWNER'S REPRESENTATIVE THAT CONSTRUCTION MAY BEGIN AFTER ALL OF THE DESCRIBED FENCING IS IN PLACE. FENCING SHALL REMAIN IN PLACE UNTIL THE PROJECT IS COMPLETED.
 - FENCES MUST BE ERECTED TO PROTECT TREES TO BE PRESERVED AS SHOWN IN DIAGRAM. FENCING SHALL BE 4' TALL TEMPORARY CHAIN-LINK PANELS INSTALLED WITH METAL CONNECTIONS TO ALL PANELS AREA INTEGRATED. THESE FENCES SHALL BE INSTALLED SO THAT IT DOES NOT ALLOW PASSAGE OF PEDESTRIANS AND/OR VEHICLES THROUGHLY. FENCES DEFINE A SPECIFIC PROTECTION ZONE FOR EACH TREE OR GROUP OF TREES. FENCES ARE TO REMAIN UNTIL ALL SITE WORK HAS BEEN COMPLETED. FENCES MAY NOT BE RELOCATED OR REMOVED WITHOUT THE PERMISSION OF THE LANDSCAPE ARCHITECT.
 - CONSTRUCTION TRAILERS, TRAFFIC AND STORAGE AREAS MUST REMAIN OUTSIDE FENCED TREE PROTECTION ZONES AT ALL TIMES. SEE DETAIL #1 "TREE PRESERVATION FENCING" FOR ADDITIONAL REQUIREMENTS.
 - ALL PROPOSED UNDERGROUND UTILITIES AND DRAIN OR IRRIGATION LINES SHALL BE ROUTED OUTSIDE THE TREE PROTECTION ZONE. IF LINES MUST TRAVERSE THE PROTECTION AREA, THEY SHALL BE TUNNELED OR BORED UNDER THE TREE ROOTS. NOTIFY THE LANDSCAPE ARCHITECT IMMEDIATELY IF ANY PROJECT PLANS CONFLICT WITH THIS REQUIREMENT.
 - NO MATERIALS, EQUIPMENT, SPILL, OR WASTE OR WASHOUT WATER MAY BE DEPOSITED, STORED, OR PARKED WITHIN THE TREE PROTECTION ZONE (FENCED AREA).
 - NOTIFY THE LANDSCAPE ARCHITECT IF TREE PRUNING IS REQUIRED FOR CONSTRUCTION CLEARANCE.
 - IF INJURY SHOULD OCCUR TO ANY TREE DURING CONSTRUCTION, NOTIFY THE LANDSCAPE ARCHITECT IMMEDIATELY. ALL DAMAGE CAUSED BY CONSTRUCTION TO EXISTING TREES SHALL BE COMPENSATED FOR BY THE OFFERING PARTY. BEFORE THE PROJECT WILL BE CONSIDERED COMPLETE.
 - WATERING SCHEDULE: WATERING PROTECTED TREES SHALL FOLLOW THESE STANDARDS, HOWEVER PERIODS OF EXTREME HEAT, WIND, RAINFALL OR DROUGHT MAY REQUIRE MORE OR LESS WATER THAN RECOMMENDED IN THESE NOTES.
 - MOIST SPECIES: 1 TIME PER MONTH DURING BRIGATION SEASON (USUALLY MARCH THROUGH SEPTEMBER)
 - QUERES/ALNUS: DEEP WATER IN MAY AND SEPTEMBER. DO NOT WATER DURING OTHER MONTHS. FOR OAKS ALREADY IN THE VICINITY OF IRRIGATED CONDITIONS, AUTOMATIC SPRINKLERS OR REGULAR WATERING SHALL NOT BE ALLOWED TO SPRAY ON OR WITHIN 1 FEET OF THE TRUNK. THE WATER SHALL NOT BE ALLOWED TO POOL OR DRAIN TOWARDS THE TRUNK.
 - WATERING METHOD: HAND WATERING SYSTEMS, RECOMMENDED FOR TREES THAT ARE PART OF A DEVELOPMENT PROJECT THAT MUST BE WATERED TO INSURE TREE SURVIVAL DURING THE COURSE OF CONSTRUCTION UNTIL AUTOMATIC IRRIGATION IS INSTALLED.
 - EROSION CONTROL DEVICES SUCH AS SILT FENCING, DEBRIS BARRI, AND WATER DIVERSION STRUCTURES SHALL BE INSTALLED ON THE UPDRL SIDE OF THE TREE PROTECTION ZONE TO PREVENT SILTATION AND/OR EROSION WITHIN THE TREE PROTECTION ZONE.
 - BEFORE GRADING, PAD PREPARATION, OR EXCAVATION FOR THE FOUNDATIONS, FOOTINGS, WALLS, OR FENCING, ANY TREES WITHIN THE SPECIFIC CONSTRUCTION ZONE SHALL BE ROOT PRUNED 1 FOOT OUTSIDE THE TREE PROTECTION ZONE BY CUTTING ALL ROOTS CLEANLY AT A 90 DEGREE ANGLE TO A DEPTH OF 24 INCHES. ROOTS SHALL BE CUT BY MANUALLY USING A REACH AND CUTTING EXPOSED ROOTS WITH A SAW. "BARBER" KNIFE, ROCK SAW, NARROW TRECHER WITH SHARP BLADES, OR OTHER APPROVED ROOT PRUNING EQUIPMENT.
 - ANY ROOTS DAMAGED DURING GRADING OR CONSTRUCTION SHALL BE EXPOSED TO SOUND TRUSSIE AND CUT CLEANLY AT A 90 DEGREE ANGLE TO THE ROOT WITH A SAW. PLACE DAMP SOIL AROUND ALL CUT ROOTS TO A DEPTH EQUALING THE EXISTING FINISH GRADE WITHIN 4 HOURS OF CUTS BEING MADE.
 - IF TEMPORARY HAUL OR ACCESS ROADS MUST PASS OVER THE ROOT AREA OF TREES TO BE RETAINED, A ROAD BED OF 4-8 INCHES OF WOOD MULCH OR GRAVEL SHALL BE CREATED TO PROTECT THE SOIL. THE ROAD BED MATERIAL SHALL BE REFRESHED AS NECESSARY TO MAINTAIN A MIN. 8 INCH DEPTH.
 - SPILL FROM TRENCHES, BASEMENTS, OR OTHER EXCAVATIONS SHALL NOT BE PLACED WITHIN THE TREE PROTECTION ZONE. EITHER TEMPORARILY OR PERMANENTLY.
 - NO BURN PILES OR DEBRIS PILES SHALL BE PLACED WITHIN THE TREE PROTECTION ZONE. NO ASHES, DEBRIS, OR GARBAGE MAY BE DUMPED OR BURIED WITHIN THE TREE PROTECTION ZONE.
 - MAINTAIN FIRE-SAFE AREAS AROUND FENCED AREA. ALSO, NO HEAT SOURCES, FLAMES, IGNITION SOURCES, OR SMOKING IS ALLOWED NEAR MULCH OR TREES.
 - DO NOT RAISE THE SOIL LEVEL WITHIN THE DEEP LINES TO ACHIEVE POSITIVE DRAINAGE, EXCEPT TO MATCH GRADES WITH SEWERMAINS AND CURBS, AND IN THOSE AREAS, FEATHER THE ADDED TOPSOIL BACK TO EXISTING GRADE AT APPROXIMATELY 3:1 SLOPE.
 - REMOVE THE ROOT WAD FOR EACH TREE THAT IS INDICATED ON THE PLAN AS BEING REMOVED.
 - EXCEPTIONS TO THE TREE PROTECTION SPECIFICATIONS MAY ONLY BE GRANTED IF EXTRAORDINARY CIRCUMSTANCES WITH WRITTEN APPROVAL FROM THE LANDSCAPE ARCHITECT PRIOR TO ANY WORK COMMENCING.
 - AS A PROTECTIVE MEASURE TO COMPENSATE FOR CONSTRUCTION IMPACTS, TWO TO SIX WEEKS PRIOR TO CONSTRUCTION, ALL RETAINED TREES SHOWN ON THIS PLAN SHALL RECEIVE AN APPLICATION OF MYCCORNEAL ALL PURPOSE SOILURE PER MANUFACTURER'S INSTRUCTIONS. THIS MYCCORNEAL PRODUCT IS A SPECIALLY FORMULATED NATURAL ACIDIC BEDDING AND WHICH ENHANCES THE ABSORPTIVE SURFACE AREA OF THE TREES' ROOT SYSTEM. THIS PROMOTES AND IMPROVES NUTRIENT AND WATER UPTAKE CAPABILITIES OF THE REMAINING ROOT STRUCTURE. DISTRIBUTE MYCCORNEAL SYSTEM WITHIN ACTIVE ROOT ZONE OF RETAINED TREES. APPLY 30 GALLONS OF SOLUTION PER TREE 4" DBH AND GREATER, A MINIMUM OF 4" BELOW SOIL SURFACE IN QUANTITIES OF 1/2 GALLON AT EACH POINT OF APPLICATION. LOCATE THE ACTIVE ROOT ZONE WITH LANDSCAPE ARCHITECT PRESENT.
 - MYCCORNEAL IS AVAILABLE FROM MYCCORNEAL APPLICATION, INC., PHONE (541) 474-3985.

EXISTING TREE INVENTORY	
#	TREE DESCRIPTION
1	27" COTTONWOOD
2	12" COTTONWOOD
3	12" COTTONWOOD
4	12" COTTONWOOD
5	6" CHERRY
6	15" SPRUCE
7	14" COTTONWOOD
8	19" COTTONWOOD
9	18" COTTONWOOD
10	6" COTTONWOOD
11	6" COTTONWOOD
12	6" COTTONWOOD
13	6" COTTONWOOD
14	19" COTTONWOOD
15	6" COTTONWOOD
16	6" COTTONWOOD
17	16" COTTONWOOD
18	16" COTTONWOOD
19	12" COTTONWOOD
20	8" COTTONWOOD
21	11" COTTONWOOD
22	20" COTTONWOOD
23	32" WILLOW
24	15" WILLOW
25	6" COTTONWOOD
26	7" COTTONWOOD
27	9" COTTONWOOD
28	22" COTTONWOOD
29	32" WILLOW
30	24" WILLOW
31	-6" EA. BOXELDER CLUMP
32	-6" EA. COTTONWOOD CLUMP
33	-6" EA. MAPLE CLUMP
34	-6" EA. MAPLE CLUMP
35	-6" EA. PLUM CLUMP
36	-6" EA. PLUM CLUMP

NOTES:
1. TREE DATA HAS BEEN REVIEWED AND/OR PROVIDED BY ASHLAND PARKS & RECREATION COMMISSION ARBORIST.
2. TREES TO BE REMOVED HAVE BEEN TAGGED BY THE ARBORIST WITH ORANGE RIBBONS AROUND TRUNKS.

TREE PROTECTION PLAN LEGEND	
SYMBOL	DESCRIPTION
	DRIFLINE OF TREE TO REMAIN
	TREE TO REMOVE
	TPZ FENCING





EAST MAIN STREET PARK
2228 EAST MAIN STREET
ASHLAND, OREGON 97520

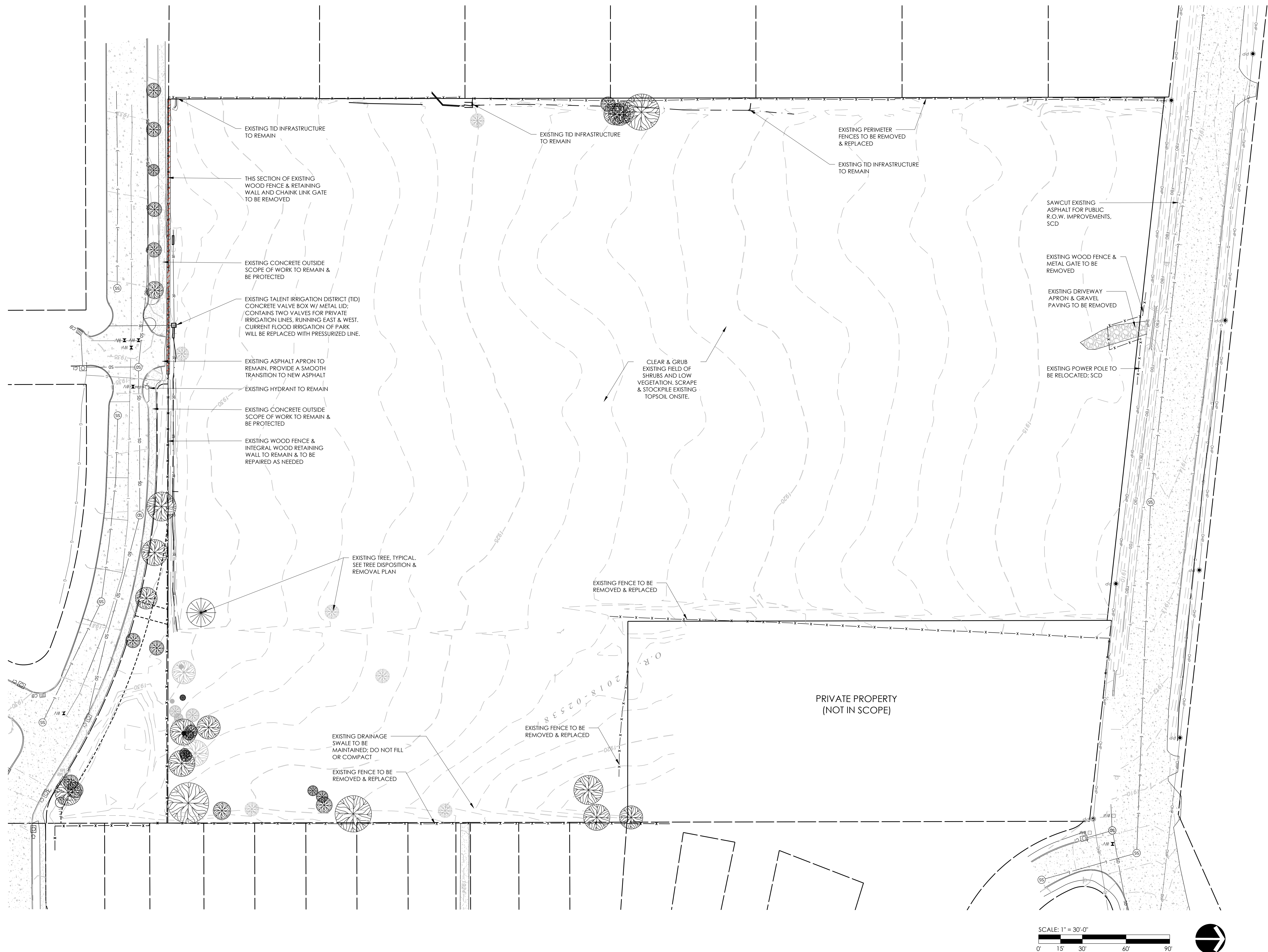
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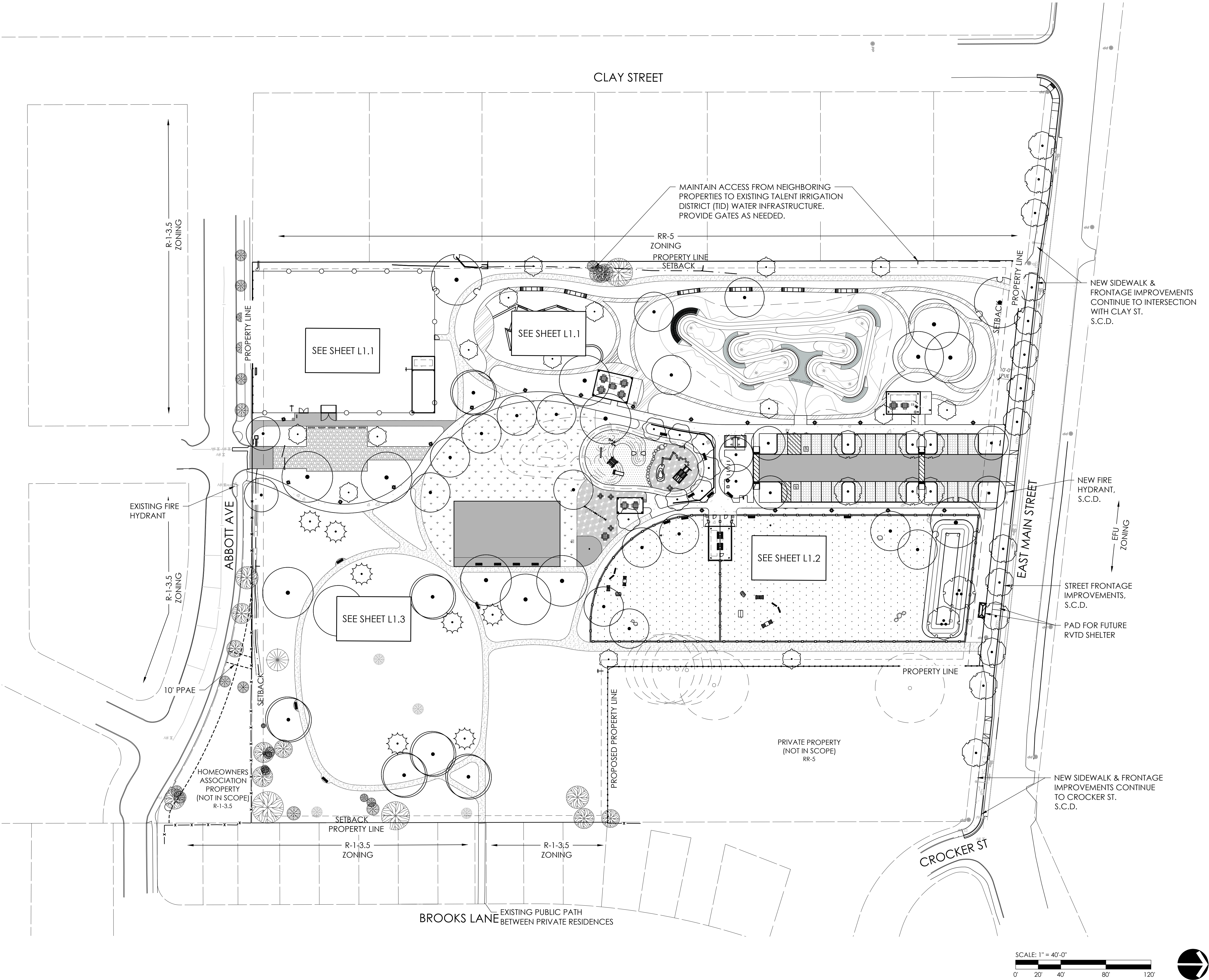
SITE DESIGN REVIEW

DEMOLITION PLAN

L0.7

PROJECT NO. 2102
03/06/24
TEAM: PvC, CG, EG, ZW





REVISIONS		
#	DATE	DESCRIPTION

SITE DESIGN
REVIEW

OVERALL
LANDSCAPE
SITE PLAN
L1.0

PROJECT NO. 2102
03/06/24
TEAM: Pvc, CG, EG, ZW

TERRAIN

LANDSCAPE ARCHITECTURE

310 Oak Street, Suite 3

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EAST MAIN STREET PARK

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REVISIONS

DATE DESCRIPTION

SITE DESIGN REVIEW

MATERIALS PLAN

L1.1

PROJECT NO. 2102

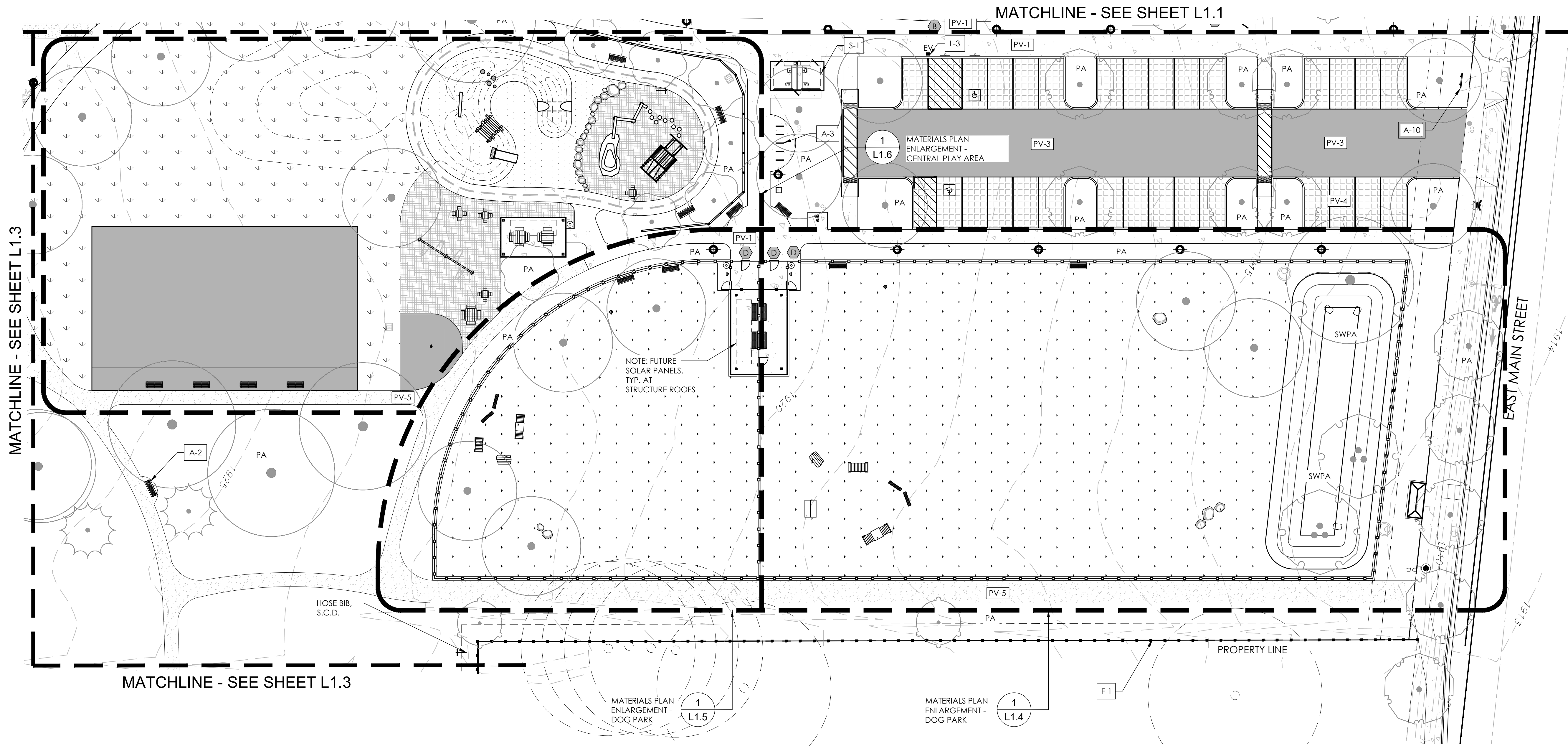
03/06/24

TEAM: Pvc, CG, EG, ZW

NOTE:
PUMP TRACK DESIGN & RENDERINGS BY AMERICAN RAMP COMPANY / VELOSOLUTIONS

Application Page Number: 177

Total Page Number: 692



SCALE: 1" = 20'-0"



EAST MAIN STREET PARK
2228 EAST MAIN STREET
ASHLAND, OREGON 97520

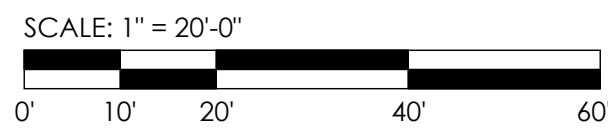
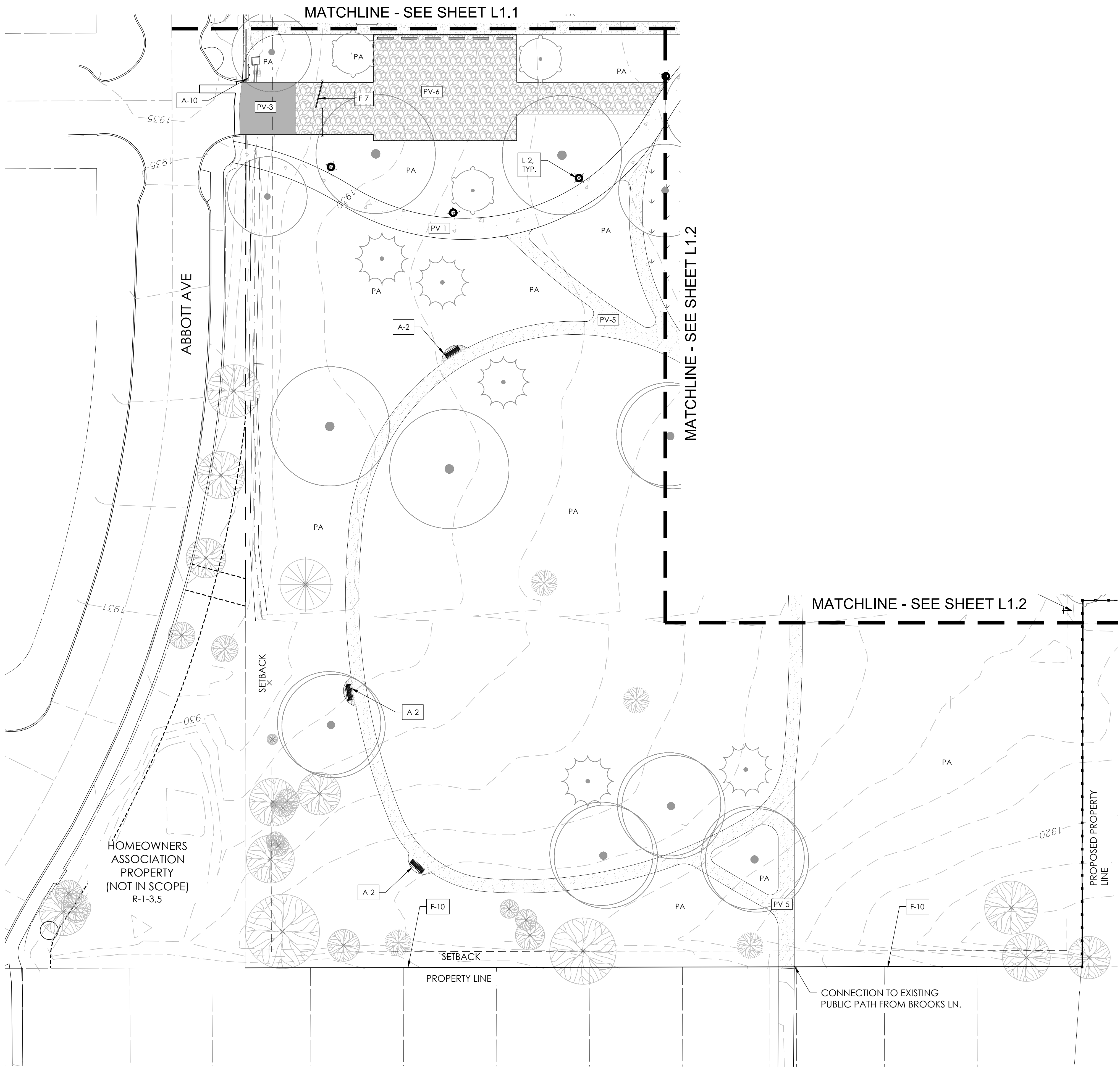
REVISIONS
DATE DESCRIPTION

SITE DESIGN
REVIEW

MATERIALS PLAN

L1.2

PROJECT NO. 2102
03/06/24
TEAM: P.V.C., C.G., E.G., Z.W.





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EAST MAIN STREET PARK
2228 EAST MAIN STREET
ASHLAND, OREGON 97520

REVISIONS	
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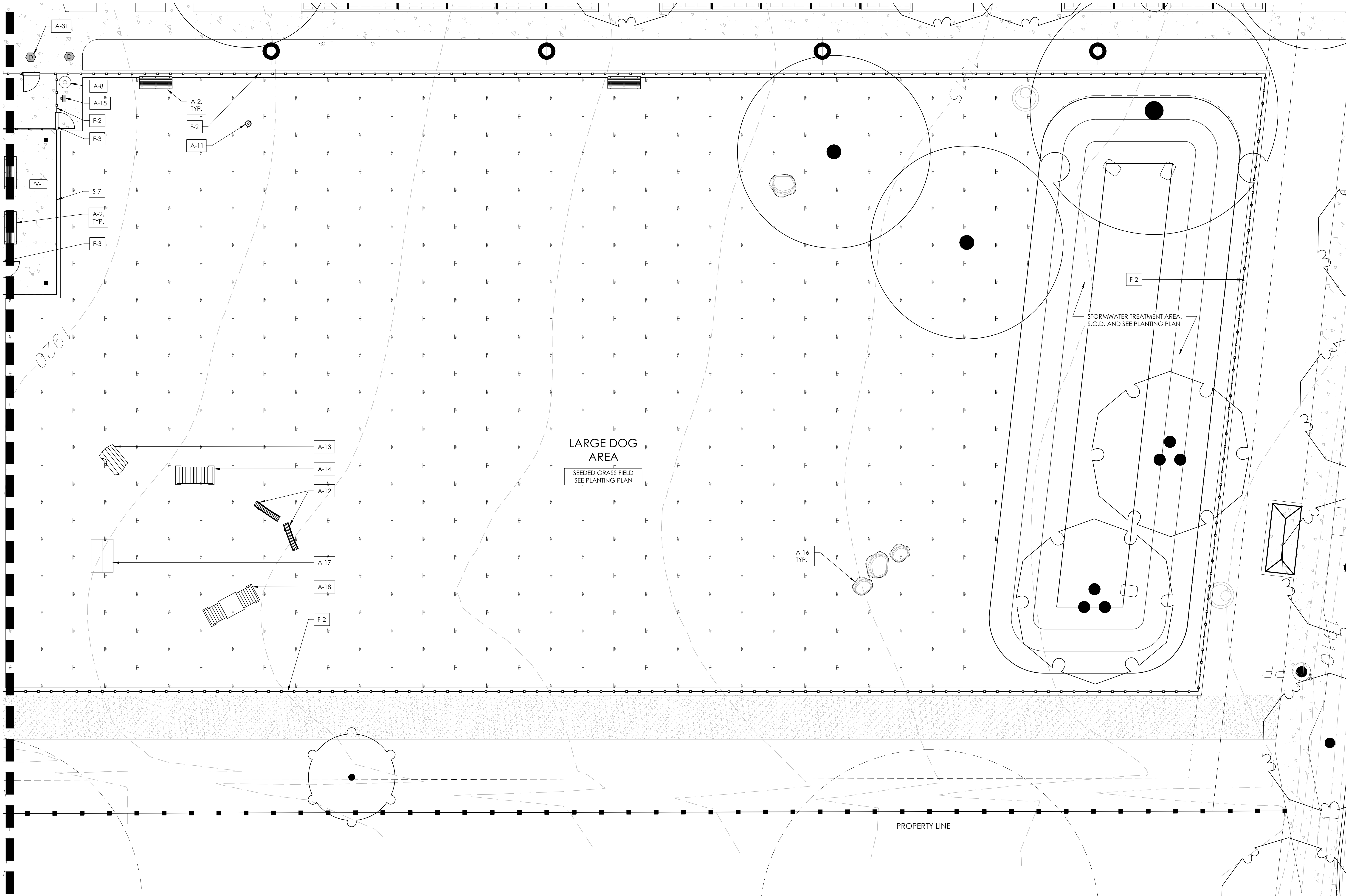
SITE DESIGN
REVIEW

MATERIALS PLAN

L1.3

PROJECT NO. 2102
03/06/24
TEAM: Pvc, CG, EG, ZW

MATCHLINE - SEE L1.5



EAST MAIN STREET PARK
2228 EAST MAIN STREET
ASHLAND, OREGON 97520

REVISIONS		
#	DATE	DESCRIPTION

SITE DESIGN
REVIEW

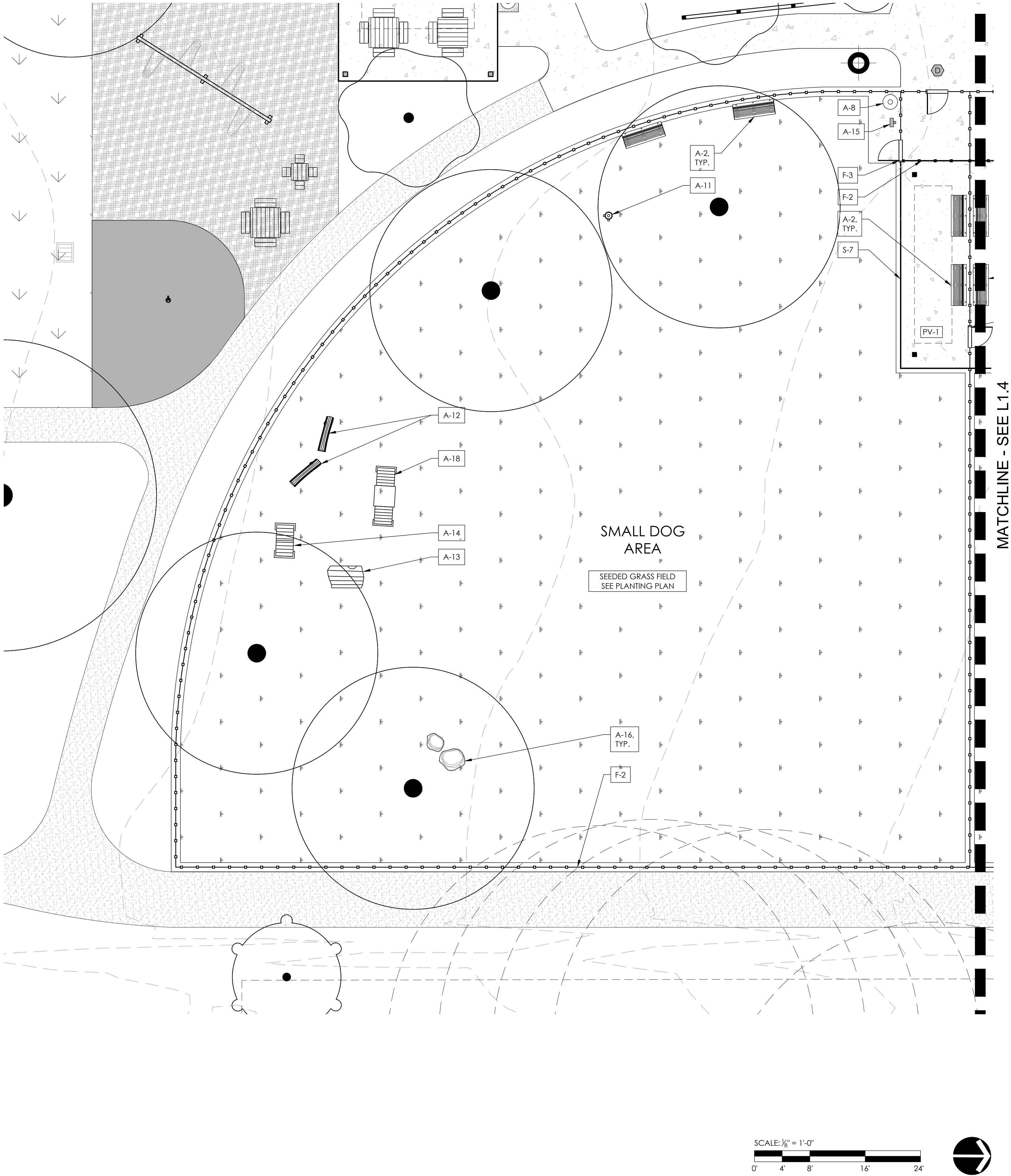
MATERIALS PLAN
ENLARGEMENT -
DOG PARK

L1.4

PROJECT NO. 2102
03/06/24
TEAM: Pvc, CG, EG, ZW

SCALE: 1/8" = 1'-0"



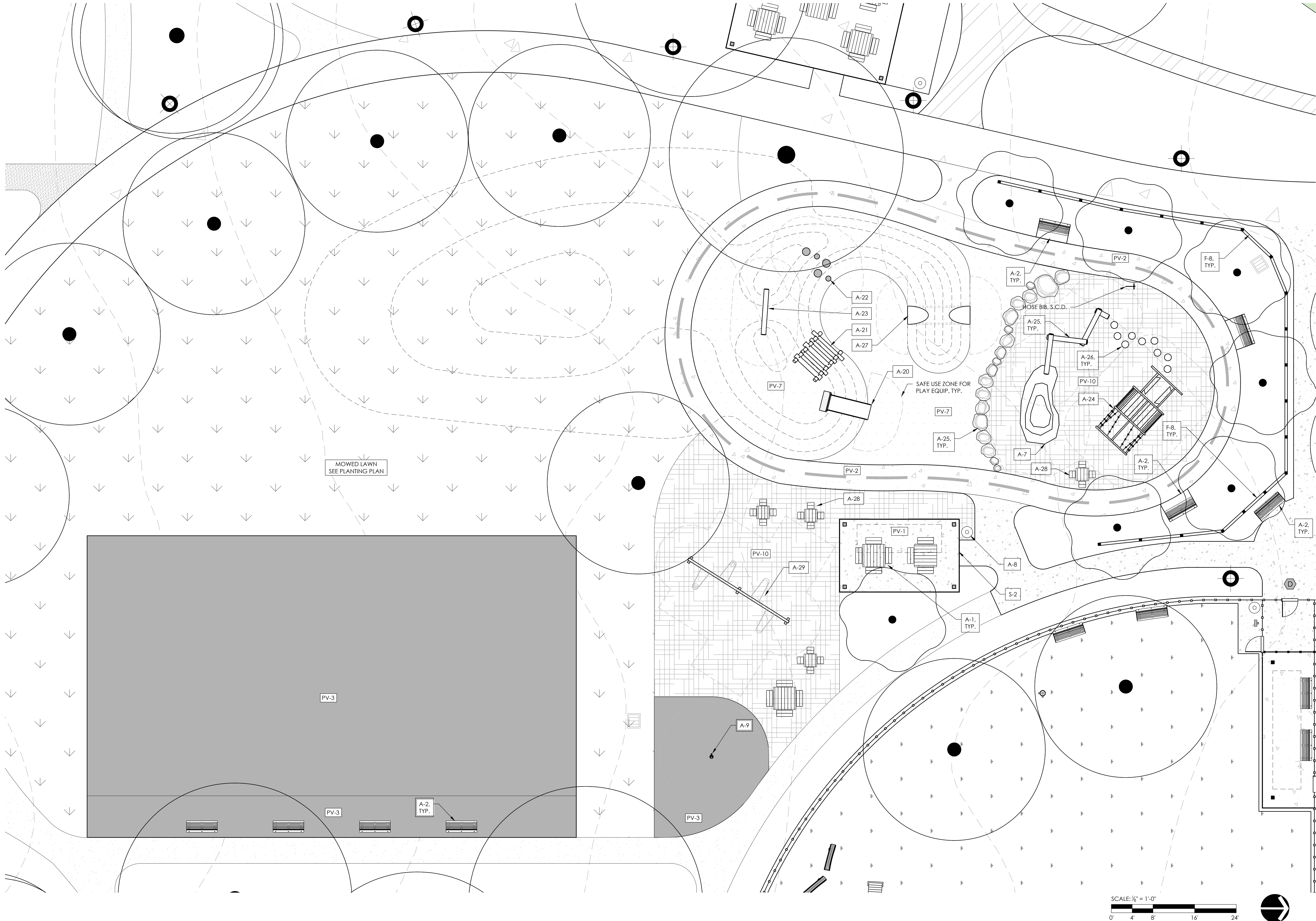


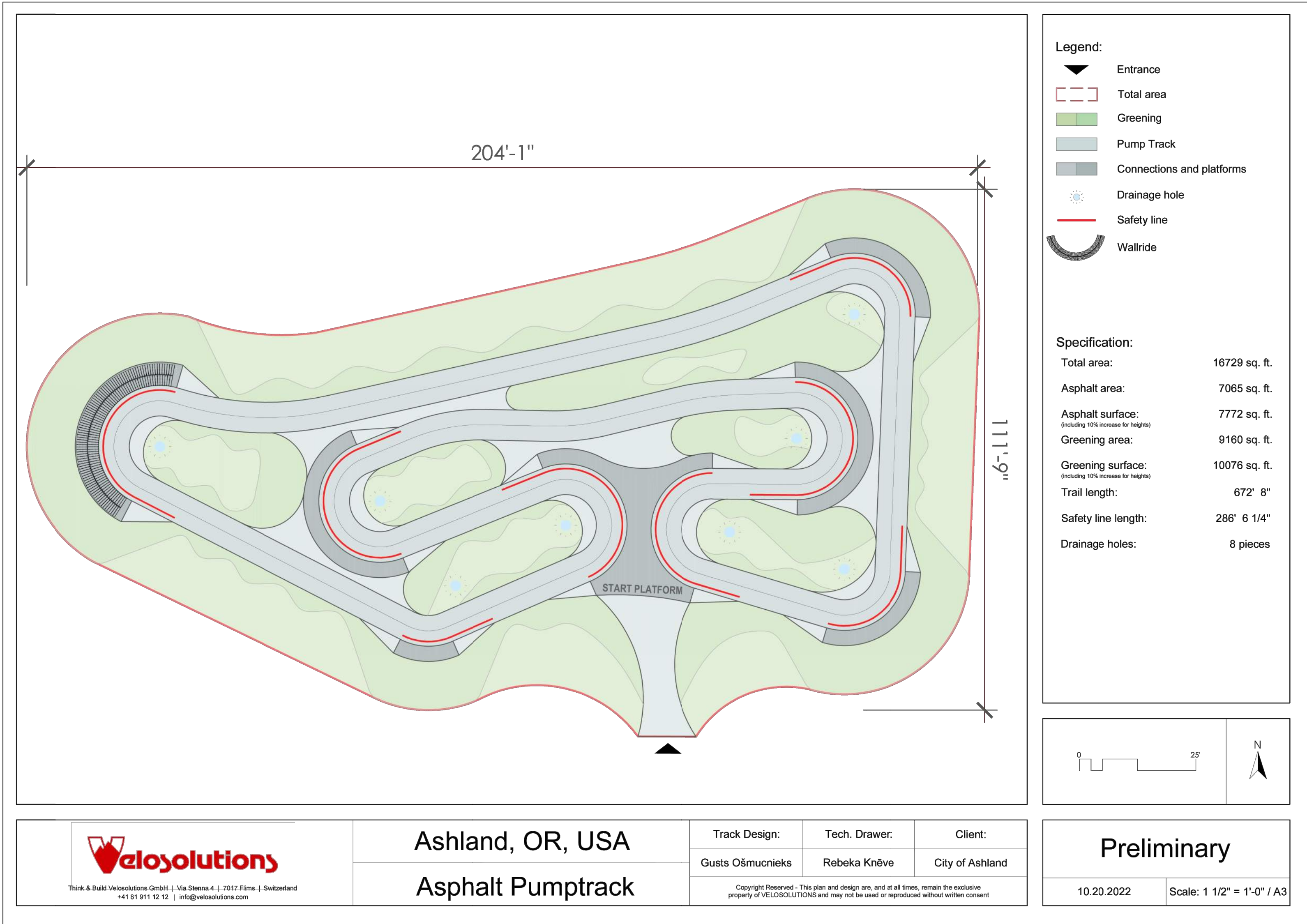
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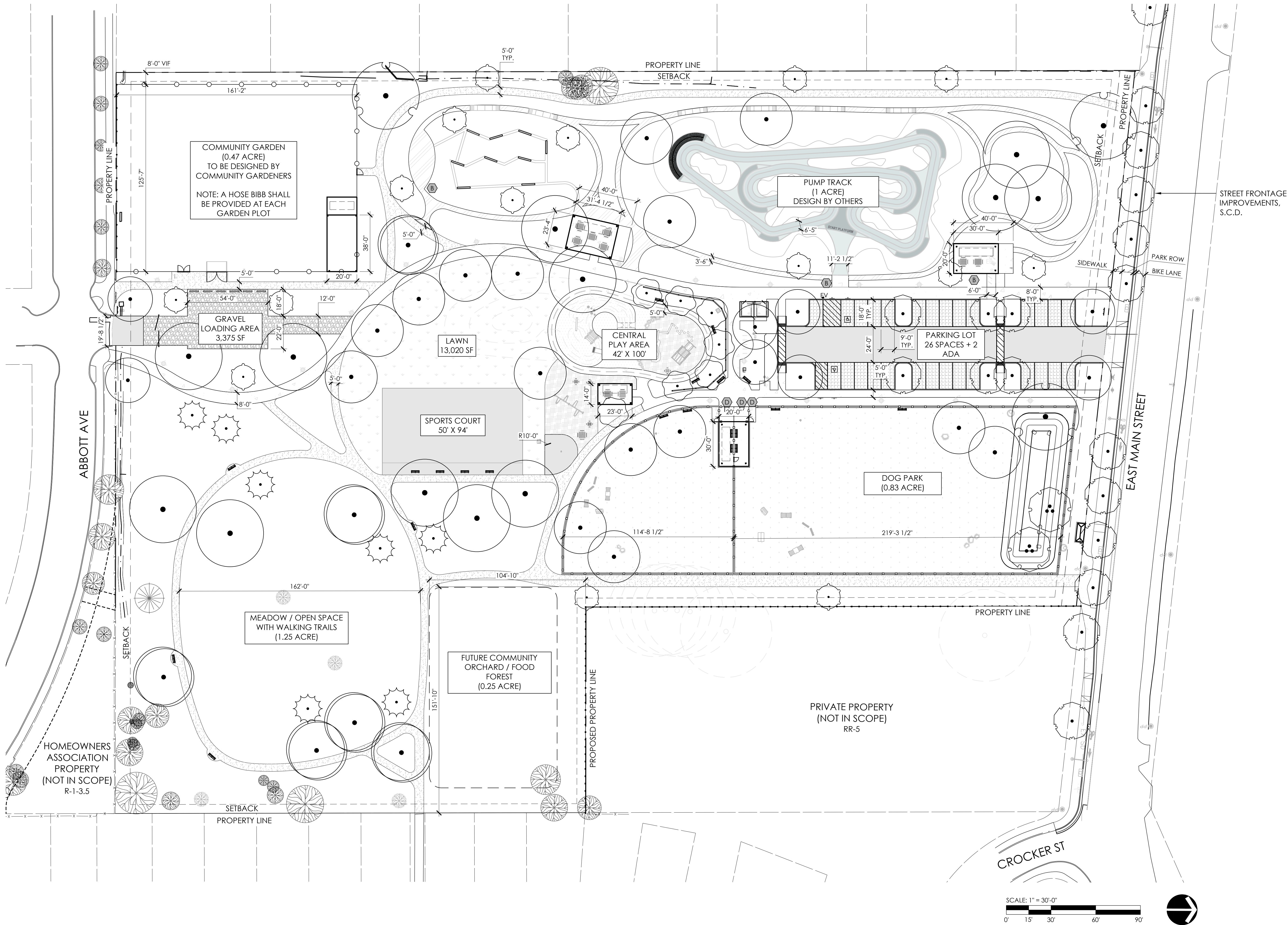
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REVIEW

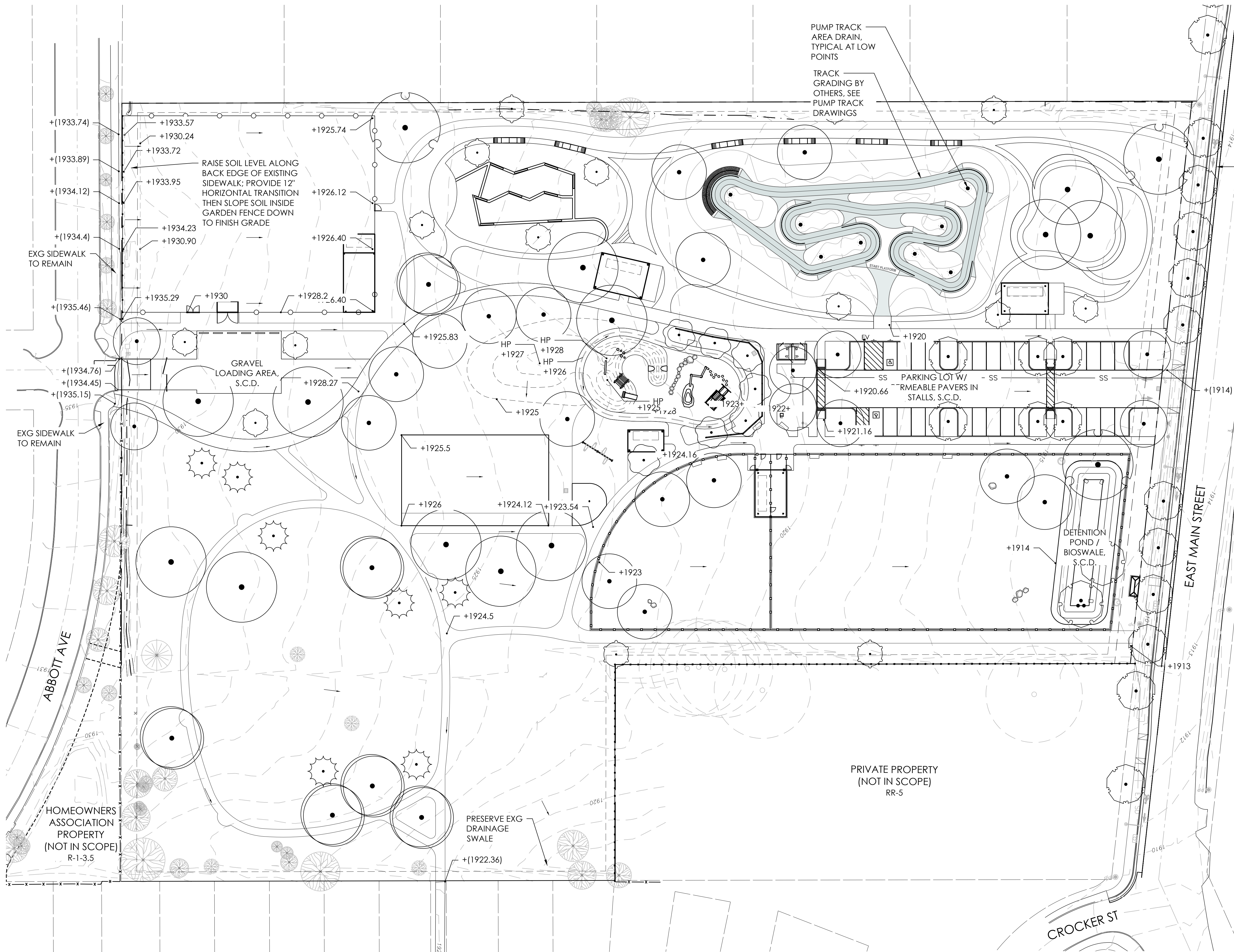
MATERIALS PLAN
ENLARGEMENT -
DOG PARK
L1.5

PROJECT NO. 2102
03/06/24
TEAM: Pvc, CG, EG, ZW









GRADING LEGEND	
SYMBOL	DESCRIPTION
FG	FINISH GRADE
FS	FINISH SURFACE
HP	HIGH POINT
LP	LOW POINT
	EXISTING CONTOUR
	PROPOSED 1 FOOT CONTOUR
+ (X.XX)	EXISTING ELEVATION
+ X.XX	PROPOSED ELEVATION
	DIRECTION OF SLOPE
AD ●	AREA DRAIN - BY CONTRACTOR; SEE NOTES BELOW

GENERAL GRADING NOTES:

- EXISTING TOPOGRAPHIC SURVEY INFORMATION PROVIDED BY POLARIS LAND SURVEYING, LLC. GRADES ENCOUNTERED MAY VARY FROM THOSE SHOWN. CONTRACTOR SHALL REVIEW THE PLANS AND CONDUCT FIELD INVESTIGATIONS AS REQUIRED TO VERIFY EXISTING CONDITIONS.
- PRIOR TO CONSTRUCTION AND/OR LANDSCAPE GRADING, THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS, T.I.D. WATER INFRASTRUCTURE, EXISTING DRAINAGE STRUCTURES, STREET IMPROVEMENTS, AND ELEVATIONS WITH THE CITY OF ASHLAND. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE OWNER OF ANY DISCREPANCIES BETWEEN PLANS AND ACTUAL SITE CONDITIONS.
- ALL FINISH GRADES SHALL BE BETWEEN 1 ½" AND 2" BELOW THE ADJACENT PAVING SURFACES UNLESS OTHERWISE NOTED.
- CROSS SLOPES SHALL BE MAX. 2%.
- AREA DRAINS TO BE PLACED IN LOW POINTS. SLOPE ADJACENT SOIL TO AREA DRAINS.
- GRADING SHALL TRANSITION SMOOTHLY TO EXISTING GRADES ALONG PROPERTY BOUNDARIES.

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ASHLAND, OREGON 97520

REVISIONS
DATE DESCRIPTION

SITE DESIGN
REVIEW

PRELIMINARY
GRADING PLAN

L3.0

PROJECT NO. 2102
03/06/24
TEAM: Pvc, CG, EG, ZW



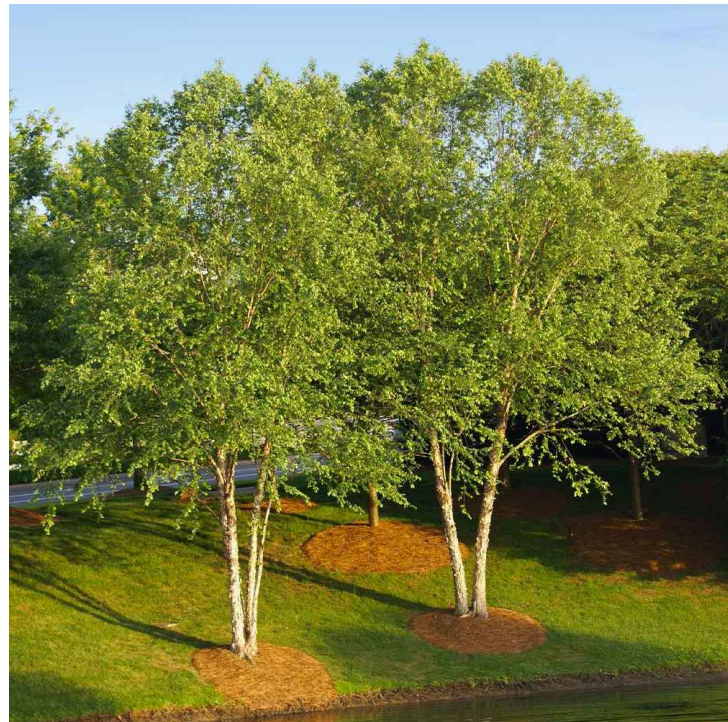
TREES



Sugar Maple (*Acer saccharum*)



Autumn Brilliance Apple Serviceberry (*Amelanchier* x g. 'Autumn Brilliance')



River Birch (*Betula nigra*)



Oklahoma Redbud (*Cercis canadensis* l. 'Oklahoma')



Pine (*Pinus spp*)



Chinese Pistache (*Pistacia chinensis*)



Scarlet Oak (*Quercus coccinea*)



California Black Oak (*Quercus kelloggii*)



Valley Oak (*Quercus lobata*)



Willow Oak (*Quercus phellos*)



Greenspire Littleleaf Linden
(*Tilia cordata* 'Greenspire')

PLANT SCHEDULE					
SYMBOL	CODE	BOTANICAL NAME	COMMON NAME	QTY	REMARKS
TREES					
	ACE SAC	ACER SACCHARUM	SUGAR MAPLE	12	
	AME GRA	AMELANCHIER X GRANDIFLORA 'AUTUMN BRILLIANCE'	AUTUMN BRILLIANCE APPLE SERVICEBERRY	7	
	BET NIG	BETULA NIGRA	RIVER BIRCH MULTI-TRUNK	2	
	CER OKL	CERCIS CANADENSIS TEXENSIS 'OKLAHOMA'	OKLAHOMA REDBUD	15	
	PIN SPP	PINUS SPP	PINE	7	
	PIS CHI	PISTACIA CHINENSIS	CHINESE PISTACHE	20	
	QUE COC	QUERCUS COCCINEA	SCARLET OAK	12	
	QUE KEL	QUERCUS KELLOGGII	CALIFORNIA BLACK OAK	6	
	QUE LOB	QUERCUS LOBATA	VALLEY OAK	3	
	QUE PHE	QUERCUS PHELLOS	WILLOW OAK	3	
	TIL GRE	TILIA CORDATA 'GREENSPIRE'	GREENSPIRE LITTLELEAF LINDEN	8	
SHRUB AREAS					
		SCREEN PLANTING		20,588 SF	
	ARB STR	ARBUTUS UNEDO	STRAWBERRY TREE	2,882 SF	
	AZA MIC	AZARA MICROPHYLLA	BOX LEAF AZARA	2,882 SF	
	BAC PIL	BACCHARIS PILULARIS	COYOTE BRUSH	2,882 SF	
	CEA RIS	CEANOTHUS SPP	CALIFORNIA LILAC	2,882 SF	
	GAR COA	GARRYA ELLIPTICA	COAST SILKTASSEL	2,882 SF	
	RHA CAL	RHAMNUS CALIFORNICA	CALIFORNIA COFFEEBERRY	3,088 SF	
	ROS RUG	ROSA RUGOSA	RUGOSA ROSE	3,088 SF	
		ORNAMENTAL POLLINATOR PLANTING		2,869 SF	
	ACH MIL	ACHILLEA MILLEFOLIUM	COMMON YARROW	287 SF	
	ASC SPE	ASCLEPIAS SPECIOSA	SHOWY MILKWEED	287 SF	
	ECH PUR	ECHINACEA PURPUREA	CONEFLOWER	287 SF	
	HES PAR	HESPERALOE PARVIFLORA	RED YUCCA	287 SF	
	NEP SMS	NEPETA SPP	CATMINT	287 SF	
	RHA CA2	RHAMNUS CALIFORNICA	CALIFORNIA COFFEEBERRY	287 SF	
	SAL 3E3	SALVIA SPP	SAGE	287 SF	
	SAM NIG	SAMBUCUS NIGRA	BLACK ELDERBERRY	287 SF	
	SCH LIT	SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM	287 SF	
	ZAU SPP	ZAUSCHNERIA SPP.	CALIFORNIA FUCHSIA	287 SF	
		POLLINATOR BUFFER SHRUBS		14,157 SF	
	ARC UV2	ARCTOSTAPHYLOS UVA-URSI	KINNIKINNICK	1,274 SF	
	CAR TES	CAREX TESTACEA	ORANGE SEDGE	1,274 SF	
	CAR CLA	CARYOPTERIS X CLANDONENSIS	BLUEBEARD	1,274 SF	
	CIS SER	CISTUS SPP.	ROCKROSE	1,274 SF	
	COT MEK	COTINUS SPP	SMOKE BUSH	1,274 SF	
	HES PAR	HESPERALOE PARVIFLORA	RED YUCCA	1,274 SF	
	MUH GPS	MUHLENBERGIA SPP	MUHLY GRASS	1,274 SF	
	PUN GRA	PUNICA GRANATUM	POMEGRANATE	1,274 SF	
	RHA IND	RHAPHIOLEPIS INDICA	INDIAN HAWTHORN	1,274 SF	
	SES AUT	SESLERIA AUTUMNALIS	AUTUMN MOOR GRASS	1,274 SF	
	ZAU SPP	ZAUSCHNERIA SPP.	CALIFORNIA FUCHSIA	1,416 SF	
GROUND COVERS					
		STREET / PARKING GROUND COVER		5,565 SF	
	EUP 232	EUPHORBIA SPP	SPURGE	5,565 SF	
	HEL SEM	HELICTOTRICHON SEMPERVIRENS	BLUE OAT GRASS	5,565 SF	
	MUH CAP	MUHLENBERGIA CAPILLARIS	PINK MUHLY GRASS	5,565 SF	
	NEP MPC	NEPETA SPP	CATMINT	5,565 SF	
	RUB NIE	RUBUS CALYCINOIDES	CREEPING BRAMBLE	5,565 SF	
		DOG PARK SEED MIX		29,949 SF	PROTIME SEED MICROCLOV
		ECO MEADOW SEED MIX		66,212 SF	
		STORMWATER SEED MIX		4,288 SF	
	ELY GLA	ELYMUS GLAUCUS	BLUE WILDRYE	3,430 SF	
	FES BS2	FESTUCA RUBRA ARENARIA	CREEPING RED FESCUE	858 SF	
		PROTIME SEED ECO-LAWN MIX WITH MICROCLOVER OR APPROVED EQUAL		23,636 SF	PROTIME SEED OR APPROVE

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EAST MAIN STREET PARK

2228 EAST MAIN STREET

ASHLAND, OREGON 97520

REVISIONS

#	DATE	DESCRIPTION
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SITE DESIGN REVIEW

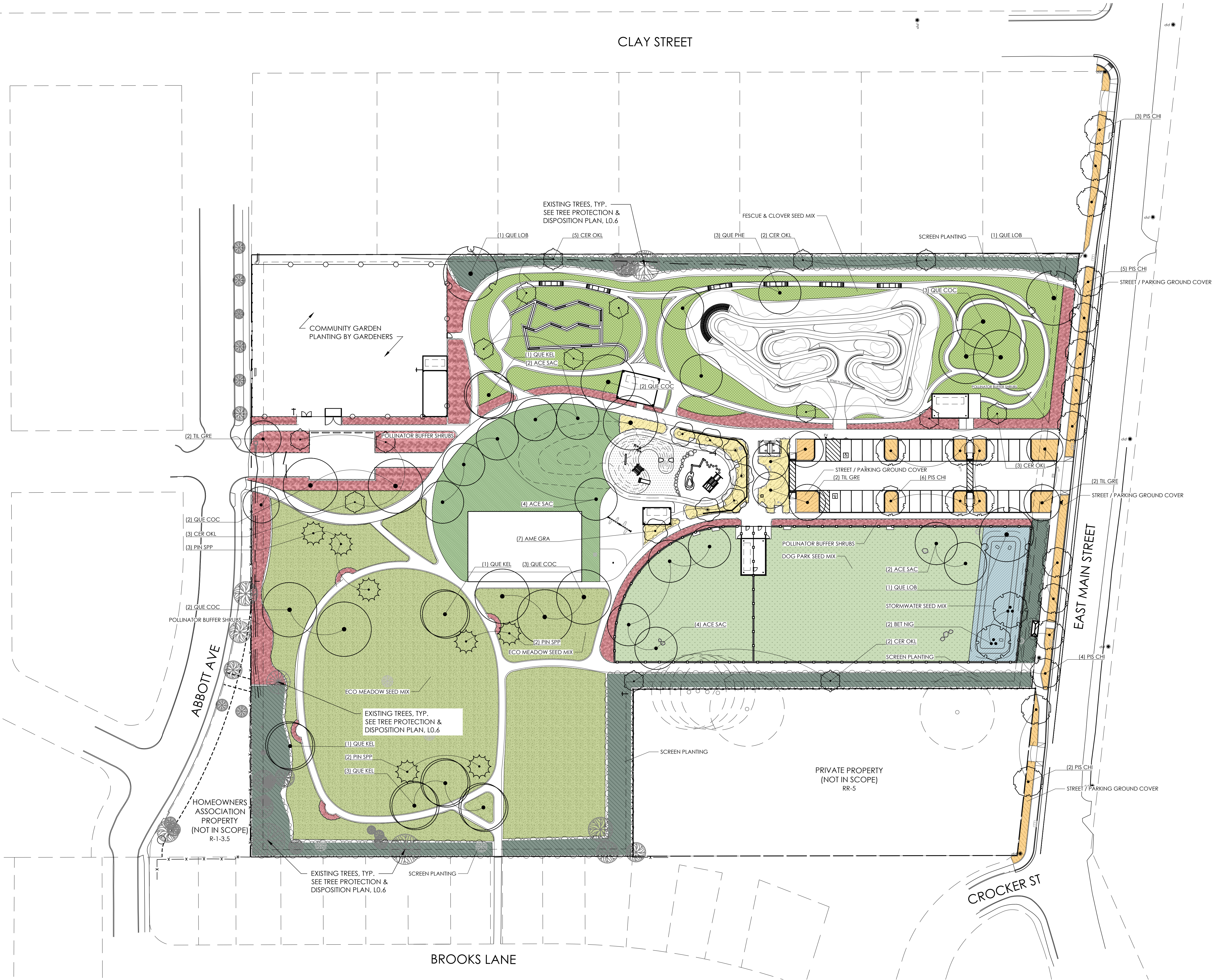
PLANT PALETTE

L4.0

PROJECT NO. 2102

03/06/24

TEAM: Pvc, CG, EG, ZW



PLANT SCHEDULE		
SYMBOL	CODE	BOTANICAL NAME
TREES		
	ACE SAC	ACER SACCHARUM
	AME GRA	AMELANCHER X GRANDIFLORA 'AUTUMN BRILLIANCE'
	BET NIG	BETULA NIGRA
	CER OKL	CERCIS CANADENSIS TEXENSIS 'OKLAHOMA'
	PIN SPP	PINUS SPP
	PIS CHI	PISTACIA CHINENSIS
	QUE COC	QUERCUS COCCINEA
	QUE KEL	QUERCUS KELLOGGII
	QUE LOB	QUERCUS LOBATA
	QUE PHE	QUERCUS PHELLOS
	TIL GRE	TILIA CORDATA 'GREENSPIRE'
SHRUB AREAS		
SCREEN PLANTING		
	ARB STR	ARBUTUS UNEDO
	AZA MIC	AZARA MICROPHYLLA
	BAC PIL	BALCHARRIS PILLULARIS
	CER RS	CERANTHUS SPP
	GAR COA	GARRYA ELIPTICA
	RHA CAL	RHAMNUS CALIFORNICA
	ROS RUG	ROSA RUGOSA
ORNAMENTAL POLLINATOR PLANTING		
	ACH MIL	ACHELLEA MILLEFOLIUM
	ASC SPE	ASCLEPIAS SPECIOSA
	ECH PUR	ECHINACEA PURPUREA
	HES PAR	HEPERALOE PARVIFLORA
	NEP SMS	NEPETA SPP
	RHA CAL	RHAMNUS CALIFORNICA
	SAL SES	SALVIA SPP
	SAM NIG	SAMBUCUS NIGRA
	SCH LIT	SCHROEDERIA SCOPARIUM
	ZAUS SPP	ZAUSCHNERIA SPP
POLLINATOR BUFFER SHRUBS		
	ARG UV2	ARCTOSTAPHYLOS UVA-URSI
	CAR TED	CAREX TESTACEA
	CAR CLA	CARYOPTERIS X CLANDONENSIS
	CIS SER	CISTUS SPP
	COI MIX	COINUS SPP
	HES PAR	HEPERALOE PARVIFLORA
	MUH GPS	MUHLBERGIA SPP
	PUN GRA	PRUNICA GRANATUM
	RHA IND	RHAPHIOLEPIS INDICA
	SES AUT	SESLERIA AUTUMNALIS
	ZAUS SPP	ZAUSCHNERIA SPP
GROUND COVERS		
STREET / PARKING GROUND COVER		
	EUP 232	EUPHORBIA SPP
	HEL SEM	HELIOTRICHON SEMPERVIRENS
	MUH CAP	MUHLBERGIA CAPILLARIS
	NEP MPC	NEPETA SPP
	RUB NE	RUBUS CALYCNOIDES
	DOG PARK SEED MIX	DOG PARK SEED MIX
	PROTIVE SEED MIX	PROTIVE SEED MIX
	ECO-LAWN MIX WITH MICROCLOVER OR APPROVED EQUAL	ECO-LAWN MIX WITH MICROCLOVER OR APPROVED EQUAL
	TURF GRASS	TURF GRASS
	ECO MEADOW SEED MIX	ECO MEADOW SEED MIX
	STORMWATER SEED MIX	STORMWATER SEED MIX
	ELY GLA	ELYMUS GLAUCUS
	FES B52	FESTUCA RUBRA ARENARIA
	FESCUE & CLOVER SEED MIX	FESCUE & CLOVER SEED MIX
	PROTIVE SEED ECO-LAWN MIX WITH MICROCLOVER OR APPROVED EQUAL	PROTIVE SEED ECO-LAWN MIX WITH MICROCLOVER OR APPROVED EQUAL

NOTE: SEE SHEET L4.0 FOR FULL PLANT PALETTE



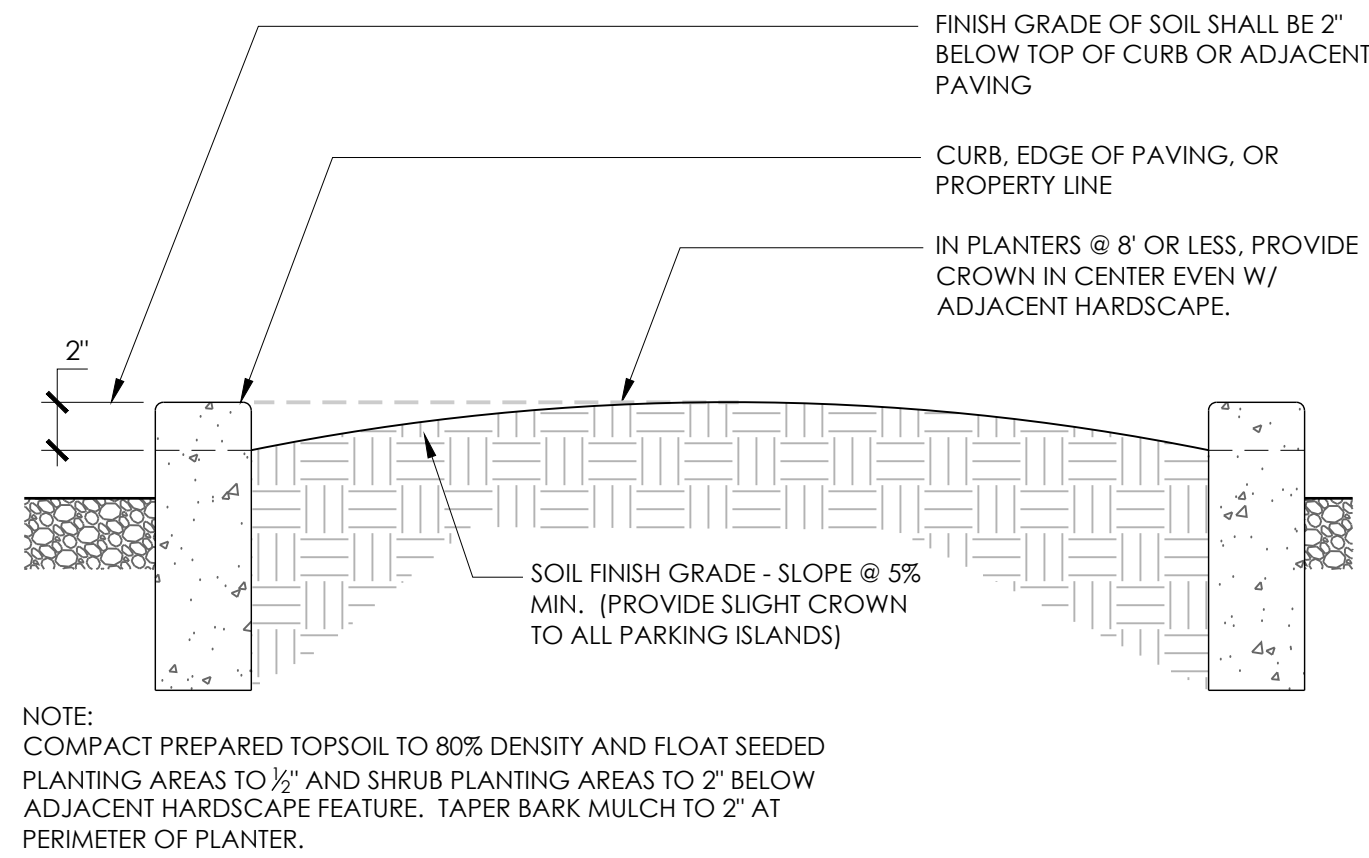
EAST MAIN STREET PARK
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REVISIONS
DATE DESCRIPTION

SITE DESIGN
REVIEW

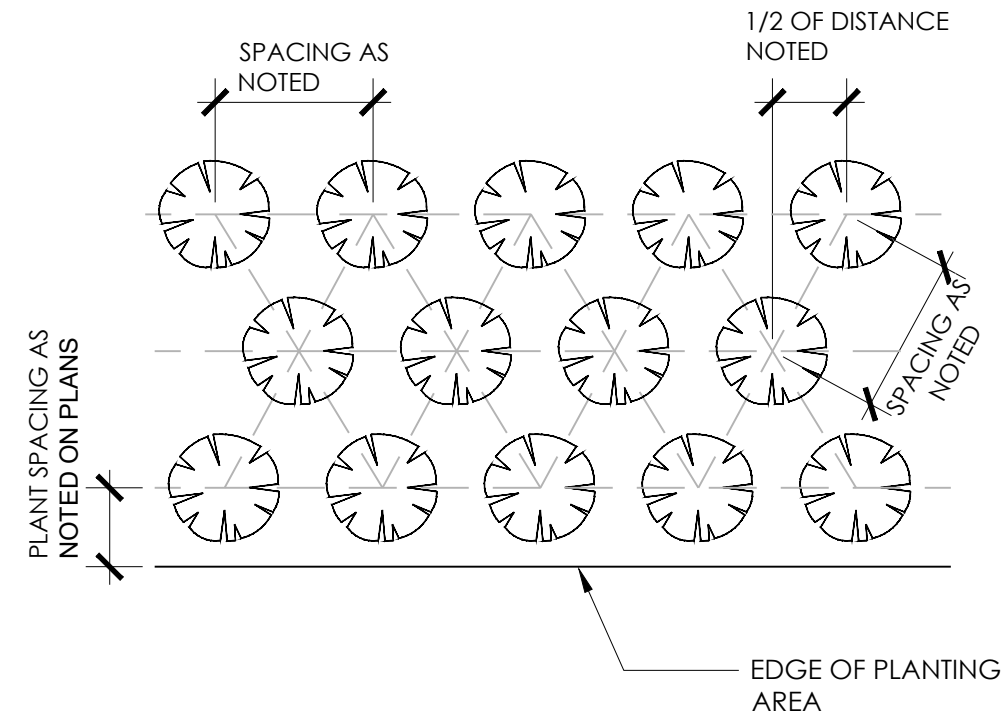
PLANTING PLAN

L4.1
PROJECT NO. 2102
03/06/24
TEAM: Pvc, CG, EG, ZW

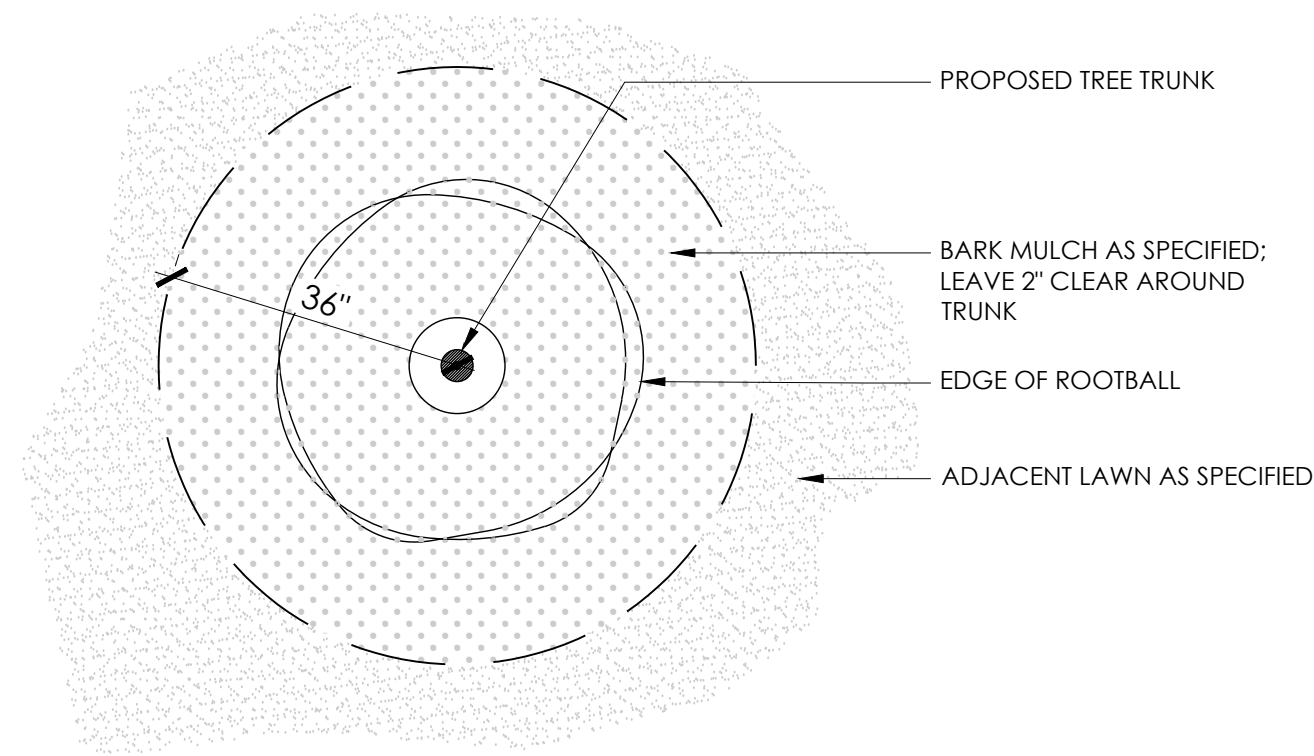


6 SECTION: SOIL PROFILE IN ISOLATED PLANTERS
Scale: 1" = 1'-0"

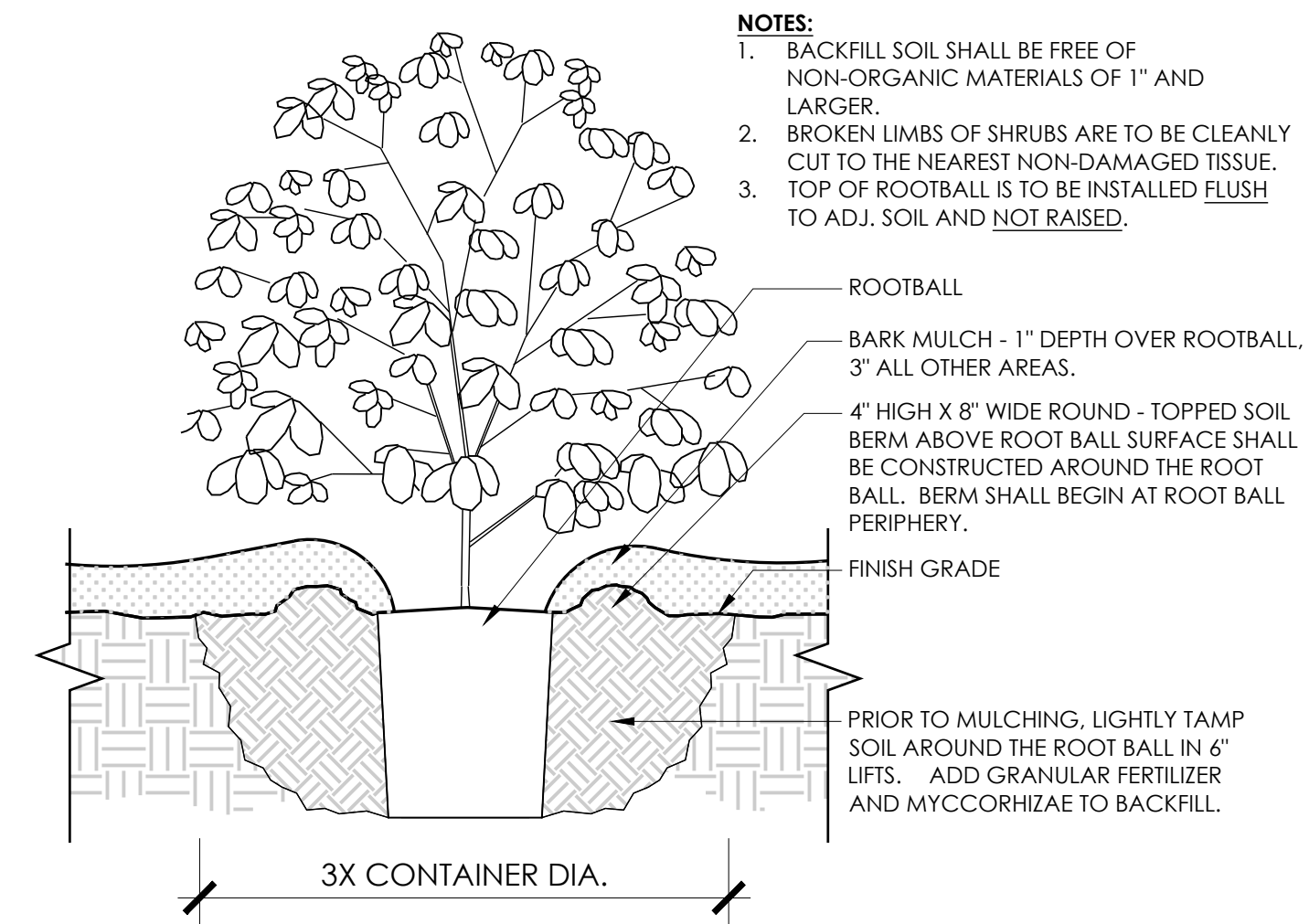
SPACING	X FACTOR
12" O.C.	1.156 (X AREA)
18" O.C.	0.513
24" O.C.	0.288
30" O.C.	0.184
36" O.C.	0.128
48" O.C.	0.072



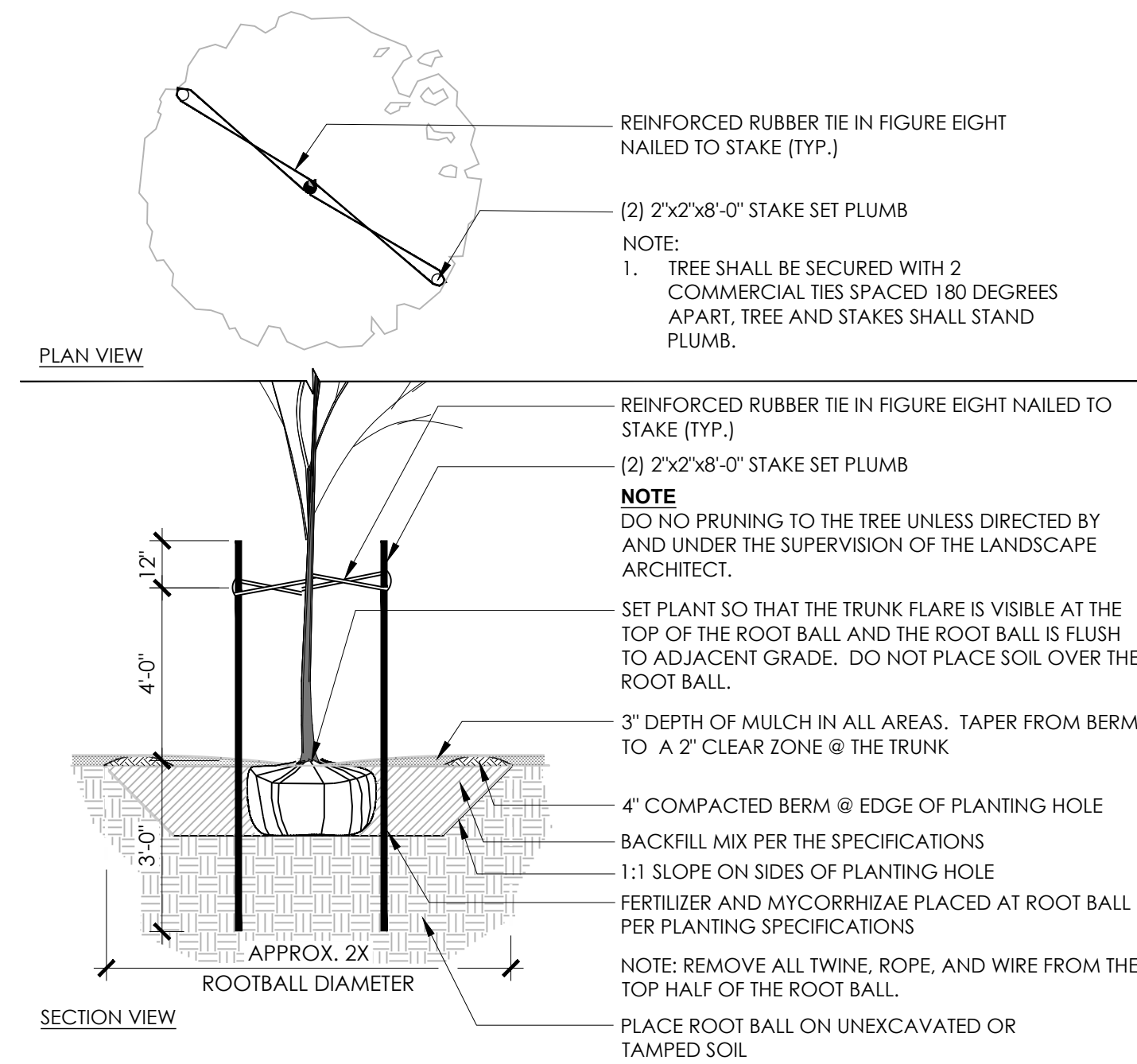
5 DETAIL: SHRUB & GROUNDCOVER PLANTING LAYOUT
Scale: NTS



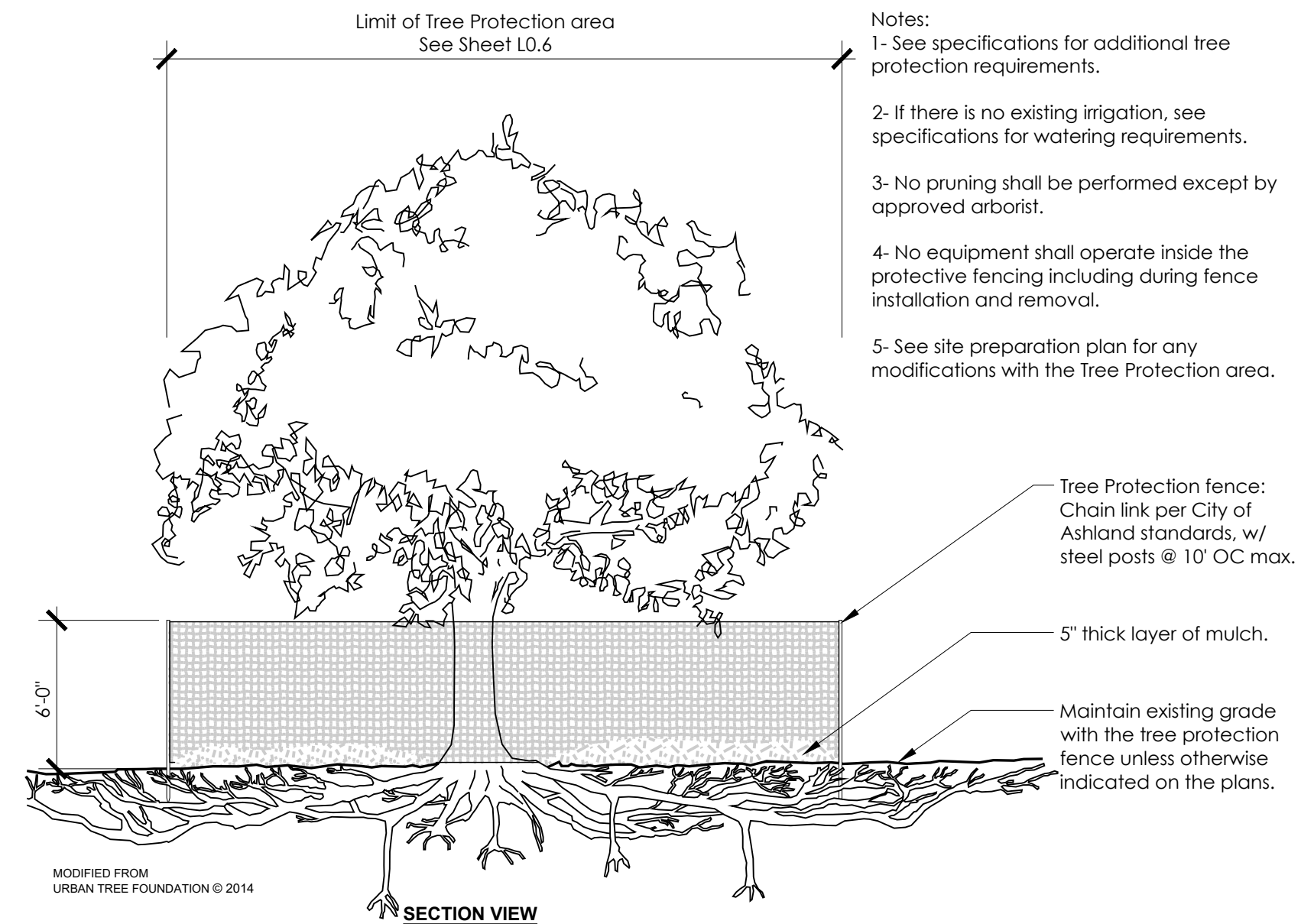
4 DETAIL: MULCH RING AT LAWN TREE
Scale: 1" = 1'-0"



3 DETAIL: SHRUB & GROUNDCOVER PLANTING
Scale: 1" = 1'-0"



2 DETAIL: TREE PLANTING & STAKING
Scale: 1/2" = 1'-0"



1 DETAIL: TREE PROTECTION FENCE
Scale: 1/4" = 1'-0"

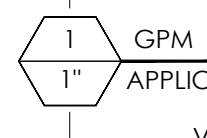
EAST MAIN STREET PARK
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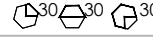
REVISIONS
DATE DESCRIPTION

SITE DESIGN
REVIEW

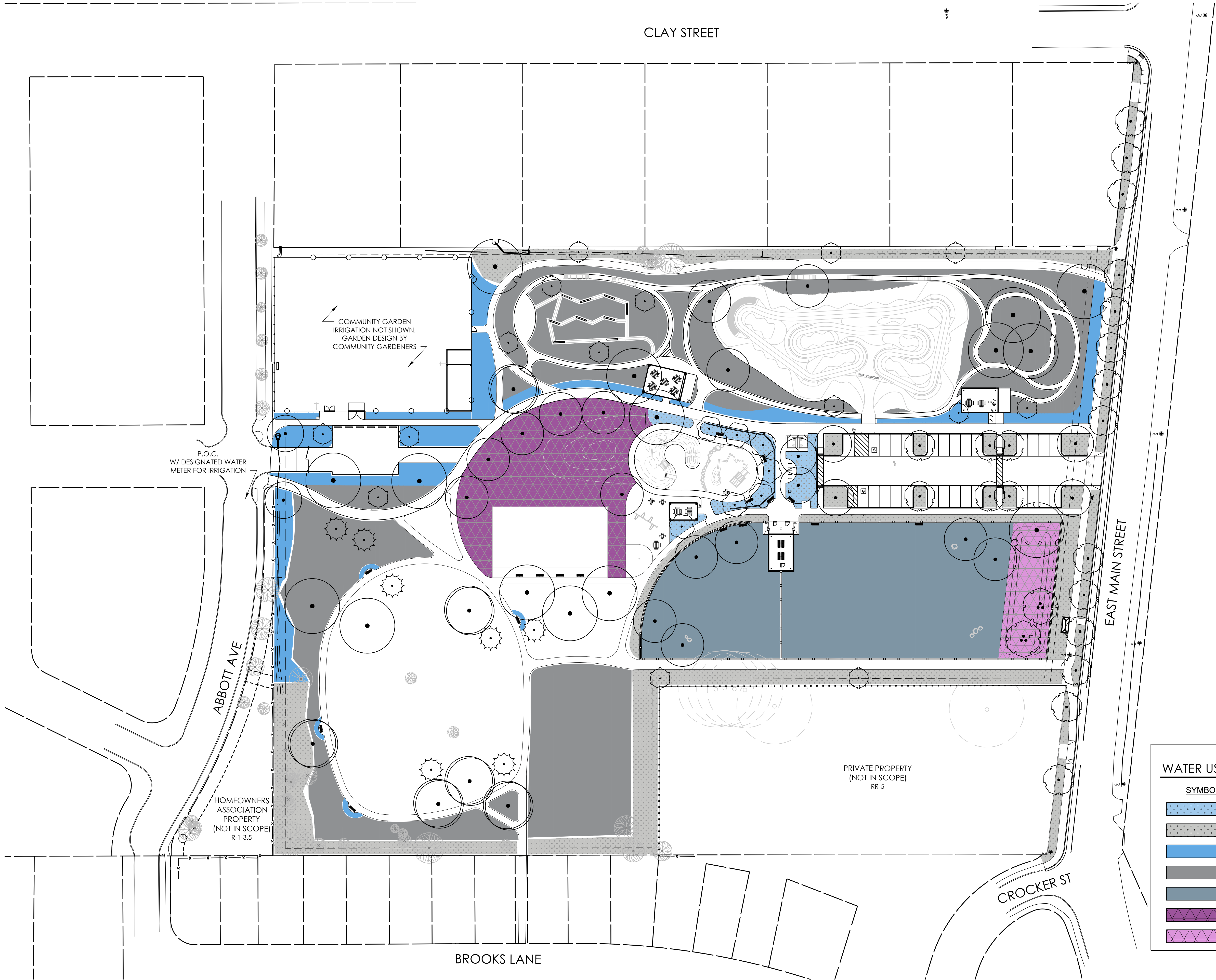
IRRIGATION NOTES
& LEGENDS

L5.0
PROJECT NO. 2102
03/06/24
TEAM: Pvc, CG, EG, ZW

IRRIGATION PLAN LEGEND	
SYMBOL	DESCRIPTION
	HUNTER ICPV-101G (SPRAY) OR APPROVED EQUAL HUNTER PCZ-101 (DRIP) OR APPROVED EQUAL
	MAIN LINE: SCH 40 PVC (1-1/2")
	LATERAL LINES SHALL BE SCH 40 PVC (1")
	SLEEVES - SCH 40, MIN SIZE SHALL BE 2x DIA. OF PASSING PIPE
	ISOLATION BALL VALVE - LINE SIZE
	QUICK COUPLING VALVE - HUNTER 44RC OR APPROVED EQUAL
	CONTROLLER: WEATHERTRAK, TO BE SELECTED BY PARKS REPRESENTATIVE
	ZONE ID 1" GPM APPLICATION VALVE SIZE
	P.O.C. POINT OF CONNECTION - SEE DETAIL X/LX.X
	DRIP IRRIGATION: HUNTER PLD-06-18 OR APPROVED EQUAL

IRRIGATION HEAD KEY					
SYMBOL	DESCRIPTION	MODEL (*) (**)	NOZZLE	RAD.	FLOW RATE (GPM)
	1/4" 1/2" FULL	HUNTER PRS30	MP-ROTATOR 1000	8'	0.11, 0.21, 0.44
	1/4" 3/4" FULL	HUNTER PRS30	MP-ROTATOR 1000	10'	0.135, 0.27, 0.54
	1/4" 3/4" FULL	HUNTER PRS40	MP-ROTATOR 1000	14'	0.19, 0.38, 0.75
	1/4" 1/2" FULL	HUNTER PRS40	MP-ROTATOR 2000	19'	0.40, 0.74, 1.47
	1/4" 1/2" FULL	HUNTER PRS30	MP-ROTATOR 3000	25'	0.71, 1.51, 2.30, 3.04
	1/4" 1/2" FULL	HUNTER PRS40	MP-ROTATOR 3000	30'	0.85, 1.82, 2.75, 3.65
	END, CENTER	HUNTER PRS40	MP-ROTATOR STRIP	STRIP	0.19, 0.38
	RZWS	HUNTER RZWS-18-25-CV			0.25

IRRIGATION NOTES		
1. THE CITY OF ASHLAND TO REVIEW AND APPROVE ALL LANDSCAPE RELATED ITEMS PRIOR TO BEGINNING LANDSCAPE INSTALLATION	13. COORDINATE ALL IRRIGATION EQUIPMENT LOCATIONS WITH OTHER CONTRACTORS. NOTIFY THE OWNER'S REPRESENTATIVE IF CONFLICTS ARE ENCOUNTERED.	
2. REVIEW SPECIFICATION SECTION 328400 FOR ALL ASPECTS OF THE IRRIGATION SYSTEM INSTALLATION.	14. ALL SPRINKLER HEADS ALONG SIDEWALKS SHALL BE TWO INCHES FROM SIDEWALKS.	
3. MAINTAIN AT JOB SITE ONE (1) COPY OF DRAWINGS, SPECIFICATIONS, ADDENDA, AND APPROVED SHOP DRAWINGS, CHANGE ORDERS, AND OTHER PROJECT DOCUMENTS.	15. PIPE DEPTH - LATERAL LINES - 12 INCH MINIMUM; MAINLINE - 18 INCH MINIMUM.	
4. RECORD ACTUAL LOCATION OF ALL CONCEALED COMPONENTS, PIPING SYSTEM, CONDUIT AND SLEEVE LOCATIONS. KEEP THIS DOCUMENT CURRENT. DO NOT PERMANENTLY CONCEAL ANY WORK UNTIL REQUIRED INFORMATION HAS BEEN RECORDED. FURNISH TWO (2) COPIES OF RECORD DRAWINGS TO THE OWNER. REDUCE ONE COPY OF RECORD DRAWING TO FIT INSIDE CONTROLLER LID. LAMINATE REDUCED COPY.	16. BOTTOM OF TRENCHES AND BACKFILL MATERIAL SHALL BE FREE OF ROCKS, CLODS, AND OTHER SHARP OBJECTS. SNAKE PIPE FROM SIDE TO SIDE AT TRENCH BOTTOM TO ALLOW EXPANSION.	
5. ALL WORK SHALL BE INSTALLED BY COMPETENT WORKMEN EXPERIENCED IN TRADE IN A NEAT AND ORDERLY MANNER ACCEPTABLE TO THE OWNER'S REPRESENTATIVE.	17. DO NOT INSTALL HEADS UNTIL LINES HAVE BEEN THOROUGHLY FLUSHED AND PRESSURE TESTED.	
6. CONFORM TO ALL PERTINENT CODES AND REGULATIONS. COMPLY WITH THE LATEST RULES OF THE NATIONAL ELECTRICAL CODE AND THE AMERICAN MASTER PLUMBERS CODE.	18. SHUT OFF VALVES ARE REQUIRED AT EACH POINT OF CONNECTION, VALVE BOX, AND AT EVERY LOCATION WHERE THE MAINLINE PASSES UNDER 20 FEET OF PAVEMENT.	
7. VERIFY THAT FIELD CONDITIONS ARE AS INDICATED ON DRAWINGS. NOTIFY THE OWNER'S REPRESENTATIVE IF DISCREPENCIES ARE OBSERVED.	19. A MANUAL DRAIN MUST BE INSTALLED AT THE LOW SPOT OF EACH ZONE.THE DRAIN SHOULD BE A BRASS MANUAL ANGLE VALVE WITH "T" STEM. DRAINS LOCATED ON LATERAL LINES SHALL BE 1" SIZE.	
8. NOTIFY OWNER'S REPRESENTATIVE 48 HOURS IN ADVANCE OF ALL SITE OBSERVATION VISITS REQUIRED BY THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL BE PRESENT AT EACH SITE OBSERVATION VISIT. REQUIRED VISITS INCLUDE: PRESSURE TEST AFTER MAINLINE LAID, AFTER NON-PRESSURIZED LINES PRIOR TO BACKFILL, AND FINAL OPERATION OF ALL IRRIGATION STATIONS INCLUDING HEAD TO HEAD COVERAGE.	20. COORDINATE WIRE AND CONDUIT LOCATIONS BETWEEN ELECTRIC CONTROL VALVES AND THE ELECTRIC CONTROLLER.	
9. IRRIGATION PIPE, HEADS, VALVES, BACKFLOW DEVICE AS NOTED ON LEGEND.	21. UPON COMPLETION OF ALL SYSTEMS, THE CONTRACTOR SHALL PERFORM A COVERAGE TEST TO DETERMINE THAT WATER IS BEING APPLIED CORRECTLY AND ADEQUATELY TO ALL PLANTINGS. CHANGE ANY HEADS, NOZZLES, OR ORIFICES AS MAY BE REQUIRED TO PROVIDE COVERAGE AS INDICATED ON THE DRAWINGS. PROMPTLY ADJUST HEADS TO KEEP WATER OFF BUILDINGS AND STRUCTURES WITH MINIMAL SPRAY ON PAVED SURFACES.	
10. VERIFY LOCATION OF EXISTING UTILITIES PRIOR TO BEGINNING WORK.	22. ALL SPRAY HEADS ADJACENT TO HARDSCAPE TO BE ON 6" POP-UPS. ALL OTHER SPRAY HEADS TO BE ON 12" POP-UPS.	
11. PIPING LAYOUT IS DIAGRAMMATIC ONLY. ROUTE PIPING IN PLANTERS AND AVOID UTILITIES AND STRUCTURES. LAYOUT SHALL FOLLOW AS CLOSELY AS PRACTICAL THE SCHEMATIC DESIGN ON THE DRAWINGS. MAKE NO SUBSTANTIAL CHANGES WITHOUT PRIOR APPROVAL FROM THE OWNER'S REPRESENTATIVE.	<u>SLEEVING:</u> 23. CONTRACTOR SHALL VERIFY SLEEVING LOCATIONS AND COORDINATE WITH THE OWNER'S REPRESENTATIVE. SLEEVES ARE TO BE PROVIDED BY GENERAL CONTRACTOR.	
12. ALL LATERAL PIPE SHALL BE 1" IN SIZE UNLESS OTHERWISE INDICATED ON THE PLAN.	24. COORDINATE THE INSTALLATION OF ELECTRICAL SERVICE AND CONDUIT TO THE LOCATION OF THE PROPOSED IRRIGATION CONTROLLER.	



WATER USE PLAN LEGEND

SYMBOL	DESCRIPTION	QTY
	DRIP - LOW WATER USE	6,844 S.F.
	DRIP - LOW WATER USE - 2 YEAR ESTABLISHMENT	42,754 S.F.
	ROTOR - LOW WATER USE	5,509 S.F.
	ROTOR - LOW WATER USE - 2 YEAR ESTABLISHMENT	82,360 S.F.
	ROTOR - MEDIUM WATER USE	29,944 S.F.
	SPRAY - HIGH WATER USE	12,885 S.F.
	SPRAY - MEDIUM WATER USE	4,285 S.F.



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REVISIONS

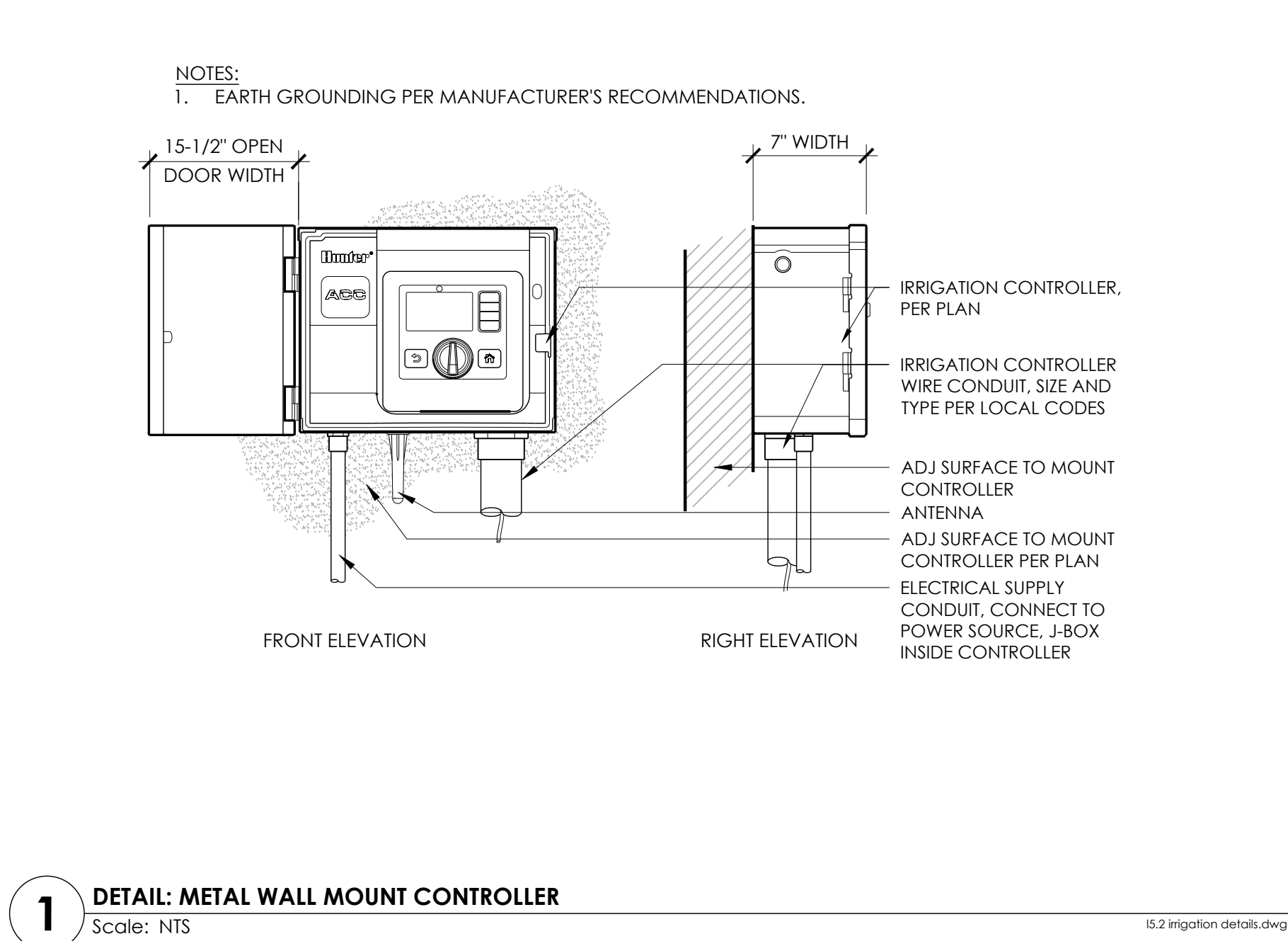
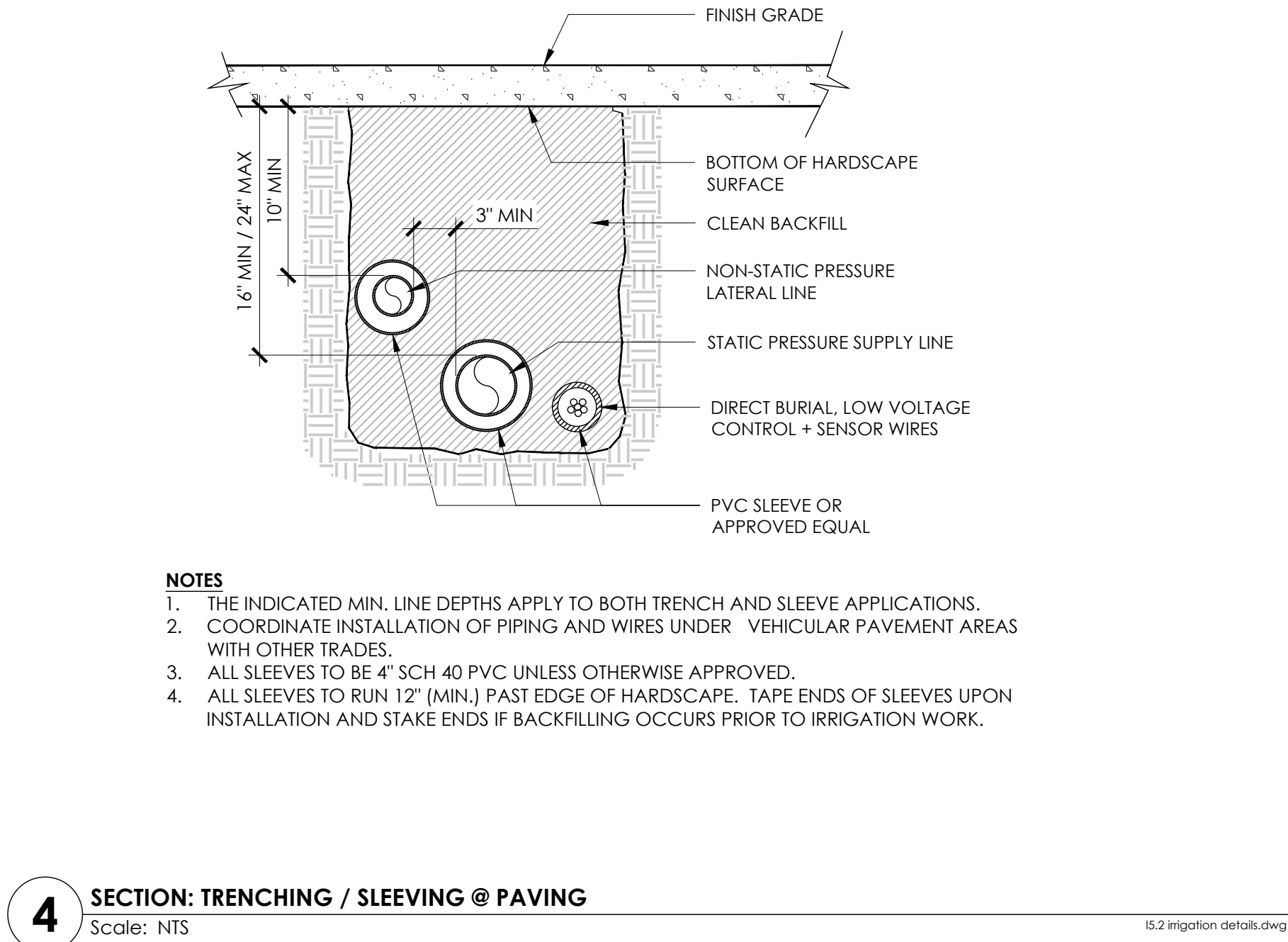
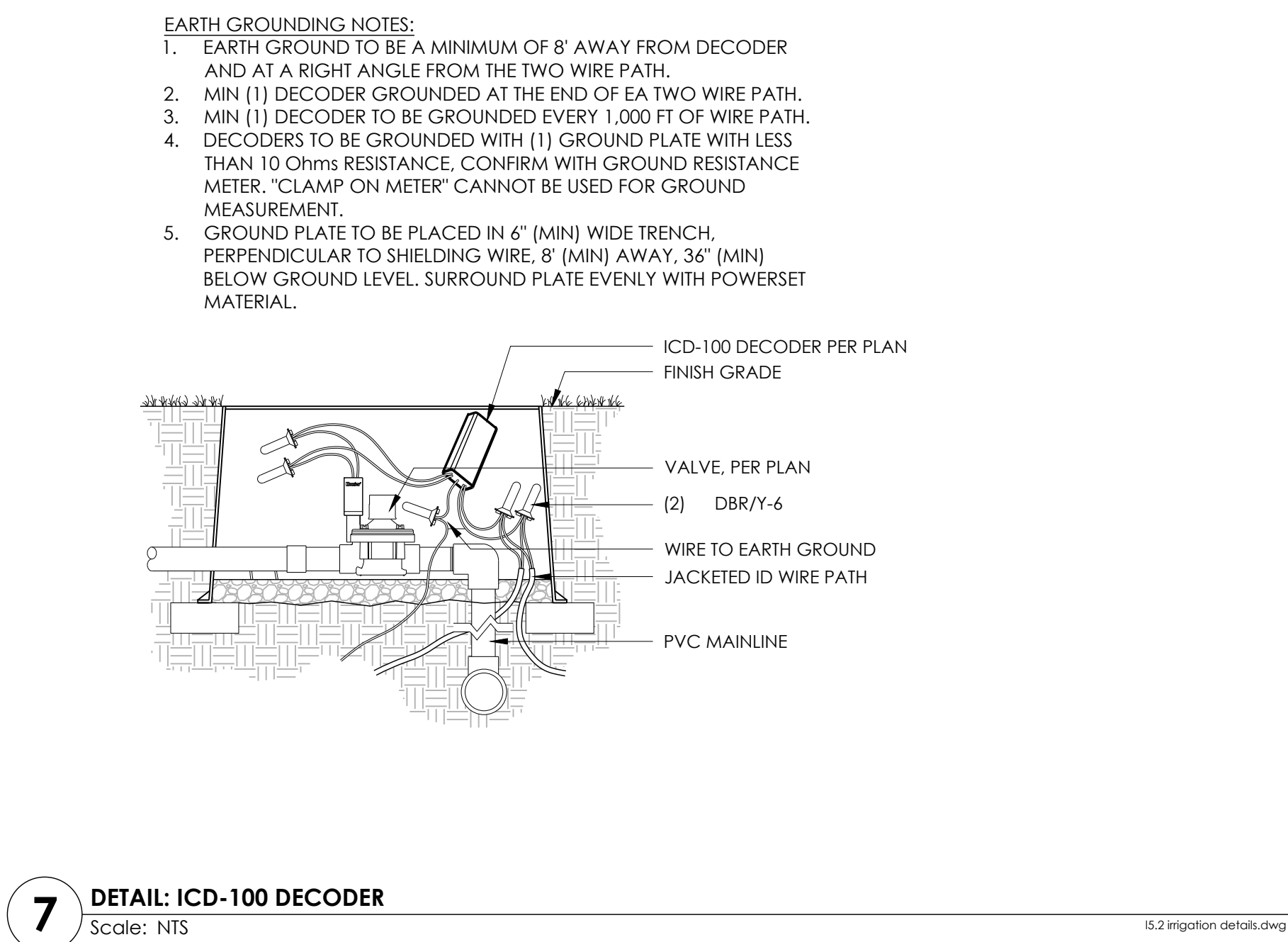
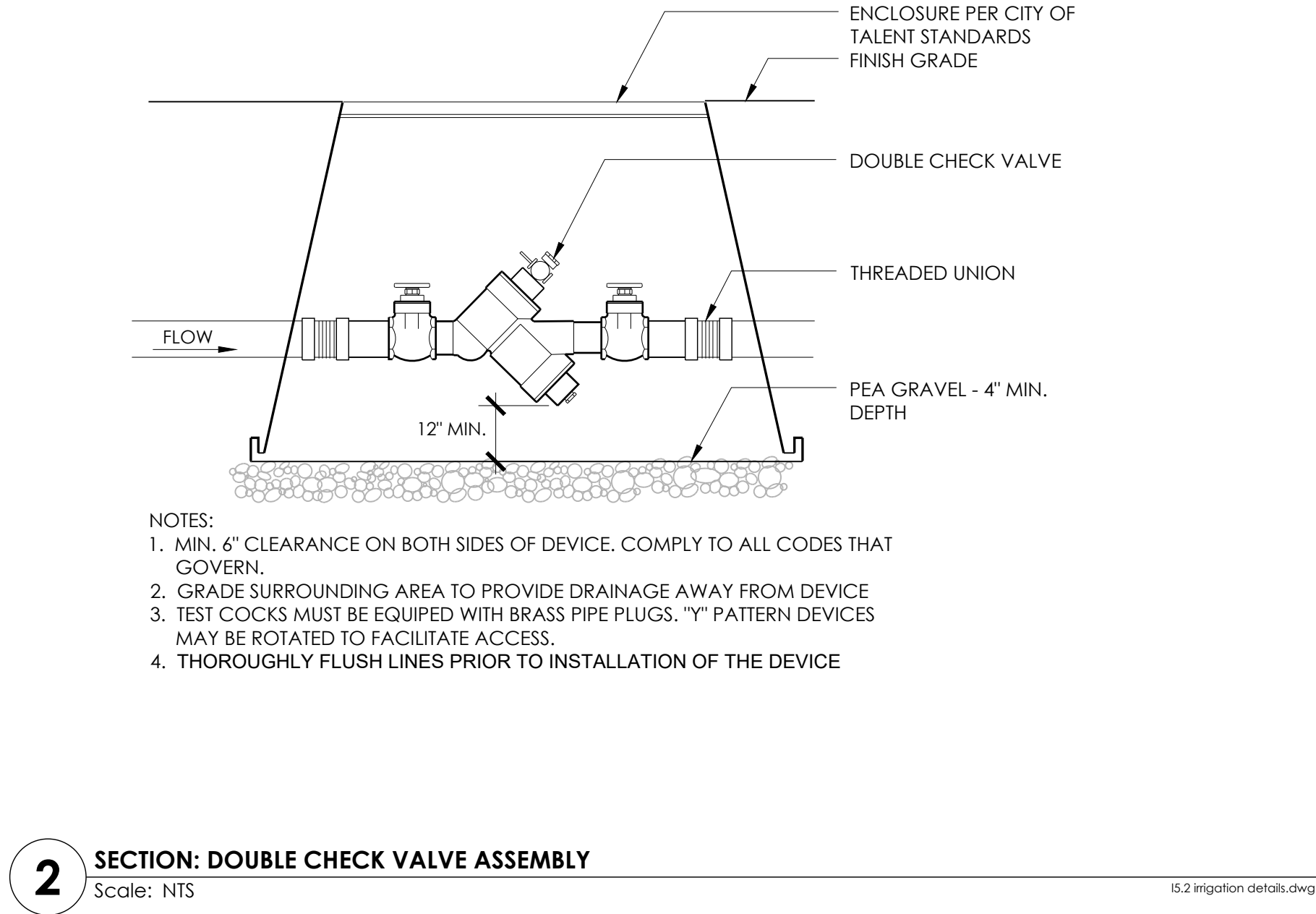
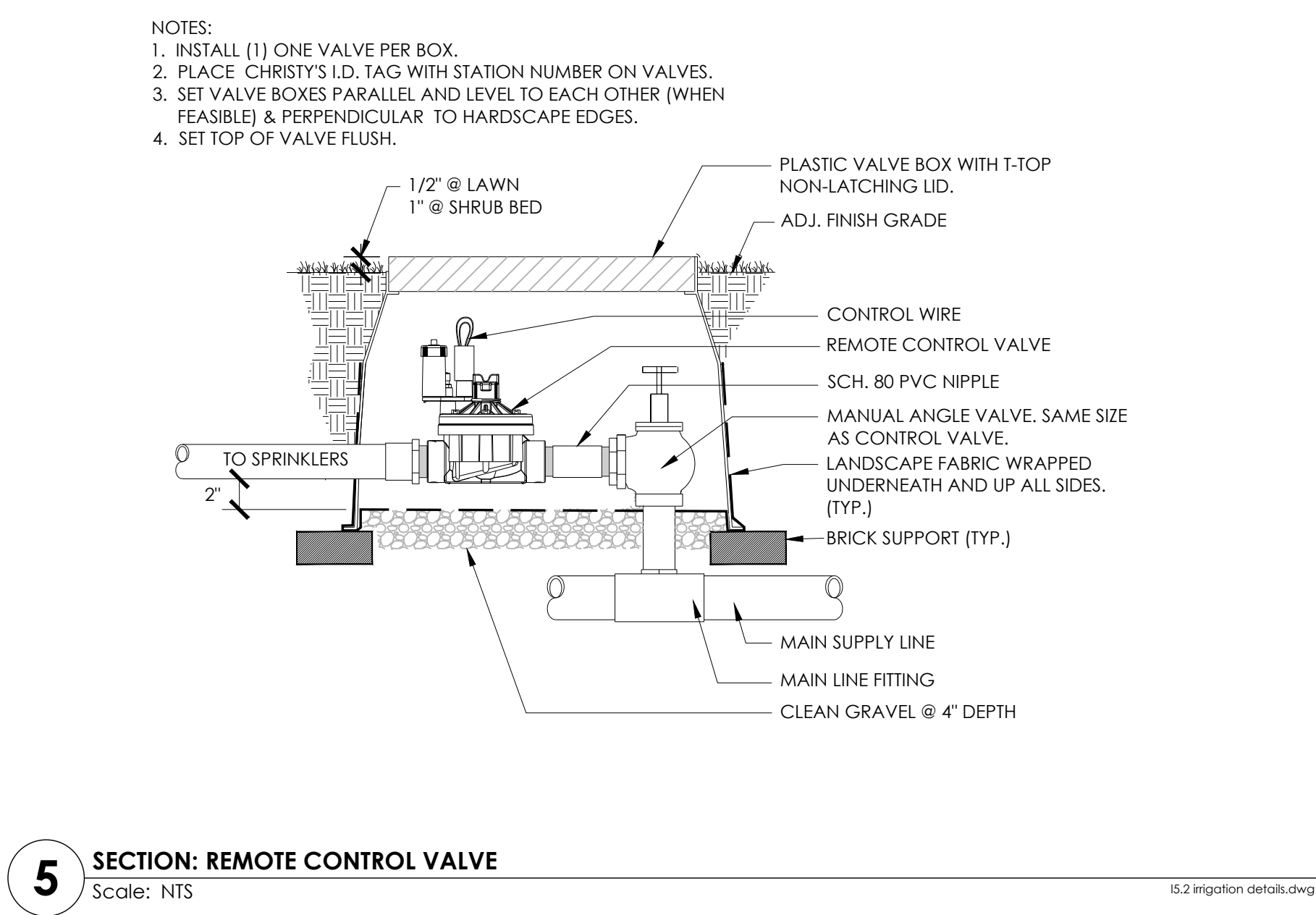
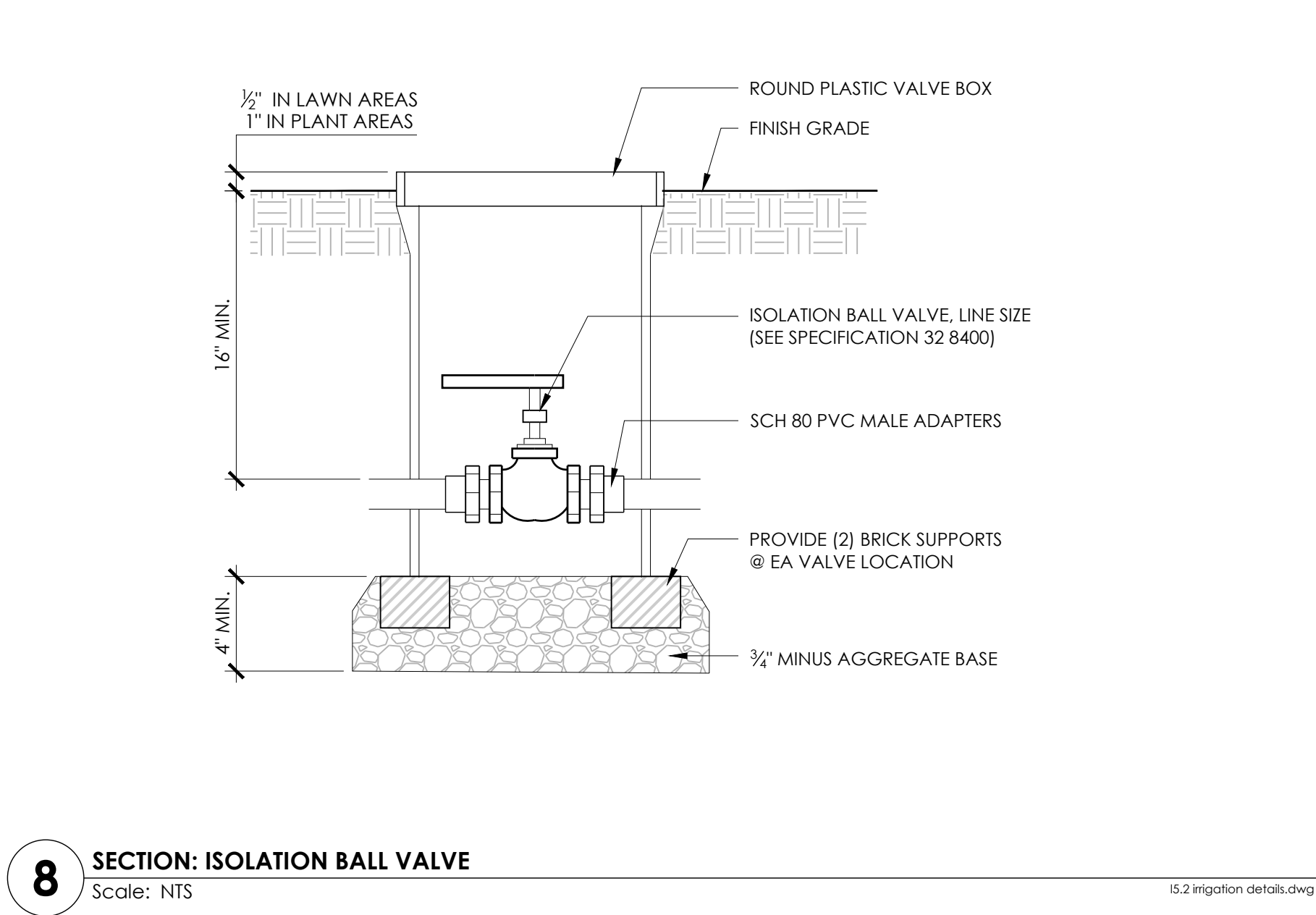
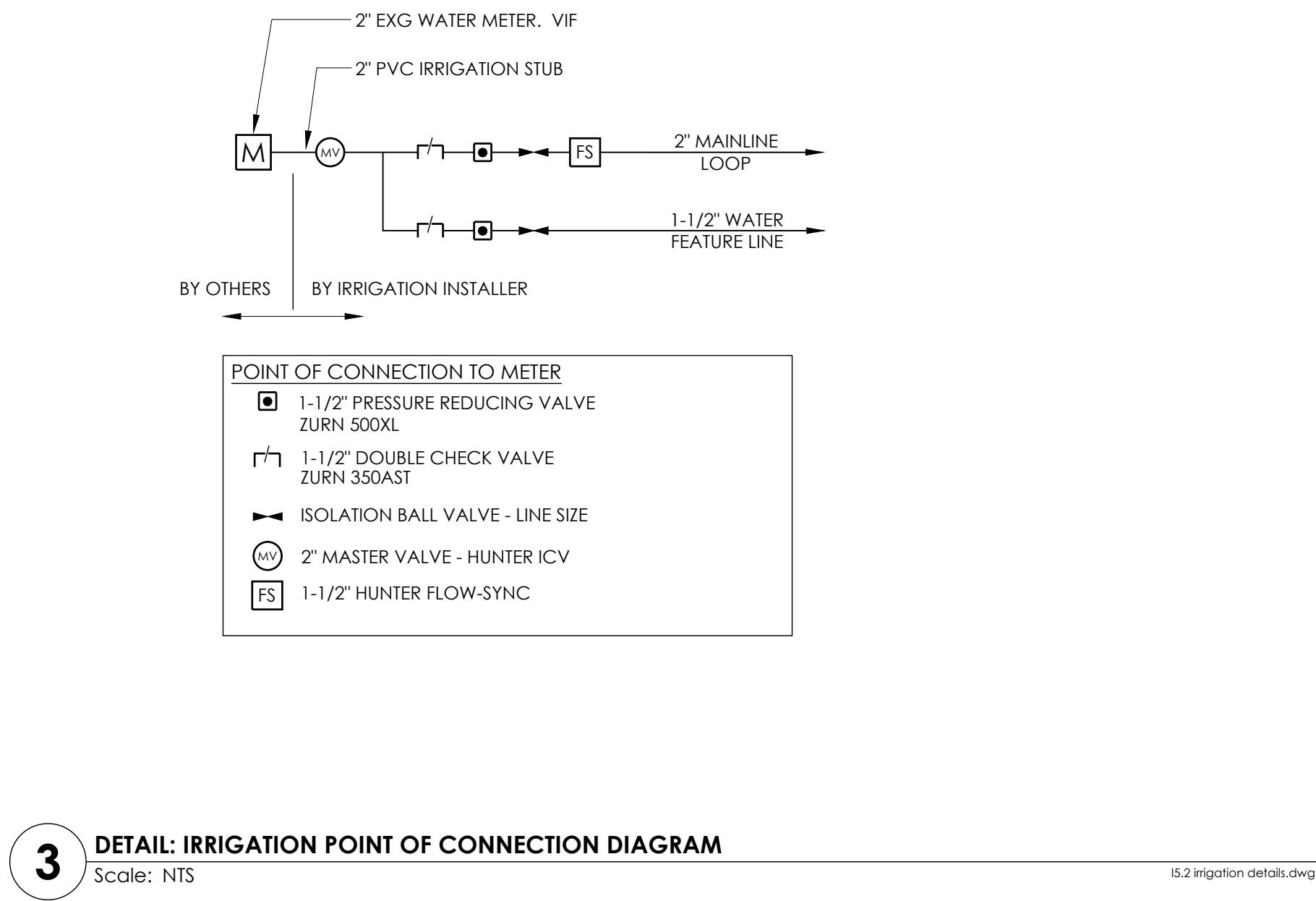
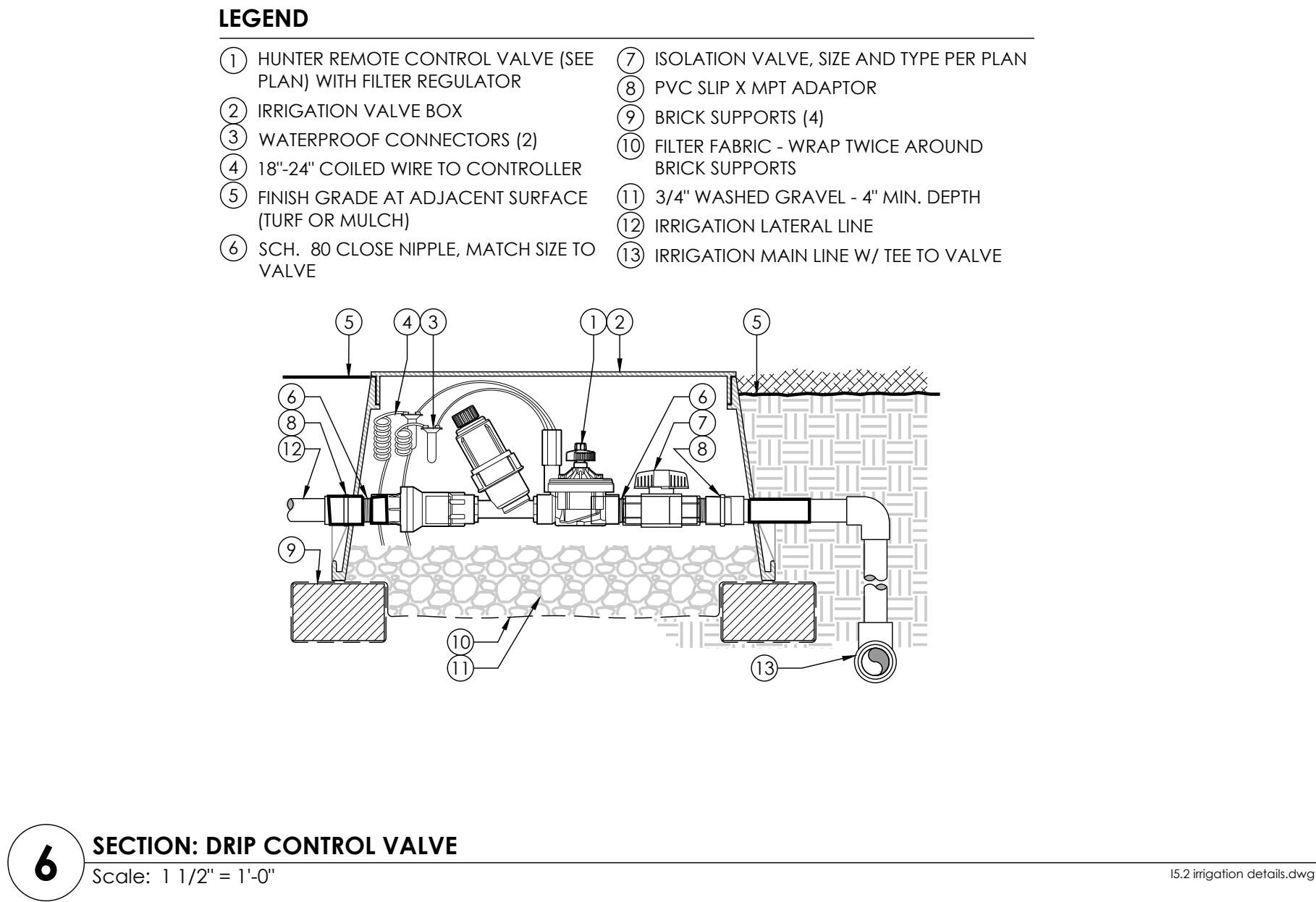
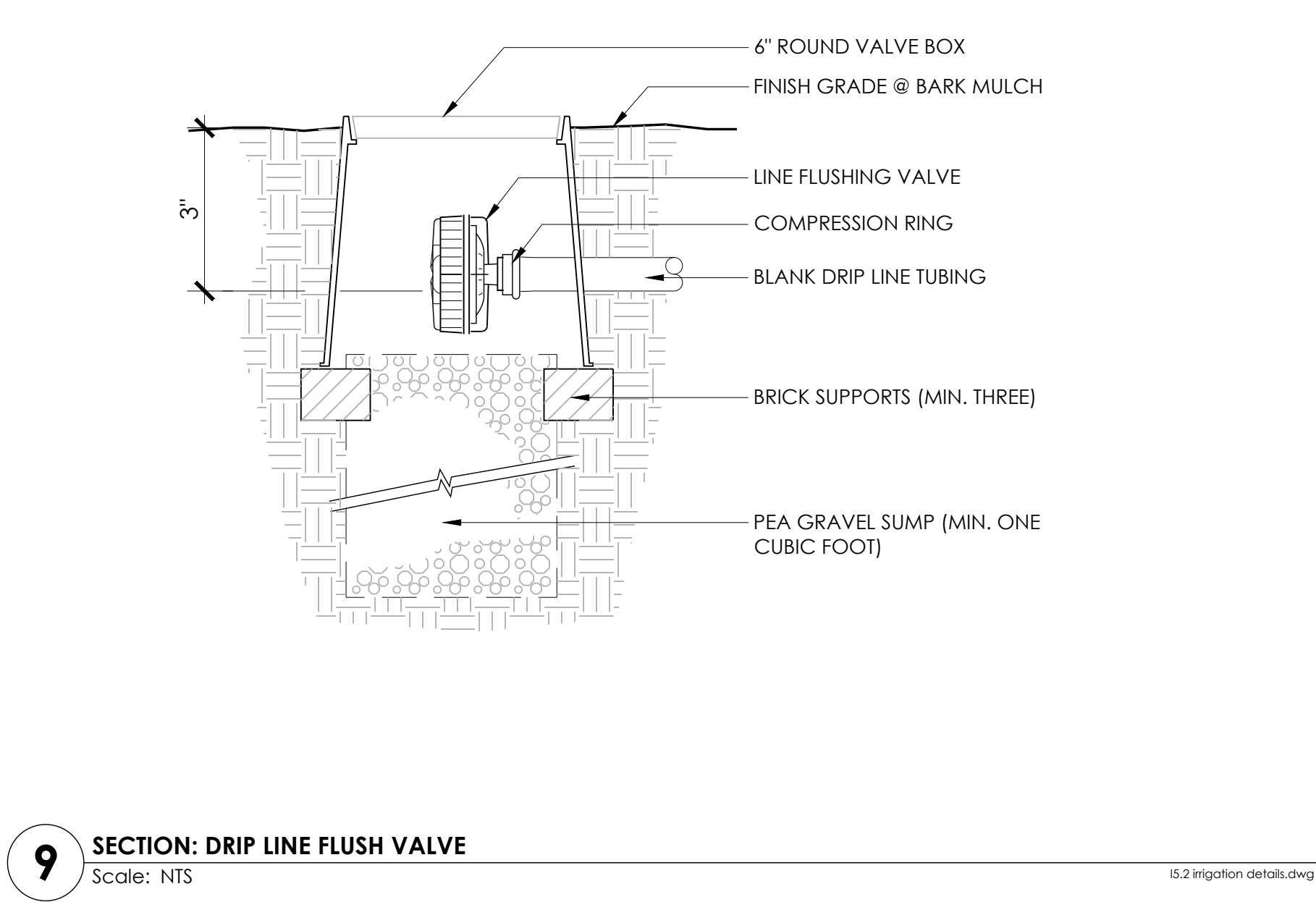
DATE DESCRIPTION

SITE DESIGN
REVIEW

WATER USE PLAN
DIAGRAM

L5.1

PROJECT NO. 2102
03/06/24
TEAM: Pvc, CG, EG, ZW



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EAST MAIN STREET PARK

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REVISIONS

DATE DESCRIPTION

SITE DESIGN REVIEW

IRRIGATION DETAILS

L5.2

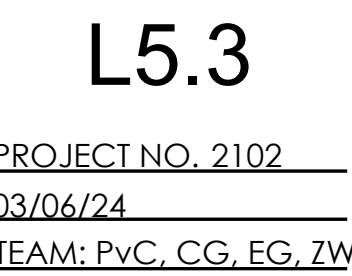
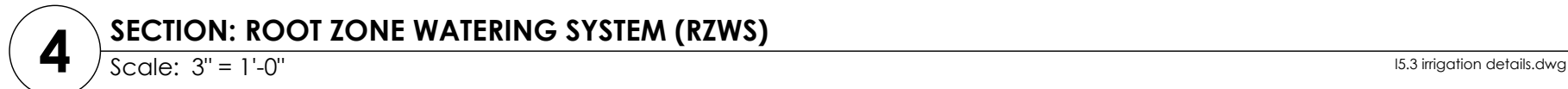
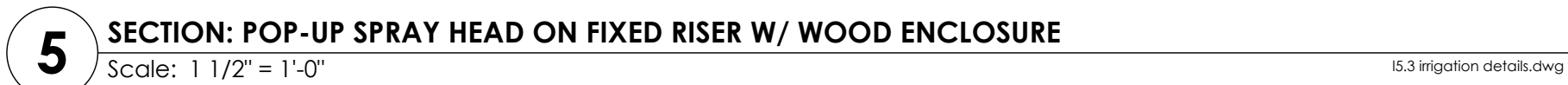
PROJECT NO. 2102

03/06/24

TEAM: Pvc, CG, EG, ZW

Application Page Number: 191

Total Page Number: 706





PERMALOC CORPORATION
13505 BARRY ST
HOLLAND, MI 49424
TOLL FREE: 1-800-356-9660
PHONE: (616) 399-9600
FAX: (616) 399-9770
www.permaloc.com

SELECT DESIRED SIZE:

- ☐ 3/16" X 5" (3.2 MM X 127 MM), 0.116" (2.95 MM) THICK WITH 0.25" (6.35 MM) EXPOSED TOP LIP
- ☐ 3/16" X 6" (3.2 MM X 152.4 MM), 0.116" (2.95 MM) THICK WITH 0.25" (6.35 MM) EXPOSED TOP LIP
- ☐ 3/16" X 8" (3.2 MM X 203 MM), 0.116" (2.95 MM) THICK WITH 0.25" (6.35 MM) EXPOSED TOP LIP
- ☐ 3/16" X 12" (3.2 MM X 305 MM), 0.116" (2.95 MM) THICK WITH 0.25" (6.35 MM) EXPOSED TOP LIP

SELECT DESIRED FINISH:

- ☐ MF - MILL FINISH-NATURAL ALUMINUM
- ☐ BL - BLACK DURAFLEX-MEETS AAMA 2603
- ☐ GR - GREEN DURAFLEX-MEETS AAMA 2603
- ☐ BR - BRONZE DURAFLEX-MEETS AAMA 2603

NOTES:

1. INSTALL PER MANUFACTURER'S "INSTALLATION GUIDELINES".
2. 8'-0" (2.44 M) SECTIONS TO INCLUDE (3) 18" (457 MM) ALUMINUM STAKES AND (3) XLR ADAPTORS.
3. 16'-0" (4.88 M) SECTIONS TO INCLUDE (5) 18" (457 MM) ALUMINUM STAKES AND (3) XLR ADAPTORS.
4. CORNERS - CUT BASE EDGING UP HALFWAY AND FORM A CONTINUOUS CORNER.
5. PERMALOC CLEANLINE XL AS MANUFACTURED BY PERMALOC CORPORATION.
6. DO NOT SCALE DRAWING.
7. THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION.
8. ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.
9. CONTRACTORS NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/info AND ENTER REFERENCE NUMBER 006-034.

PERMALOC CLEANLINE XL ALUMINUM EDGING WITH XLR ADAPTOR

TOP OF EDGING TO BE MAXIMUM OF 1/2" (12.7 MM) ABOVE SURFACE MATERIAL

BED MEDIA OR AGGREGATE

COMPACT GRADES ADJACENT TO EDGING TO AVOID SETTLING

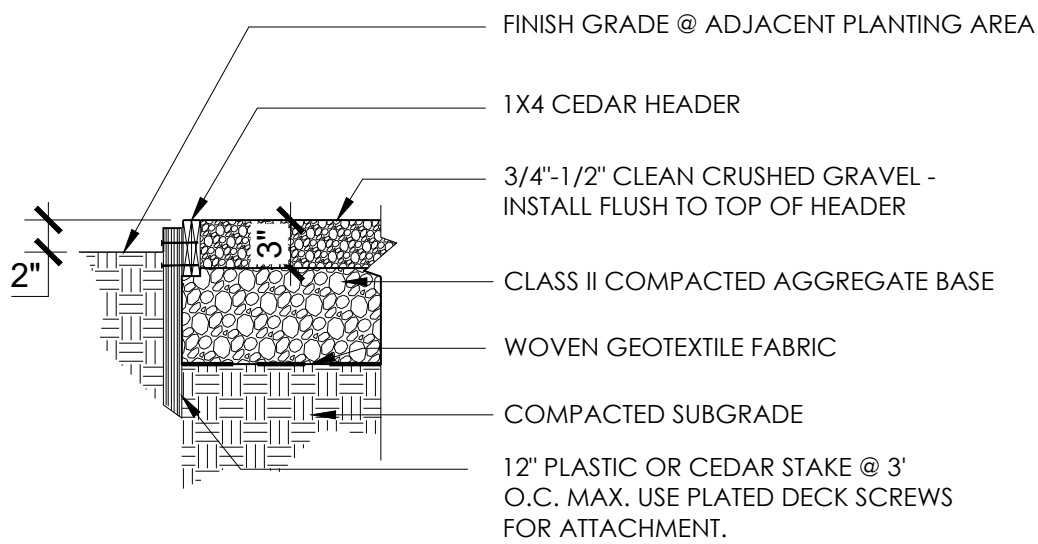
18" (457 MM) ALUMINUM STAKES TO LOCK INTO XLR ADAPTOR

SIDE VIEW

17.0 landscape details.dwg

NOTES:

1. USE PLATED SCREWS OR RING SHANK NAILS TO JOIN BOARD TO STAKE.
2. ALLOW FOR THERMAL EXPANSION BY LEAVING GAPS IN JOINTS OR AT THE END OF A RUN.
3. DO NOT SCREW THROUGH SLIP JOINTS. SEE MANUF. SLIP JOINT DETAIL FOR FACTORY CUT THERMAL EXPANSION USING 7GA. GALV. STL. HAIRPIN.
4. PROVIDE THE OWNER WITH THE OPTION OF INSTALLING STEEL OR PROFESSIONAL GRADE FLEXIBLE EDGE RESTRAINT PRODUCT.
5. WHEN ADJACENT TO CONCRETE, INSTALL CRUSHED ROCK FLUSH TO CONCRETE GRADES.
6. COMPACT ALL CRUSHED ROCK PAVING WITH WATER FILLED ROLLER. DAMPEN ROCK PRIOR TO ROLLING.



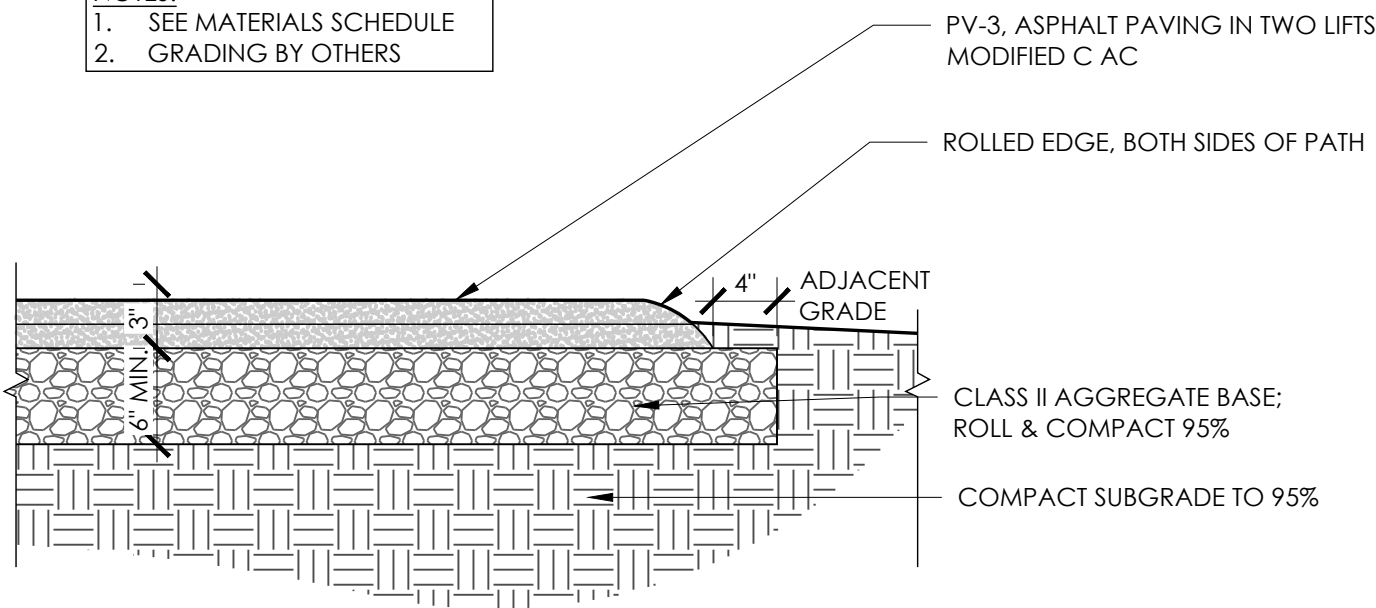
DETAIL: VEHICULAR GRAVEL PAVING

Scale: 1" = 1' - 0"

17.0 landscape details.dwg

NOTES:

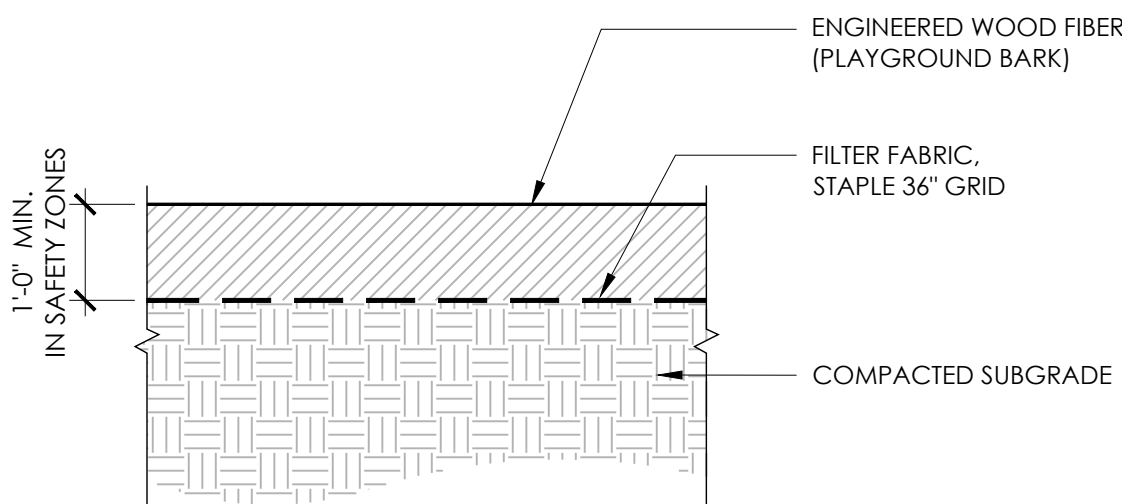
1. SEE MATERIALS SCHEDULE
2. GRADING BY OTHERS



DETAIL: ASPHALT PAVING

Scale: 1" = 1' - 0"

17.0 landscape details.dwg



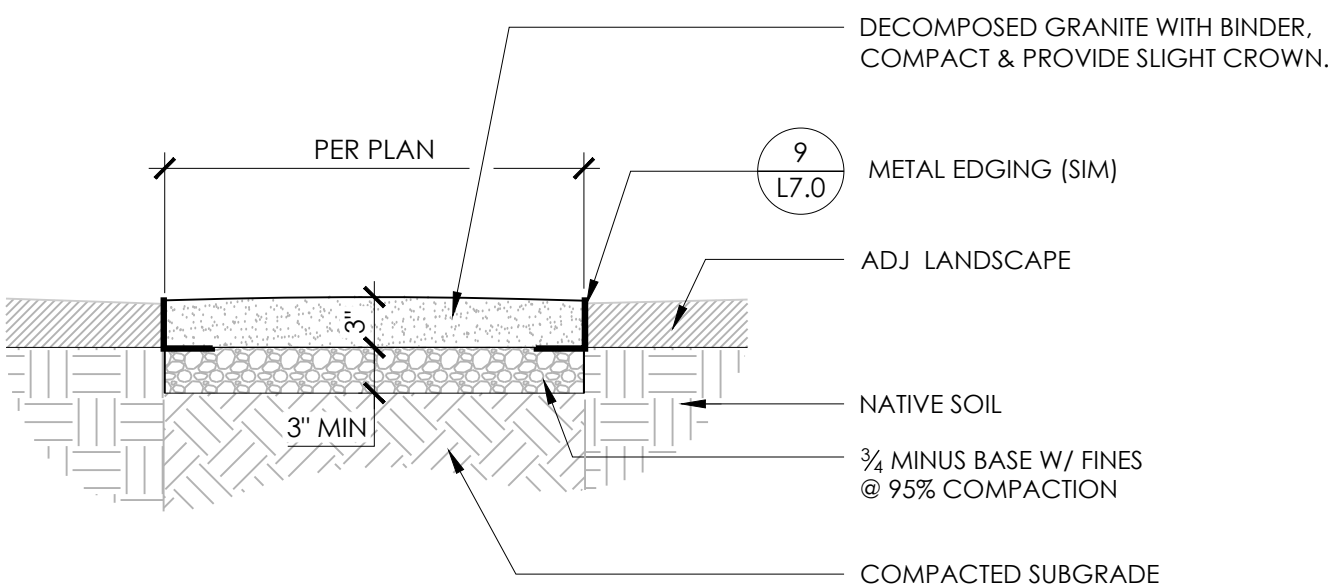
DETAIL: PLAYGROUND BARK

Scale: 1/2" = 1' - 0"

17.0 landscape details.dwg

NOTE

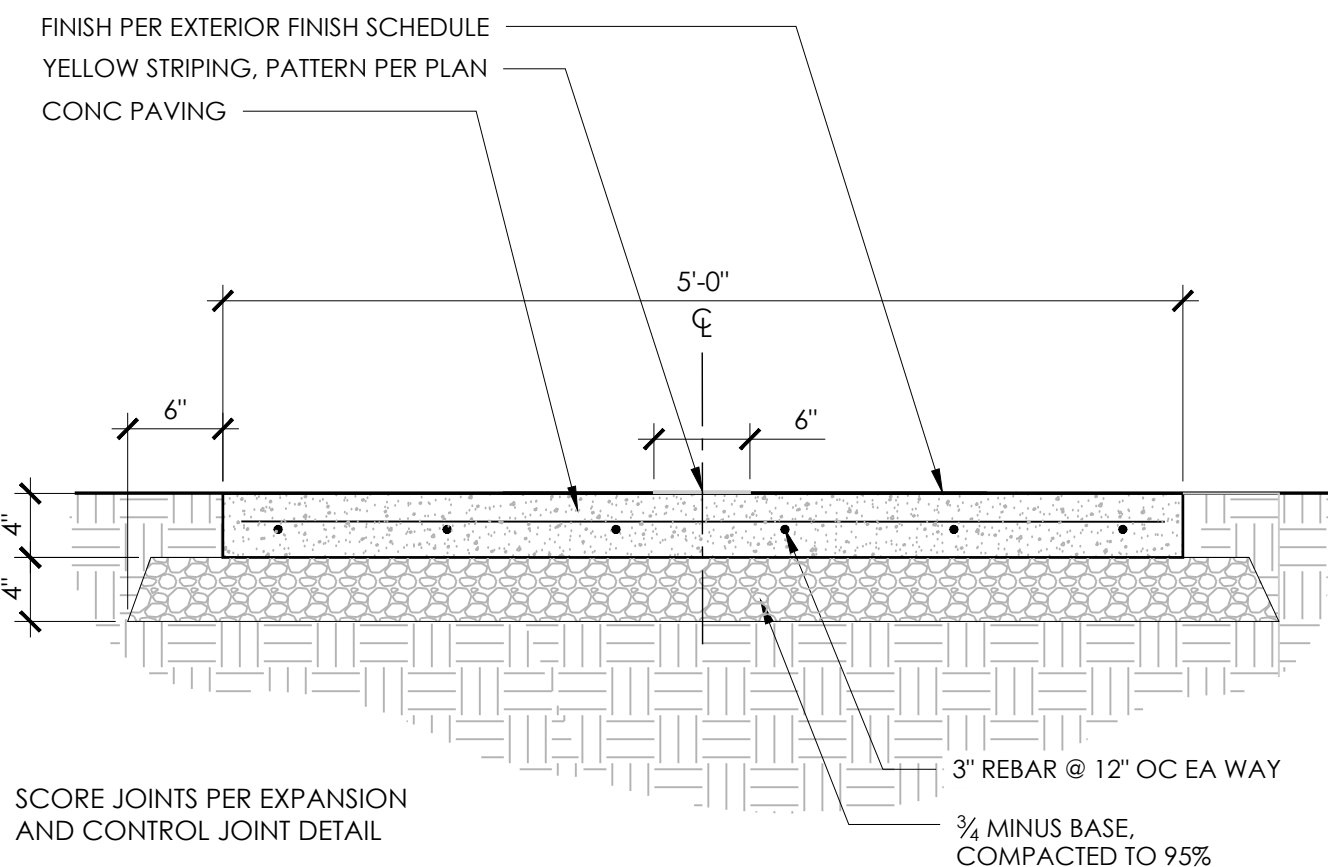
1. PROVIDE A SLIGHT (+/- 1/2") CROWN IN THE PATH.



DETAIL: DECOMPOSED GRANITE PAVING

Scale: 1" = 1' - 0"

17.0 landscape details.dwg



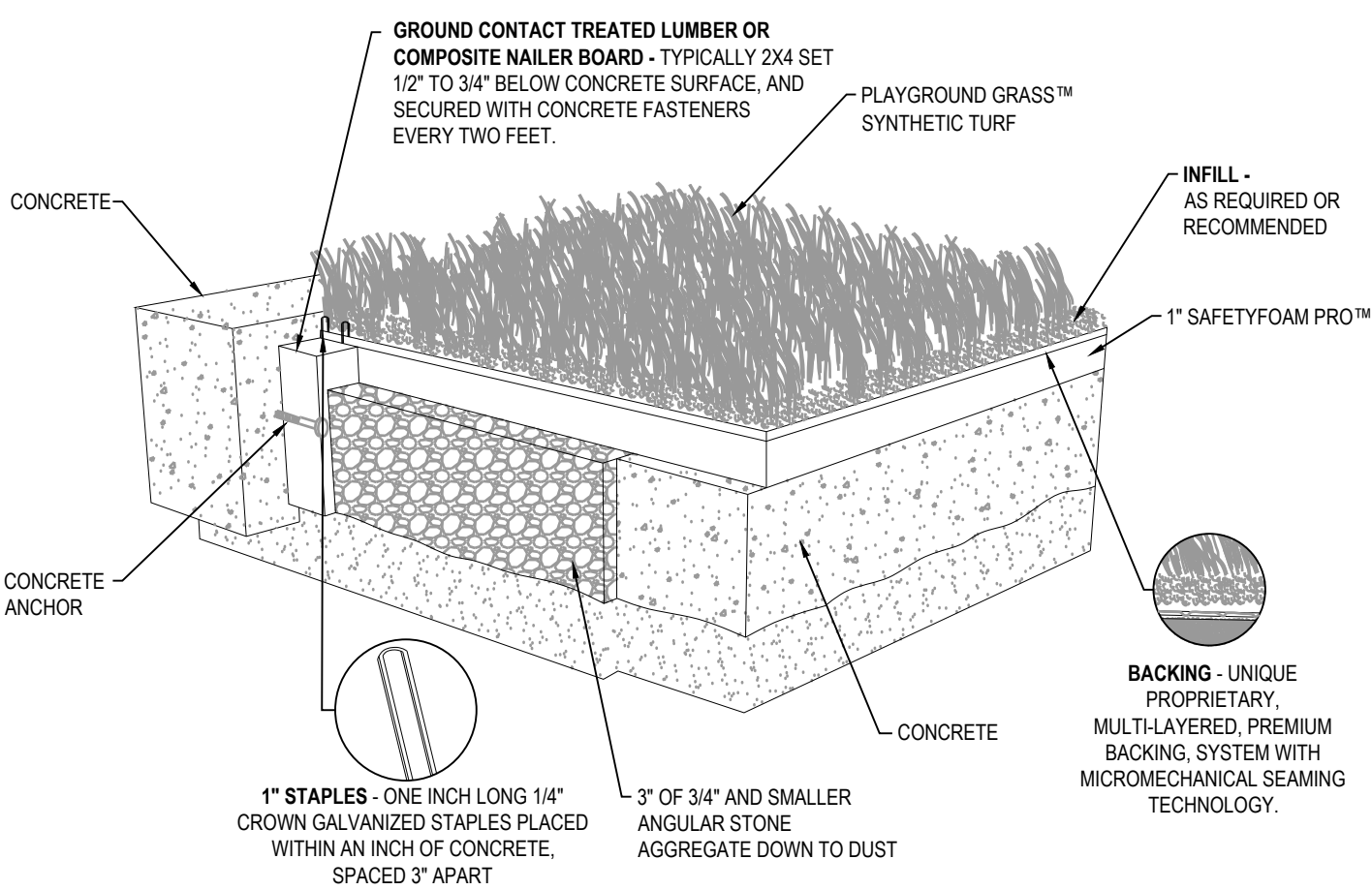
DETAIL: CONCRETE PAVING W/ PLAY STRIPING

Scale: 1" = 1' - 0"

17.0 landscape details.dwg



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8007 BEESON ST.
LOUISVILLE, OH 44641
TOLL FREE: 1-866-992-7876
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FAX: (866) 212-1925
www.foreverlawn.com



PERSPECTIVE

DETAIL: PLAYGROUND GRASS

Scale: NOT TO SCALE

17.0 landscape details.dwg

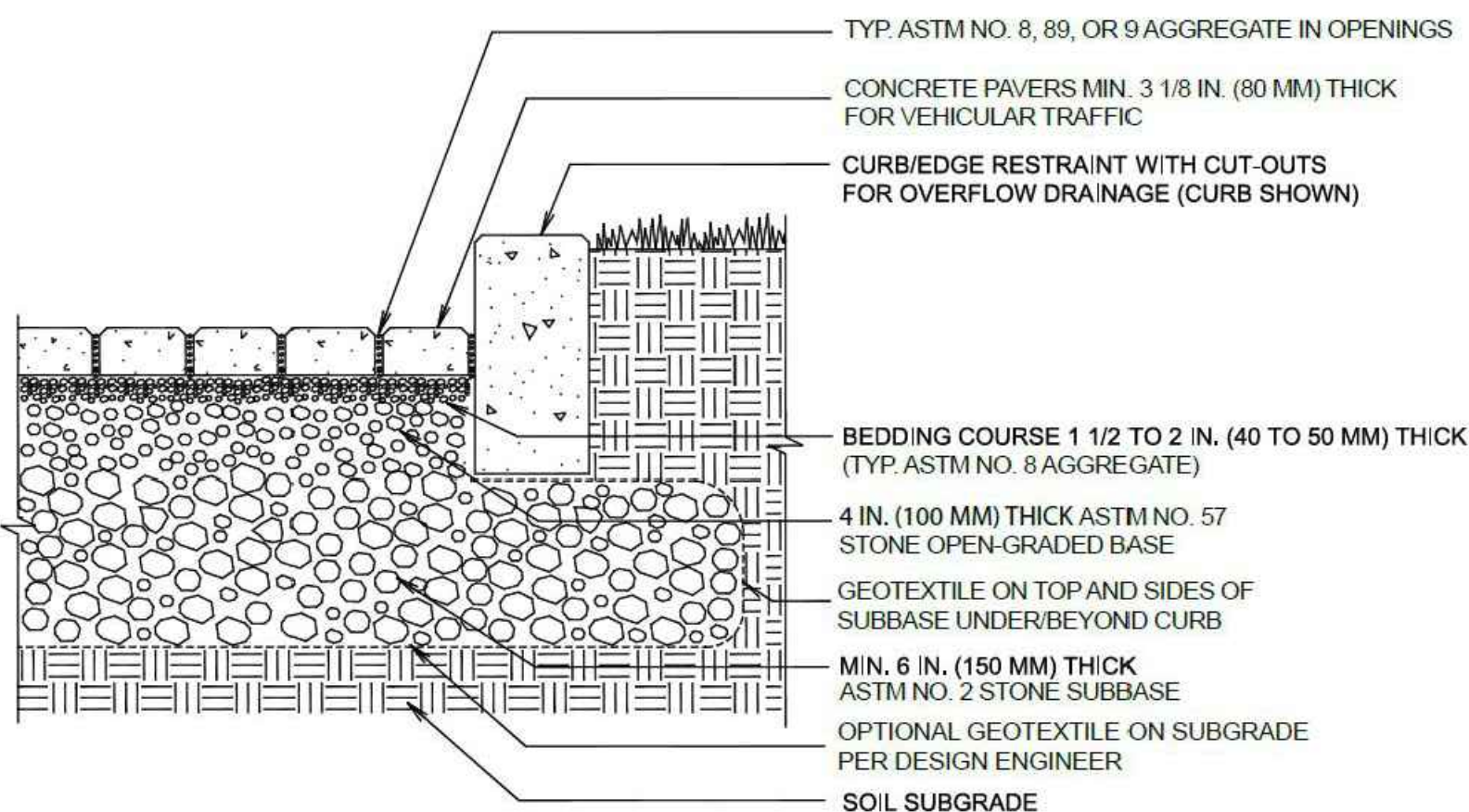
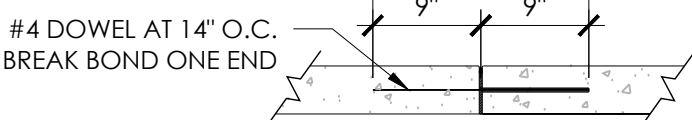
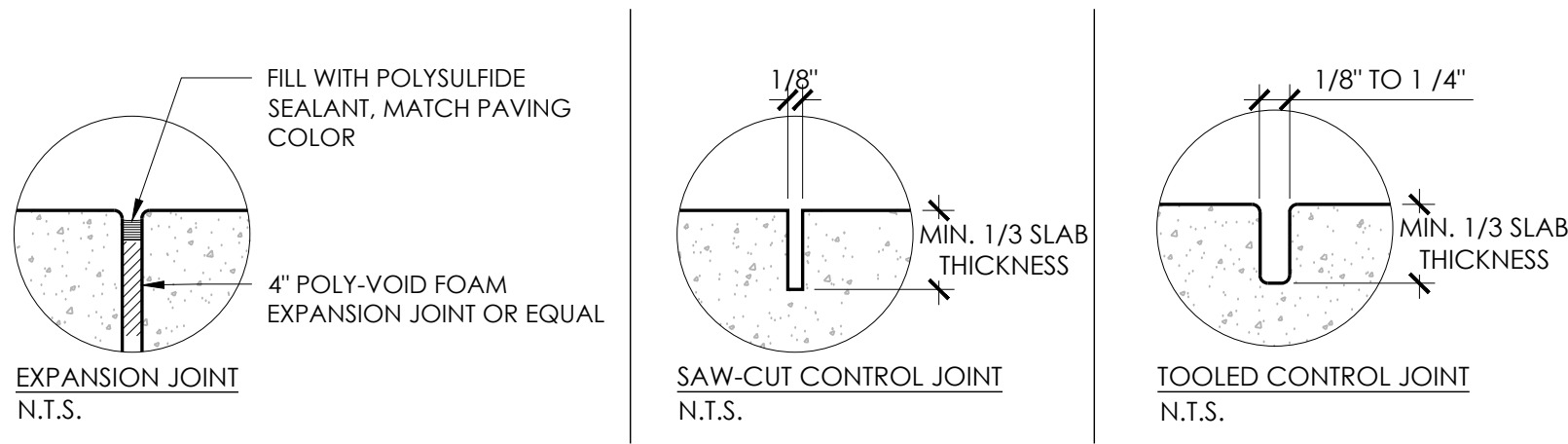


Figure 4. Full infiltration cross section allows storage and infiltration. Overflows are to swales, bioretention areas or storm sewer inlets.

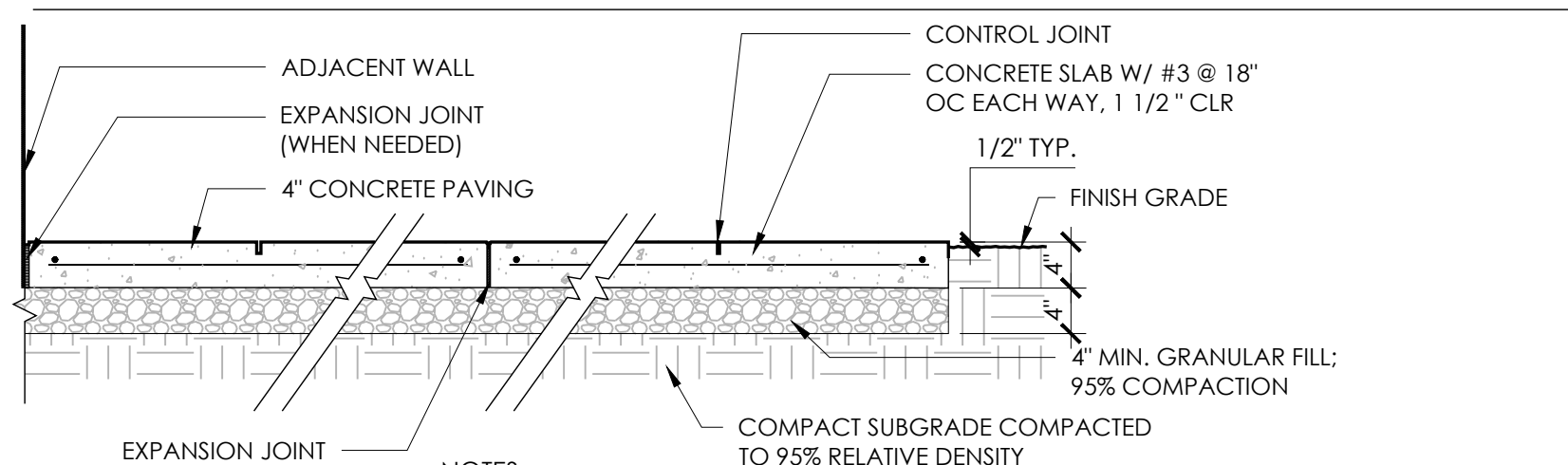
DETAIL: PERMEABLE PAVERS

Scale: NOT TO SCALE

17.0 landscape details.dwg



NOTES:
1. EXPANSION JOINTS TYP. AT ALL BUILDING FACE AND COLUMNS.



- NOTES:
1. SEE MATERIALS SCHEDULE FOR FINISH.
 2. SEE LAYOUT PLAN FOR LOCATION OF SCORE JOINTS.
 3. CONCRETE STRENGTH @ 3000-3500 PSI MIN.

DETAIL: CONCRETE PAVING

Scale: 3/4" = 1' - 0"

17.0 landscape details.dwg



EAST MAIN STREET PARK
2228 EAST MAIN STREET
ASHLAND, OREGON 97520

REVISIONS
DATE DESCRIPTION

SITE DESIGN
REVIEW

LANDSCAPE
DETAILS

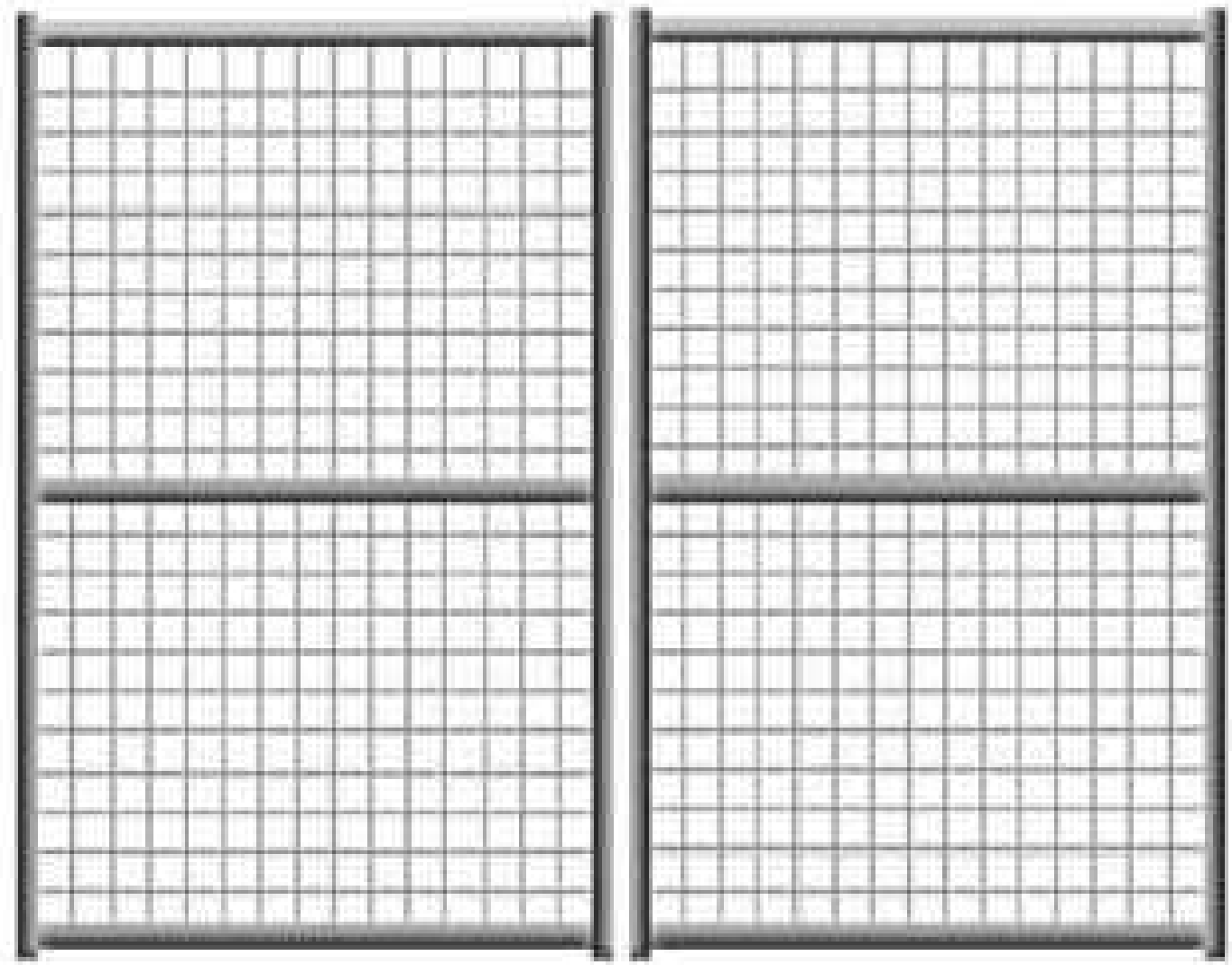
L7.0

PROJECT NO. 2102
03/06/24
TEAM: Pvc, CG, EG, ZW



9 **DETAIL: PERIMETER NEIGHBOR FENCE**
Scale: NTS

17.1 landscape details.dwg



6 **DETAIL: COMMUNITY GARDEN GATE**
Scale: NTS

17.1 landscape details.dwg

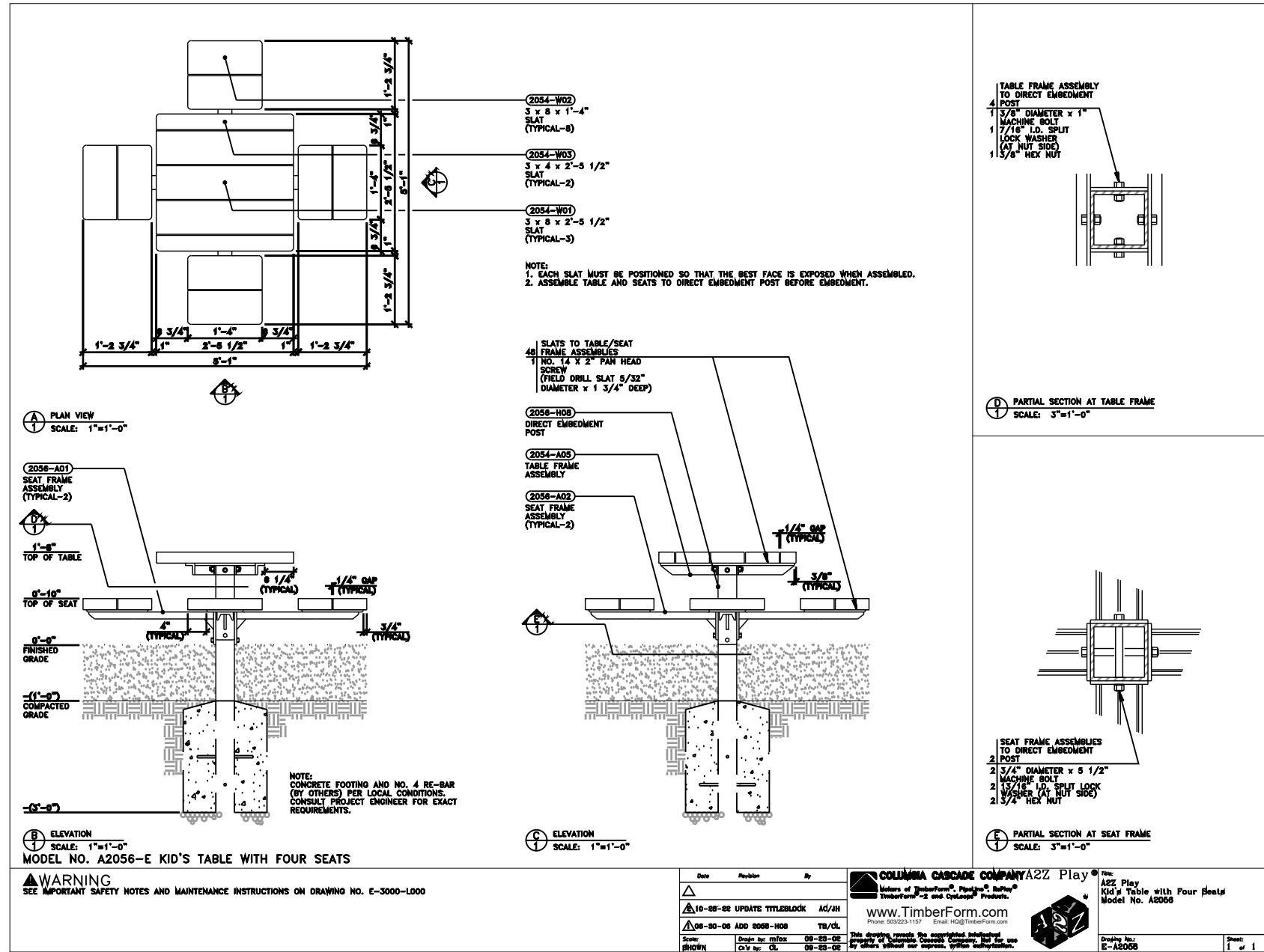


3 **DETAIL: DOG PARK GATE**
Scale: NTS

17.1 landscape details.dwg



DECORATIVE ENTRY GATE CONCEPT



8 **DETAIL: KIDS TABLE & CHAIRS**
Scale: NTS

17.1 landscape details.dwg



COMMUNITY GARDEN DEER FENCE - BLACK VINYL COATED AT STREET-FACING SIDE



COMMUNITY GARDEN DEER FENCE - NON-STREET FACING SIDES

5 **DETAIL: COMMUNITY GARDEN FENCE**
Scale: NTS

17.1 landscape details.dwg



BLACK VINYL COATED CHAIN LINK FENCE

2 **DETAIL: DOG PARK FENCE**
Scale: NTS

17.1 landscape details.dwg



DOUBLE LEAF SWING ARM VEHICULAR GATE

7 **DETAIL: VEHICLE GATE AT GARDEN PARKING LOT**
Scale: NTS

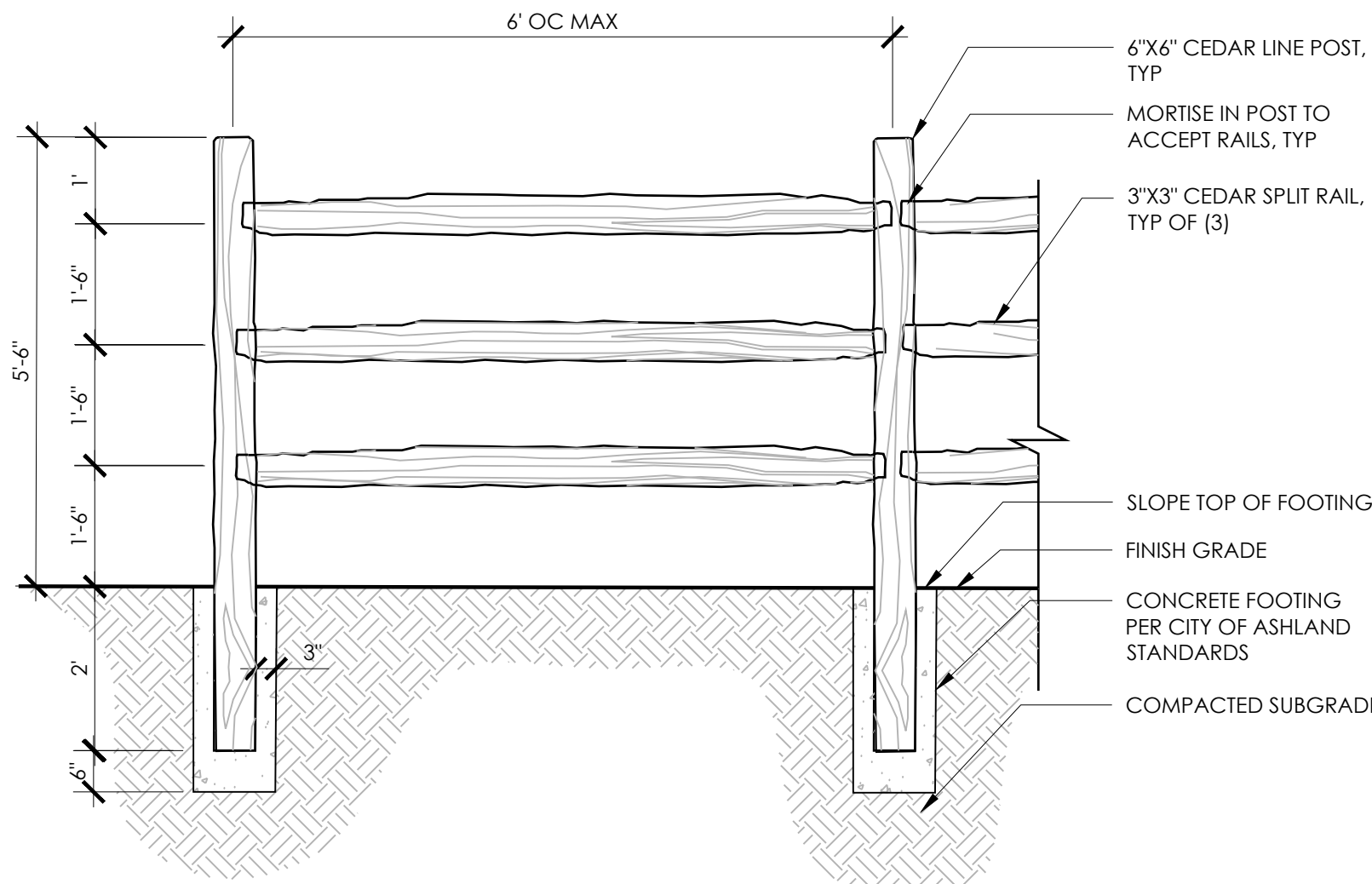
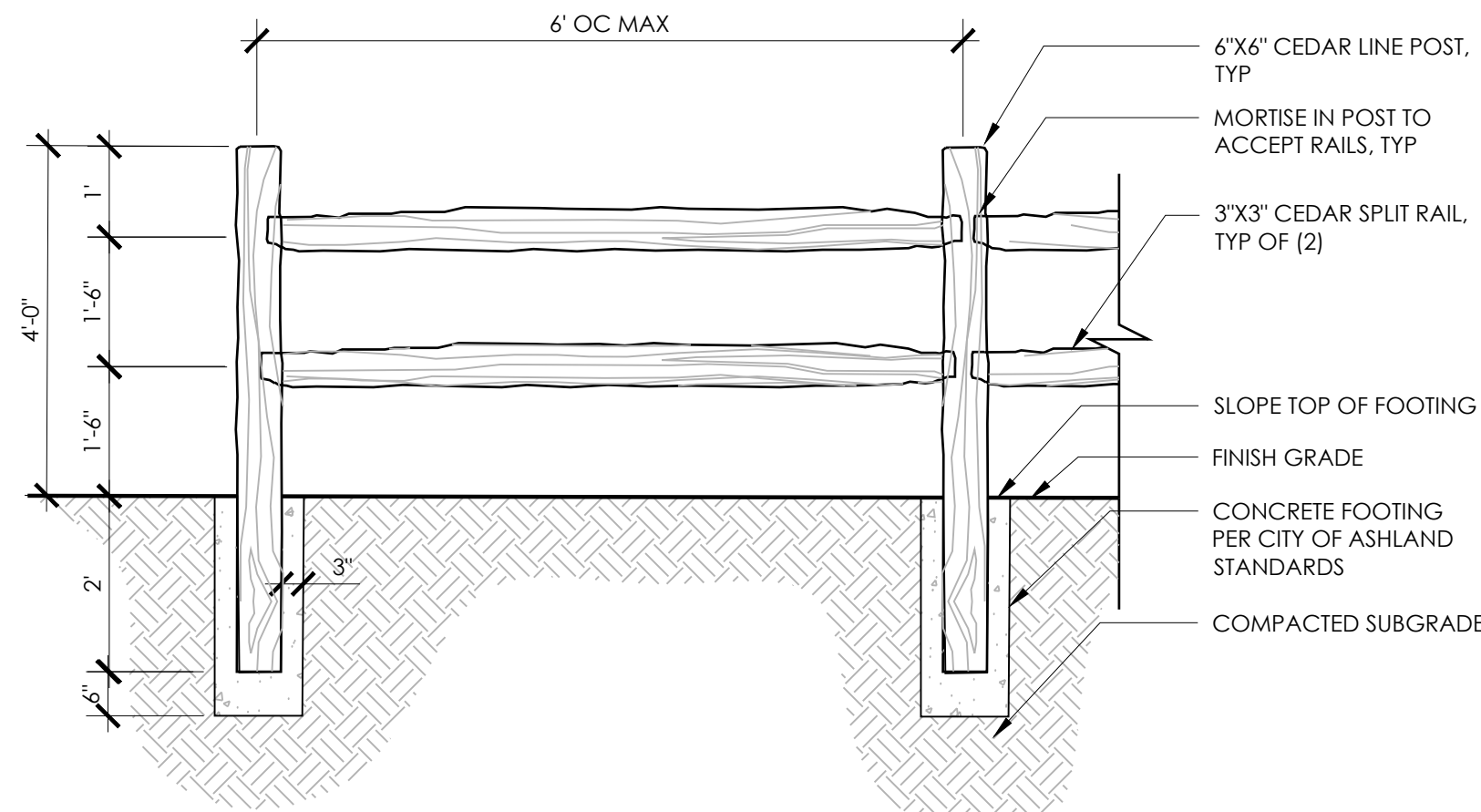
17.1 landscape details.dwg

4 **DETAIL: PLAY AREA FENCE**
Scale: 1/2" = 1'-0"

17.1 landscape details.dwg

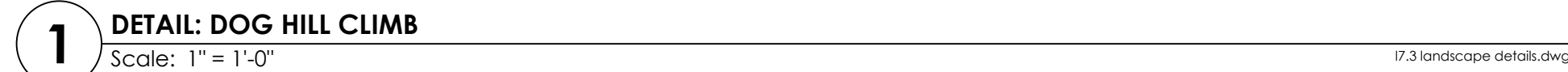
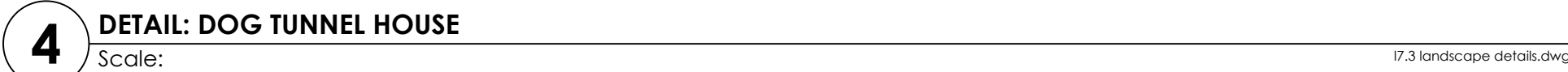
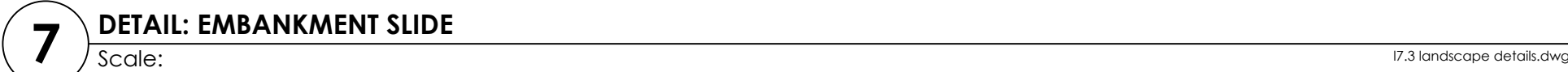
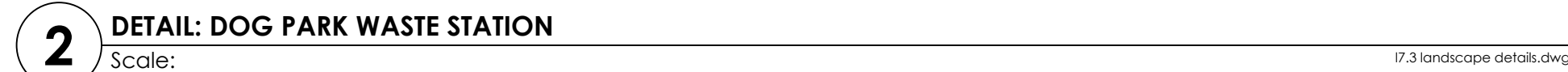
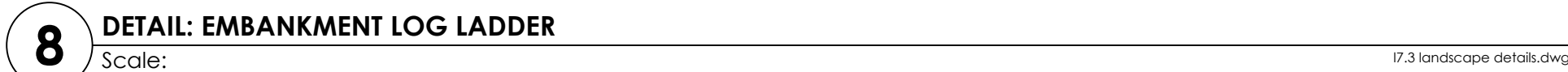
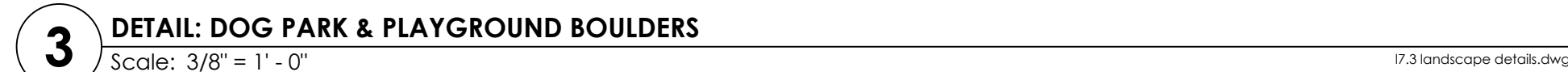
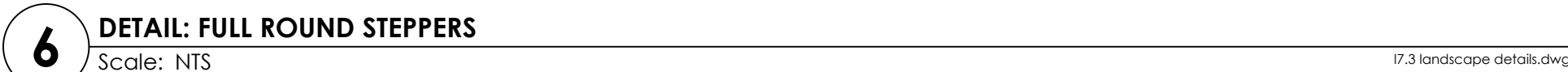
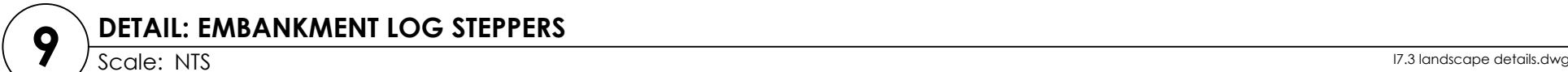


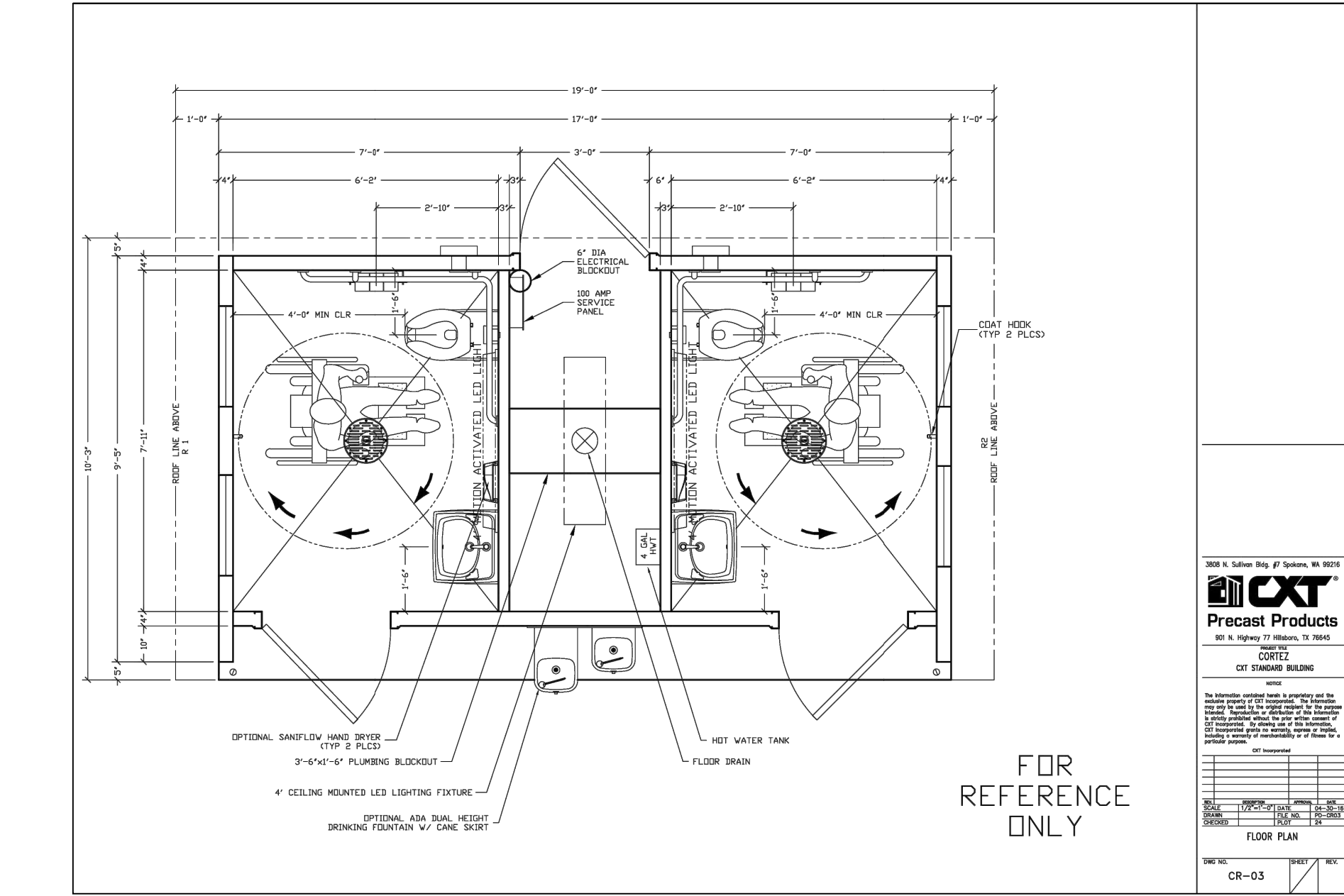
SPLIT RAIL FENCE



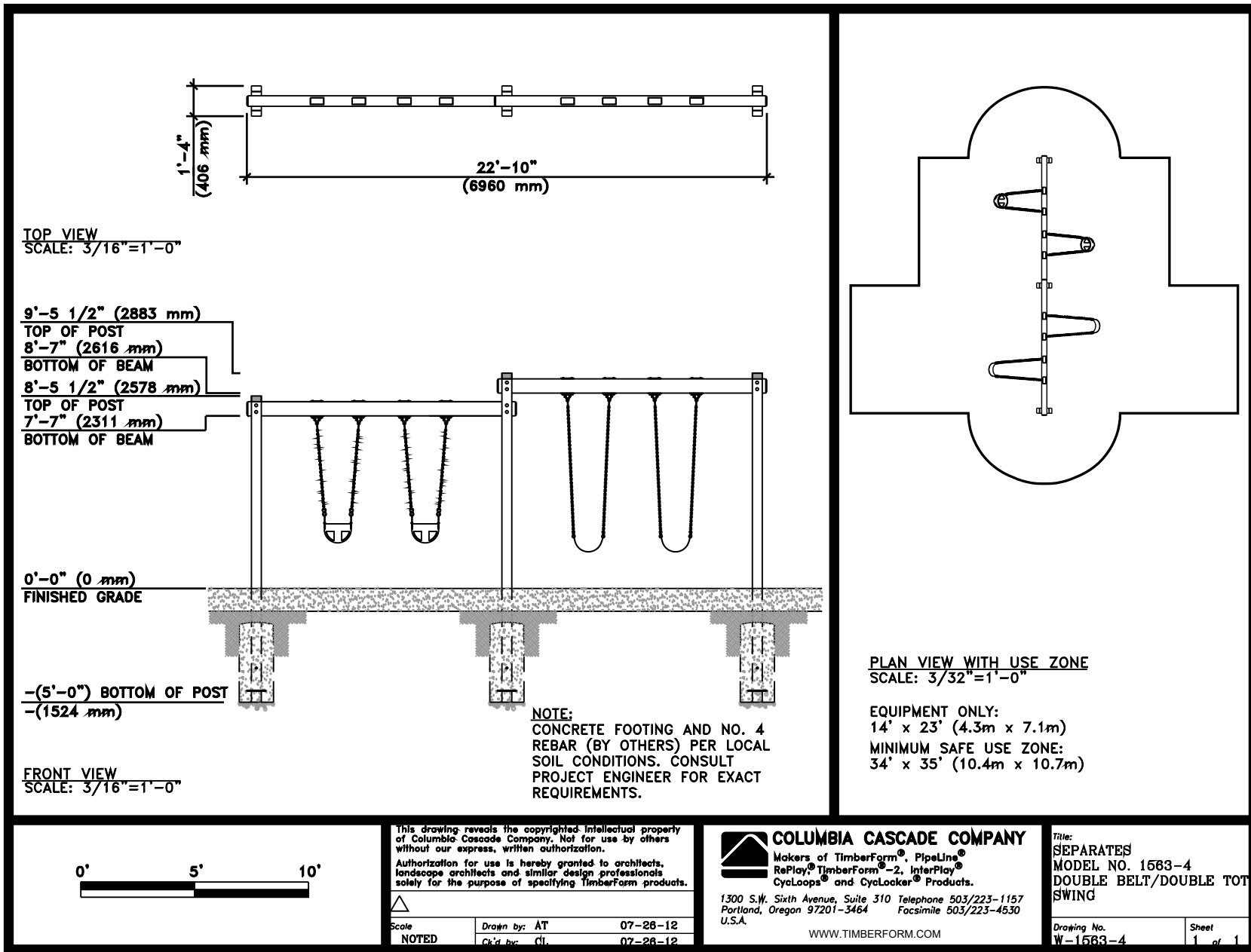
1 **DETAIL: PERIMETER FENCE - SPLIT RAIL**
Scale: 1/2" = 1' - 0"

17.1 landscape details.dwg

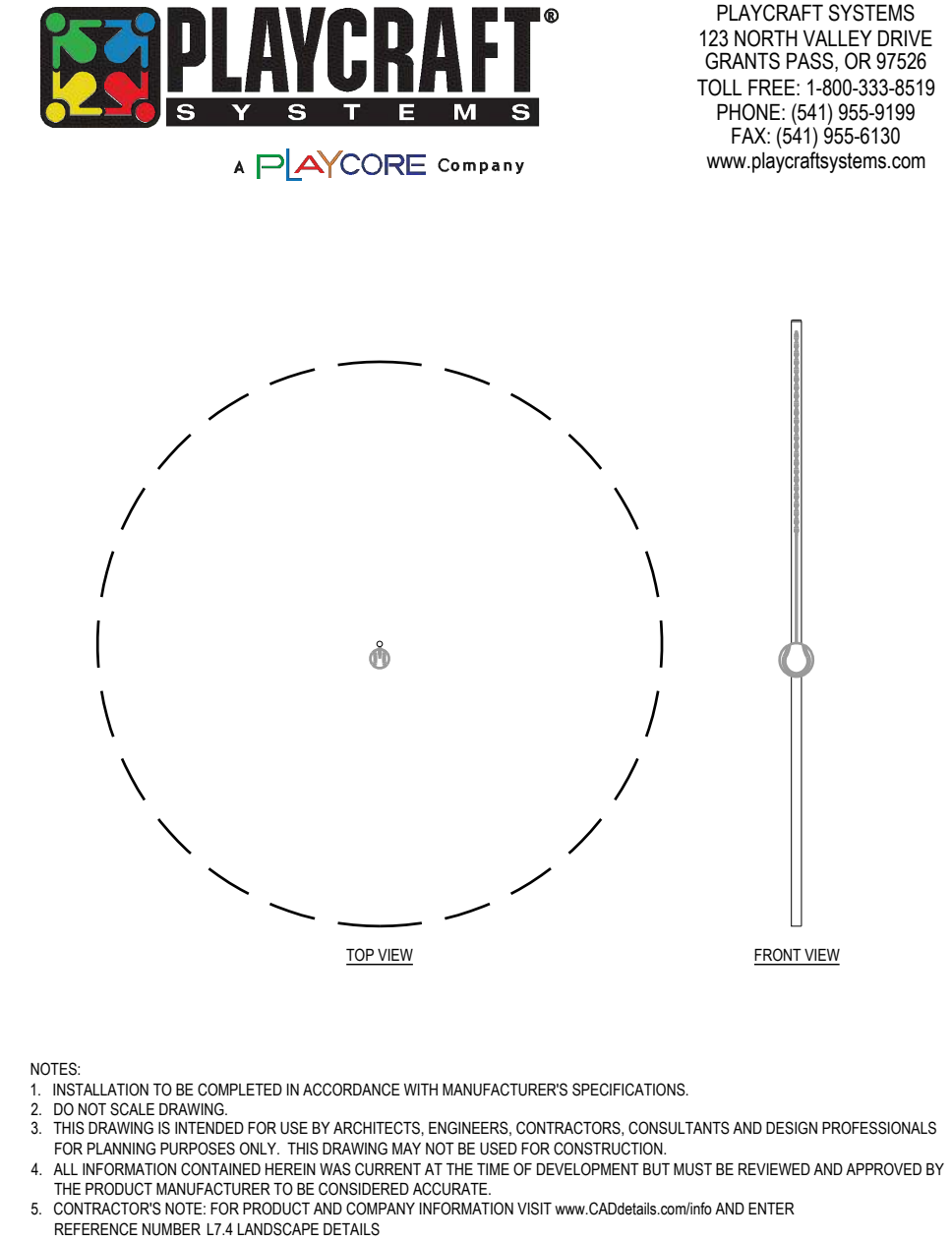




8 DETAIL: RESTROOM FLOOR PLAN
Scale: NTS



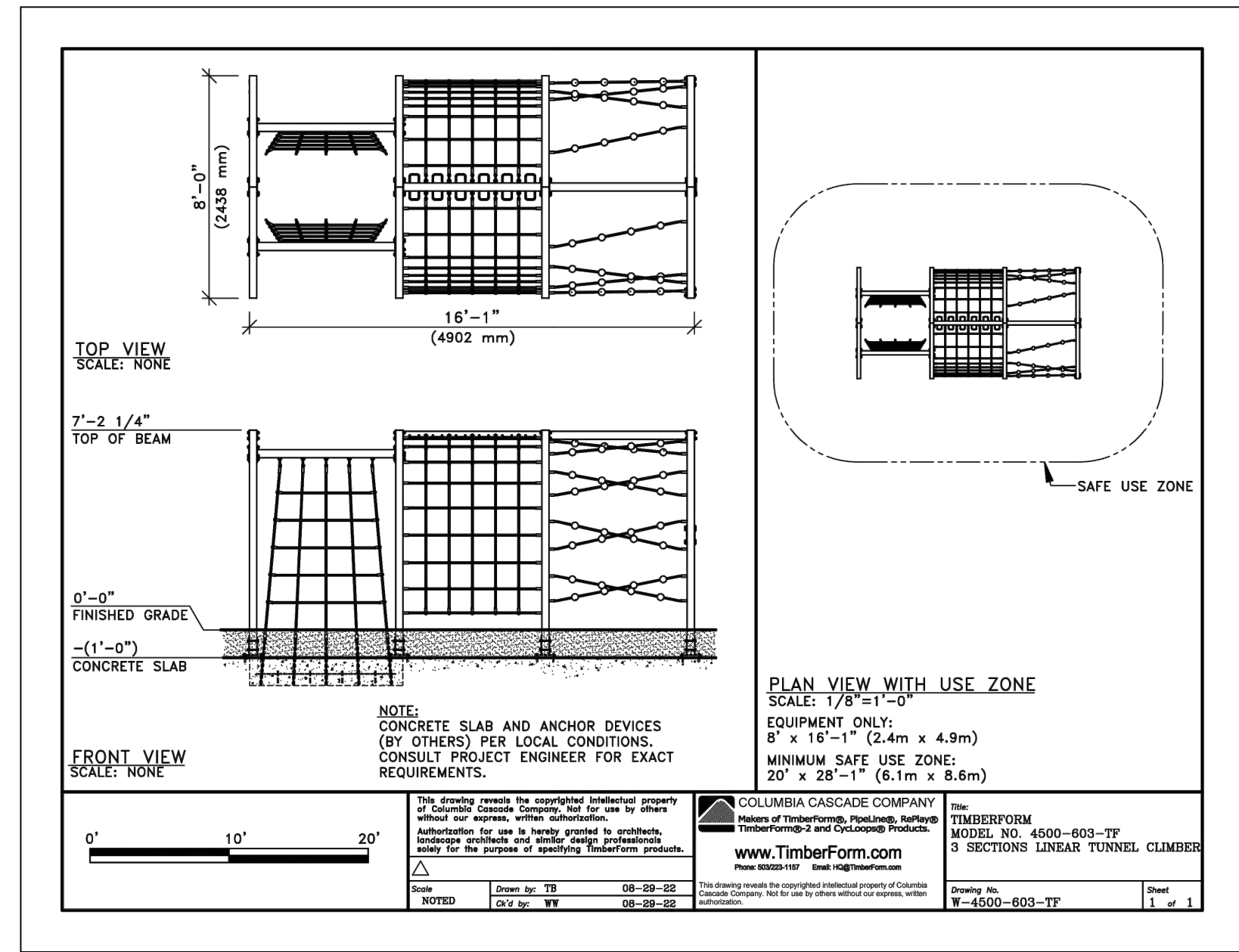
6 DETAIL: SWINGSET, COLUMBIA CASCADE MODEL NO. 1563-4
Scale: NTS



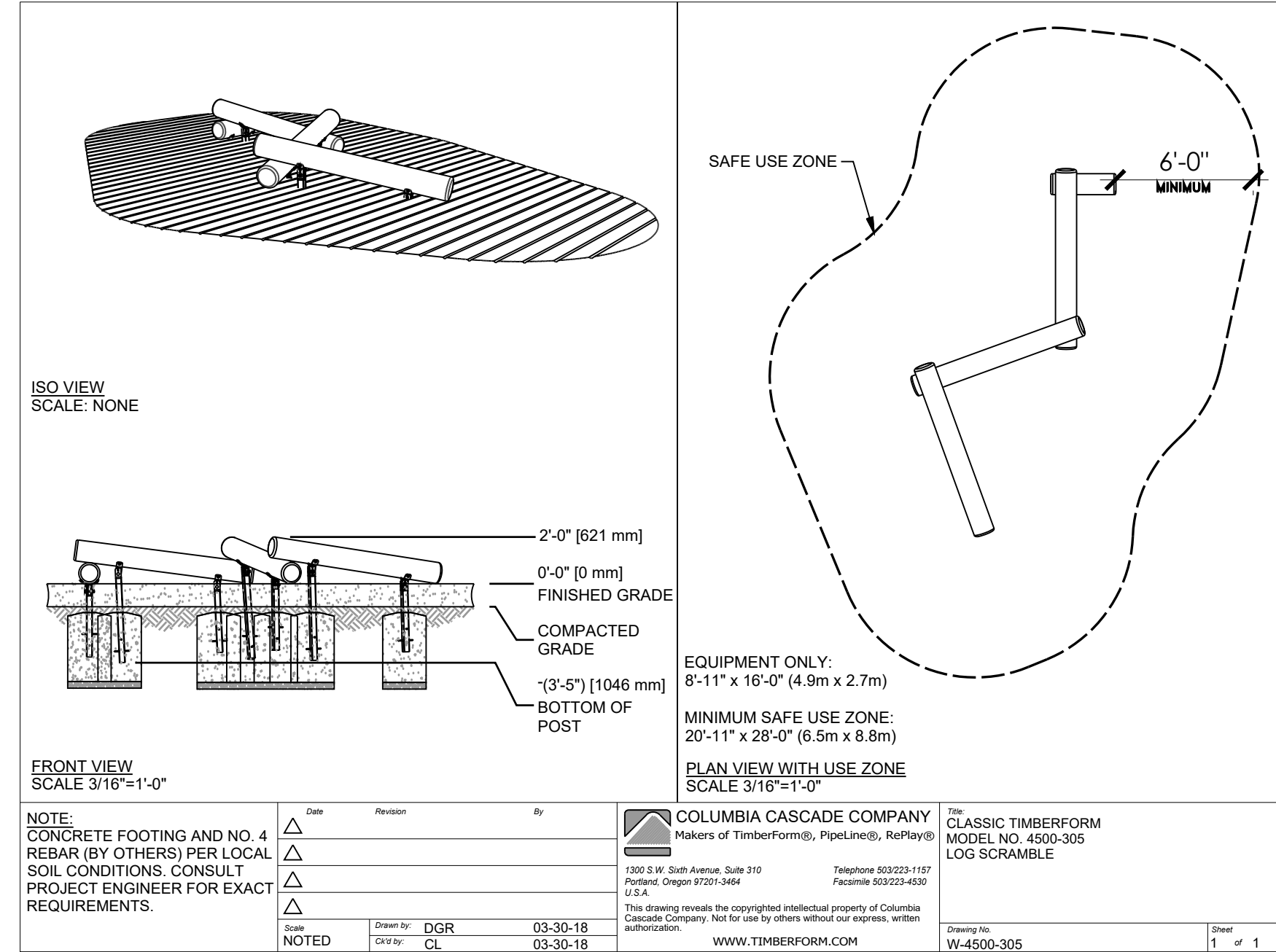
3 DETAIL: TETHER BALL
Scale: NTS



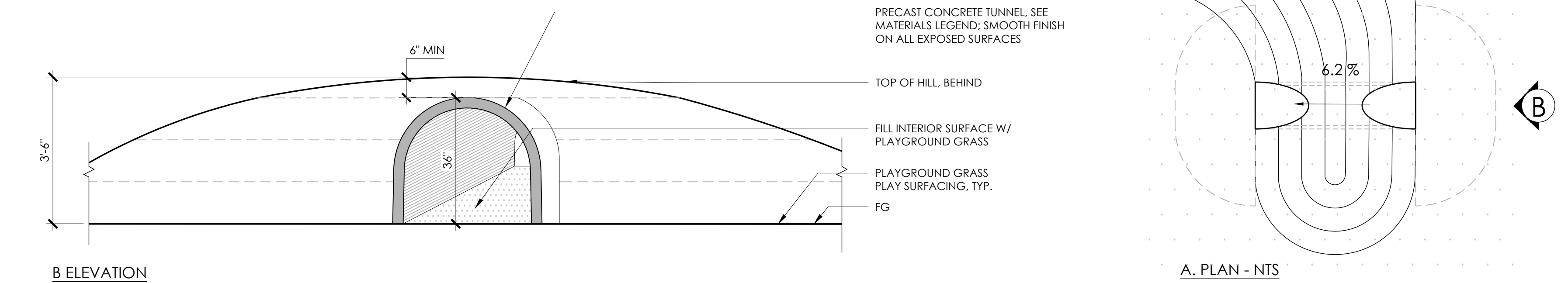
7 DETAIL: RESTROOM CONCEPT IMAGES
Scale:



5 DETAIL: TIMBERFORM TUNNEL CLIMBER
Scale: NTS



2 DETAIL: LOG SCRAMBLE
Scale: NTS



4 DETAIL: HILLSIDE TUNNEL
Scale: 1/2" = 1' - 0"



1 DETAIL: BALANCE LOG
Scale: NTS



EAST MAIN STREET PARK
2228 EAST MAIN STREET
ASHLAND, OREGON 97520

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L7.4

PROJECT NO. 2102
03/06/24
TEAM: Pvc, CG, EG, ZW

PLAY



BALANCE LOG



TURF BERM WITH CONCRETE TUNNEL



EMBANKMENT STEPPERS



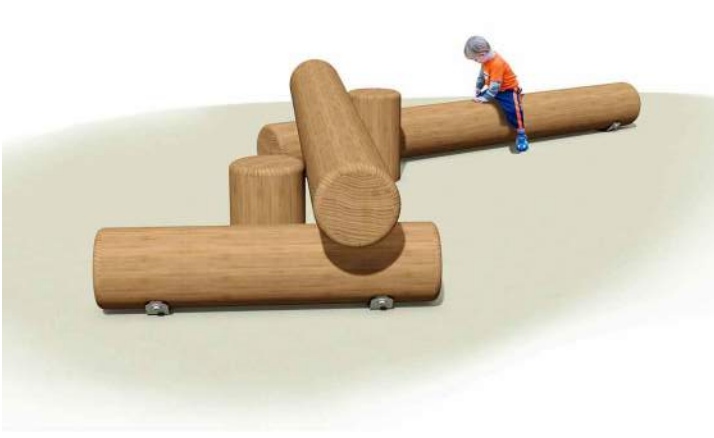
EMBANKMENT LADDER



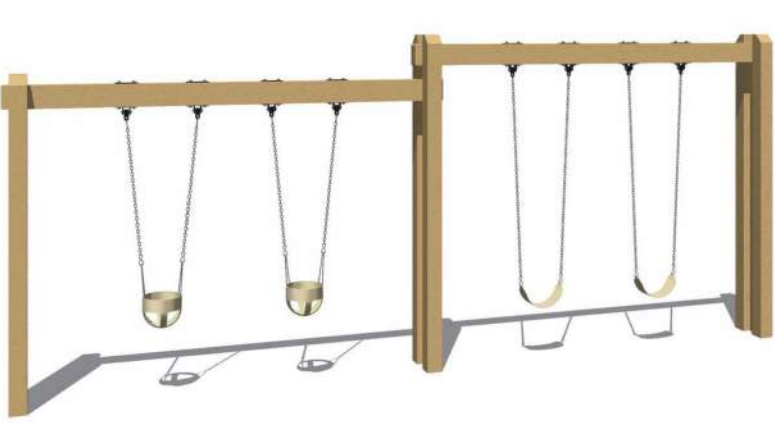
PLAYGROUND GRASS



PLAYGROUND BARK



LOG SCRAMBLE



SWINGS



PUMP TRACK

PLAY



TETHER BALL



KID'S PICNIC TABLES



CONCRETE PAVING W/ PAINTED PLAY STRIPING



ASPHALT SPORTS COURT



EMBANKMENT SLIDE



LINEAR CLIMBER TUNNEL



BOULDER PLAY MOUND

DOG PARK



DECORATIVE DOG PARK ENTRY



DOG PARK LOG TUNNEL OR SIMILAR AMENITIES



AGILITY RAMP OR SIMILAR AMENITIES



FIRE HYDRANT WATER FEATURE



PLAYFUL CUSTOM BIKE RACK



MULTI LEVEL DRINKING FOUNTAINS W/ PET BOWL OR BOTTLE FILLER



DEER FENCE



STORAGE SHED

SITE MATERIALS & FURNISHINGS



PARK ENTRY SIGN



BENCHES



SHADE STRUCTURE STYLE



BIKE REPAIR POST



TRASH RECEPTACLE



RESTROOMS



BIKE RACKS



PEDESTRIAN-SCALE LIGHTING

SITE MATERIALS & FURNISHINGS



TABLES & CHAIRS



CONCRETE PAVING MULTI-USE PATH



PERMEABLE PAVERS FOR PARKING STALLS



PAVER STALLS / ASPHALT DRIVE AISLE



DECOMPOSED GRANITE WALKING TRAILS



GRAVEL PARKING AREA - COMMUNITY GARDEN



SOLAR PANELS ON SHADE STRUCTURE ROOF



3 RENDERING: VIEW INTO PARK FROM MULTI-USE PATH OFF OF ABBOTT AVE.
Scale: NTS

19.1 concept renderings.dwg



2 RENDERING: CENTRAL PLAY AREA & DOG PARK
Scale: NTS

19.1 concept renderings.dwg



5 RENDERING: VIEW OF CENTRAL PLAY AREA FROM PARKING LOT
Scale: NTS

19.1 concept renderings.dwg



4 RENDERING: DOG PARK
Scale: NTS

19.1 concept renderings.dwg



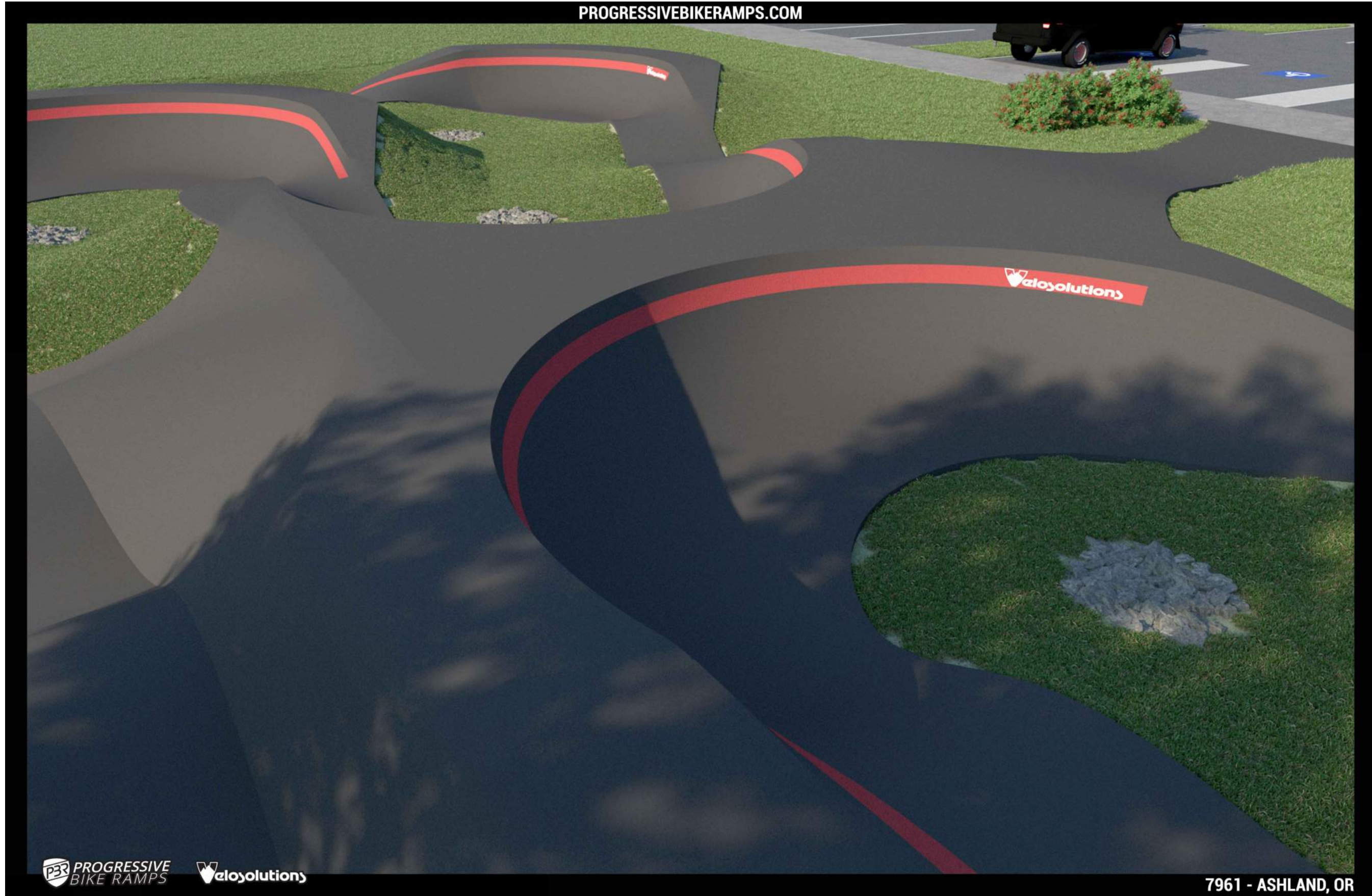
1 RENDERING: VIEW FROM PARKING LOT ENTRANCE OFF OF EAST MAIN ST.
Scale: NTS

19.1 concept renderings.dwg



4 RENDERING: PUMP TRACK BIRDS EYE VIEW
Scale: NTS

19.2 pump track.dwg



2 RENDERING: PUMP TRACK CLOSE UP
Scale: NTS

19.2 pump track.dwg



3 RENDERING: WALLRIDE CLOSE UP
Scale: NTS

19.2 pump track.dwg



1 RENDERING: PUMP TRACK PERSPECTIVE
Scale: NTS

19.2 pump track.dwg

NOTE:
PUMP TRACK DESIGN & RENDERINGS BY AMERICAN RAMP COMPANY / VELOSOLUTIONS

317.11' 2228 East Main Street
Ashland, Oregon
LYING SITUATE WITHIN
SOUTHWEST QUARTER OF SECTION 11
OWNSHIP 39 SOUTH, RANGE 1 EAST, WILLAMETTE MERIDIAN
CITY OF ASHLAND, JACKSON COUNTY, OREGON
FOR
Ashland Parks & Recreation Commission
340 South Pioneer Street
Ashland, Oregon 97520

THIS PROPERTY LINE HAS BEEN
REMOVED THROUGH AN
APPROVED AND RECORDED PLA
THAT TOOK PLACE AFTER THIS
SURVEY WAS COMPLETED.

O.R. 2018-037280
5.50 ACRES

SCALE: 1" = 30'



CONTOUR INTERVAL = ONE FOOT

	BRASS CAP MONUMENT, RECOVERED
	IRON PIN MONUMENT, RECOVERED
	SURVEY CONTROL POINT, AS DESCRIBED
	SUBJECT PROPERTY LINE
	BOUNDARY LINE
	CENTERLINE
	EASEMENT LINE
	FENCE LINE
	WATER LINE
	BURIED NATURAL GAS LINE
	BURIED TELEPHONE LINE
	BURIED CABLE TV LINE
	BURIED IRRIGATION LINE
	STORM DRAIN LINE
	SANITARY SEWER LINE
	OVERHEAD POWER LINE
	BURIED POWER LINE
	BURIED FIBER OPTIC CABLE
	CONTOUR LINE
	POWER POLE
	POWER PEDESTAL/CABINET
	ELECTRIC METER
	AREA LIGHT
	POWER TRANSFORMER
	WATER METER
	WATER VALVE
	FIRE HYDRANT
	CATCHBASIN
	CURB INLET
	STORM SEWER MANHOLE
	SANITARY SEWER MANHOLE
	CLEANOUT
	TELEPHONE PEDESTAL
	GAS METER
	GAS VALVE
	IRRIGATION BOX
	SIGN
	MAILBOX

THE BASIS OF VERTICAL CONTROL FOR THIS SURVEY IS A CITY OF ASHLAND GPS NETWORK STATION "TOLMAN #506", A 3" DIAMETER BRASS CAP IN CONCRETE, LOCATED EAST OF THE ANGLE POINT ON THE NORTH END OF TOLMAN CREEK ROAD. BENCHMARK ELEVATION = 1917.03', BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929, ADJUSTED IN 1956 (NGVD 29/56).

EXPOSED UTILITY STRUCTURES SHOWN HEREON WERE FIELD LOCATED DURING THE PERFORMANCE OF THIS SURVEY. BURIED UTILITY LOCATIONS WERE DETERMINED BY UTILIZING A COMBINATION OF FIELD SURVEYED PAINT MARKS AND "AS-BUILT" RECORD DRAWINGS FURNISHED BY THE RESPECTIVE UTILITY COMPANY REPRESENTATIVES. ARE APPROXIMATE AND SHOWN HEREON FOR GRAPHIC PURPOSES ONLY. FIELD VERIFICATION OF ALL BURIED UTILITIES MUST BE PERFORMED PRIOR TO ANY EXCAVATION OR CONSTRUCTION ACTIVITIES.

OREGON
JULY 14, 1998
SHAWN KAMPMANN
2883 LS

RENEWAL DATE: 6/30/2023

SURVEYED BY:

POLARIS LAND SURVEYING LLC
P.O. BOX 459
ASHLAND, OREGON 97520
(541) 482-5009

DATE: JULY 24, 2022
PROJECT NO. 1426-22

Assessor's Map No. 39 1E 11 CB, Tax Lot 200

POLARIS LAND SURVEYING

C1.1

EXISTING CONDITIONS

1. INCLUDE A LIST OF ALL PERSONNEL (BY NAME AND POSITION) THAT ARE RESPONSIBLE FOR THE DESIGN, INSTALLATION AND MAINTENANCE OF STORMWATER CONTROL MEASURES (E.G. ESCP DEVELOPER, BMP INSTALLER (SEE SECTION 4.10), AS WELL AS THEIR INDIVIDUAL RESPONSIBILITIES. (SECTION 4.4.C.II)
2. VISUAL MONITORING INSPECTION REPORTS MUST BE MADE IN ACCORDANCE WITH DEQ 1200-C PERMIT REQUIREMENTS. (SECTION 6.5)
3. INSPECTION LOGS MUST BE KEPT IN ACCORDANCE WITH DEQ'S 1200-C PERMIT REQUIREMENTS. (SECTION 6.5.C)
4. RETAIN A COPY OF THE ESCP AND ALL REVISIONS ON SITE AND MAKE IT AVAILABLE ON REQUEST TO DEQ, AGENT, OR THE LOCAL MUNICIPALITY. (SECTION 4.7)
5. THE PERMIT REGISTRANT MUST IMPLEMENT THE ESCP. FAILURE TO IMPLEMENT ANY OF THE CONTROL MEASURES OR PRACTICES DESCRIBED IN THE ESCP IS A VIOLATION OF THE PERMIT. (SECTIONS 4.4 AND 4.11)
6. THE ESCP MUST BE ACCURATE AND REFLECT SITE CONDITIONS. (SECTION 4.8)
7. SUBMISSION OF ALL ESCP REVISIONS IS NOT REQUIRED. SUBMITTAL OF THE ESCP REVISIONS IS ONLY UNDER SPECIFIC CONDITIONS. SUBMIT ALL NECESSARY REVISION TO DEQ OR AGENT WITHIN 10 DAYS. (SECTION 4.9)
8. SEQUENCE CLEARING AND GRADING TO THE MAXIMUM EXTENT PRACTICAL TO PREVENT EXPOSED INACTIVE AREAS FROM BECOMING A SOURCE OF EROSION. (SECTION 2.2.2)
9. CREATE SMOOTH SURFACES BETWEEN SOIL SURFACE AND EROSION AND SEDIMENT CONTROLS TO PREVENT STORMWATER FROM BYPASSING CONTROLS AND PONDING. (SECTION 2.2.3)
10. IDENTIFY, MARK, AND PROTECT (BY CONSTRUCTION FENCING OR OTHER MEANS) CRITICAL RIPARIAN AREAS AND VEGETATION INCLUDING IMPORTANT TREES AND ASSOCIATED ROOTING ZONES, AND VEGETATION AREAS TO BE PRESERVED. IDENTIFY VEGETATIVE BUFFER ZONES BETWEEN THE SITE AND SENSITIVE AREAS (E.G., WETLANDS), AND OTHER AREAS TO BE PRESERVED, ESPECIALLY IN RIPARIAN AREAS. (SECTION 2.2.1)
11. PRESERVE EXISTING VEGETATION WHEN PRACTICAL AND RE-VEGETATE OPEN AREAS, RE-VEGETATE OPEN AREAS WHEN PRACTICABLE BEFORE AND AFTER GRADING OR CONSTRUCTION. IDENTIFY THE TYPE OF VEGETATIVE SEED MIX USED. (SECTION 2.2.5)
12. MAINTAIN AND DELINEATE ANY EXISTING NATURAL BUFFER WITHIN THE 50-FEET OF WATERS OF THE STATE. (SECTION 2.2.4)
13. INSTALL PERIMETER SEDIMENT CONTROL, INCLUDING STORM DRAIN INLET PROTECTION AS WELL AS ALL SEDIMENT BASINS, TRAPS, AND BARRIERS PRIOR TO LAND DISTURBANCE. (SECTIONS 2.1.3)
14. CONTROL BOTH PEAK FLOW RATES AND TOTAL STORMWATER VOLUME, TO MINIMIZE EROSION AT OUTLETS AND DOWNSTREAM CHANNELS AND STREAMBANKS. (SECTIONS 2.1.1 AND 2.2.16)
15. CONTROL SEDIMENT AS NEEDED ALONG THE SITE PERIMETER AND AT ALL OPERATIONAL INTERNAL STORM DRAIN INLETS AT ALL TIMES DURING CONSTRUCTION, BOTH INTERNALLY AND AT THE SITE BOUNDARY. (SECTIONS 2.2.6 AND 2.2.13)
16. ESTABLISH CONCRETE TRUCK AND OTHER CONCRETE EQUIPMENT WASHOUT AREAS BEFORE BEGINNING CONCRETE WORK. (SECTION 2.2.14)
17. APPLY TEMPORARY AND/OR PERMANENT SOIL STABILIZATION MEASURES IMMEDIATELY ON ALL DISTURBED AREAS AS GRADING PROGRESSES. TEMPORARY OR PERMANENT STABILIZATION MEASURES ARE NOT REQUIRED FOR AREAS THAT ARE INTENDED TO BE LEFT UNVEGETATED, SUCH AS DIRT ACCESS ROADS OR UTILITY POLE PADS. (SECTIONS 2.2.20 AND 2.2.21)
18. ESTABLISH MATERIAL AND WASTE STORAGE AREAS, AND OTHER NON-STORMWATER CONTROLS. (SECTION 2.3.7)
19. KEEP WASTE CONTAINER LIDS CLOSED WHEN NOT IN USE AND CLOSE LIDS AT THE END OF THE BUSINESS DAY FOR THOSE CONTAINERS THAT ARE ACTIVELY USED THROUGHOUT THE DAY. FOR WASTE CONTAINERS THAT DO NOT HAVE LIDS, PROVIDE EITHER (1) COVER (E.G., A TARP, PLASTIC SHEETING, TEMPORARY ROOF) TO PREVENT EXPOSURE OF WASTES TO PRECIPITATION, OR (2) A SIMILARLY EFFECTIVE MEANS DESIGNED TO PREVENT THE DISCHARGE OF POLLUTANTS (E.G., SECONDARY CONTAINMENT). (SECTION 2.3.7)
20. PREVENT TRACKING OF SEDIMENT ONTO PUBLIC OR PRIVATE ROADS USING BMPs SUCH AS: CONSTRUCTION ENTRANCE, GRAVELED (OR PAVED) EIDS AND PARKING AREAS, GRAVEL ALL UNPAVED ROADS LOCATED ONSITE, OR USE AN EXIT TIRE WASH. THESE BMPs MUST BE IN PLACE PRIOR TO LAND-DISTURBING ACTIVITIES. (SECTION 2.2.7)
21. WHEN TRUCKING SATURATED SOILS FROM THE SITE, EITHER USE WATER-TIGHT TRUCKS OR DRAIN LOADS ON SITE. (SECTION 2.2.7.F)
22. CONTROL PROHIBITED DISCHARGES FROM LEAVING THE CONSTRUCTION SITE, I.E., CONCRETE WASH-OUT, WASTEWATER FROM CLEANOUP OF STUCCO, PAINT AND CURING COMPOUNDS. (SECTIONS 1.5 AND 2.3.9)
23. ENSURE THAT STEEP SLOPE AREAS WHERE CONSTRUCTION ACTIVITIES ARE NOT OCCURRING ARE NOT DISTURBED. (SECTION 2.2.10)
24. PREVENT SOIL COMPACTION IN AREAS WHERE POST-CONSTRUCTION INFILTRATION FACILITIES ARE TO BE INSTALLED. (SECTION 2.2.12)
25. USE BMPs TO PREVENT OR MINIMIZE STORMWATER EXPOSURE TO POLLUTANTS FROM SPILLS; VEHICLE AND EQUIPMENT FUELING, MAINTENANCE, AND STORAGE; OTHER CLEANING AND MAINTENANCE ACTIVITIES; AND WASTE HANDLING ACTIVITIES. THESE POLLUTANTS INCLUDE FUEL, HYDRAULIC FLUID, AND OTHER OILS FROM VEHICLES AND MACHINERY, AS WELL AS DEBRIS, FERTILIZER, PESTICIDES AND HERBICIDES, PAINTS, SOLVENTS, CURING COMPOUNDS AND ADHESIVES FROM CONSTRUCTION OPERATIONS. (SECTIONS 2.2.15 AND 2.3)
26. PROVIDE PLANS FOR SEDIMENTATION BASINS THAT HAVE BEEN DESIGNED PER SECTION 2.2.17 AND STAMPED BY AN OREGON PROFESSIONAL ENGINEER. (SEE SECTION 2.2.17.A)
27. IF ENGINEERED SOILS ARE USED ON SITE, A SEDIMENTATION BASIN/IMPOUNDMENT MUST BE INSTALLED. (SEE SECTIONS 2.2.17 AND 2.2.18)
28. PROVIDE A DETERWATERING PLAN FOR ACCUMULATED WATER FROM PRECIPITATION AND UNCONTAMINATED GROUNDWATER SEEPAGE DUE TO SHALLOW EXCAVATION ACTIVITIES. (SEE SECTION 2.4)
29. IMPLEMENT THE FOLLOWING BMPs WHEN APPLICABLE: WRITTEN SPILL PREVENTION AND RESPONSE PROCEDURES, EMPLOYEE TRAINING ON SPILL PREVENTION AND PROPER DISPOSAL PROCEDURES, SPILL KITS IN ALL VEHICLES, REGULAR MAINTENANCE SCHEDULE FOR VEHICLES AND MACHINERY, MATERIAL DELIVERY AND STORAGE CONTROLS, TRAINING AND SIGNAGE, AND COVERED STORAGE AREAS FOR WASTE AND SUPPLIES. (SECTION 2.3)
30. USE WATER, SOIL-BINDING AGENT OR OTHER DUST CONTROL TECHNIQUE AS NEEDED TO AVOID WIND-BLOWN SOIL. (SECTION 2.2.9)
31. THE APPLICATION RATE OF FERTILIZERS USED TO REESTABLISH VEGETATION MUST FOLLOW MANUFACTURER'S RECOMMENDATIONS TO MINIMIZE NUTRIENT RELEASES TO SURFACE WATERS. EXERCISE CAUTION WHEN USING TIME-RELEASE FERTILIZERS WITHIN ANY WATERWAY RIPARIAN ZONE. (SECTION 2.3.5)
32. IF AN ACTIVE TREATMENT SYSTEM (FOR EXAMPLE, ELECTRO-COAGULATION, FLOCCULATION, FILTRATION, ETC.) FOR SEDIMENT OR OTHER POLLUTANT REMOVAL IS EMPLOYED, SUBMIT AN OPERATION AND MAINTENANCE PLAN (INCLUDING SYSTEM SCHEMATIC, LOCATION OF SYSTEM, LOCATION OF INLET, LOCATION OF DISCHARGE, DISCHARGE DISPERSION DEVICE DESIGN, AND A SAMPLING PLAN AND FREQUENCY) BEFORE OPERATING THE TREATMENT SYSTEM. OBTAIN ENVIRONMENTAL MANAGEMENT PLAN APPROVAL FROM DEQ BEFORE OPERATING THE TREATMENT SYSTEM. OPERATE AND MAINTAIN THE TREATMENT SYSTEM ACCORDING TO MANUFACTURER'S SPECIFICATIONS. (SECTION 1.2.9)
33. TEMPORARILY STABILIZE SOILS AT THE END OF THE SHIFT BEFORE HOLIDAYS AND WEEKENDS, IF NEEDED. THE REGISTRANT IS RESPONSIBLE FOR ENSURING THAT SOILS ARE STABLE DURING RAIN EVENTS AT ALL TIMES OF THE YEAR. (SECTION 2.2)
34. AS NEEDED BASED ON WEATHER CONDITIONS, AT THE END OF EACH WORKDAY SOIL STOCKPILES MUST BE STABILIZED OR COVERED, OR OTHER BMPs MUST BE IMPLEMENTED TO PREVENT DISCHARGE TO SURFACE WATERS OR CONVEYANCE SYSTEMS LEADING TO SURFACE WATERS. (SECTION 2.2.8)
35. SEDIMENT FENCE: REMOVE TRAPPED SEDIMENT BEFORE IT REACHES ONE THIRD OF THE ABOVE GROUND FENCE HEIGHT AND BEFORE FENCE REMOVAL. (SECTION 2.1.5.B)
36. OTHER SEDIMENT BARRIERS (SUCH AS BIOBAGS): REMOVE SEDIMENT BEFORE IT REACHES TWO INCHES DEPTH ABOVE GROUND HEIGHT AND BEFORE BMP REMOVAL. (SECTION 2.1.5.C)
37. CATCH BASINS: CLEAR BEFORE RETENTION CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT. SEDIMENT BASINS AND SEDIMENT TRAPS: REMOVE TRAPPED SEDIMENTS BEFORE DESIGN CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT AND AT COMPLETION OF PROJECT. (SECTION 2.1.5.D)
38. WITHIN 24 HOURS, SIGNIFICANT SEDIMENT THAT HAS LEFT THE CONSTRUCTION SITE, MUST BE REMEDIATED. INVESTIGATE THE CAUSE OF THE SEDIMENT RELEASE AND IMPLEMENT STEPS TO PREVENT A RECURRENCE OF THE DISCHARGE WITHIN THE SAME 24 HOURS. ANY IN-STREAM CLEAN-UP OF SEDIMENT SHALL BE PERFORMED ACCORDING TO THE OREGON DEPARTMENT OF STATE LANDS REQUIRED TIMEFRAME. (SECTION 2.2.19.A)
39. THE INTENTIONAL WASHINGS OF SEDIMENT INTO STORM SEWERS OR DRAINAGE WAYS MUST NOT OCCUR. VACUUMING OR DRY SWEEPING AND MATERIAL PICKUP MUST BE USED TO CLEANUP RELEASED SEDIMENTS. (SECTION 2.2.19)
40. DOCUMENT ANY PORTION(S) OF THE SITE WHERE LAND DISTURBING ACTIVITIES HAVE PERMANENTLY CEASED OR WILL BE TEMPORARILY INACTIVE FOR 14 OR MORE CALENDAR DAYS. (SECTION 6.5.F.1)
41. PROVIDE TEMPORARY STABILIZATION FOR THAT PORTION OF THE SITE WHERE CONSTRUCTION ACTIVITIES CEASE FOR 14 DAYS OR MORE WITH A COVERING OF BLOWN STRAW AND A TACKIFIER, LOOSE STRAW, OR AN ADEQUATE COVERING OF COMPOST MULCH UNTIL WORK RESUMES ON THAT PORTION OF THE SITE. (SECTION 2.2.20)
42. DO NOT REMOVE TEMPORARY SEDIMENT CONTROL PRACTICES UNTIL PERMANENT VEGETATION OR OTHER COVER OF EXPOSED AREAS IS ESTABLISHED. ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED, ALL TEMPORARY EROSION CONTROLS AND RETAINED SOILS MUST BE REMOVED AND DISPOSED OF PROPERLY, UNLESS NEEDED FOR LONG TERM USE FOLLOWING TERMINATION OF PERMIT COVERAGE. (SECTION 2.2.21)

[illegible]

EXIST. FIRE HYDRANT	AC	ASPHALT
EXIST. WATER VALVE	BC	BACK OF CURB
EXIST. BLOW OFF	BR	BOTTOM OF RAMP
EXIST. WATER METER	BS	BOTTOM OF STAIRS
EXIST. HOSE BIB	BW	BOTTOM OF WALL
EXIST. IRRIGATION VALVE	CMP	CORRUGATED METAL PIPE
EXIST. AIR RELEASE VALVE	CO	CLEANOUT RISER
EXIST. STORM DRAIN MANHOLE	C	CONCRETE
EXIST. CLEANOUT	DIP	DUCTILE IRON PIPE
EXIST. SANITARY SEWER MANHOLE	(E)	EXISTING
EXIST. MAILBOX	EG	EXISTING GRADE
HANDICAP PARKING SYMBOL	EOC	EDGE OF CONCRETE
PARALLEL PARKING STRIPING	EOP	EDGE OF PAVEMENT
BICYCLE LANE SYMBOL	FF	FINISHED FLOOR
EXIST. SANITARY SEWER	FG	FINISHED GRADE
EXIST. STORM DRAIN	FL	FLOW LINE
EXIST. WATER	G	GAS
EXIST. GAS	GB	GRADE BREAK
EXIST. ELECTRIC	GC	GENERAL CONTRACTOR
EXIST. OVERHEAD POWER	GRD	GROUND
EXIST. TELEPHONE	GRVL	GRAVEL
EXIST. FIBER OPTIC	HDPE	HIGH-DENSITY POLYETHYLENE
EXIST. CURB AND GUTTER	HP	HIGH POINT
EXIST. CENTERLINE	IE	INVERT ELEVATION
EXIST. RIGHT OF WAY	LP	LOW POINT
EXIST. CONTOUR	MAX	MAXIMUM
PROPOSED CONTOUR	ME	MATCH EXISTING
SANITARY SEWER	MIN	MINIMUM
STORM DRAIN	MUTCD	MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
WATER	ODOT	OREGON DEPARTMENT OF TRANSPORTATION
GAS	PERF	PERFORATED PIPE
ELECTRIC	PVC	POLYVINYL CHLORIDE
CURB AND GUTTER	RCP	REINFORCED CONCRETE PIPE
PROPOSED RIGHT OF WAY	RE	RIM ELEVATION
FLOW LINE	REQ'D	REQUIRED
PROPERTY LINE	ROW	RIGHT-OF-WAY
FIRE HYDRANT	SD	STORM DRAIN
WATER VALVE	SDMH	STORM DRAIN MANHOLE
WATER METER	SS	SANITARY SEWER
BACKFLOW DEVICE	SSMH	SANITARY SEWER MANHOLE
IRRIGATION WATER METER	STD	STANDARD
AIR RELEASE VALVE	SW	SIDEWALK
BLOWOFF DEVICE ASSEMBLY	TBR	TO BE REMOVED
FIRE DEPARTMENT CONNECTION	TC	TOP OF CURB
END PLUG	TR	TOP OF RAMP
TEE	TOW	TOP OF WALL
SANITARY SEWER CLEANOUT	TYP	TYPICAL
CONCENTRIC MANHOLE	UPC	UNIFORM PLUMBING CODE
STORM DRAIN CLEANOUT	W	WATER
CONTROL STRUCTURE MANHOLE		
ATRIUM DRAIN / BUBBLER		
AREA DRAIN		
CATCH BASIN INLET		
CURB INLET		
LIGHTS		
SIGN (TRAFFIC, INFORMATION)		
BOLLARD		
CONCRETE		
HMAC PAVING		
NEW RIP RAP		

VEHICLE TRAFFIC

- EXHAUST EMISSIONS
- POSSIBLE FUEL AND SYSTEMS LEAKAGE
- TIRE WEAR
- MECHANICAL PARTS AND BRAKING SYSTEMS
- BODYWORK (CORROSION, ETC.)

ROAD SEDIMENT

CHARGE

UTION SITES ARE AUTHORIZED IF THE TERMS
ROLS ARE IMPLEMENTED TO MINIMIZE
BY LOCAL ORDINANCE:
REFIGHTING ACTIVITIES:

NG THE ENGINE, UNDERCARRIAGE, AND
PS, SOLVENTS, OR DETERGENTS USED;

FLUSHINGS;
ENTS, AND DETERGENTS ARE NOT USED, AND
ANCES;

OXIC OR HAZARDOUS SUBSTANCES HAVE NOT
(D) AND WHERE SOAPS, SOLVENTS, AND
WATERS INTO ANY SURFACE WATER, STORM
UNLESS THE CONVEYANCE IS CONNECTED TO A
CONTROL FOR THE POLLUTANTS PRESENT. PER
NT INTO ANY STORMWATER CONVEYANCE IS

NDENSATE;
ATER OR SPRING WATER;
CONTAMINATED WITH PROCESS MATERIALS

Site Condition	Minimum Frequency
1. Active period	On initial date that first disturbance activities commence. Within 24 hours of any storm event, including rain from snow melt, that results in discharge from the site. At least once every 14 days, regardless of whether stormwater runoff is occurring.
2. Inactive periods greater than fourteen (14) consecutive calendar days	The contractor may reduce the frequency of inspections at any area of the site where its stabilization shops in Section 2.2.20 have been established for a period of 14 days or more, but no less than 14 calendar days apart, then, once per month.
3. Periods during which the site is inaccessible due to inclement weather	If safe, accessible and practical, inspections must occur daily at a relevant discharge point or downstream location during inclement weather.
4. Periods during which construction activities are suspended and runoff is reduced due to inclement weather	If safe, inspections may be temporarily suspended. Immediately resume monitoring upon thawing, or when weather improves.
5. Periods during which construction activities are conducted and runoff is reduced during inclement weather	Inspection frequency may be reduced to once a month. Immediately resume monitoring upon thawing, or when weather improves.

Year	2024/2025				
Phase/BMP	CLEARING	MASS GRADING	UTILITY CONSTRUCTION	VERTICAL CONSTRUCTION	FINAL STABILIZATION
EROSION PREVENTION					
Ground Cover					
Plastic Sheeting					
Dust Control	X	X			
Temporary Stabilization (Straw/Mulch/Hydroseed)					
Final stabilization shall be establishment of native grassy material or established hydroseed prior to removal of erosion control measures.					X
Buffer Zone (from Ravine)					
SEDIMENT CONTROL					
Sediment Fence (Perimeter)	X	X	X	X	X
Sediment Fence (Interior)					
Straw Wattles					
Inlet Protection			X	X	
Dewatering					
Construction Entrance	X	X	X		
Existing Outlet Protection	X	X	X	X	
New Outlet Protection		X	X	X	
Existing Curb Inlet Check Dams					
POLLUTION PREVENTION					
Hazard Waste Management					
Spill Kit Onsite	X	X	X	X	X
Concrete Washout Area		X	X	X	

A PRACTICES LIST OF AVAILABLE BEST MANAGEMENT PRACTICES (BMP) OPTIONS BASED ON DEQ'S 1200-C PERMIT APPLICATION AND ESCP GUIDANCE DOCUMENT HAS BEEN REVIEWED TO COMPLETE THIS EROSION AND SEDIMENT CONTROL PLAN. SOME OF THE ABOVE LISTED BMPS WERE NOT CHOSEN BECAUSE THEY WERE DETERMINED TO NOT EFFECTIVELY MANAGE EROSION PREVENTION AND SEDIMENT CONTROL FOR THIS PROJECT BASED ON SPECIFIC SITE CONDITIONS, INCLUDING SOIL CONDITIONS, TOPOGRAPHIC CONSTRAINTS, ACCESSIBILITY TO THE SITE, AND OTHER RELATED CONDITIONS. AS THE PROJECT PROGRESSES AND THERE IS A NEED TO REVISE THE ESCP, AN ACTION PLAN WILL BE SUBMITTED.

- CLEAN UP SPILLS OR CONTAMINATED SURFACES IMMEDIATELY USING DRY CLEAN UP MEASURES (DO NOT CLEAN CONTAMINATED SURFACES BY HOISING THE AREA DOWN), AND ELIMINATE THE SOURCE OF THE SPILL TO PREVENT A DISCHARGE OR A CONTINUATION OF AN ONGOING DISCHARGE; AND
- STORE MATERIALS IN A COVERED AREA (E.G., PLASTIC SHEETING, TEMPORARY ROOFS), OR IN SECONDARY CONTAINMENT TO PREVENT THE EXPOSURE OF THESE CONTAINERS TO PRECIPITATION OR STORMWATER RUNOFF. OR A SIMILARLY EFFECTIVE MEANS DESIGNED TO PREVENT THE DISCHARGE OF POLLUTANTS FROM THESE AREAS.



NOT TO SCALE

- * HOLD A PRE-CON MEETING OF PROJECT CONSTRUCTION PERSONNEL THAT INCLUDES THE EC INSPECTOR.
- * ALL INSPECTIONS MUST BE MADE IN ACCORDANCE WITH DEQ 1200 C PERMIT REQUIREMENTS.
- * INSPECTION LOGS MUST BE KEPT IN ACCORDANCE WITH DEQ'S 1200 C PERMIT REQUIREMENTS.
- * CHANGES TO THE APPROVED ESC PLAN MUST BE SUBMITTED TO DEQ IN THE FORM OF AN ACTION PLAN.



Know what's **below**.
Call before you dig.

NOT TO SCALE

TODD POWELL, P.E.
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(541) 613-0723
todd@powellengineeringconsulting.com

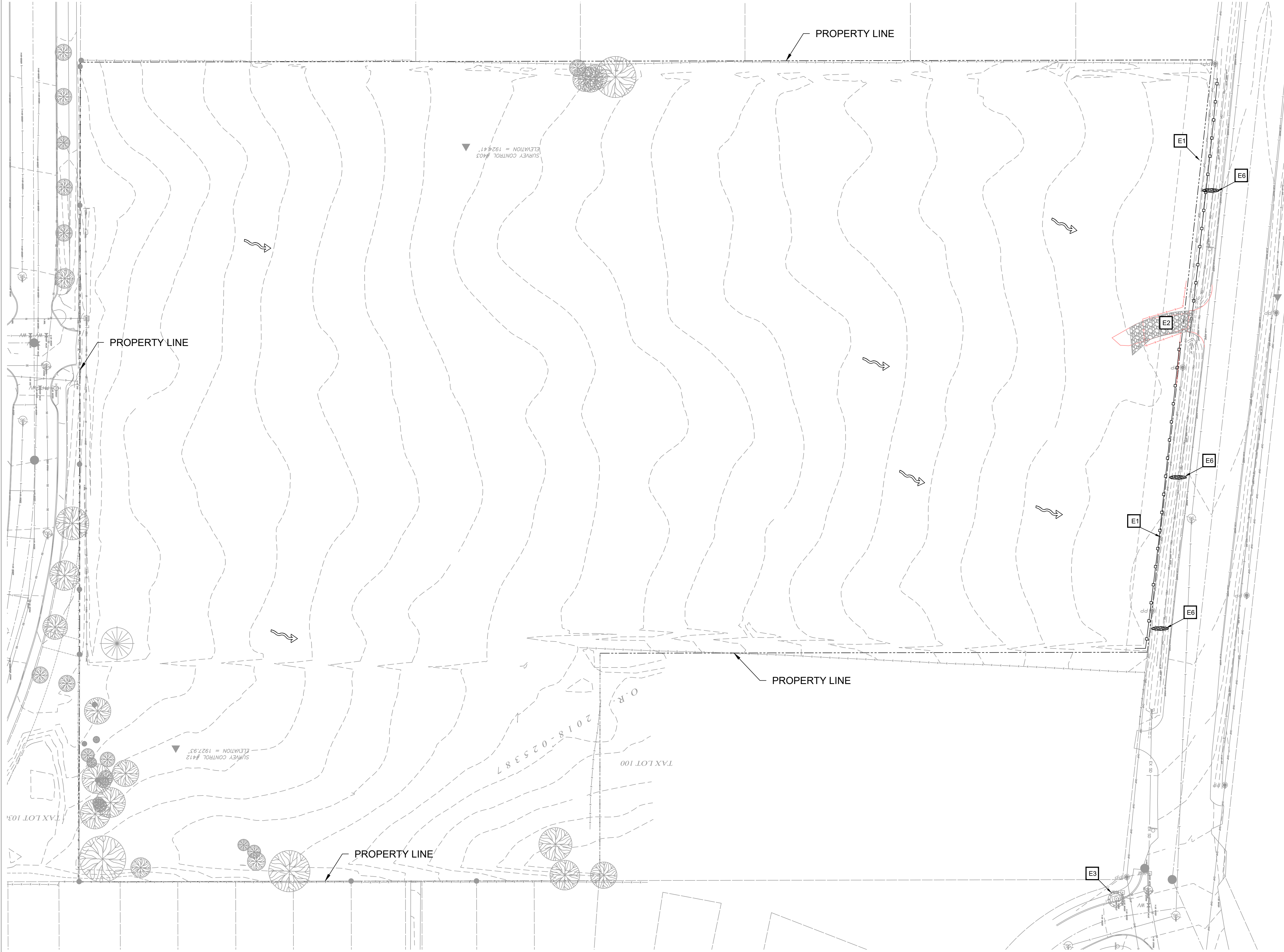
MARQUESS & ASSOCIATES, INC.
 RICK SWANSON, P.E., G.E.
 1120 EAST JACKSON
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POLARIS LAND SURVEYING LLC
P.O. BOX 459
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EAST MAIN STREET PARK
CITY OF ASHLAND PARKS AND RECREATION

DATE		REVISION DESCRIPTION	NO.
		DRAWN BY:	TDP
		DESIGNED BY:	TDP
		CHECKED BY:	TDP
		ISSUE DATE:	05/06/24
		SITE DESIGN REVIEW	
JOB NO. 21-003	ESCP - COVER SHEET C2.0		



ESCP LEGEND

- E1** SEDIMENT FENCE PER ODOT DETAIL RD1040 ON SHEET C2.4
- E2** UTILIZE EXISTING DRIVE APPROACH AS TEMPORARY CONSTRUCTION ENTRANCE. REINFORCE TO MEET REQUIREMENTS OF ODOT DETAIL RD1000 ON SHEET C2.4.
- E3** INSTALL INLET PROTECTION ON EXISTING CATCH BASINS PER ODOT DETAIL RD1010 ON SHEET C2.4.
- EX. SURFACE FLOW DIRECTION
- E6** INSTALL ROCK CHECK DAM PER ODOT DETAIL RD1005 ON SHEET C2.4.

WET WEATHER CONSTRUCTION

THE SITE SOILS ARE CONSIDERED VERY MOISTURE SENSITIVE AND, AS SUCH, ARE SUSCEPTIBLE TO DISTURBANCE BY CONSTRUCTION EQUIPMENT, PARTICULARLY DURING PERIODS OF WET WEATHER. DURING WET WEATHER, THE CONTRACTOR SHALL MINIMIZE TRAFFIC ON PREPARED SOIL SUBGRADE AREAS. IF THE SITE SOILS ARE EXPOSED DURING WET WEATHER, THE USE OF CRUSHED ROCK PLACED AS ENGINEERED FILL IN THE BOTTOM OF THE EXCAVATIONS MAY BE NECESSARY TO PROTECT THE SUBGRADE. THE GRADING CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO LIMIT SURFACE DISTURBANCE AND PROTECT THE SITE GRADING AREA FROM EXCESSIVE RUNOFF EROSION.

ESCP RESPONSIBILITY

IT IS THE INTENT OF THIS TEMPORARY EROSION AND SEDIMENT CONTROL PLAN THAT STORM WATER RUNOFF BE CONTROLLED AT ALL TIMES TO PREVENT SOIL EROSION AND TO MAINTAIN WATER QUALITY. ANY AND ALL MEASURES NECESSARY TO DO SO SHALL BE EMPLOYED BY THE CONTRACTOR.

- REGARDLESS OF SITE, WEATHER, SOIL OR OTHER CONDITIONS, THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ENSURING THAT EROSION DOES NOT OCCUR ON THE SITE AND THAT POLLUTED OR SILT-LADEN RUNOFF DOES NOT LEAVE THE SITE OR ENTER INTO ANY CREEK, STREAM, WETLAND OR WATER BODY ON THE SITE.
- BEYOND THE MINIMUM REQUIREMENTS SHOWN ON THIS PLAN, THE CONTRACTOR SHALL BE RESPONSIBLE FOR SELECTING AND IMPLEMENTING APPROPRIATE METHODS, "BEST MANAGEMENT PRACTICES" (BMPs), FOR STORM WATER TREATMENT AND CONTROL THAT MEET THE REQUIREMENTS OF THE STATE AND LOCAL JURISDICTION.
- THE CONTRACTOR SHALL REPORT ALL WATER QUALITY CONCERNS AND ACTIVITIES TO THE PROJECT ENGINEER. IN THE EVENT THAT THE INSTALLED WATER QUALITY CONTROL MEASURES ARE INEFFECTIVE AT CONTROLLING EROSION AND SEDIMENT, THE CONTRACTOR SHALL IMMEDIATELY REPORT TO AND CONSULT WITH THE PROJECT ENGINEER TO FIND AN APPROPRIATE REMEDY. ALL CONSTRUCTION ACTIVITIES, WITH THE EXCEPTION OF EROSION AND SEDIMENT CONTROL MEASURES, SHALL CEASE UNTIL SUCH TIME AS THE WATER QUALITY IS BROUGHT UNDER CONTROL.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MONITORING WEATHER FORECASTS AND ANTICIPATING STORM ACTIVITY AND SHALL SCHEDULE ALL PROJECT ACTIVITIES IN ANTICIPATION OF THE WEATHER.
- ALL SUPPLIES AND MATERIALS NECESSARY FOR IMPLEMENTING BMPs SHALL BE STORED ON SITE AND SHALL BE IMMEDIATELY AVAILABLE FOR USE. SUCH SUPPLIES AND MATERIALS SHALL INCLUDE, BUT NOT BE LIMITED TO, STRAW BALES OR OTHER MULCHING MATERIAL, SILT FENCING AND STAKES, FILTER FABRIC, ETC.
- DURING AND AFTER RUNOFF PRODUCING STORM EVENTS, CONTRACTOR SHALL MONITOR ALL EROSION CONTROL MEASURES AND SHALL PRIORITIZE IMPLEMENTATION AND MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES ABOVE ALL OTHERS.

NOTE: IMPLEMENT EROSION CONTROL MEASURES PER EROSION AND SEDIMENT CONTROL PLANS PRIOR TO VEGETATION BEING DISTURBED. CONTACT ROGUE VALLEY SEWER SERVICES (RVSS) AT 541-779-4144 FOR EROSION CONTROL INSPECTION PRIOR TO THE START OF GRADING OR EXCAVATION.

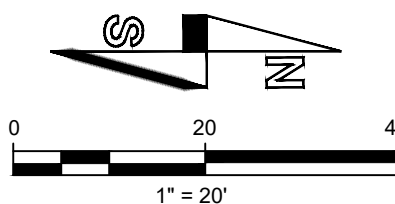
DEMO KEY

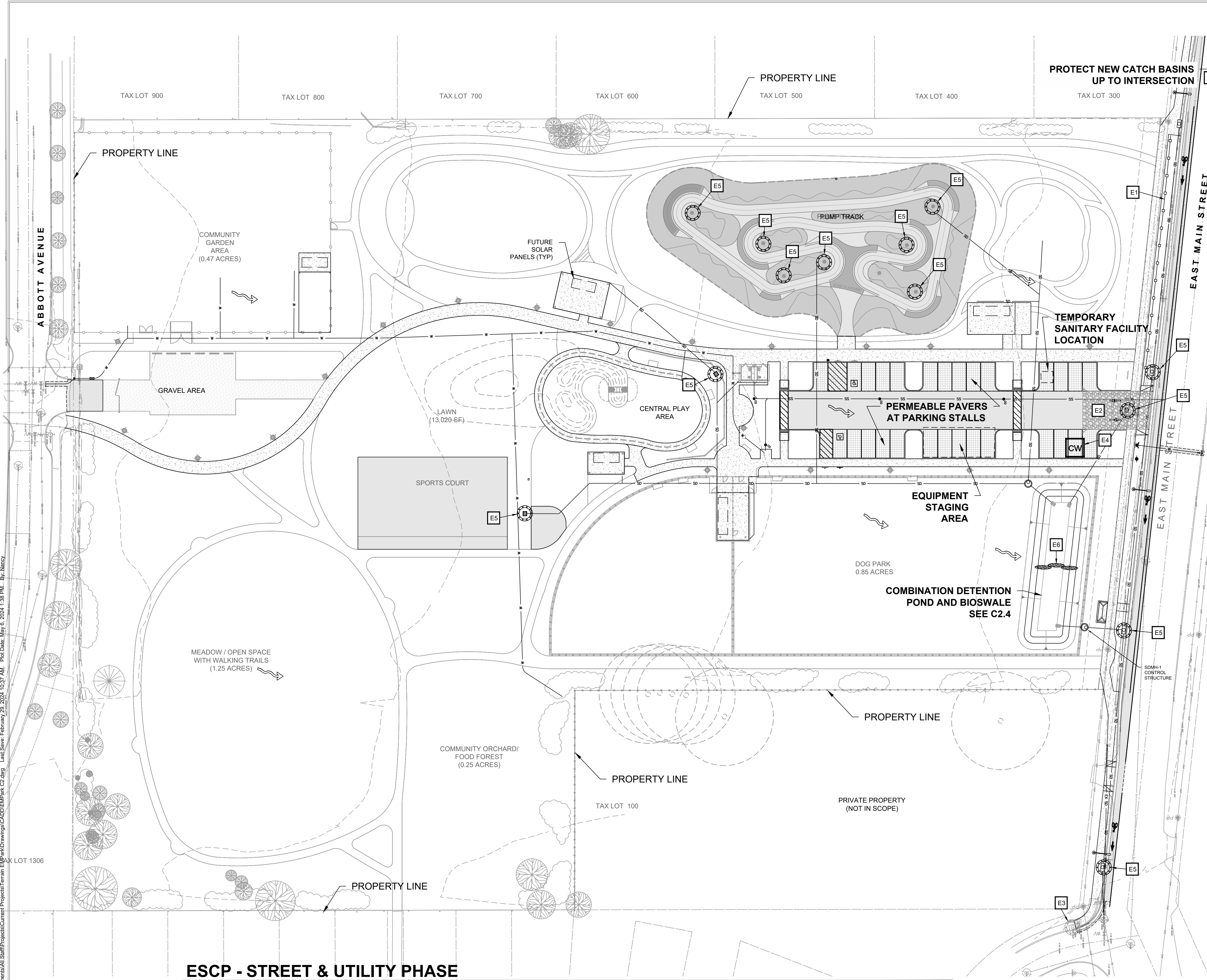
- BOLD/RED ELEMENTS TO BE DEMOLISHED AND HAULED OFF TO AN APPROVED DISPOSAL GROUND. COORDINATE ABANDONMENT OF UNDERGROUND UTILITIES WITH THE APPROPRIATE AGENCY PRIOR TO DEMOLITION.
- "TBR" = TO BE REMOVED.

DATE					
REVISION DESCRIPTION					
NO.					
DRAWN BY:	TDP				
DESIGNED BY:	TDP				
CHECKED BY:	TDP				
ISSUE DATE:	05/06/24				
SITE DESIGN REVIEW					
JOB NO.	21-003	ROUGH GRADING & DEMO PHASE			
		C2.1			

ESCP - ROUGH GRADING AND DEMO PHASE

SCALE: 1" = 20' - 0" (24x36)





ESCP - STREET & UTILITY PHASE

SCALE: 1" = 20' - 0" (24x36)

ESCP LEGEND

- E1** SEDIMENT FENCE PER ODOT DETAIL RD1040 ON SHEET C2.4
- E2** TEMPORARY CONSTRUCTION ENTRANCE. PER PER ODOT DETAIL RD1000 ON SHEET C2.4.
- E3** INSTALL INLET PROTECTION ON EXISTING CATCH BASINS PER ODOT DETAIL RD1010 ON SHEET C2.4.
- E4** INSTALL CONCRETE WASH OUT PER DETAIL 1, ON SHEET C2.4.
- E5** INSTALL INLET PROTECTION ON NEW CATCH BASINS PER ODOT DETAIL RD1010 ON SHEET C2.4.
- E6** INSTALL ROCK CHECK DAM PER ODOT DETAIL RD1005 ON SHEET C2.4.
- CW** NEW BIOSWALE SEE DETAILS ON SHEET C2.4

NEW BIOSWALE SEE DETAILS ON SHEET C2.4

EX. SURFACE FLOW DIRECTION

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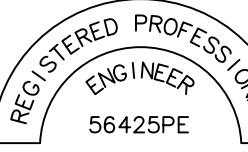


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541.613.0723 phone

www.powellengineeringconsulting.com



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ENGINEER
No. 56425PE
OREGON
JAN. 13, 2004
TODD D. POWELL
EXPIRES: 12/31/24

VERIFY SCALES

ORIGINAL DRAWING
BASED ONE INCH
IF NOT ONE INCH ON THIS
SHEET, ADJUST SCALES
ACCORDINGLY

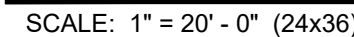
EAST MAIN STREET PARK

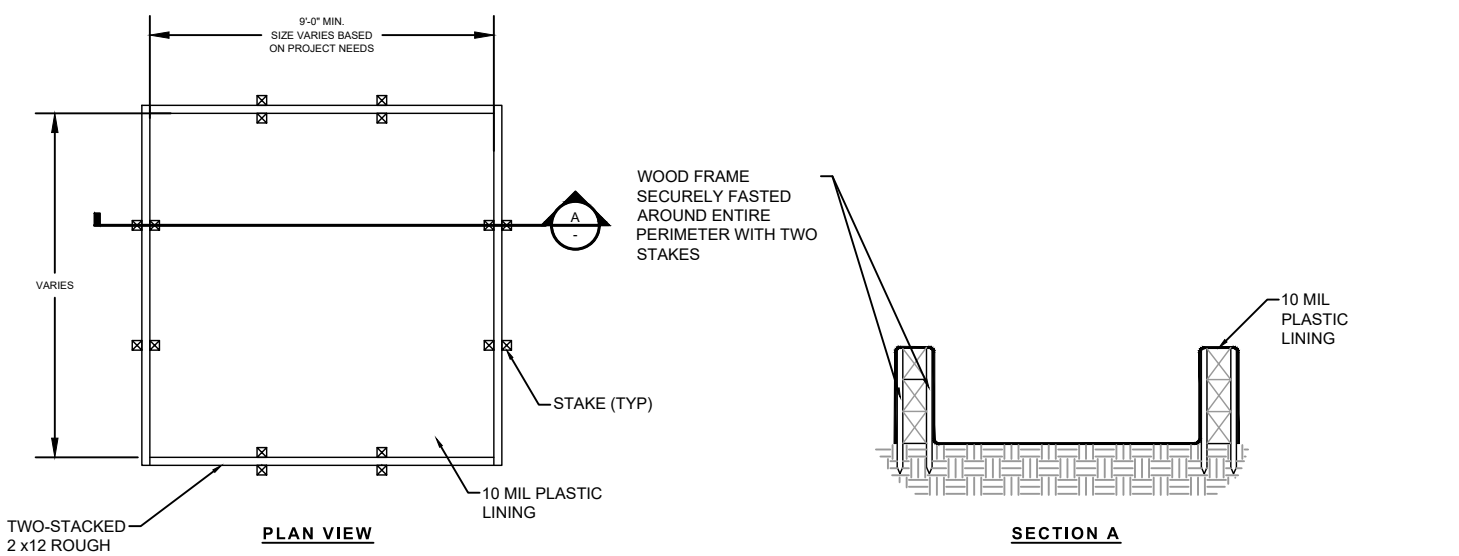
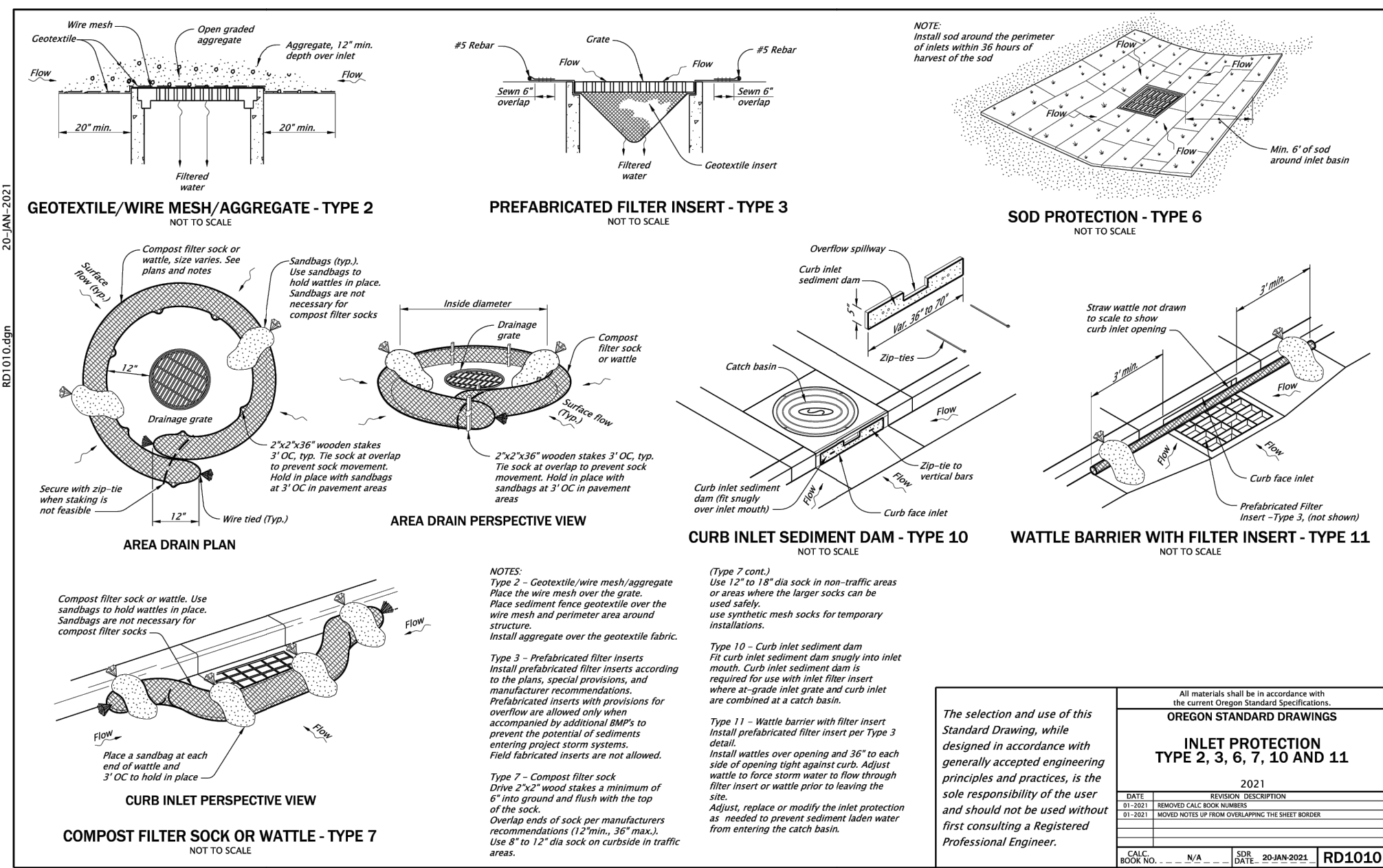
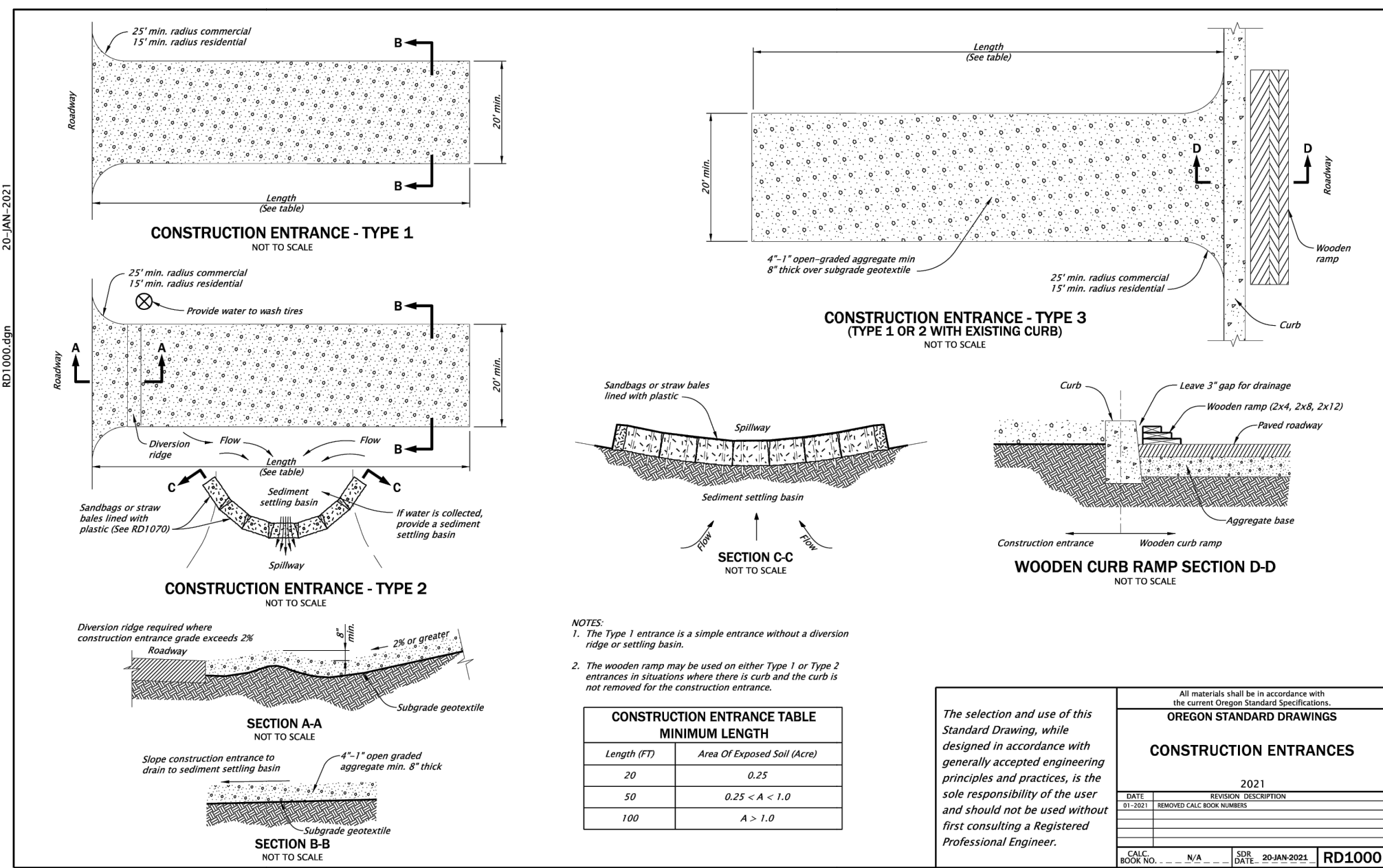
CITY OF ASHLAND PARKS AND RECREATION

MAP 39-1E-11-CB, TAX LOT 200

2228 EAST MAIN STREET, ASHLAND, OR 97520

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ISSUE DATE:	05/06/24				
SITE DESIGN REVIEW					
JOB NO.	21-003				
STREET & UTILITY PHASE	C2.2				

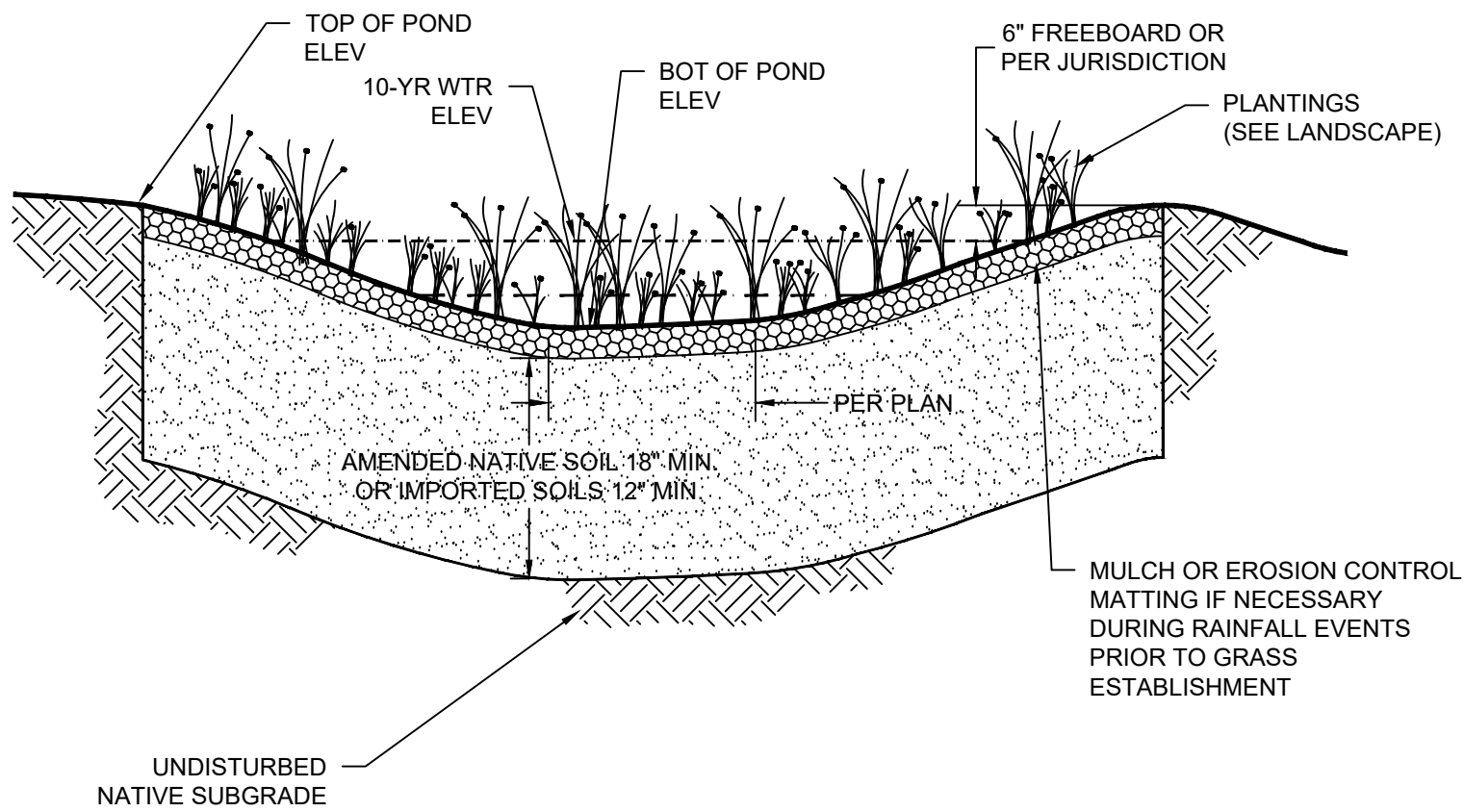
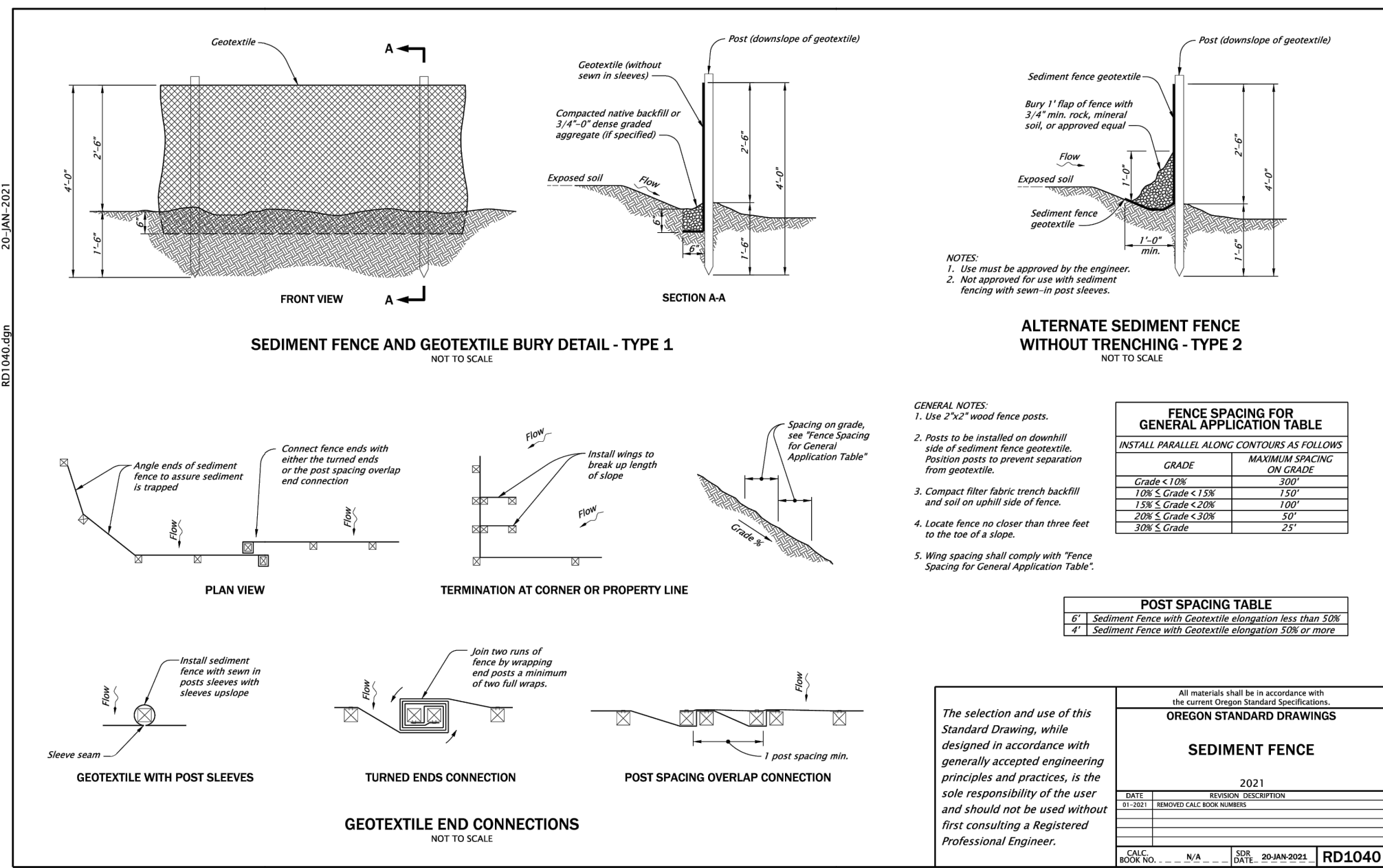
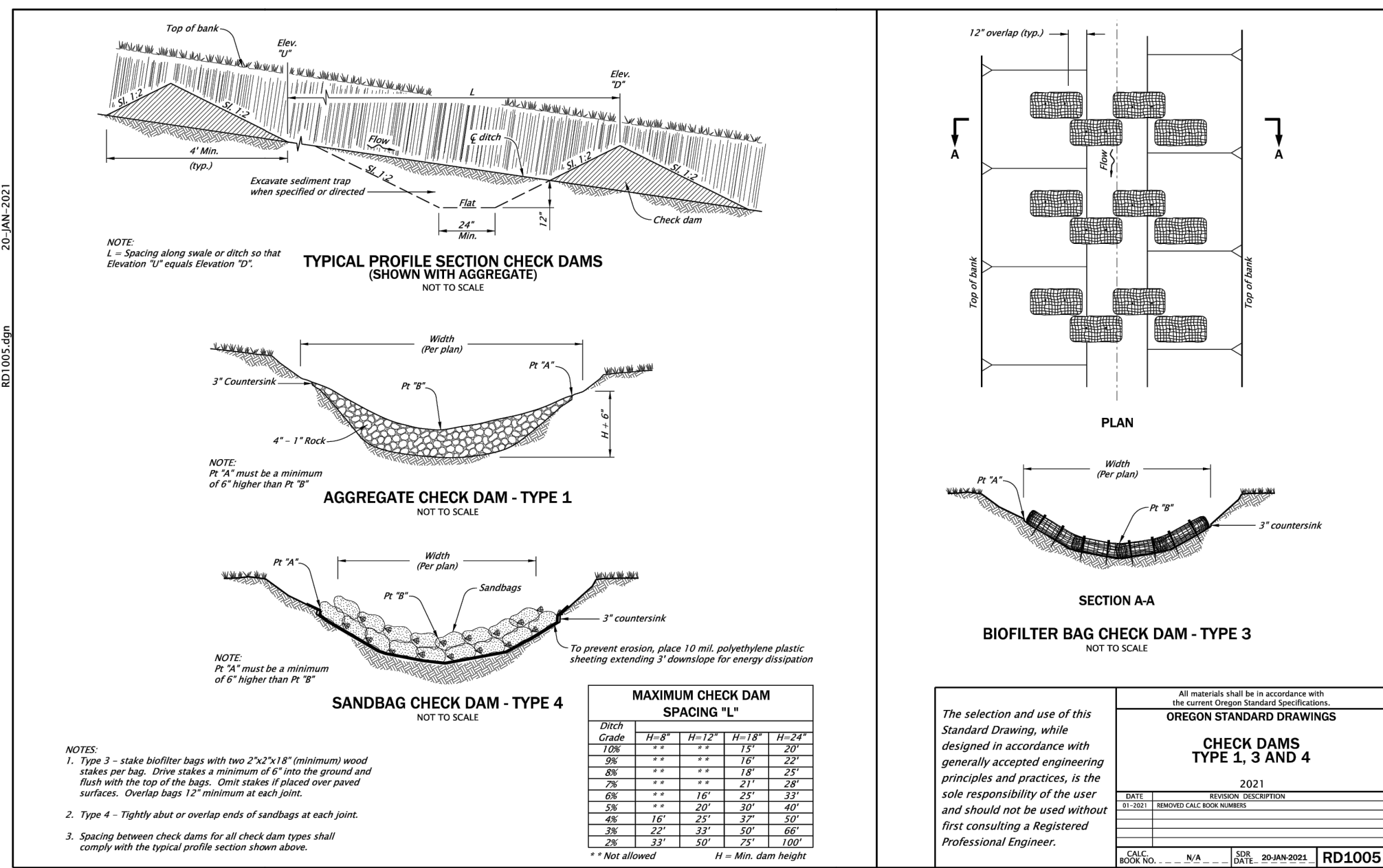
Application Page Number: 207



- NOTES**
1. DETAIL SHOWN TO REPRESENT INTENT. EQUIVALENT ALTERNATIVES ARE AVAILABLE.
 2. COORDINATE MODIFICATIONS WITH EROSION CONTROL INSPECTOR.
 3. EMPTY WHEN $\frac{3}{4}$ FULL .

1 CONCRETE WASHOUT

SCALE: NTS

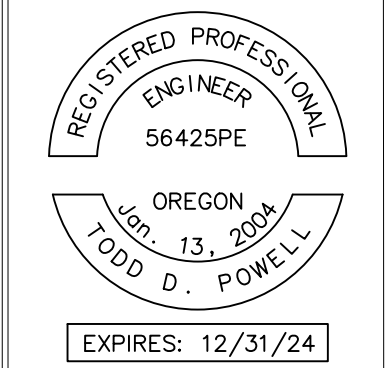


SECTION - BIOSWALE/POND

SCALE: NTS MODIFIED RVSS BMP 8.01

SCALE: NTS

MODIFIED RVSS BMP 8.01



VERIFY SCALES

ORIGINAL DRAWING
BAR IS ONE INCH

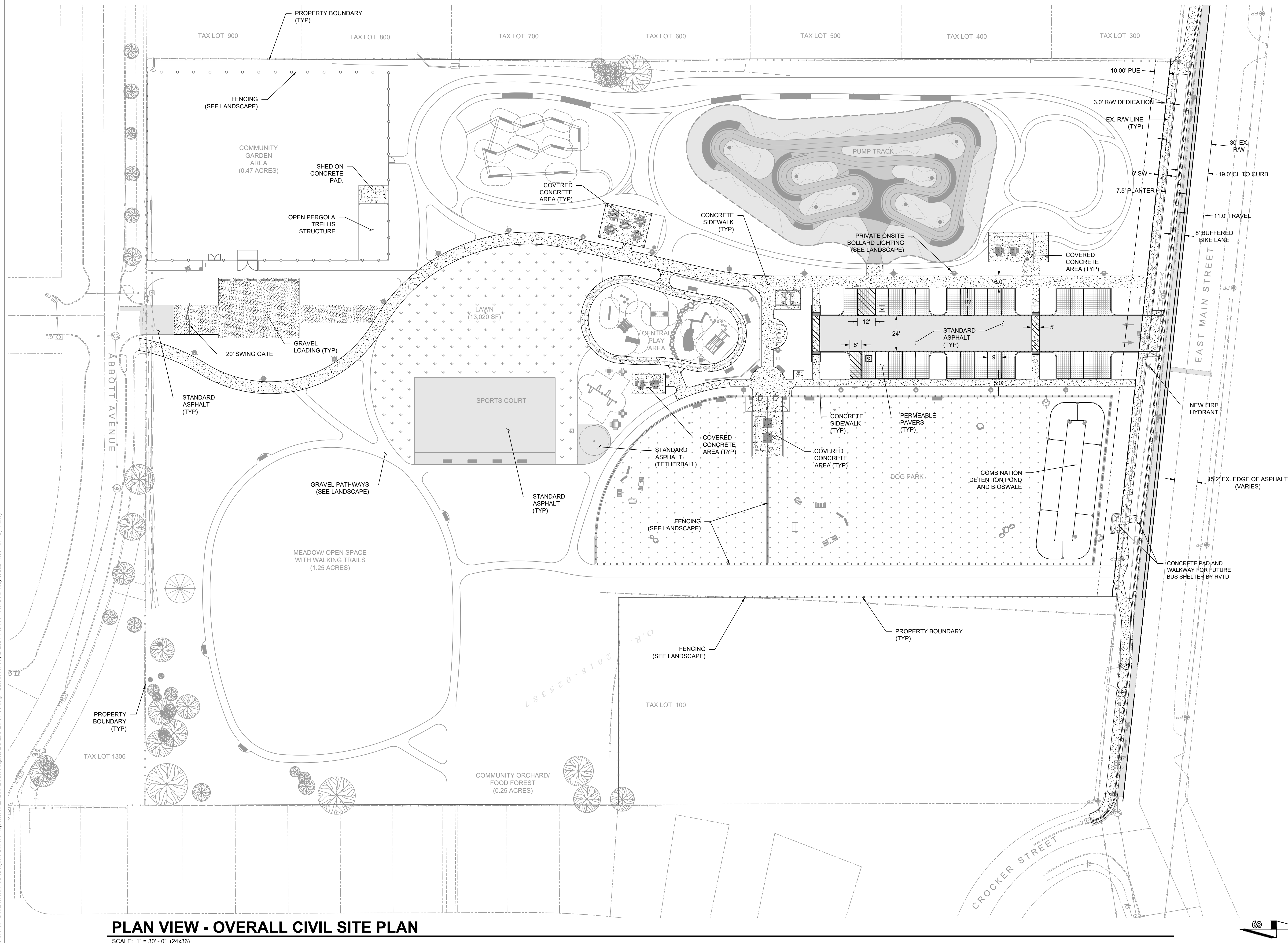


IF NOT ONE INCH ON THIS
SHEET, ADJUST SCALES
ACCORDINGLY

EAST MAIN STREET PARK
CITY OF ASHLAND PARKS AND RECREATION
MAP 39-JE-11-CR, TAX LOT 200
2228 EAST MAIN STREET, ASHLAND, OR 97520

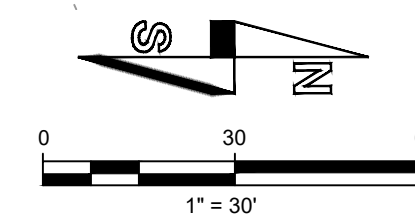
MAP 39-1E-11-CB, TAX LOT 200
2228 EAST MAIN STREET, ASHLAND, OR 97520

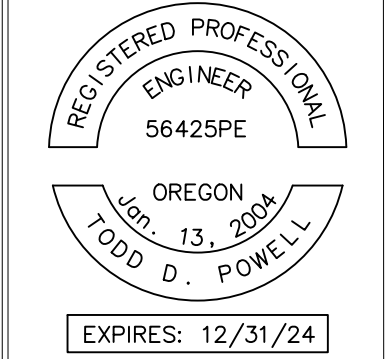
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ISSUE DATE:	05/06/24				
SITE DESIGN REVIEW					
JOB NO.	CIVIL SITE PLAN				
21-003	C3.0				



PLAN VIEW - OVERALL CIVIL SITE PLAN

SCALE: 1" = 30' - 0" (24x36)





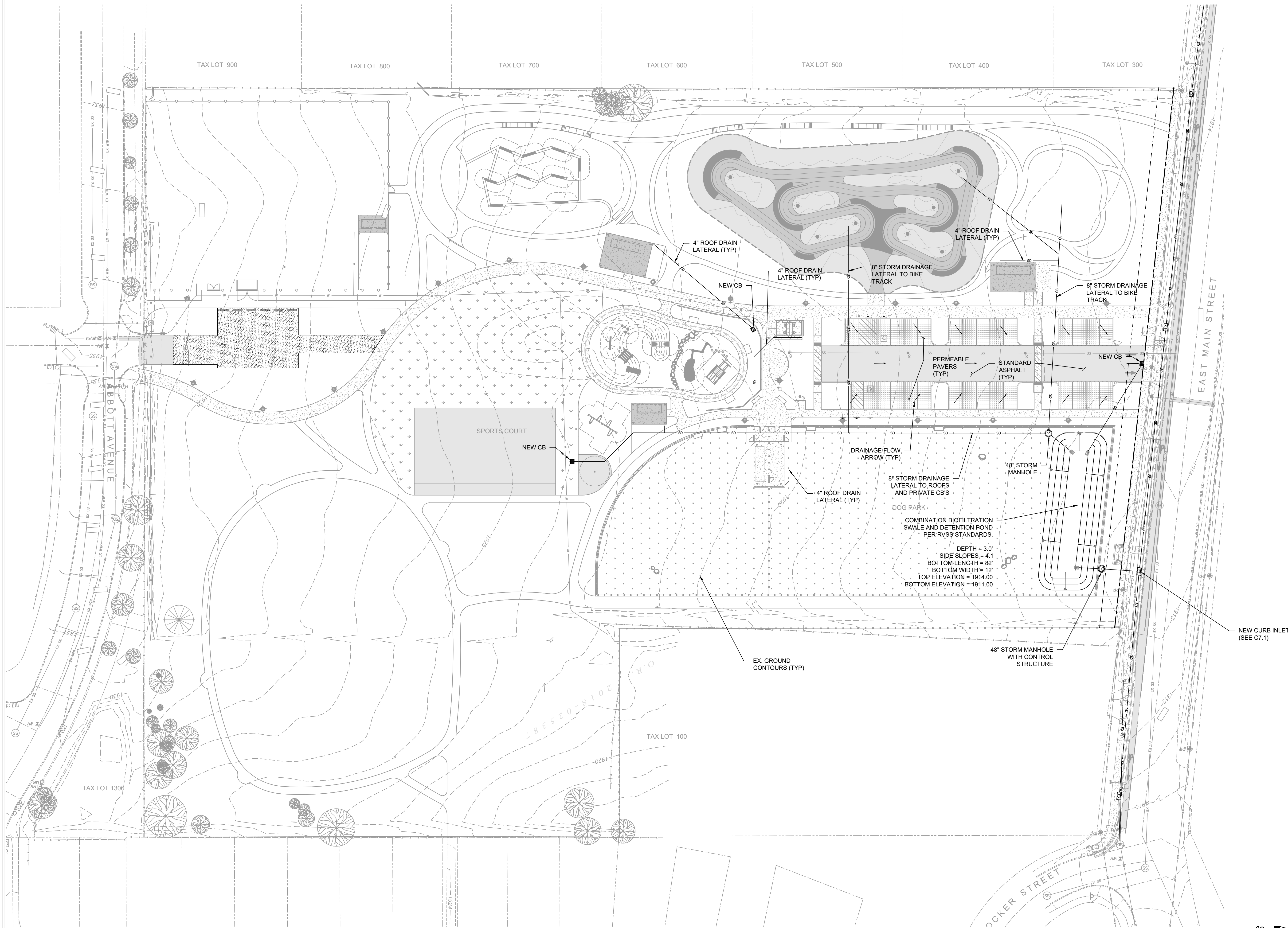
VERIFY SCALES
ORIGINAL DRAWING
BAR IS ONE INCH



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SHEET, ADJUST SCALES
ACCORDINGLY

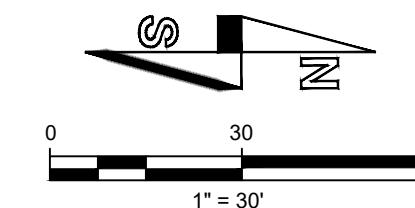
EAST MAIN STREET PARK
CITY OF ASHLAND PARKS AND RECREATION
MAP 39-JE-11-CR, TAX LOT 200
2228 EAST MAIN STREET, ASHLAND, OR 97520

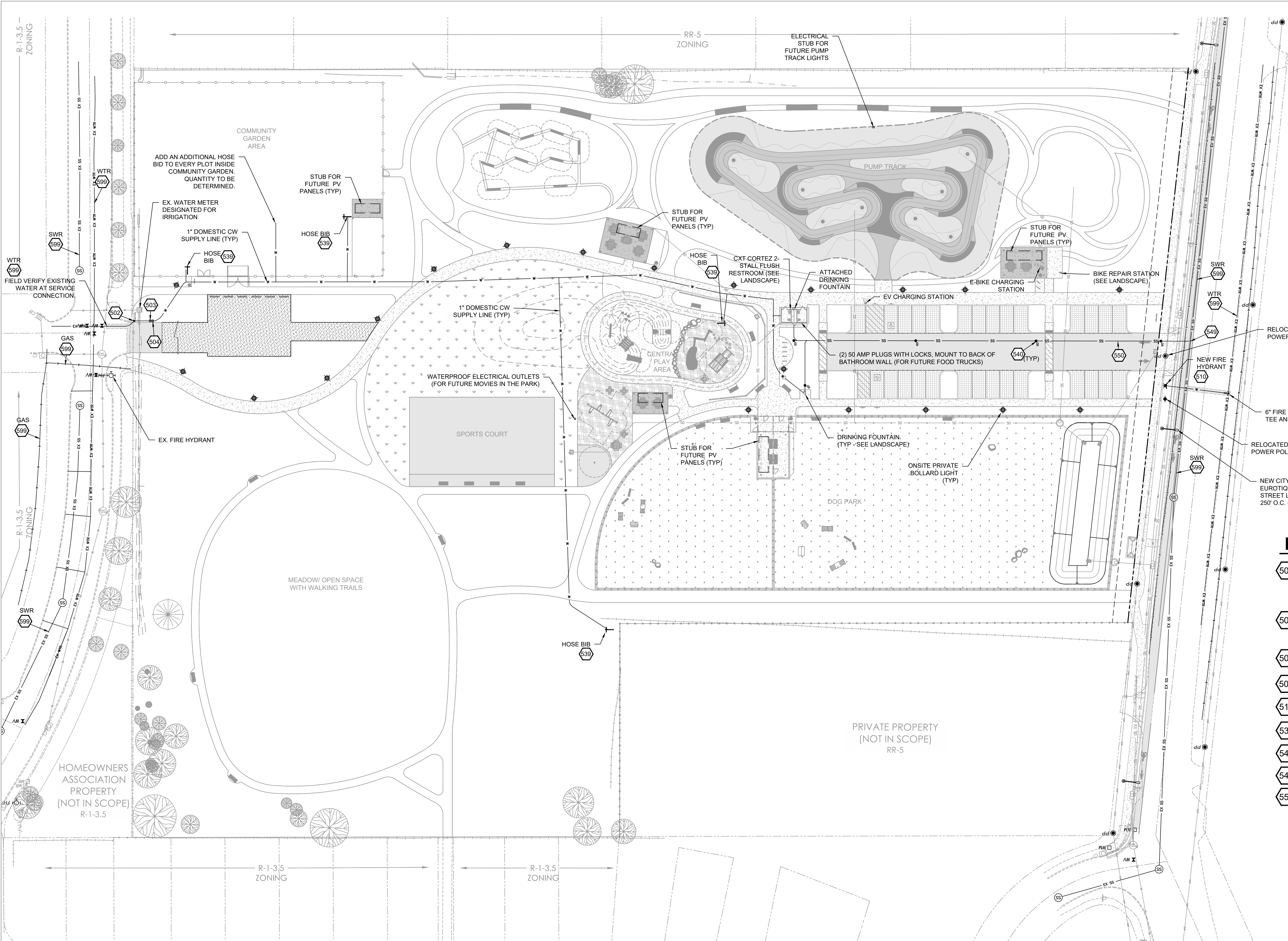
MAP 39-1E-11-CB, TAX LOT 200
2228 EAST MAIN STREET, ASHLAND, OR 97520

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PLAN VIEW - PRELIMINARY GRADING AND DRAINAGE PLAN

SCALE: 1" = 30' - 0" (24x36)



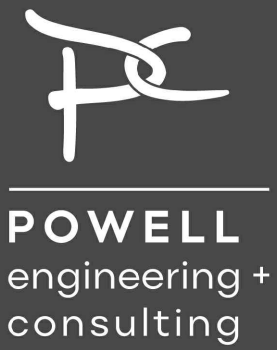


GENERAL NOTES

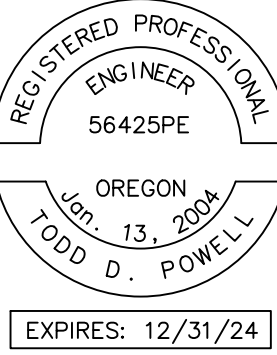
- SEE LANDSCAPE PLANS FOR PLANTING AND IRRIGATION DETAILS AND SPECIFICATIONS.

UTILITY STATEMENT:

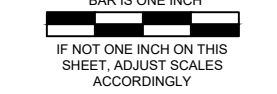
EXISTING UNDERGROUND UTILITIES ILLUSTRATED IN THESE PLANS ARE APPROXIMATED BASED ON MAPS OBTAINED FROM THE CITY OF ASHLAND PUBLIC WORKS, OR HAVE BEEN LOCATED BY A UTILITY LOCATE COMPANY. LAYOUT INDICATED IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. ALL LINES WITHIN PROJECTED WORK ZONE SHALL BE FIELD VERIFIED AS REQUIRED PRIOR TO CONSTRUCTION.



100 E. Main St., Suite O
Medford, OR 97501
541.613.0723 phone
www.powellengineeringconsulting.com



VERIFY SCALES



EAST MAIN STREET PARK CITY OF ASHLAND PARKS AND RECREATION

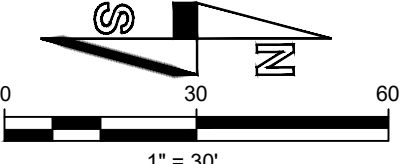
MAP 39-1E-11-CB, TAX LOT 200
2228 EAST MAIN STREET, ASHLAND, OR 97520

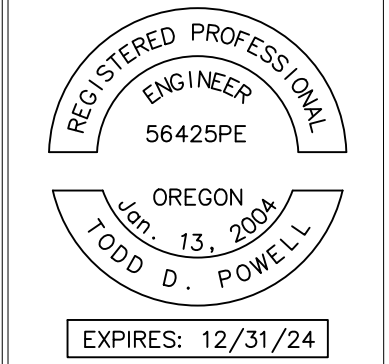
KEYNOTES

- 502 CITY TO INSTALL 1" WATER METER. CONTRACTOR TO PROVIDE EXCAVATION, BACKFILL, SHORING, DEWATERING, TRAFFIC CONTROL, AND SETTING METER TO GRADE.
- 503 INSTALL STATE OF OREGON APPROVED BACKFLOW DEVICE. TESTING SHALL BE COMPLETED BY AN OREGON CERTIFIED BACKFLOW ASSEMBLY TESTER.
- 504 PRESSURE REDUCING VALVE
- 506 WATER SERVICE LINE
- 510 FIRE HYDRANT ASSEMBLY
- 539 HOSE BIB
- 540 SANITARY SEWER CLEAN OUT
- 549 SEWER SERVICE CONNECTION TO EXISTING
- 550 4" PVC SEWER LATERAL AT 2% MIN. SLOPE

PLAN VIEW - SITE UTILITY PLAN

SCALE: 1" = 30' - 0" (24x36)





VERIFY SCALES
ORIGINAL DRAWING
BAR IS ONE INCH

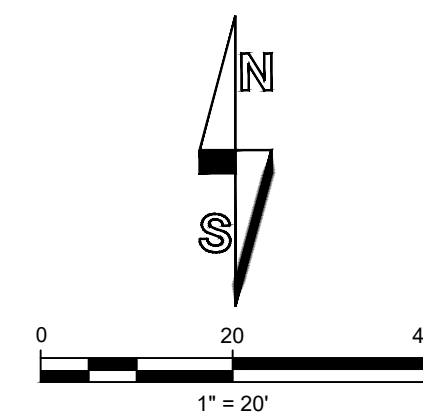
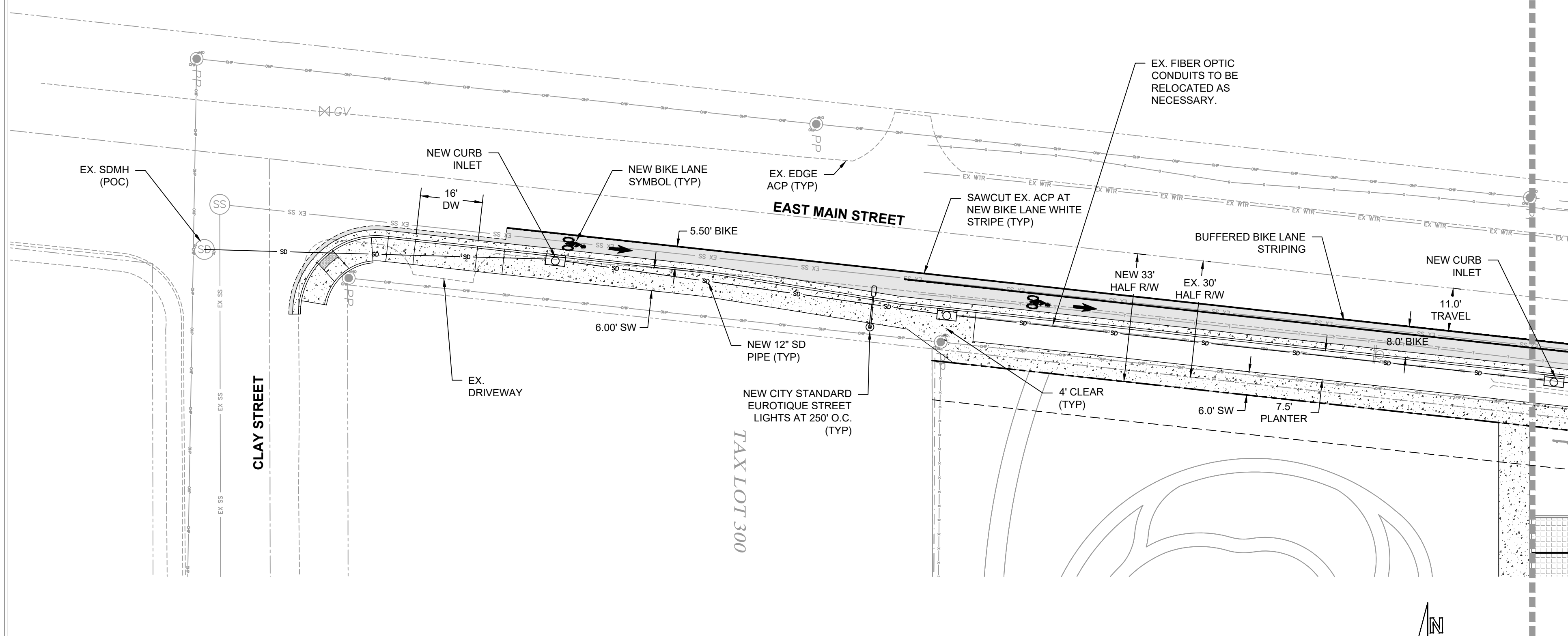
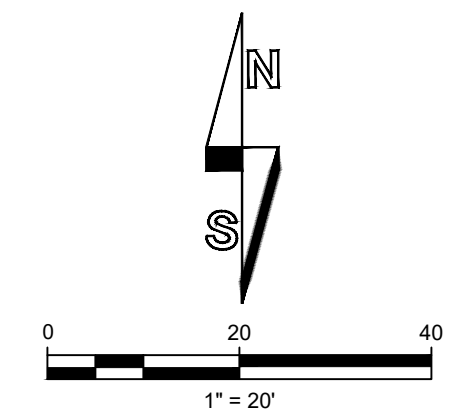
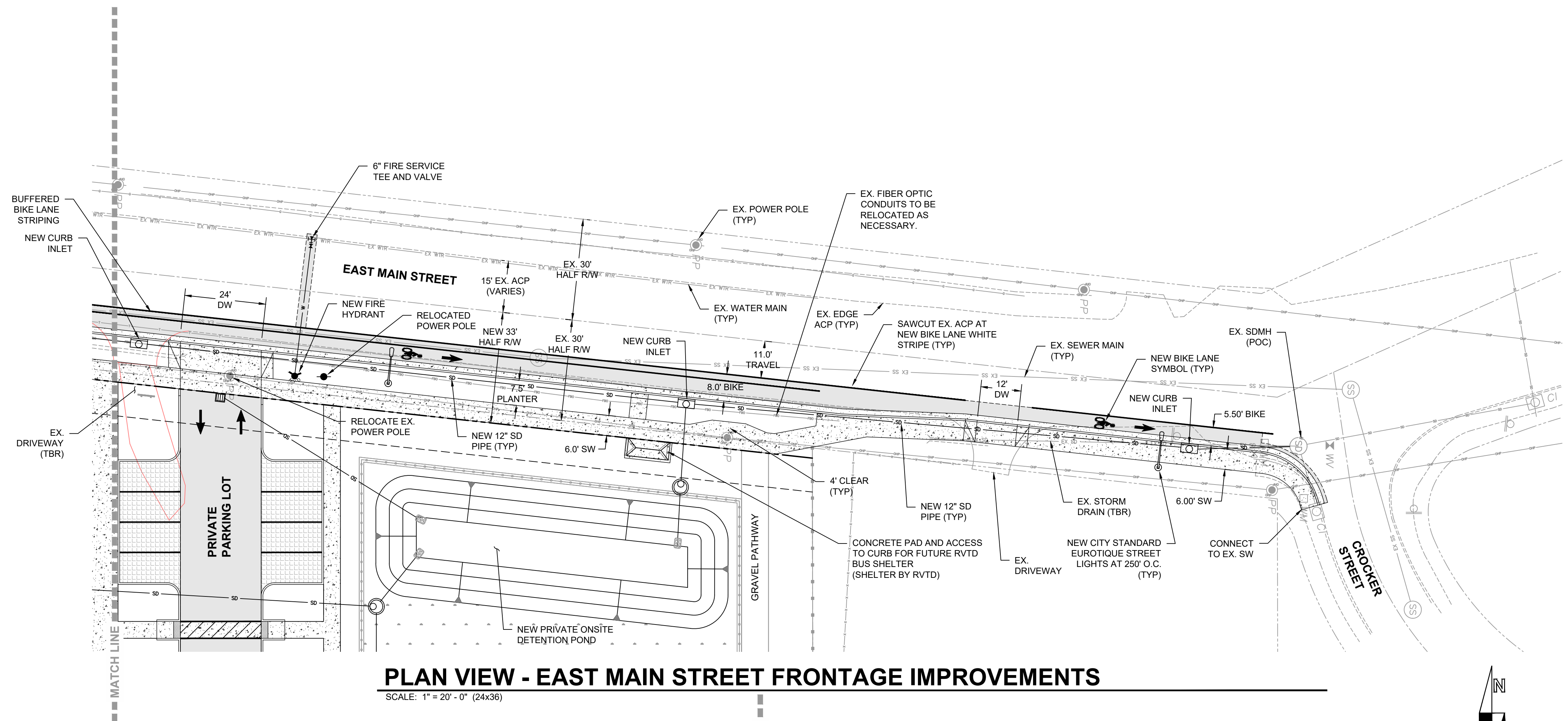


IF NOT ONE INCH ON THIS
SHEET, ADJUST SCALES
ACCORDINGLY

EAST MAIN STREET PARK
CITY OF ASHLAND PARKS AND RECREATION
MAP 39-JE-11-CR, TAX LOT 200
2228 EAST MAIN STREET, ASHLAND, OR 97520

MAP 39-1E-11-CB, TAX LOT 200
2228 EAST MAIN STREET, ASHLAND, OR 97520

DATE						
		REVISION DESCRIPTION				
NO.						
DRAWN BY:	TDP					
DESIGNED BY:	TDP					
CHECKED BY:	TDP					
ISSUE DATE:	05/06/24					
SITE DESIGN REVIEW						
JOB NO. 21-003	FRONTAGE IMPROVEMENTS					
C7.1						



PLAN VIEW - EAST MAIN STREET FRONTAGE IMPROVEMENTS