

## ORDINANCE NO. NS-2309

AN ORDINANCE AMENDING THE BEND DEVELOPMENT CODE TO ADOPT THE OREGON STATE UNIVERSITY – CASCADES INSTITUTIONAL MASTER PLAN.

### Findings

- A. On January 2, 2018, Oregon State University – Cascades submitted a Type III Quasi-judicial application for a Development Code amendment for the OSU-Cascades Master Plan.
- B. On April 9, 2018, the Planning Commission held a public hearing on the Development Code amendments and issued a recommendation that the City Council adopt an Ordinance to amend the Development Code to codify the OSU-Cascades Overlay Zone, including the Phasing Plan and Transportation and Parking Demand Management (TPDM) Plan.
- D. The Bend City Council held a public hearing on May 16, 2018, to consider the Planning Commission recommendation.
- E. The amendments to the Development Code approved by this Ordinance meet all applicable Development Code criteria, policies of the Bend Area General Plan, Oregon Statewide Planning Goals, and the Transportation Planning Rule.

### THE CITY OF BEND ORDAINS AS FOLLOWS:

- Section 1. The Bend Development Code is amended to codify the OSU-Cascades Overlay Zone as contained in Exhibit A.
- Section 2. The OSU-Cascades Phasing Plan is adopted as contained in Exhibit B.
- Section 3. The OSU-Cascades Transportation and Parking Demand Management (TPDM) Plan is adopted as contained in Exhibit C.
- Section 4. The City Council adopts the findings in support of this ordinance as contained in Exhibit D.

First reading: May 16, 2018.

Second reading and adoption by roll call vote: June 6, 2018.


YES: Casey Roats, Mayor  
Sally Russell  
Bruce Abernethy  
Bill Moseley  
Nathan Boddie  
Justin Livingston  
Barb Campbell

  
\_\_\_\_\_  
Casey Roats, Mayor

Attest:

  
\_\_\_\_\_  
Robyn Christie, City of Bend Recorder

Approved as to form:

  
\_\_\_\_\_  
Mary Winters, City Attorney

# EXHIBIT A

## Chapter 2.7 SPECIAL PLANNED DISTRICTS

Sections:

Article XVII. Oregon State University - Cascades Overlay Zone

- 2.7.3500 Oregon State University – Cascades.**
- 2.7.3510 Purpose and Applicability.**
- 2.7.3520 Definitions.**
- 2.7.3530 Permitted, Conditional and Accessory Uses.**
- 2.7.3540 Development Standards.**
- 2.7.3550 Parking and Loading.**
- 2.7.3560 Special Street Standards.**
- 2.7.3570 Transportation Mitigation.**
- 2.7.3580 Transportation and Parking Demand Management Plan**
- 2.7.3590 Future Capacity Reservation**

Article XVII. Oregon State University - Cascades Overlay Zone

### **2.7.3500 Oregon State University – Cascades**

**2.7.3500 Oregon State University - Cascades**

**2.7.3510 Purpose and Applicability.**

A. The purpose of the Oregon State University – Cascades (OSU-C) Overlay Zone is to establish the OSU-C Master Plan and implement the relevant Bend Comprehensive Plan policies regarding the Century Drive Area Opportunity Area. The overlay standards will:

- Provide areas within the overlay district for a four-year, 5,000-student university and graduate school.
- Identify areas within the overlay district for traditional mixed-use development.
- Provide transportation options for students, staff and employees and reduce reliance on the automobile.
- Provide opportunities for a variety of housing options, including traditional student dormitories, staff housing, and multi-family housing available to the community.
- Encourage pedestrian-friendly development that is supportive of transit.

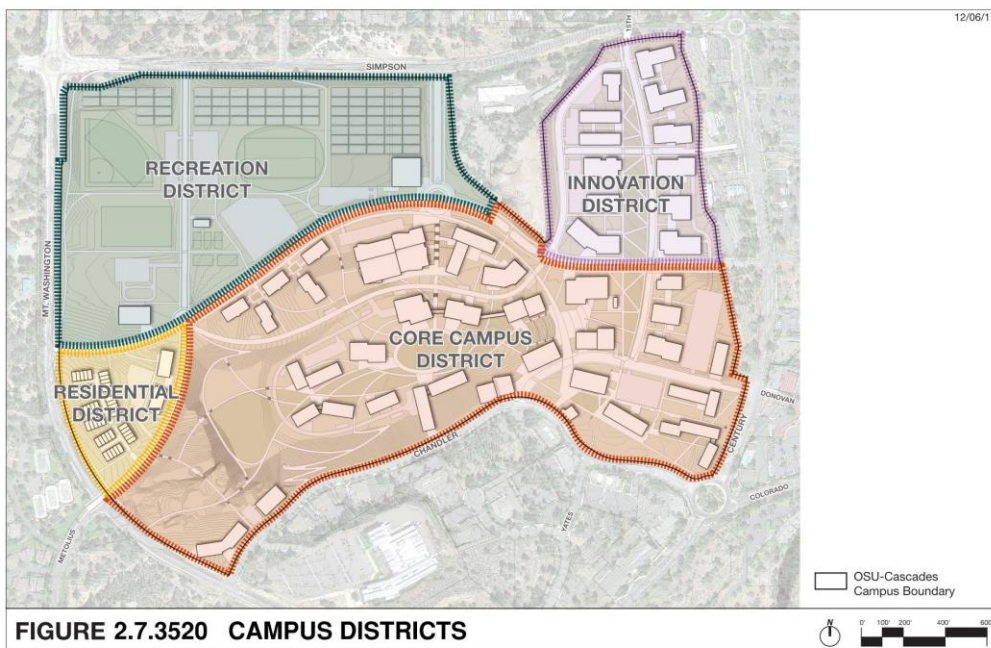
- Create an economically successful mixed-use center.
- Provide opportunities for university-related research and development.

B. The area regulated by the OSU-C Overlay Zone is approximately 128 acres of land and includes the areas on Figure 2.7.3520, Campus Districts.

### 2.7.3520 Definitions

The following definitions apply to uses, buildings types and standards that are specific to the OSU-C Overlay Zone:

- A. **OSU-C Campus** means the area identified as the “OSU-C Campus” on Figure 2.7.3520, which includes the Innovation District, Core Campus District, Recreation District and Residential District.
- B. **Innovation District** means the area identified as the “Innovation District” on Figure 2.7.3520.
- C. **Core Campus District** means the area identified as the “Core Campus District” on Figure 2.7.3520. The Core Campus District includes the existing 10-acre campus approved in 2014 under PZ 14-0210.
- D. **Recreation District** means the area identified as the “Recreation District” on Figure 2.7.3520.
- E. **Residential District** means the area identified as the “Residential District on Figure 2.7.3520.

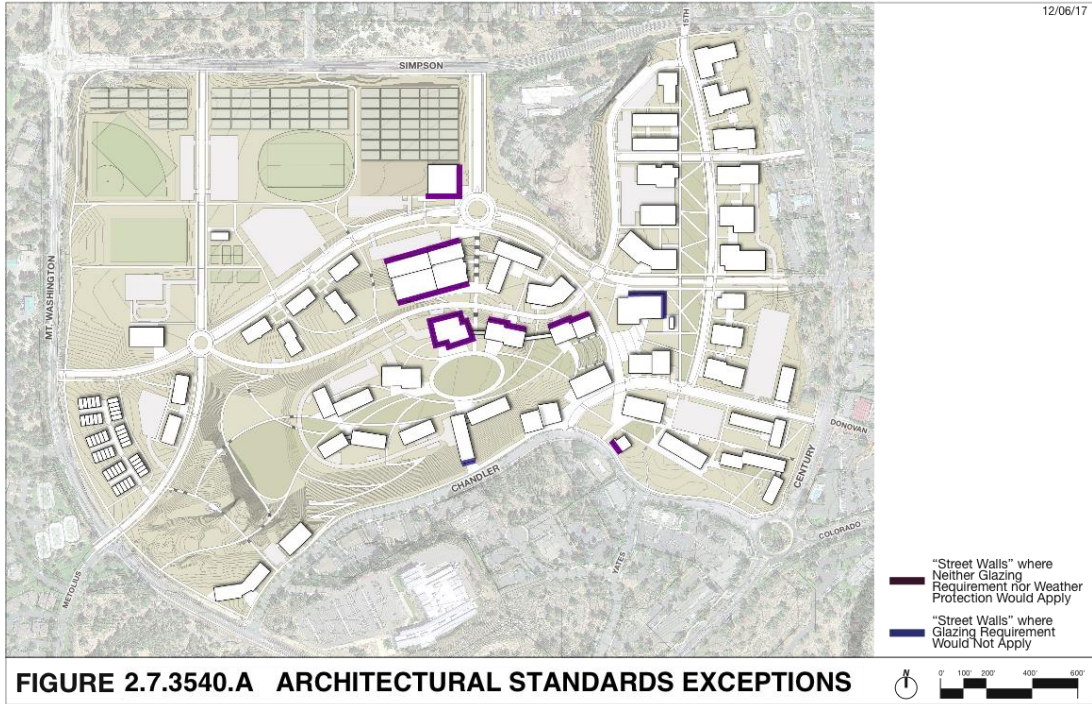


### **2.7.3530 Permitted, Conditional and Accessory Uses**

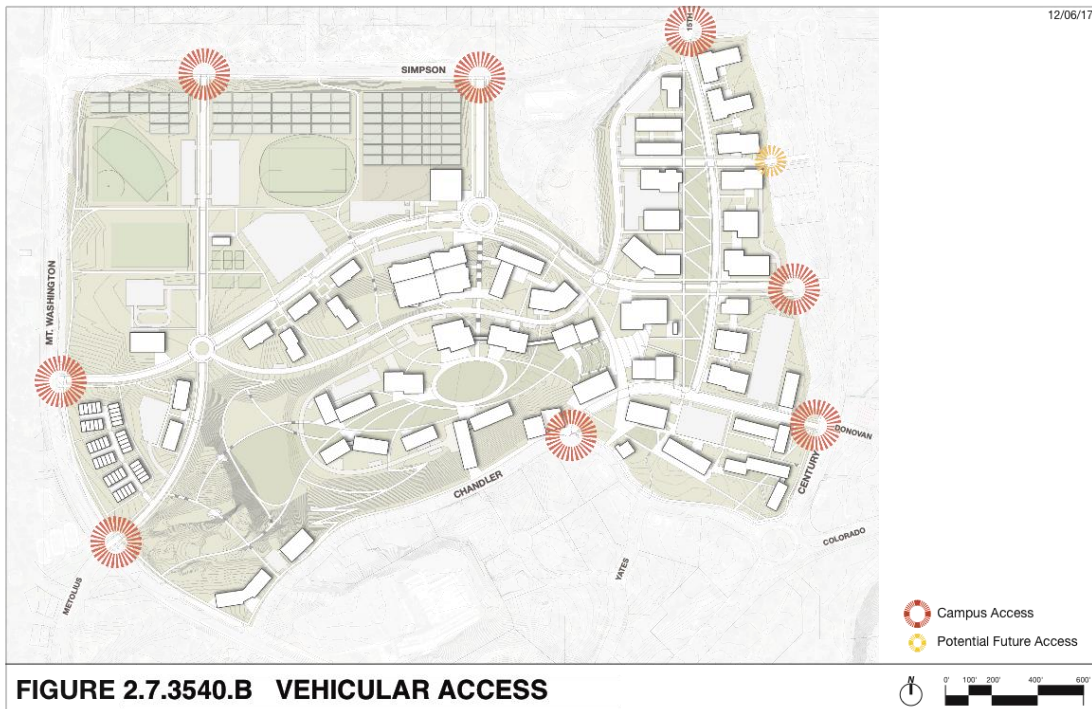
- A. Permitted and Conditional Uses. All permitted uses in the MU Zone are permitted uses in the OSU-C Overlay Zone. All conditional uses in the MU Zone are conditional uses in the OSU-C Overlay Zone.
- B. Accessory Uses. In addition to accessory uses permitted in the MU Zone, the following accessory uses are permitted in the OSU-C Overlay:
  - 1. Central Utility Plant;
  - 2. Alternative energy system(s) to serve university energy needs;
  - 3. Stormwater and wastewater management systems/facilities;
  - 4. Parks, playgrounds, play fields, athletic facilities, sports complexes, recreational facilities, trails, natural areas, open spaces;
  - 5. Uses and structures that are of a nature customarily incidental and subordinate to a permitted use or an approved conditional use, including, but not limited to, parking lots/parking areas and service roads needed to serve permitted or conditional uses;
  - 6. Outdoor storage provided such storage is set back at least 25 feet from the OSU-C Campus boundary and is screened from the public right-of-way;
  - 7. Facilities yard (maintenance vehicles, equipment and similar uses);
  - 8. Public safety facilities.

### **2.7.3540 Special Development Standards**

- A. Applicability. The special development standards of the OSU-C Overlay Zone supersede the standards of the underlying zone and Title 3 where they vary. Where no special standards are provided, the applicable standards of the underlying zone apply.
- B. Maximum Front Yard Setback. There is no maximum front setback; however, where a building is set back more than 10 feet from a public or private right of way, one or more of the following treatments must be included in the setback area between the building and the street:
  - 1. Sidewalks or multi-use paths 10 feet or wider;
  - 2. Improved plazas and pedestrian areas;
  - 3. Outdoor dining and/or gathering areas;
  - 4. Specialty landscaping, including water treatment-oriented landscaping;
  - 5. Native landscaping, woodland forest areas;
  - 6. Traditional campus greens, quadrangle or park areas; and
  - 7. Parking and Maneuvering Areas as allowed by BDC 2.7.3550.A.
- C. Architectural Standards. The street-walls that will not be required to meet the architectural standards of BDC 2.3.500 are depicted in Figure 2.7.3540.A.



- D. Block Lengths. Block length and perimeters within the OSU-C Overlay Zone are generally depicted on Figure 2.7.3540.B.
- E. Vehicular Access Management. Vehicular access to the City's street system is permitted in the general locations depicted on Figure 2.7.3540.B.

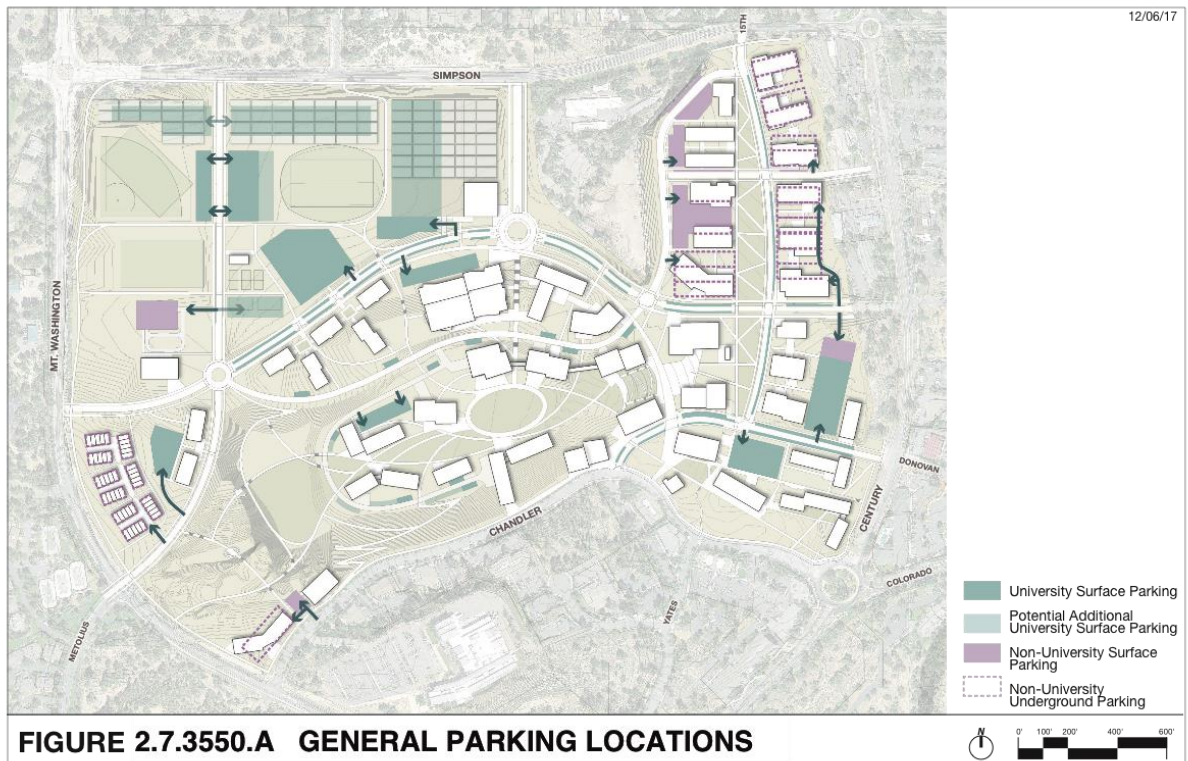


F. Landscape Requirements. Parking lots that will serve a dual purpose for energy generation with photovoltaic arrays will not be required to meet the landscaping requirement of BDC Chapter 3.2.

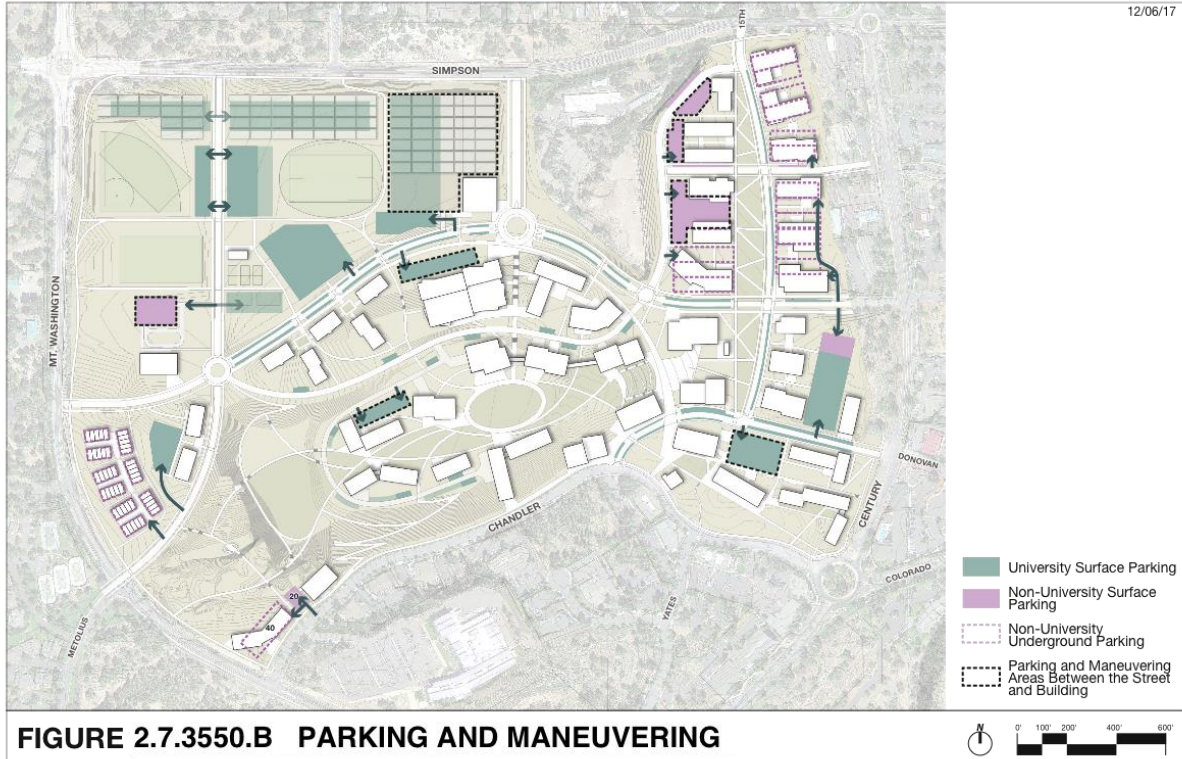
### 2.7.3550 Parking and Loading.

A. Parking Location. The required number of vehicle parking spaces must comply with the standards of BDC Table 3.3.300, or as modified by the approved Transportation Parking Demand Management program contained in Ordinance NS-[REDACTED]. The general locations of possible parking areas as depicted in Figure 2.7.3550.A must comply with the following:

1. Parking in the Core Campus District may be provided in the Core Campus District, the Recreation District or a combination of both.
2. Parking in the Innovation District may be provided in the Innovation District or in the eastern portion of the Core Campus District.
3. Parking in any other district must be located in the same district consistent with the requirements of BDC Chapter 3.3.



B. Parking and Maneuvering Areas. Parking and maneuvering areas located between the street and the building are only permitted in the general locations shown on Figure 2.7.3550.B.

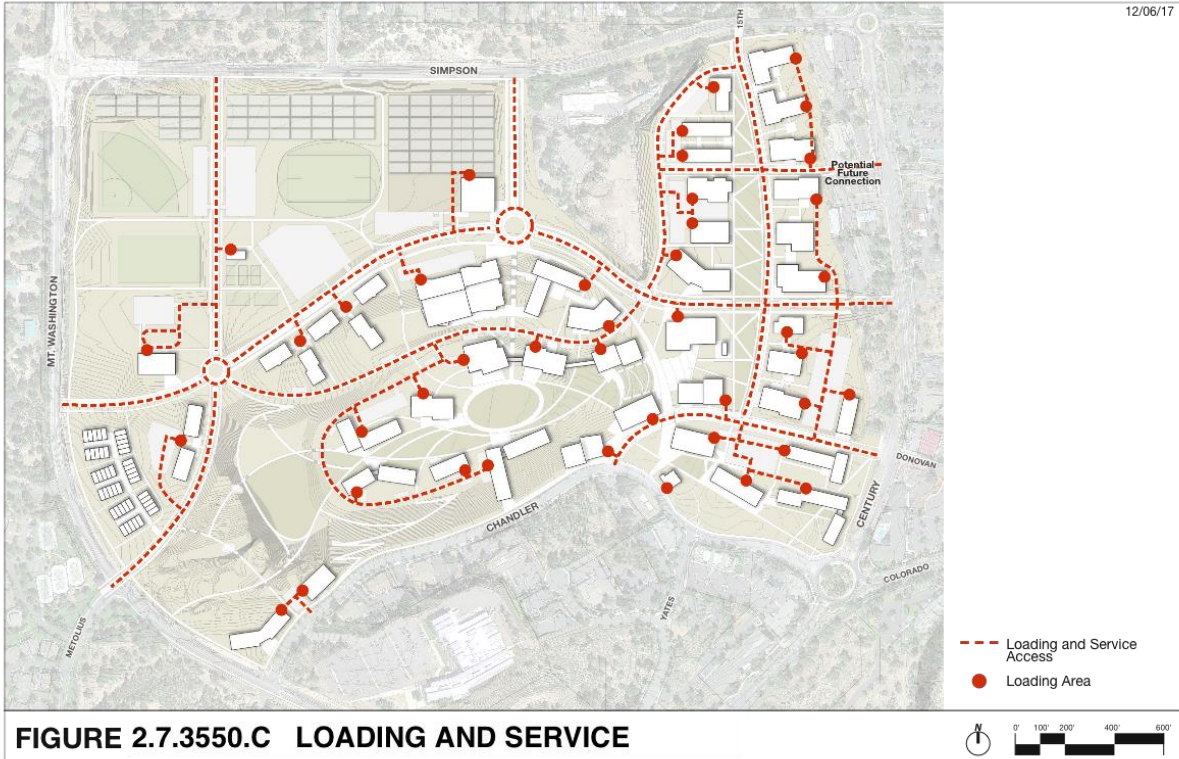


### C. Bicycle Parking Standards.

1. Location and Timing: The required number of bicycle parking spaces may be located in areas subject to a prior Site Plan Review approval provided that the applicant demonstrates that the alternate location will better serve the OSU-C Campus population.

### D. Loading and Service Standards. Loading and service areas are permitted in the locations generally depicted on Figure 2.7.3550.C.

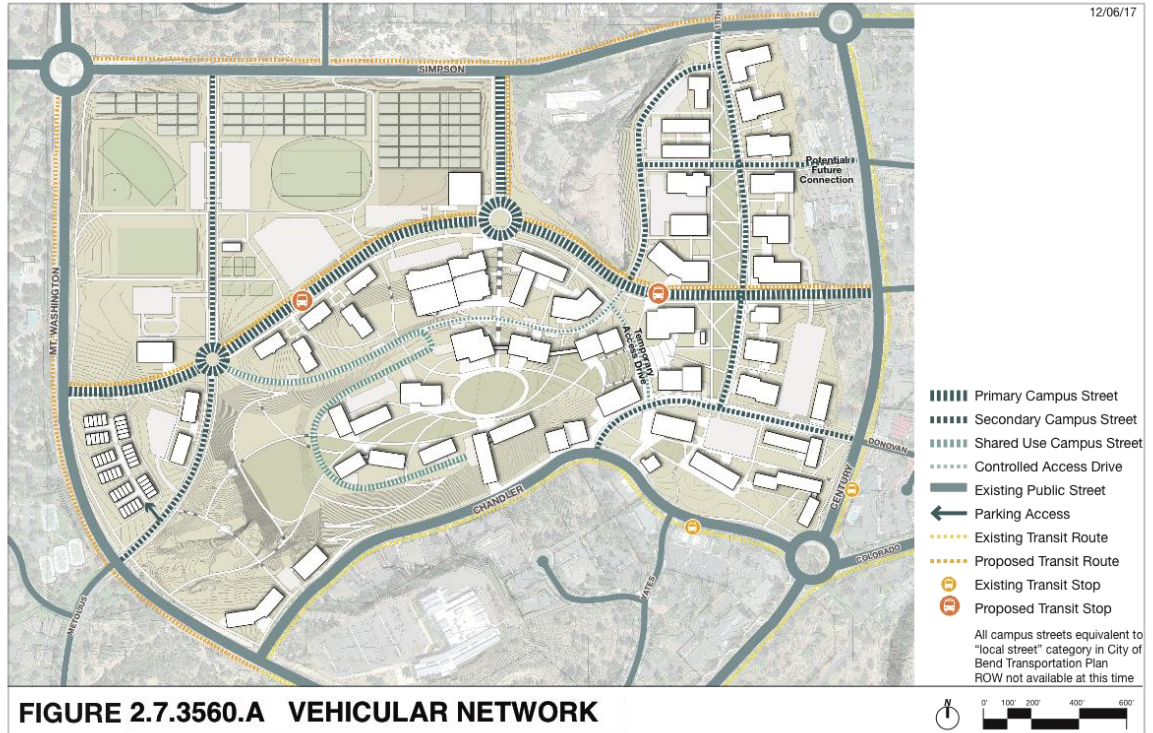




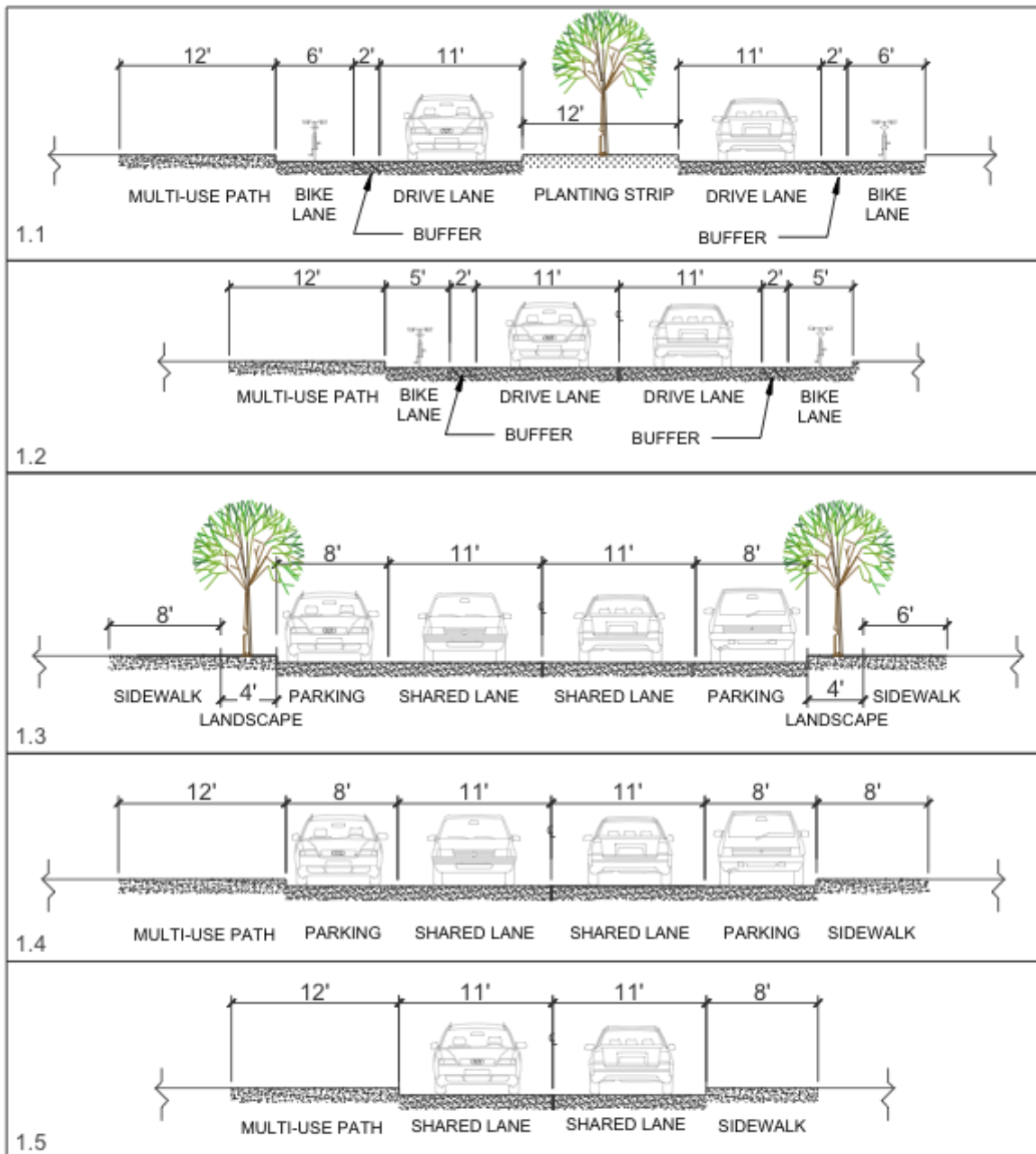
## 2.7.3560 Special Street Standards

A. Figure 2.7.3560.A depicts the street type, street location and alignment within the OSU-C Overlay Zone. The associated typical street cross sections are below.

1. Primary campus street sections must comply with the standards for private streets found in BDC Chapter 3.4, or be selected from the typical sections 1.1 to 1.5, as shown below.
2. Secondary campus street sections must comply with the standards for private streets found in BDC Chapter 3.4, or be selected from the typical sections 2.1 to 2.3, as shown below.
3. Shared use campus street sections must comply with the standards for private streets found in BDC Chapter 3.4, or meet the standards of typical section 3.1 shown below.
4. Controlled access drive sections must comply with the standards for private streets found in BDC Chapter 3.4, or meet the standards of typical section 4.1 shown below. Gates, bollards or barriers restricting vehicular access may be allowed upon City review.

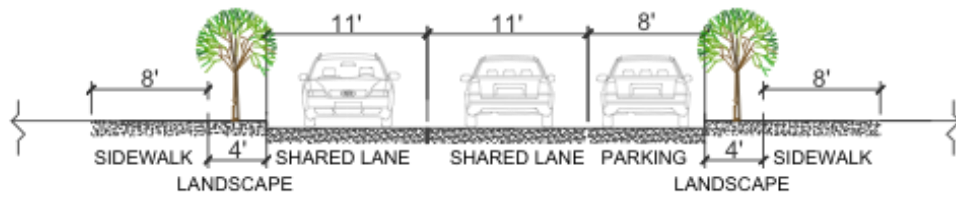


- B. Any City street standard adopted after the effective date of the ordinance codified in this chapter, which permits a lesser street standard to be applied citywide, may be applied in the OSU-C Overlay Zone.
- C. Local Streets. Local streets within the OSU-C Overlay Zone may be public or private streets. All private streets must comply with the standards for private streets found in BDC Chapter 3.4, or as set forth in Figure 2.7.3560.A and the associated typical sections.

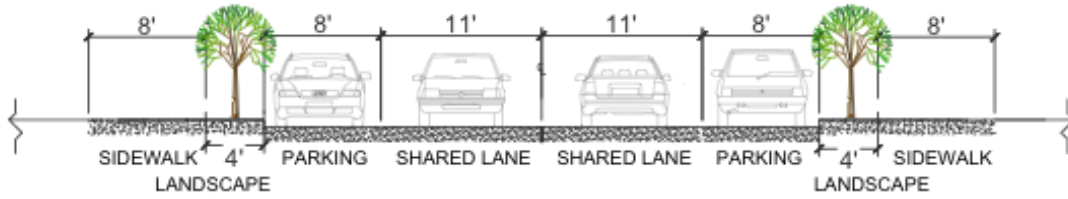


**TYPICAL STREET SECTION N.T.S**

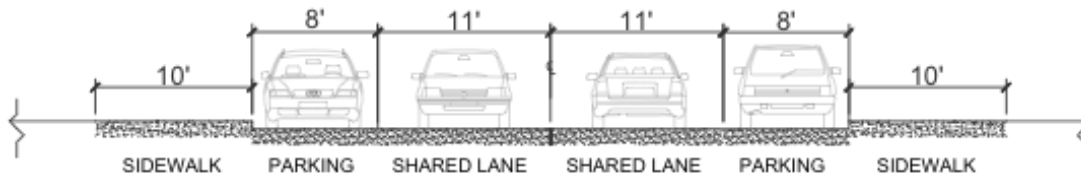
PRIMARY CAMPUS STREET (PRIVATE)



2.1



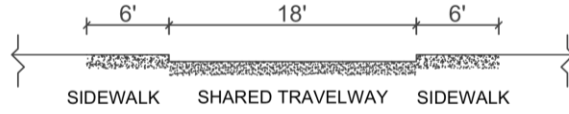
2.2



2.3

**TYPICAL STREET SECTION N.T.S**  
**SECONDARY CAMPUS STREET (PRIVATE)**

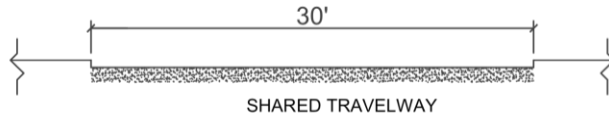
3.1



### TYPICAL STREET SECTION N.T.S

SHARED USE CAMPUS STREET (PRIVATE)

4.1



### TYPICAL STREET SECTION N.T.S

CONTROLLED ACCESS DRIVE (PRIVATE)

**2.7.3570 Transportation Mitigation Plan**

- A. Applicability. The following Transportation Mitigation Plan applies to all development within the Oregon State University – Cascades Overlay Zone. The Transportation Mitigation Plan is adopted and implemented pursuant to BDC 4.7.600.D(1).
- B. Alternate Transportation Design Standards. Transportation facilities within the Oregon State University – Cascades Overlay Zone shall comply with the standards set forth in BDC 2.7.3560 and BDC Figure 2.7.3560.A.
- C. Development Limitations. In order to ensure consistency with the Traffic Impact Analysis prepared for the Oregon State University – Cascades Master Plan and to mitigate impacts to the City’s transportation system, the following traffic generating uses within the Oregon State University – Cascades Overlay Zone are limited to the thresholds in Table 2.7.3570.D.
- D. Transportation Mitigation. The following transportation mitigation measures must be constructed pursuant to the phasing schedule in Table 2.7.3570.D prior to Certification of Occupancy for any building in the phase.

**Table 2.7.3570.D**

Phase	Proposed buildings (with traffic impact)	Proposed Buildings (no traffic impact)	Mitigation requirements
Phase 1A	<ul style="list-style-type: none"> <li>• 55,000 gsf academic building</li> <li>• 55,000 gsf of Innovation District facilities</li> </ul>		<ul style="list-style-type: none"> <li>• Non-Mountable single lane roundabout at SW Colorado Avenue and SW Columbia Street</li> </ul>
Phase 1B		<ul style="list-style-type: none"> <li>• 22,500 gsf student success center (phase one of building)</li> <li>• 166-bed student residence</li> </ul>	<ul style="list-style-type: none"> <li>• Portion of a 10’ wide sidewalk and curb on south side of Simpson Ave between the Mt. Washington roundabout east to the existing sidewalk fronting 339 SW Century Drive (portions of the sidewalk may be pushed to future phases as long as the existing path remains functional)</li> <li>• Dedication of right-of-way (ROW) along Simpson Avenue to provide 50 feet of ROW from the ROW centerline</li> </ul>

Phase	Proposed buildings (with traffic impact)	Proposed Buildings (no traffic impact)	Mitigation requirements
			<ul style="list-style-type: none"> <li>• Westbound left-turn lane at SW Simpson Avenue and OSU-C Main Entrance</li> <li>• Marked pedestrian crossing with refuge island at SW Simpson Avenue and Main OSU-C Entrance</li> </ul>
Phase 2	<ul style="list-style-type: none"> <li>• 55,000 gsf academic building</li> <li>• 40,000 assembly building</li> <li>• 142,000 gsf of Innovation District facilities plus middle market housing (72 units)</li> </ul>	<ul style="list-style-type: none"> <li>• 249-bed student residences</li> <li>• Central utility plant</li> <li>• 40,000 gsf recreation facility (phase one of building)</li> </ul>	<ul style="list-style-type: none"> <li>• Non-Mountable single lane roundabout at SW Columbia Street and SW Simpson Avenue (if not already constructed by others)</li> <li>• Mountable Single Lane Roundabout at SW Century Drive and OSU-C Main Entrance</li> <li>• Sidewalk connection on the south side of SW Simpson Avenue between SW Columbia Street and the Safeway site at 320 SW Century Drive.</li> <li>• Taylor Drive from Century Drive to the site</li> <li>• Westbound left-turn lane at SW Simpson Avenue and 15<sup>th</sup> Street</li> <li>• Pedestrian crossing at SW Simpson Avenue and SW 15<sup>th</sup> Street</li> </ul>
Phase 3	<ul style="list-style-type: none"> <li>• 110,000 gsf of additional academic space</li> <li>• 52,800 gsf early learning center</li> <li>• 42,000 gsf of Innovation District facilities plus middle market housing (42 units)</li> </ul>	<ul style="list-style-type: none"> <li>• 18,000 gsf dining facility</li> <li>• student residences with 265 additional beds</li> </ul>	<ul style="list-style-type: none"> <li>• Southbound left-turn lane at SW Mt. Washington Drive and OSU-C Entrance</li> <li>• Marked pedestrian crossing of SW Mt. Washington Drive at OSU-C Access point</li> <li>• Marked pedestrian crossing of SW Simpson Avenue at West OSU-C Access</li> <li>• 10' sidewalk along east side of Mt. Washington from existing sidewalk at Chandler Ave to the Simpson roundabout</li> </ul>

Phase	Proposed buildings (with traffic impact)	Proposed Buildings (no traffic impact)	Mitigation requirements
			<ul style="list-style-type: none"> <li>• Curb along property frontage on Mt. Washington from existing curb south of Metolious intersection to existing curb at Chandler Ave</li> <li>• Dedication of ROW along Mt. Washington to provide 50 feet of ROW from the ROW centerline</li> <li>• Remainder of a 10' wide sidewalk on south side of Simpson Ave if not already constructed</li> </ul>
Phase 4A	<ul style="list-style-type: none"> <li>• 110,000 gsf of additional academic space</li> <li>• 55,000 gsf expansion of recreation facility (phase two of building)</li> <li>• 141,000 gsf of Innovation District facilities plus middle market housing (187 units)</li> </ul>	<ul style="list-style-type: none"> <li>• 35,000 gsf student success center (phase two of building)</li> <li>• 661-bed student residences</li> </ul>	<ul style="list-style-type: none"> <li>• Southbound left-turn lane at SW Mt. Washington Drive and SW Metolious Drive</li> <li>• Marked pedestrian crossings on SW Mt. Washington Drive at Metolious Drive access point</li> </ul>
Phase 4B	<ul style="list-style-type: none"> <li>• 45 units of middle market housing</li> <li>• 30,000 gsf mixed-use partner</li> </ul>	<ul style="list-style-type: none"> <li>• 30,000 gsf of research space</li> <li>• 345-bed student residences</li> </ul>	

E. Modifications to Transportation Mitigation Plan. If the applicant proposes modifications to the OSU-Cascades Master Plan pursuant to BDC 4.5.100.F which result in an increase of more than 15 percent in the aggregate square footage of the traffic impact producing buildings, or an increase of more than 15 percent in the number of residential units identified in Table 2.7.3570.D, the Site Plan Review application for such building must include a supplemental traffic analysis utilizing the Transportation Impact Analysis prepared for the OSU-Cascades Master Plan to determine whether the increase in building square footage or residential units would



require one or more off-site operational improvements identified in Table 2.7.3570.D to be constructed prior to the time identified in Table 2.7.3570.D. If the supplemental traffic analysis determines that the mitigation requirements identified in Table 2.7.3570.D are required prior to the time identified in Table 2.7.3570.D, the applicant shall construct the mitigation requirements at the time identified in the supplement traffic analysis.

**2.7.3580 Transportation and Parking Demand Management Plan**

- A. Applicability. The following Transportation and Parking Demand Management Plan (TPDM Plan) applies to all development within the Oregon State University – Cascades Overlay Zone.
- B. Trip and Parking Reduction Measures. The TPDM Plan must include the measures set forth in BDC Table 2.7.3580.B, and may include any measures identified in BDC Table 4.8.500 – Trip and Parking Reduction Measures if such additional measures are adopted through Site Plan approvals, consistent with BDC 4.8.800.

**Table 2.7.3580.B**

<b>Facility Provision Measures</b>	<b>Parking Reduction</b>
Provide on-site showers and lockers free of charge.	5%
Provide enclosed bike lockers and/or fenced, covered bike storage areas and/or a designated bike storage area inside a building.	5%
<b>Ongoing Incentive Measures</b>	
Project is located within 1/4 mile of a transit facility and employer participates in CET’s Group Bus Program.	5%
Provide a bike-share program or free use of bikes on-site that is available to all tenants/employees of the site.	5%

- C. Ongoing Participation, Monitoring and Reporting. The applicant is required to commit to ongoing participation in the TPDM plan in its deeds, tenant leases, codes, covenants and restrictions and is subject to ongoing monitoring and tracking of the activities undertaken to implement the approved measures and their results. The

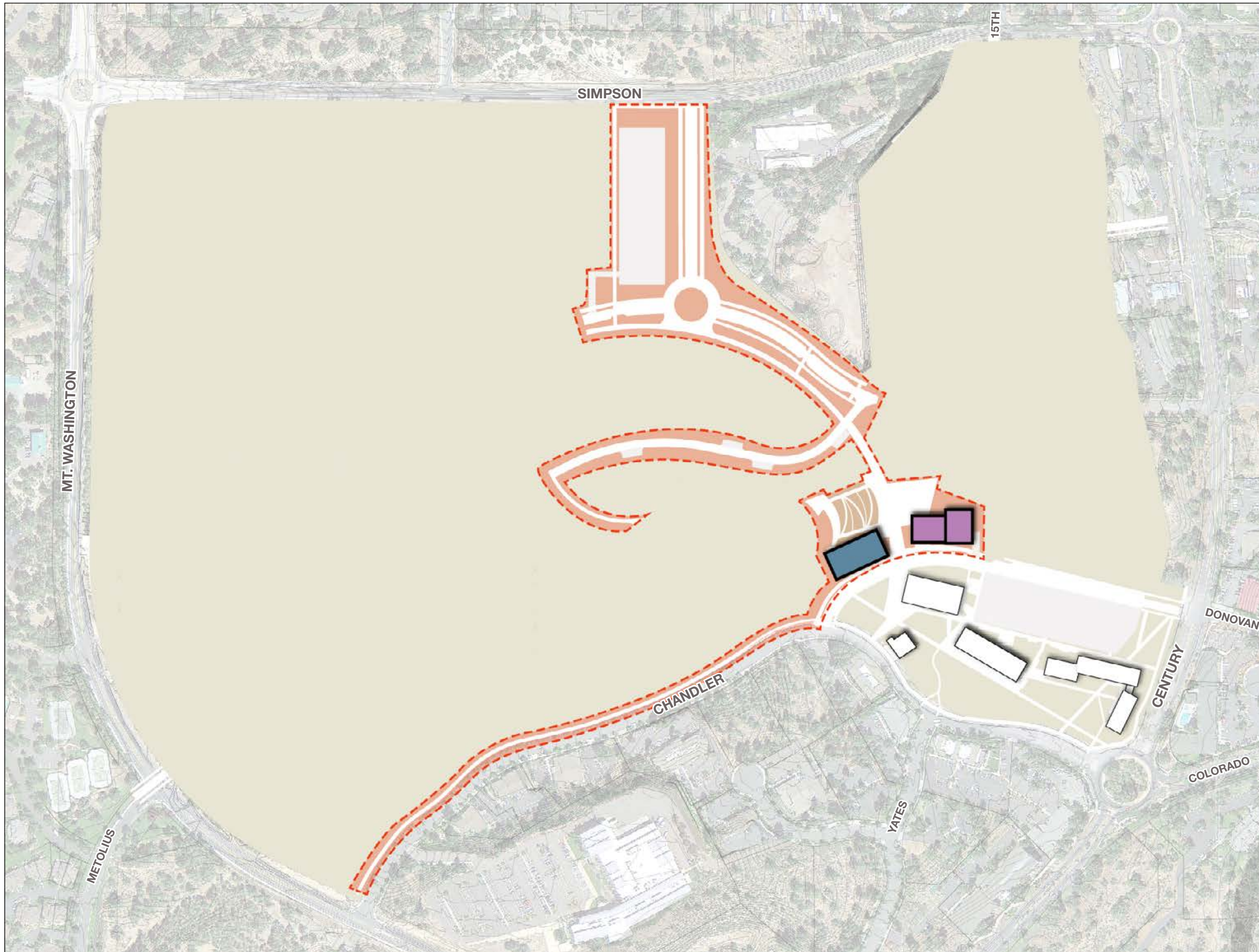
applicant shall submit an annual report to the City no later than August 30 of each year, which shall include the following information:

1. Evidence that the Parking Reduction measures identified in Table 2.7.3580.B or other Parking Reduction Measures approved pursuant to BDC 4.8.800 were in place or operational during the prior 12-month period.
2. A description of any voluntary Parking Reduction measures identified in BDC Table 4.8.500 in place or operational during the prior 12-month period.
3. The average utilization of parking spaces located in the Campus and Recreation Districts during Fall, Winter and Spring academic terms for the prior 12-month period. For purposes of reporting, counts shall be taken on a weekly basis between the weekday hours of 12pm and 4pm.

If the average utilization of parking spaces exceeds 93% during Fall, Winter or Spring term during any 12-month reporting period, the City shall have the discretion to require the applicant to provide additional parking spaces in the Recreation District concurrent with the next site plan application filed by the applicant. The number of additional parking spaces required during subsequent Site Plan Review must be equal to the number of parking spaces required to reduce the average utilization of parking spaces to 90%, based on the most recent reporting year.

### **2.7.3590 Future Capacity Reservation**

- A. The OSU-Cascades Master Plan reserves infrastructure capacity (sewer, water, and transportation) through and including 2034, for all Site Plan Review applications filed pursuant to the phasing plan through 2034. Site Plan Review applications submitted after 2034 will be subject to new utility and transportation analyses.
- B. Student Population. The OSU-Cascades campus is designed to accommodate a 5,000 student on-campus population. Concurrent with submission of site plan applications prior to December 31, 2034 for the final two academic buildings, the applicant shall demonstrate that the current on-campus student population, together with the on-campus student population to be supported by the final academic buildings, will not exceed 5,000 students. If the combined student population exceeds 5,000 students, the site plan applications shall include traffic impact, water and sewer analyses accounting for any combined student population in excess of 5,000 students.

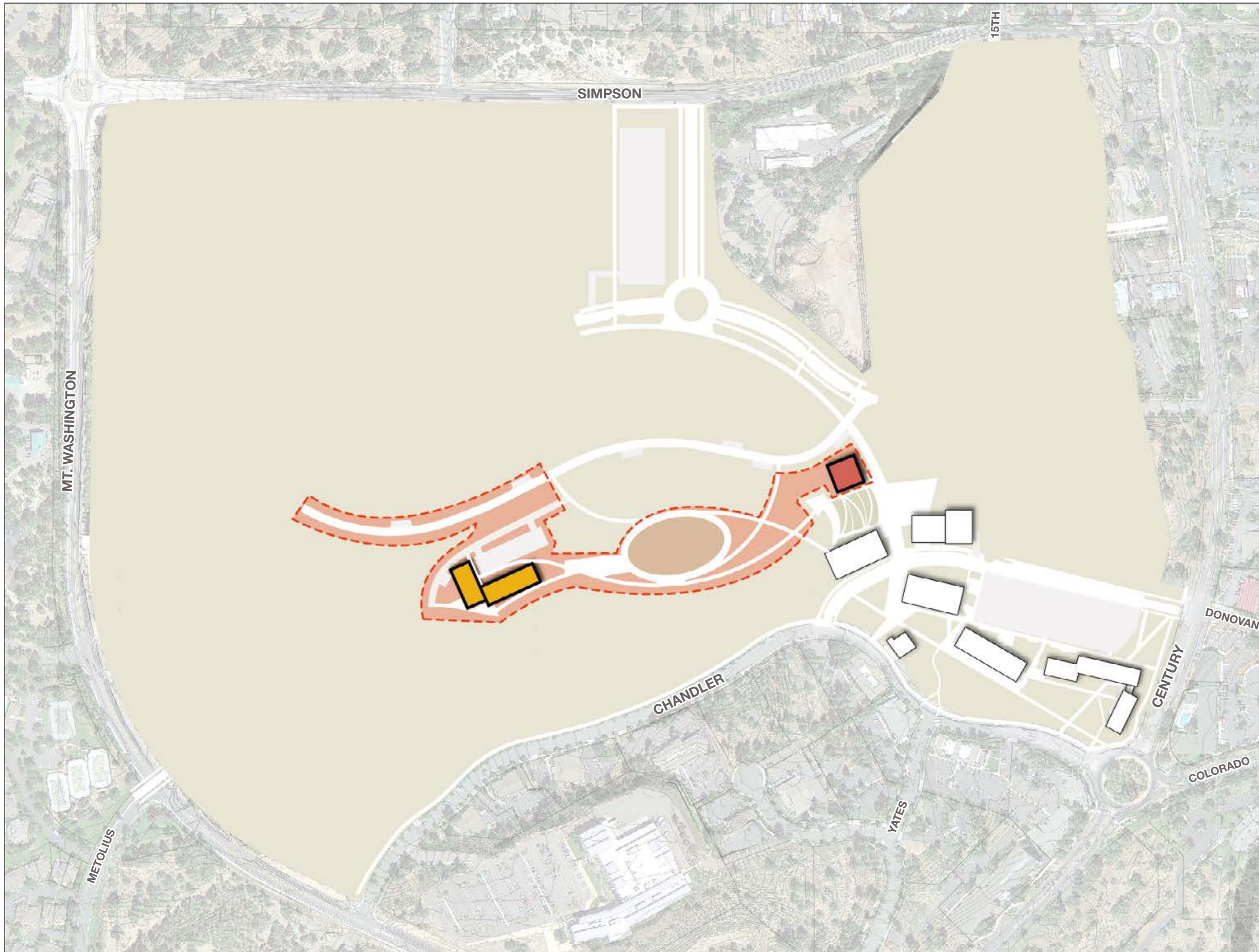


Phase	Total University Parking	Total Non-University Parking
1A	450-560	90-110
1B	450-560	90-110
2	540-670	390-490
3	720-900	500-620
4A	880-1,090	950-1,190
4B	850-1,060	950-1,140

- Campus Life
- Academic
- Student Housing
- Middle Market Housing
- Mixed-Use Partner and Middle Market Housing

# PHASING: PHASE 1A



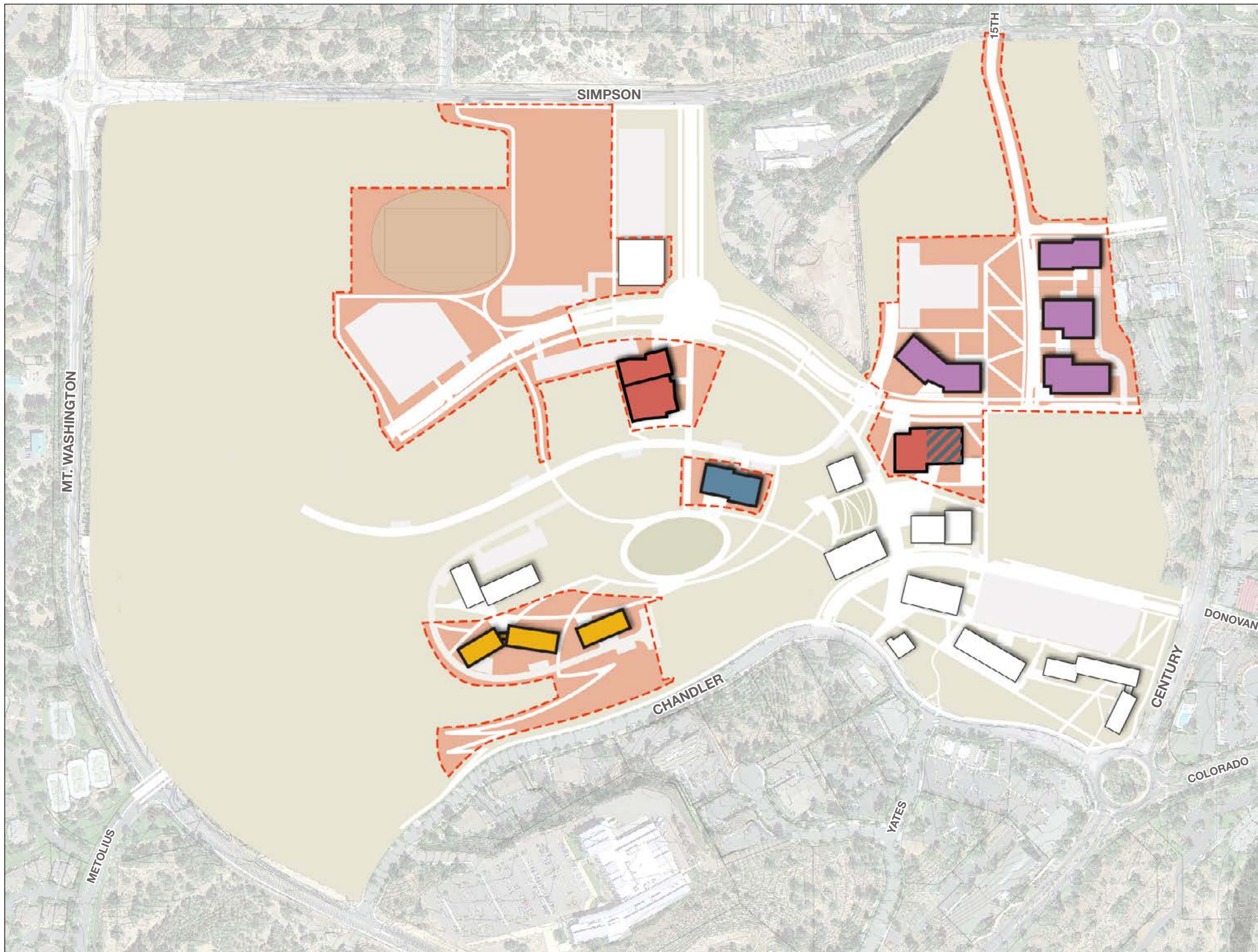


Phase	Total University Parking	Total Non-University Parking
1A	450-560	90-110
1B	450-560	90-110
2	540-670	390-490
3	720-900	500-620
4A	880-1,090	950-1,190
4B	850-1,060	950-1,140

- Campus Life
- Academic
- Student Housing
- Middle Market Housing
- Mixed-Use Partner and Middle Market Housing

**PHASING: PHASE 1B**



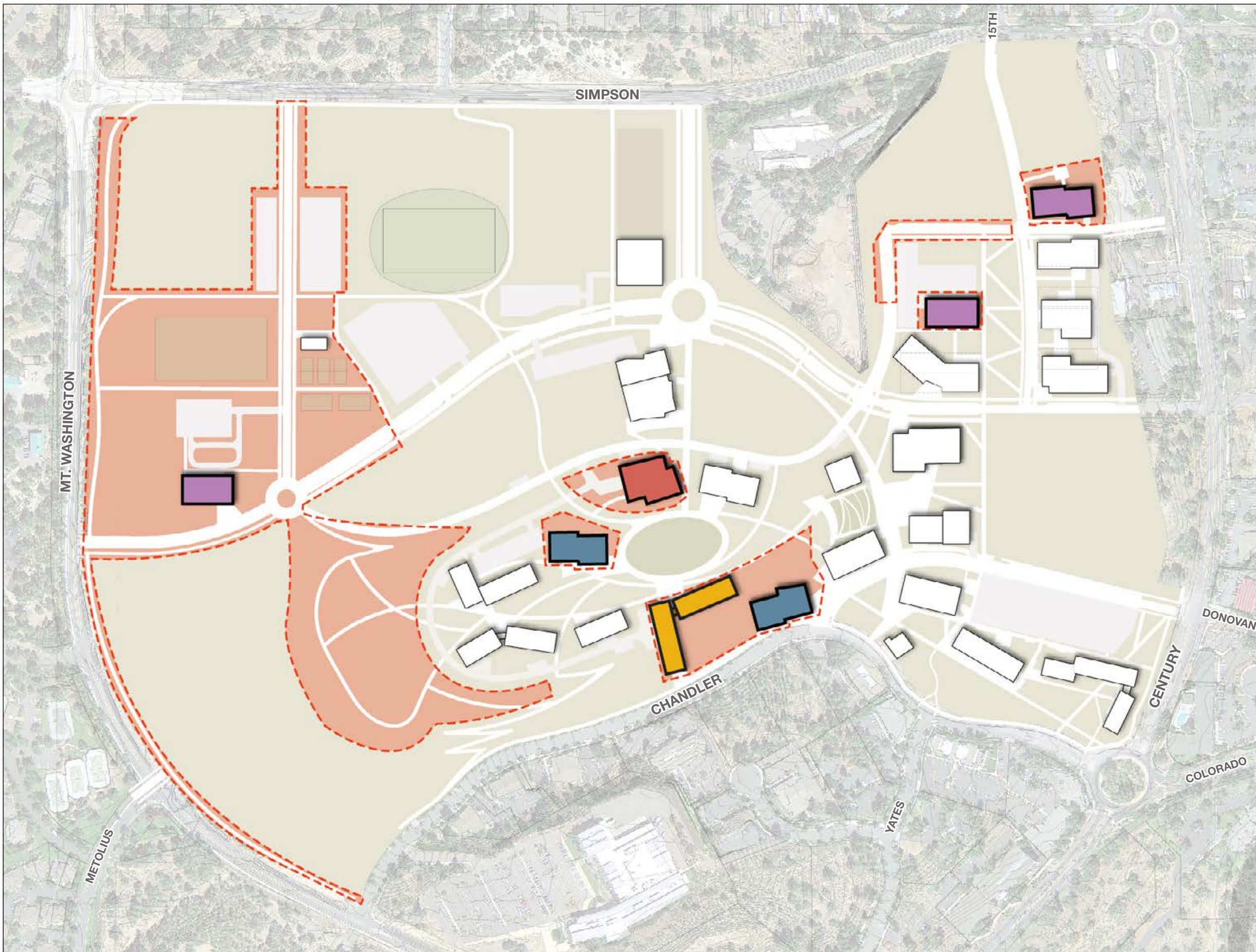


Phase	Total University Parking	Total Non-University Parking
1A	450-560	90-110
1B	450-560	90-110
2	540-670	390-490
3	720-900	500-620
4A	880-1,090	950-1,190
4B	850-1,060	950-1,140

- Campus Life
- Academic
- Student Housing
- Middle Market Housing
- Mixed-Use Partner and Middle Market Housing

**PHASING: PHASE 2**



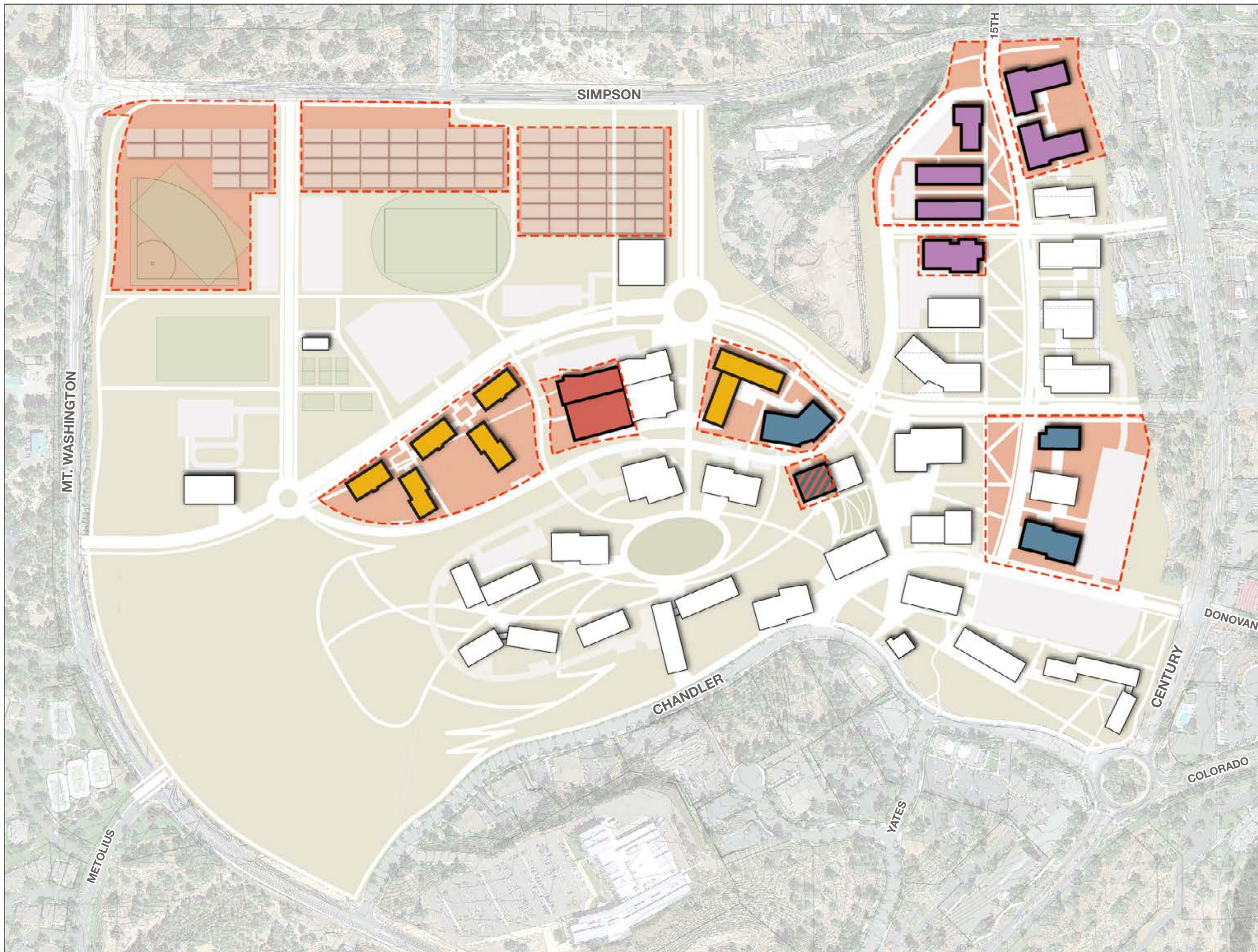


Phase	Total University Parking	Total Non-University Parking
1A	450-560	90-110
1B	450-560	90-110
2	540-670	390-490
3	720-900	500-620
4A	880-1,090	950-1,190
4B	850-1,060	950-1,140

- Campus Life
- Academic
- Student Housing
- Middle Market Housing
- Mixed-Use Partner and Middle Market Housing

**PHASING: PHASE 3**



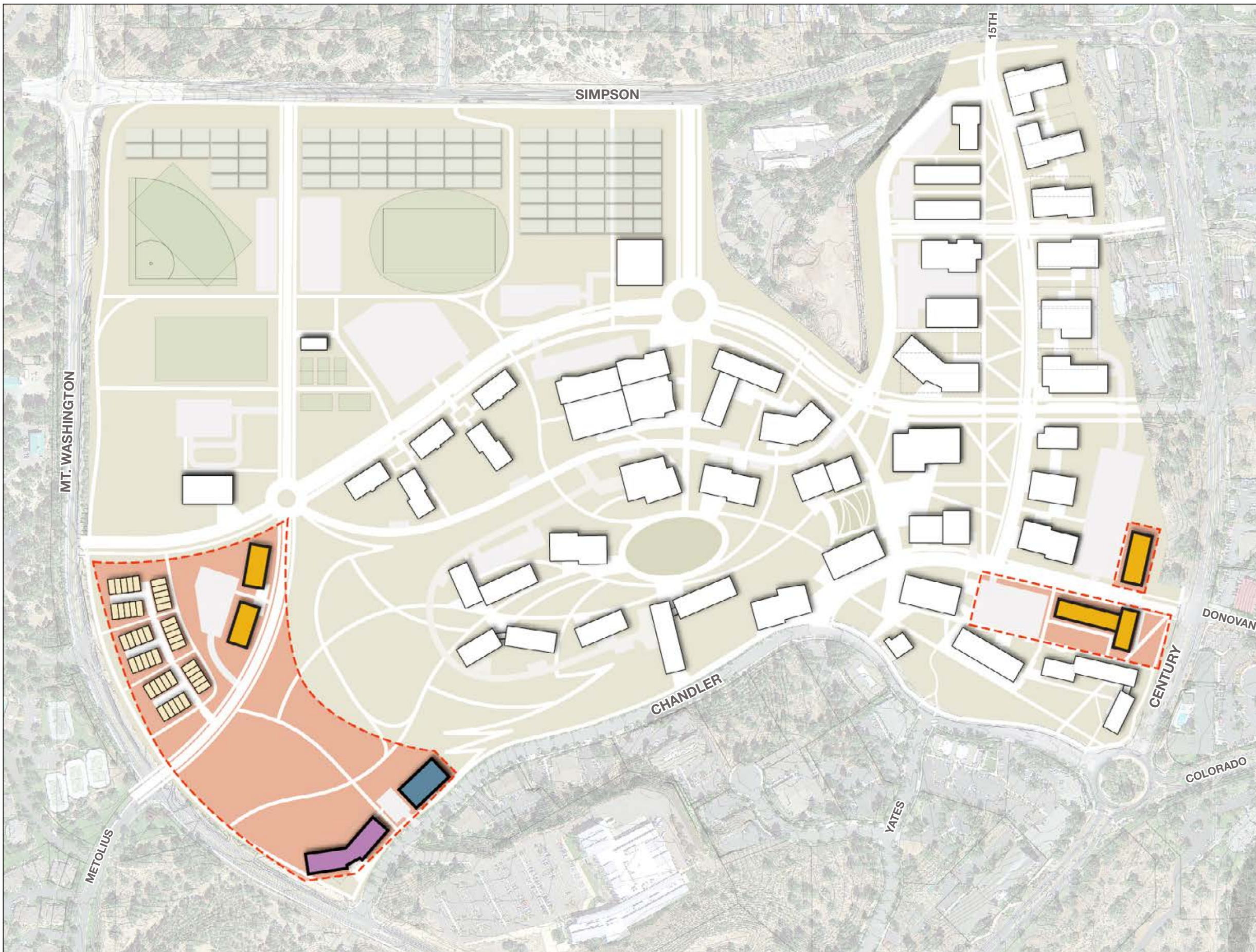


Phase	Total University Parking	Total Non-University Parking
1A	450-560	90-110
1B	450-560	90-110
2	540-670	390-490
3	720-900	500-620
4A	880-1,090	950-1,190
4B	850-1,060	950-1,140

- Campus Life
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- Mixed-Use Partner and Middle Market Housing

**PHASING: PHASE 4A**





Phase	Total University Parking	Total Non-University Parking
1A	450-560	90-110
1B	450-560	90-110
2	540-670	390-490
3	720-900	500-620
4A	880-1,090	950-1,190
4B	850-1,060	950-1,140

- Campus Life
- Academic
- Student Housing
- Middle Market Housing
- Mixed-Use Partner and Middle Market Housing

**PHASING: PHASE 4B**





Transportation & Parking Demand Management Plan

# **Oregon State University – Cascades**

Bend, Oregon

December 2017



## Transportation & Parking Demand Management Plan

# Oregon State University – Cascades Long Range Development Plan

Bend, Oregon

Prepared For:

**Oregon State University - Cascades**

650 SW Columbia Street

Bend, Oregon 97702

(541) 322-3113

Prepared By:

**Kittelson & Associates, Inc.**

354 SW Upper Terrace Drive Suite 101

Bend, Oregon 97702

(541) 312-8300

Wayne Kittelson, PE

Ashleigh Ludwig, PE, AICP

Ellen Moshier, PE

Phillip S.D. Worth

Project No. 20270

December 2017





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## PREFACE

The Bend Development Code, Chapter 4.8, Transportation and Parking Demand Management (TPDM) Plan, establishes the requirements of this document. Chapter 4.8 lists 14 submittal requirement items (sequenced as A through N) that are to be addressed by the TPDM Plan. Therefore, content for this Oregon State University-Cascades Transportation and Parking Demand Management Plan is organized to address the 14 items, in the order they are listed in Chapter 4.8.

## INTRODUCTION

This report details a Transportation and Parking Demand Management (TPDM) program for the Oregon State University–Cascades (OSU-C) campus and OSU-C’s Long Range Development Plan. There are many objectives served by the TPDM program, such as minimizing the rate at which single occupant vehicle (SOV) trips are generated and optimizing the use of more sustainable methods of transportation. Marketing, education, enforcement, and use of incentives and disincentives are key components in the application of any TPDM measures. These reflect OSU-C’s commitment to changing the environment and identifying itself as a unique place and experience. The TPDM Plan and recommended measures contained in this report will be monitored, reviewed and revised as necessary by OSU-C.

OSU-C has been operating in Central Oregon since September 2001 on the Central Oregon Community College campus. In September 2016, OSU-C opened a 4-year university campus at 1500 SW Chandler Avenue. Upon opening the new campus, OSU-C has been actively managing parking and providing a robust Transportation Demand Management (TDM) program to students, faculty and staff. Even as OSU-C continues to make great strides in managing travel demands and reducing single occupant vehicle trips, it remains committed to enhancing these programs to support increasing student enrollment and job growth as part of the planned OSU-C Long Range Development Plan.

The program for the OSU-C Long Range Development plan consists of core academic, administrative, co-curricular, housing, and support space, as well as facility needs for a planned enrollment of approximately 5,000 headcount students. The space projections also include additional spaces identified through the planning process that are beyond the core needs of the campus, but would support the vision and mission of the university. These additional spaces, such as additional recreation facilities, early learning education center, middle market housing, innovation district or conference facilities, could be developed in partnership with local entities.

The OSU-C TPDM Plan is prepared to:

- **Support the OSU-C Mission/Vision** – to train and equip students to make measurable and sustaining contributions to the world around them.
- **Support OSU-C Sustainability Goals & Policies** – by prudently sizing parking facilities to provide access, while promoting stewardship of precious natural, civic and economic resources.
- **Support OSU-C University-Community Partnership Plan** – by fostering constructive relationships that create lasting value.
- **Support City Sustainability Initiatives** – by providing a leading example of resource stewardship and extending assistance to others in their efforts.

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## PURPOSE & APPLICABILITY

In conjunction with this TPDM Plan, OSU-C has submitted an Institutional Master Plan and a Transportation Facilities Report in compliance with the Bend Development Code (BDC) Chapter 4.5, Master Planning and Development Alternatives, BDC Chapter 4.7 and BDC Chapter 4.8. Consistent with the BDC, this plan:

- Includes strategies to reduce single-occupant vehicle trips and increase walking, biking, and transit use;
- Strives to reduce parking demand due to campus-related commuting activities; and
- Is prepared by a transportation planner, or licensed professional qualified in civil or traffic engineering by the State of Oregon.



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## TPDM SUBMITTAL REQUIREMENTS

### A. TPDM GOALS, OBJECTIVES AND POLICIES

OSU-C has expressed a strong commitment to sustainable practices and the TPDM plan is among them. Several policies and programs that provide the underpinnings of a successful TPDM plan have already been developed and are employed on campus. OSU-C promises to support students, faculty and staff that pledge to use sustainable methods of accessing the campus and minimize parking demands. This policy of support is made tangible through a range of support programs that will be tailored to the evolving needs of the users.

TPDM policies will be provided to new students, faculty and staff at the OSU-C campus and the Innovation District. These policies will be reviewed during student and employee orientation. Policies will also be available on the OSU-C website.

New residents and tenants associated with the Innovation District and Middle Market Housing will be notified of OSU-C's policies and encouraged to use alternative modes of transportation.

### B. ESTIMATED POPULATION

The OSU-C campus population comprises university students, faculty and staff (employees), guests and visitors. Plans also include the Early Learning Center, Innovation District and Middle Market Housing. These anticipated populations are provided in Table 1.

The breakdown of headcount and full-time-equivalent (FTE) enrollment within each of the academic areas was supplied by the Academic Curriculum Council. Enrollment is projected to be approximately 5,000 students (headcount) and 3,900 (FTE). Housing for approximately 40 percent of the headcount enrollment (for a total of 2,000 beds) is anticipated to be on campus.

**Table 1: Estimated Population Summary**

Population Category	Metric	OSU-C Headcount	Equivalent FTE	Total
Undergraduate <sup>(1)</sup>	Students	4,468	3,418	3,418
Graduate <sup>(1)</sup>	Students	524	473	473
Full Time Faculty & Staff <sup>(2)</sup>	Employees	448	448	448
Part Time Faculty & Staff <sup>(2)</sup>	Employees	327	99	99
Middle Market Housing <sup>(3)</sup>	Residents	-	-	692
Innovation District <sup>(4)</sup>	Employees	-	-	986
Early Learning Center <sup>(5)</sup>	Employees	-	-	88
Recreation Center <sup>(6)</sup>	Employees	-	-	-
<b>Total Estimated Population</b>				<b>6,204</b>

Source: Academic Curriculum Council

- (1) Includes full-time and part-time students that work anywhere on campus, including the Recreation Center
- (2) Includes full-time and part-time staff for the Recreation Center
- (3) Assumes two persons per household (U.S. 2010 Census indicates the Bend average is approximately 2.4 persons per household)
- (4) Assumes 3 persons per thousand square feet
- (5) Based on research by OSU of similar facilities
- (6) Employees of the Recreation Center are accounted for in the OSU-C student and employee populations

## University Visitors & Deliveries

In addition to the planned population, the campus will experience a number of daily visitors. Although there is much variability to the number of university visitors that come on any given day, it is estimated that there is a correlation between student enrollment and number of visitors. These visitors include prospective students, alumni, special event guests, members of the business community, researchers, vendors, contactors and others servicing or visiting the campus.

The estimated visitor population, based on existing visitor permits issued to visitors and guests and service/delivery logs provided by OSU-C, is presented in Table 2.

**Table 2: Estimated Visitors & Deliveries**

Visitors & Deliveries	Total
Campus Visitors/Daily Passes	300/150
Deliveries/Contractors/Service	20

## C. MODE OF TRAVEL BY USERS

Modes that students, faculty and staff have to choose from for daily access to the OSU-C campus include walking, biking, transit, being dropped off and/or picked up, carpooling, and driving alone. From

the “Drive Less. Save More: OSU-Cascades” program that ran on campus during the 2016-2017 academic year, results indicate the campus has a 52.4 percent drive alone (i.e., SOV) mode split today.

A breakdown of each commuter mode share is provided in Table 3. Mode share reflects a distribution of all trips to campus, and does not indicate that all commuters are on campus at any one time during the day.

**Table 3: OSU-C Commuter Mode Choice**

Mode of Travel	2017 Survey Data
Walk	8.5%
Bicycle	14.4%
Transit/Shuttle	7.4%
Carpool	14.8%
Drive Alone	52.4%
Other	2.4%

Source: OSU-C, 2017 Spring Survey

## D. PARKING DEMAND

The anticipated parking demand by time of day is presented in Table 4.

**Table 4: OSU-C Anticipated Parking Demand by Time of Day**

Time of Day	Anticipated Peak Parking Demand <sup>(1)</sup>
7:00 – 8:00 AM	1,583
8:00 – 9:00 AM	1,753
9:00 – 10:00 AM	1,925
10:00 – 11:00 AM	1,933
11:00 AM – 12:00 PM	1,937
12:00 – 1:00 PM	1,884
1:00 – 2:00 PM	1,811
<b>2:00 – 3:00 PM</b>	<b>2,053</b>
3:00 – 4:00 PM	1,951
4:00 – 5:00 PM	1,827
5:00 – 6:00 PM	1,720
6:00 – 7:00 PM	1,436
7:00 – 8:00 PM	1,314

Sources: OSU-C for demand rates by university population type  
 ITE Parking Generation, 4<sup>th</sup> Edition for demand rates by land use and time of day  
 (1) This estimate considers the benefits of a shared-use parking system and complementary TDM strategies

The anticipated peak demand of 2,053 vehicles is estimated to occur between 2:00 PM and 3:00 PM on a typical weekday when school is in session and all other planned land uses on the campus are fully occupied.

## E. SHARED SPACES

A primary goal of the OSU-C TPDM plan is to provide and manage the vehicle parking supply as a shared-use parking system. This approach provides a high degree of efficiency in the use of spaces to meet demands for parking at all times of the day and from all anticipated users of the campus. The parking demand estimate provided in Section D above (Table 4), assumes a shared-use parking system.

## F. PARKING AND BICYCLE SUPPLY

It is necessary to summarize BDC parking requirements and TDM parking reduction allowances in order to report the estimated number of vehicle parking spaces to be provided at the OSU-C campus. BDC Chapter 3.3 establishes the minimum parking requirements for the planned uses on the campus. Table 5 summarizes the uses, minimum code requirements and resulting number of minimum parking spaces required.

**Table 5: Minimum Vehicle Parking Required per City of Bend Development Code (Table 3.3.300)**

User Type	Metric	Amount	Rate	Spaces
On-campus Students	Students	2,000	0.10	200
Off-campus Students	Students	2,992	0.20	598
Campus Employees	FTEs	547	0.48	263
MM Housing	Dwellings	346	1.00	346
Innovation District <sup>(1)</sup>	1,000 Sq. Ft.	328.75	2.00	658
Early Learning Center	Employees	88	1.00	88
Recreation Center <sup>(2)</sup>	1,000 Sq. Ft.	55	1.00	55
<b>Total Parking Spaces</b>				<b>2,208</b>
<b>Total Parking Spaces with 20 Percent TDM Reduction</b>				<b>1,766</b>

(1) Approximately 51,250 Sq. Ft. of the 380,000 Sq. Ft. planned for the Innovation District will be occupied by OSU-C faculty, staff and students, leaving 328,750 Sq. Ft. of development to be accounted for by using the "Office" land use to determine the code requirement.

(2) Approximately 45,000 Sq. Ft. of the 100,000 Sq. Ft. Recreation Center will be occupied by OSU-C faculty, staff and students, leaving 55,000 Sq. Ft. of development to be accounted for by using the "Recreation Center" land use to determine the code requirement.

As shown in Table 5, a minimum of 2,208 spaces are required by BDC 3.3.300. BDC Chapter 4.8 allows OSU-C to reduce the amount of parking constructed, as credit for implementing specific trip and parking reduction measures (BDC Chapter 4.8, Table 4.8.500). OSU-C is eligible for a 20 percent reduction of the minimum parking required by BDC 3.3.300, which is equal to a 442-space reduction.

Section I of this TPDM addresses the way in which OSU-C achieves eligibility for the 20 percent reduction. The result of applying the 20 percent reduction is a code requirement for 1,766 spaces.

Table 6 summarizes the minimum number of planned on-campus and off-campus parking spaces, including designated carpool/vanpool spaces, carsharing spaces, and bicycle spaces. The carsharing spaces will be provided on an as-needed basis, driven by OSU-C’s goals and the market for carsharing. As a result, more carsharing spaces could be provided.

**Table 6: Parking Supply Inventory (Spaces)**

Type of Spaces	OSU-C	Comments
On-street Spaces	75	Estimated future capacity on Chandler Avenue, as allowed by code.
On-site Spaces	1,691	Minimum parking supply. OSU-C will monitor parking to ensure needs are met.
Carpool/Vanpool	5%	A minimum of 100 spaces and up to 193 spaces will be reserved for carpool/vanpool spaces as demand warrants.
Carsharing/Fleet	4-12	Will vary based on market demand.
Bikes	Up to 1,200	Storage will vary based on demand. Additional spaces will be provided, should demand exceed supply.

Source: OSU-C

OSU-C has already installed over twice the number of bicycle storage spaces required by the code on-campus. This trend encourages bicycle use and is reflective of the demand and popularity of cycling to/from campus. With the planned growth, OSU-C is committed to continuing to monitor bicycle parking demand on campus and will add spaces as needed.

## G. PARKING DEMAND & TRIP GENERATION ANALYSIS

Item G requests the same information as provided under other items. Specifically, items D and E provide descriptions and results of detailed parking demand analysis and item H provides a description of detailed trip generation analysis results for the OSU-C campus.

A separate OSU-C Transportation Facilities Report (TFR), previously submitted to the city of Bend, documents the conservative approach OSU-C has taken to estimate and analyze the campus master plan trip generation. The analysis was conducted using the standard ITE trip estimates without further TDM adjustments to identify potential off-site impacts. Without accounting for any trip reductions (i.e., TDM), this conservative approach produces an estimate of 14,121 net-new trips on a daily basis. The approach produces an estimate of approximately 1,207 net-new trips during the weekday afternoon hour and 1,450 net-new vehicle trips during the weekday p.m. peak hour. The TDM program outlined in later sections of this plan is expected to result in lower trip rates than studied and summarized in the TFR.

Overall, OSU will provide a minimum of 1,766 parking spaces, which will be accommodated by 75 spaces on Chandler Avenue and 1,691 spaces on campus.

## H. ESTIMATED DAILY & PEAK HOUR TRIP GENERATION

Gross trip generation was developed using trip generation rates from the Institute of Transportation Engineers (ITE) *Trip Generation*, 9th Edition and data specific to the OSU-C campus. A more detailed discussion of the trip generation methodology is included in the TFR.

The trip generation includes the following ITE land use codes (LUCs):

- LUC 550 – College/ University
- LUC 820 - Shopping Center
- LUC 750 - Office Park
- LUC 230 - Residential Condominium/Townhouse
- LUC 520 - Elementary School
- LUC 565 – Daycare Center
- LUC 495 – Recreational Community Center

Based on this mix of uses, ITE suggests that a nine (9) percent internal trip capture could be expected during the evening commute hour.

In addition, internalization between the university and the non-university uses is also anticipated, particularly as uses within the Innovation District or non-student housing are expected to have some level of affiliation with OSU-C. A 25 percent capture rate has been assumed between the supporting uses and the university, for a total internalization of 34 percent within the mixed-use campus.

Given the functions of a co-use space, OSU-C is expected to have a high correlation with the affiliate tenants. This could be businesses related to research, technology or other fields related to courses at the university. Given the high level of expected collaboration, a 50 percent internalization rate with the university was assumed for the co-use space. There is also expected to be internalization between the co-use space and the surrounding innovation district. A conservative 17 percent internalization rate between the co-use space and the innovation district (half of the internalization assumed for the innovation district) was also applied. This results in a total internalization of 67 percent for the co-use space. This internalization is premised on an integrated multimodal transportation network throughout the campus connecting the Innovation District with the remainder of the campus at buildout.

The trip generation estimates provide unadjusted vehicle trips assuming that all trips are vehicle trips. No trip reduction was taken for alternative modes of transportation, in order to produce a conservative estimate. Table 7 contains the resulting weekday, peak hour of generator and adjacent street traffic peak hour trip generation estimate.

**Table 7: ITE Trip Generation**

Campus Uses	Daily Trips	Afternoon Peak Hour (Peak Hour of Generator)			Weekday PM Peak Hour (Adjacent Street Traffic)		
		Total	In	Out	Total	In	Out
OSU-C Campus Trips	5,318	529	169	360	529	169	360
Supporting Office/Retail	1,832	103	49	54	159	75	84
Industry Space	1,620	136	66	71	210	29	181
Co-Use Space	184	16	8	8	24	3	21
Mid-Market Housing	2,263	162	84	77	210	137	73
Early Learning Center	1,044	163	82	81	167	79	88
Recreation Center	1,860	98	47	51	151	74	77
<b>Total Net-New Trips</b>	<b>14,121</b>	<b>1,207</b>	<b>505</b>	<b>702</b>	<b>1,450</b>	<b>566</b>	<b>884</b>

Source: TFR, Kittelson & Associates

## I. TRIP & PARKING REDUCTION MEASURES

The following provides a discussion of trip reduction measures, or transportation demand management (TDM) measures that are currently being applied or will be implemented at the campus. Per the City’s Institutional Master Plan code, these are segregated into Facilities Provision and On-going Incentives measures. These measures will be implemented as the minimum commitment on behalf of OSU-C to manage single-occupancy vehicle trips and promote active modes of transportation. As a result, incentives to encourage non-auto trips will continuously grow with the campus’s needs.

Table 8 provides a summary of the city of Bend Master Plan Code’s allowable trip and parking reduction measures (BDC Table 4.8.500).

**Table 8: City of Bend: Potential Trip and Parking Reduction Measures (BDC Table 4.8.500)**

Facility Provision Measures	Trip Reduction	Parking Reduction
Project provides no more than the minimum required parking and achieves that by providing the maximum on-street parking that is permitted and/or using shared parking agreements.	5%	-
Project reserves a minimum of 10% of vehicle parking spaces with designated signage for carpool, vanpool and car share vehicles, with a minimum of one space required. The carpool, vanpool and car share parking spaces must be provided free of charge and located at the most desirable on-site location.	5%	5%
Provide on-site showers and lockers free of charge.	5%	5%
Provide enclosed bike lockers and/or fenced, covered bike storage areas and/or a designated bike storage area inside a building.	5%	5%
Project provides twice as many covered, secured bike parking racks or facilities as required by BDC Chapter 3.3, Vehicle Parking, Loading and Bicycle Parking.	5%	5%
On-going Incentive Measures	Trip Reduction	Parking Reduction
Project is located within 1/4 mile of a transit facility and employer participates in CET's Group Bus Program.	5%	5%
Implement a carpool, vanpool and/or car share program (e.g., carpool ride-matching for employees, assistance with vanpool formation, provision of vanpool or car share vehicles). The carpool, vanpool and car share parking spaces must be provided free of charge and located at the most desirable on-site location.	5%	5%
Project charges the actual cost to provide on-site parking on an annual basis for employee/student parking and provides free parking for carpool, vanpool and car share vehicles. The carpool, vanpool and car share parking spaces must be located at the most desirable on-site location.	5%	5%
Implement parking cash-out program for employees (non-driving employees receive transportation allowance equivalent to the value of subsidized parking).	5%	5%
Provide a shuttle program or participation in an existing recognized shuttle program subject to any fees for the existing program.	5%	5%
Flexible Scheduling – Allow employees to reduce their number of weekly commute trips and shift work trips to nonpeak hour times of day. Examples include: Teleworking, Compressed Workweek, Flexible Schedule	5%	5%
Provide unbundled parking.	5%	5%
Provide a bike-share program or free use of bikes on-site that is available to all tenants/employees of the site.	5%	-
Provide a guaranteed ride home program.	5%	5%
Participation in a Transportation Demand Management (TDM) incentive program recognized by the City (e.g., Commute Options Partner Program).	5%	-
<b>Other TPDM elements as approved by the City.</b>	<b>Up to 25%</b>	<b>Up to 20%</b>

Source: Bend Master Plan Code, Table 4.8.500

Table 9 provides a summary of the measures OSU-C is planning to implement.

### 1. Maximum Trip Generation Reduction Rate

Table 9 demonstrates that OSU-C more than qualifies for a full 25 percent peak hour trip generation reduction rate resulting from the combined trip reduction measures contained in this TPDM. This would equate to a PM peak hour trip generation reduction of more than 350 trips. Nonetheless, no trip reduction credits were taken for the traffic analysis reported in the separate TFR. This conservative approach assures OSU-C, the city and the community that impacts identified through the TFR are very likely to be less than anticipated in (1) timeframe of occurrence, (2) significance and/or (3) duration.



**Table 9: OSU-C: Trip & Parking Reduction Measures**

Facility Provision Measures	Trip Reduction <sup>(1)</sup>		Parking Reduction	
	OSU-C	Innovation District	OSU-C	Innovation District
Project provides no more than the minimum required parking and achieves that by providing the maximum on-street parking that is permitted and/or using shared parking agreements.	5%	5%	5%	5%
Provide on-site showers and lockers free of charge.	5%	5%	5%	5%
Provide enclosed bike lockers and/or fenced, covered bike storage areas and/or a designated bike storage area inside a building.	5%	5%	5%	5%
Potential Incentive Measures	Trip Reduction <sup>(1)</sup>		Parking Reduction	
	OSU-C	Innovation District	OSU-C	Innovation District
Project is located within 1/4 mile of a transit facility and employer participates in CET's Group Bus Program.	5%	5%	5%	5%
Flexible Scheduling – Allow employees to reduce their number of weekly commute trips and shift work trips to nonpeak hour times of day. Examples include: Teleworking, Compressed Workweek, Flexible Schedule	5%	5%	5%	5%
Provide a bike-share program or free use of bikes on-site that is available to all tenants/employees of the site.	5%	5%	5%	-
Provide a guaranteed ride home program.	5%	5%	5%	5%
Participation in a Transportation Demand Management (TDM) incentive program recognized by the City (e.g., Commute Options Partner Program).	5%	5%	5%	-
<b>Total Reduction Taken</b>	<b>0%<sup>(1)</sup></b>	<b>0%<sup>(1)</sup></b>	<b>20%</b>	<b>20%</b>

(1) The OSU-C Master Plan includes Facility Provisions and Potential Incentives that earn the right for a full 25% reduction in master plan trip generation. Note that these reductions are reported as zero due to OSU-C choosing to be conservative in estimating its impacts on the transportation system through the separately submitted TFR.

## 2. Parking Reduction Measures

Table 9 displays eight (8) parking reduction measures that OSU-C proposes as a part of this TPDM plan. A minimum of three (3) are required by BDC Chapter 4.8. These measures qualify OSU-C to take the maximum allowed 20 percent reduction to the minimum parking requirement.

## 3. Vehicle Parking Space Reduction

Table 8, which repeats the contents of BDC Table 4.8.500, associates a five (5) percent reduction with each of the eight (8) measures being proposed by OSU-C. However, the reduction allowed by the city cannot exceed 20 percent. Application of the 20 percent parking reduction to the minimum code requirement contained in BDC Table 3.3.300 results in a required supply of 1,766 spaces.

## J. OSU-C REDUCTION OF TRIPS & PARKING DEMAND

All programs, activities and incentives related to OSU-C's TPDM Plan will be communicated and promoted to all students and employees. This awareness of TPDM and trip choice options, particularly for new students and employees, will help to inform and establish efficient mode choice and travel behavior.

## Transit

The following transit measures will be implemented:

- Allow public transit to provide service within a quarter-mile and participate in CET's Group Bus Program.
- Provide up-to-date transit maps in common areas throughout campus.
- Provide subsidized pre-tax transit passes to faculty and staff.
- Encourage tenants of the Innovation District to provide transit subsidies to their employees.

## Walking & Biking

The following walking and bike measures will be implemented:

- Provide on-site showers and lockers free of charge.
- Provide enclosed bike lockers and/or fenced, covered bike storage areas and/or a designated bike storage area inside a building.
- Provide a bike-share program that is available to all students and employees on-campus.
- Provide an annual tune-up workshop or credit to a local bike shop for registered bicycle commuters.

## Vehicle Parking

Strategies and policies to reduce vehicle parking demand will include:

- Provide electric vehicle charging stations on campus.
- Provide a carpool, vanpool and/or car share program, locating preferential carpool spaces on campus at desirable parking locations.
- Collaborate with surrounding businesses, property owners and the City to determine if implementing on-street parking regulations are beneficial.
- Charge for on-campus parking permits.
- Charge on-campus visitors for parking on an hourly basis.

## Other Measures

Additional incentive measures include:

- Provide a new employee and student commuter orientation package encouraging non-SOV commuting.

- Maintain a transportation page on the OSU-C website that provides information and promotes alternative transportation.
- Reward students, staff, and faculty who walk, bike, carpool, skate, vanpool, or take the bus to campus.
- Investigate the feasibility of a “Park Once” policy to discourage vehicle trips from one end of the campus to the other.
- Allow employees to reduce their number of weekly commute trips and shift work trips to non-peak hour times of day. Examples include:
  - Teleworking – Allow employees to work from home or a non-office location one or more days a week.
  - Compressed Workweek – Enable employees to compress regularly scheduled hours into fewer work days per week.
  - Flexible Schedule – Allow employees to offset work hours from the typical 8-5 standard and shift commute travel to off peak hours.
  - Class Schedule – Offer morning, mid-day and evening classes to distribute student demands for access to campus.
- Provide a guaranteed ride home program.
- Provide a safe rides program for students.
- Continue to participate in a Transportation Demand Management (TDM) incentive program recognized by the City.
- Offer peer-to-peer car rental.

## Parking Permits

Permits are used as the primary means of controlling access to the OSU-C parking system. Parking permits are required for all students and employees. Visitors are allowed to park on campus in designated areas and must pay on an hourly basis. Vehicles without a valid permit are subject to fine and/or towing.

## K. PROMOTION OF TPDM PLAN

A market-based incentives program is envisioned for the on-campus parking supply. Incentives will be used to lower costs, to correlate use with supply, to promote carpooling, and to assist campus users in avoiding reliance on parking as a primary means of access. The intent of these incentives is to optimize the productive person-access capacity of the parking system, while achieving equally important sustainability goals related to the use of active transportation for primary campus access.

- **Incentives** - Incentives will be consistent with the current program.

- **Adjustments** - Incentives may be adjusted by the OSU-C transportation program manager in response to market conditions.
- **Parking Policies** - Parking policies will be provided to new students, faculty and staff. These policies will be reviewed during student and employee orientation. Policies also will be available on the OSU-C website.
- **Alternatives** - The OSU-C transportation program manager will promote alternatives to parking and the reliance on parking as a primary means of access.
- **Signage and Markings** - Parking signage and markings will be provided and maintained to avoid confusion and reinforce appropriate use of the on-campus parking system.
- **University-Community Partnership Agreement** - It is OSU-C rule to pursue Good Neighbor agreements with surrounding businesses and neighborhood associations that are willing to collaboratively work to their mutual benefit to minimize the misuse of parking resources and identify and appropriately deal with violators.

## L. SITE PLAN

The conceptual OSU-C campus plan is shown in Appendix 1. These plans show suggested locations for bicycle parking, shuttle stops, and other transportation-related measures. These plans are subject to change as the campus design evolves.

## M. TPDM DESIGNATED CONTACT

The TPDM contact is responsible for administering programs such as: carpool/vanpool ride-matching services, promotional programs, and updating commuter information.

Casey Bergh / Transportation Program Manager  
Oregon State University – Cascades  
DINE 108, 1500 SW Chandler Avenue  
Bend, OR 97702  
T: 541-322-2036  
casey.bergh@osucascades.edu

## N. ENFORCEMENT AND MONITORING PROGRAM

Chapter 4.8, Subsection N makes reference to Ordinance NS-2289, 2017. Neither the Chapter nor the Ordinance provides any specific requirement for enforcement or monitoring. Thus, a summary of what OSU-C will enforce and monitor is provided.

The OSU-C TDM will prepare an annual report for the OSU-C administration that summarizes the management and operations activities of the transportation and parking system. The report will include

summaries of each area of monitoring; performance against the goals, objectives and measures; actions taken during the year; and, recommendations going forward.

### ***On-campus Parking Enforcement***

OSU-C will provide sufficient, trained staff resources to ensure that the on-campus parking supply is appropriately used and that violators are warned, fined and/or towed, as appropriate to the circumstances. Violators found to lack vehicle registration with OSU-C will be required to register the vehicle's license plate.

### ***“No Tolerance” Policy Enforcement***

OSU-C has a “no tolerance” policy for students, faculty and staff that abuse the on-campus parking system. Violators will be fined and/or towed. Records of violations will be maintained by the parking enforcement staff and reported to the Human Resources Department or the Registrar's Office, as appropriate. Repeated violations are subject to loss of parking rights, reprimand or other action deemed appropriate by OSU-C.

### ***Monitoring***

OSU-C will monitor use of the on-campus parking system frequently enough to ensure proper use and minimize the impact of violators on system efficiency.

On-campus parking occupancy will be monitored by enforcement staff, particularly during peak periods of parking demand. OSU-C will require that all faculty, staff and students register and mark their vehicles with identification stickers by OSU-C. Violators will be required to comply.

- **Enforcement Actions** - Records of enforcement actions will be maintained and monitored for the frequency of actions by type, location and offender.
- **Guest and Visitors Passes** - Records of passes issued will be maintained and monitored for the type and number of passes issued each period.
- **Enrollment and Employment** - Records of student enrollment and number of on-campus employees (faculty and staff) will be maintained for the relevant information about the number of potential users of on-campus parking by type of student and employee.

Transportation demand management will be monitored by OSU-C staff, in the following ways:

- **Bicycle Activity** – Use and condition of on-campus bicycle parking.
- **Bike Share Program** – Participation in the program.
- **Cascades East Transit** – OSU-C will request ridership reports from Cascades East Transit for routes and stops on and near the campus.
- **Transit Passes** – Participation in the subsidized transit pass program.

- **Carpool/Vanpool/Car Share** – Participation in the program and use of designated carpool/vanpool spaces.
- **New Employee/Student Orientation** – Number and percent of new employees receiving orientation that includes information on commute options.
- **TDM Program** – Registration and participation in the program.

## SUPPLEMENTAL: INNOVATION DISTRICT TDM

As the owner of the Innovation District, OSU-C is committed to requiring tenants to discourage single-occupancy vehicle trips. TDM measures will either be provided by OSU-C, as the landlord for future tenants, or required of the tenants through their lease commitments.

### Facility Provision Measures

OSU-C is committed to providing or requiring tenants to provide the following Facility Provision Measures in the Innovation District:

- No more than the minimum parking required.
- On-site showers and lockers free of charge.
- Secure and covered bicycle storage in locations conducive to frequent bicycle use.
- Bicycle tune-up stations.
- Electric vehicle charging stations.

### On-going Incentives Measures

OSU-C is committed to implement the following On-going Incentives Measures:

- Locate campus within 1/4 mile of a transit facility and participate in CET's Group Bus Program.
- Allow tenants of the Innovation District to participate in OSU-C's carpool, vanpool and/or car share program. These parking spaces will be carpool, vanpool and car share parking spaces provided free of charge (or at discounted rates) and located at the most desirable on-site locations.
- The Innovation District tenants will be included in OSU-C's bike-share program.
- Require tenants to participate in a Transportation Demand Management (TDM) incentive program recognized by the City.
- Request and encourage tenants to provide subsidized pre-tax transit passes to employees.
- Provide an Annual Tune-up Workshop for bicycle commuters in the Innovation District.
- Require tenants to provide new employee commuter orientation packages encouraging non-SOV commuting.

## Appendix 1 Conceptual Site Plan





## EXHIBIT D

### MASTER PLAN FINDINGS



COMMUNITY  
DEVELOPMENT

#### I. APPLICABLE CRITERIA, STANDARDS, AND PROCEDURES:

- (1) City of Bend Development Code
  - (a) Chapter 2.3, Mixed-Use Zoning Districts
  - (b) Chapter 4.1, Development Review and Procedures
  - (c) Chapter 4.5, Master Planning and Development Services
  - (d) Chapter 4.7, Transportation Analysis
  - (e) Chapter 4.8, Transportation and Parking Demand Management (TPDM) Plan
- (2) Bend Comprehensive Plan
- (3) Oregon Administrative Rules
  - (a) Chapter 660-012-0060, Plan and Land Use Regulation Amendments
  - (b) Chapter 660-015-0000, Statewide Planning Goals and Guidelines

#### II. PROCEDURAL FINDINGS:

1. **LOCATION:** The subject properties are located at 1500 SW Chandler Avenue, 1707 SW Simpson Avenue, 1757 SW Simpson Avenue, 19755 Simpson Avenue (south of Simpson only), 19745 Simpson Avenue, 19795 Simpson Avenue, and 1435 SW Simpson Avenue, in addition to two parcels without assigned addresses (map and Tax Lots 181101D012300, and 181101A004300).
2. **PROPOSAL:** Type III application to amend the Bend Development Code to adopt the Oregon State University – Cascades Institutional Master Plan encompassing 128 acres.
3. **PUBLIC NOTICE AND COMMENTS:** The applicant held a neighborhood public meeting on November 15, 2017. Notice of this meeting was sent by the applicant to all property owners within 500 feet of the subject property boundary, as well as to representatives of all 13 neighborhood association. The subject property is located within the Century West Neighborhood Association boundary. Members of the Century West Neighborhood Association were in attendance, but designated representatives anticipated by the applicant to be in attendance were not present. The applicant provided the public comments that were submitted at that meeting and for two weeks prior to that meeting (see submitted Exhibit 23). The applicant also submitted responses to these public comments.



Side Pines Cooperative (a mobile home park immediately north of Simpson Avenue on 15<sup>th</sup> Street), expressed concern that the University would claim eminent domain on the mobile home park in the future and wanted assurances that this would not occur in the future as the university expanded. She also expressed concern over the maximum building height of 65 feet in the MU zone and requested that development within 200 feet of Simpson Avenue be limited to 3 stories high. Finally, she expressed concern over the use of 15<sup>th</sup> Street as a bike greenway, as it is heavily utilized with on-street parking; this “Greenway” project is a separate City project and is not part of the OSU-Cascades master plan submittal but the master plan does provide a pedestrian and bicycle connection to 15<sup>th</sup> Street.

4. **APPLICATION ACCEPTANCE DATE:** This Institutional Master Plan application was submitted on January 2, 2018 and accepted as complete on February 13, 2018. This application is being reviewed concurrently with a rezone application. Per BDC 4.1.430.C.6, major master plans and concurrent zone changes are exempt from the 120-day time limit for final action. A final decision on this application will be governed by BDC 4.5.100.D.
5. **PLANNING COMMISSION HEARING:** On April 9, 2018 the Planning Commission held a public hearing and accepted testimony on the zone change request. At the conclusion of the hearing, the commission voted 4 in favor, 1 opposed and 2 absent to recommend that the Council approve the master plan.

### III. FINDINGS OF CONFORMANCE WITH APPLICABLE CRITERIA:

#### CONFORMANCE WITH CITY OF BEND DEVELOPMENT CODE

##### 4.5.300 Institutional Master Plan

**B. Applicable Standards and Criteria.** There are three categories of Master Plans (Community Master Plan, Institutional Master Plan, and Employment Master Plan) each with a distinct set of standards and criteria. The determination of Master Plan category will be made by the City based on the most prominent use(s) proposed by the Master Plan or development proposal. Each Master Plan or development proposal must only fall into one Master Plan category and only the standards and criteria applicable to the category of Master Plan determined by the City are applicable to a proposed Master Plan or development proposal.

**FINDING:** BDC 4.5.300.B requires an Institutional Master Plan for any property or combination of adjacent properties under common ownership for an institution of higher education of 10 acres or greater. In accordance with BDC 4.5.300.B, this application includes a proposed Institutional Master Plan for OSU-Cascades, an institution of higher education of greater than 10 acres in size. Therefore, the proposed OSU-Cascades Master Plan review will be based on the standards and criteria applicable to an Institutional Master Plan, which are addressed below.

**C. Uses.** The uses are the same as those permitted within the zoning district except as follows;

- 1. Density transfers may be permitted as part of a Major Community Master Plan 20 acres or larger, or as part of a Major Employment or Major Institutional Master Plan in an Opportunity Area that is 20 acres or larger; however, the density must comply with the density standards in 4.5.200.E.3;**
- 2. Uses not permitted in the zoning district may be allowed when consistent with the Bend Comprehensive Plan Designation’s Characteristics; and**
- 3. Private recreational facilities and private open space areas in compliance with BDC 4.5.200.E.4 are permitted as part of a Community Master Plan.**

**FINDING:** OSU-Cascades is seeking approval of an Institutional Master Plan for an institution of higher education within the Mixed-Use Urban zone, a permitted use per the Bend Development Code. The proposed OSU-Cascades Overlay Zone code notes: “all permitted uses in the MU zone shall be permitted in the OSU-C Overlay Zone” and “all conditional uses in the MU zone shall be conditional uses in the OSU-C Overlay Zone.” The proposed OSU-Cascades Overlay Zone code also permits accessory uses to the institution of higher education, as permitted in the MU zone. Only uses allowed by code are proposed.

Although the proposed Major Institutional Master Plan is within an Opportunity Area that is larger than 20 acres, no density transfers are proposed.

**D. Consistency with ORS 227.178. A Major Master Plan is an amendment to an acknowledged Comprehensive Plan and/or land use regulation and is therefore not subject to the 120-day review period under ORS 227.178. The City will use all reasonable resources to render a final decision on all Major Master Plans within 180 days of receiving a complete application. Approval or denial of the Major Master Plan application will be based on the standards and criteria at the time the Major Master Plan was first submitted to the City.**

**FINDING:** The City will not process the application as a “permit” subject to the 120-day rule set forth in ORS 227.178 due to the fact that the Master Plan will include the adoption of elements of the Master Plan text into BDC Chapter 2.7 as required by BDC 4.5.300(C)(2).

**E. Submittal Requirements.** The following information must be submitted as deemed applicable by the Development Services Director based on the size, scale, and complexity of the Master Plan.

- 1. Existing Conditions Submittal Requirements.**
  - a. Narrative statement that describes the following:**

- i. **Current uses.**
- ii. **Site description, including the following items. May also reference submitted maps, diagrams or photographs.**
  - (A) **Physical characteristics;**
  - (B) **Building inventory including size and height;**
  - (C) **Vehicle/bicycle parking, and loading areas;**
  - (D) **Landscaping/usable open space; and**
  - (E) **Lot coverage.**
- iii. **Infrastructure facilities and capacity, including the following items.**
  - (A) **Water;**
  - (B) **Sanitary sewer;**
  - (C) **Stormwater management; and**
  - (D) **Easements.**

**FINDING:** The Applicant has included a narrative of all the above required existing conditions information, as applicable, in Exhibit 1 of the application.

**b. Existing Site Conditions Map.**

- i. **The existing site conditions map must include the following information on-site and within 150 feet of the proposed Master Plan (as applicable):**
  - (A) **The applicant's entire property and the surrounding property. The property boundaries, dimensions and gross area must be identified. Existing aerial photos may be used;**
  - (B) **Ownership of Master Plan area and ownership of all property within 150 feet of the proposed Master Plan;**
  - (C) **Topographic contour lines shown at one-foot intervals for slopes of 10 percent or less. For slopes greater than 10 percent, contour lines must be shown at two-foot intervals. Slopes greater than 25 percent must be identified;**
  - (D) **The location, names, and widths of existing public and private streets, alleys, drives, sidewalks, bike lanes, multi-use paths, transit routes and facilities, rights-of-way, and easements. Existing aerial photos may be used;**
  - (E) **The location of existing irrigation canals and ditches, pipelines, drainage ways, waterways, railroads, and any natural features such as rock outcroppings, wooded areas, and natural hazards. Existing aerial photos may be used;**
  - (F) **The location of existing sanitary and storm sewer lines, water mains, septic facilities, culverts, and other underground and overhead utilities;**
  - (G) **Potential natural hazard areas, including any areas identified as subject to a 100-year flood, areas subject to high water table, and areas mapped by the City, County, or State as having a potential for geologic hazards;**

- (H) Resource areas, including wetlands on the City's Local Wetlands Inventory, streams, surface mines, and wildlife habitat identified by the City or any natural resource regulatory agencies as requiring protection; and
- (I) Locally or federally designated historic and cultural resources on the site and the adjacent parcels.

ii. The existing site conditions map must include the following information on-site:

- (A) The location of existing structures, parking, loading and service areas, and pavement. Existing aerial photos may be used; and
- (B) The location, size and species of trees and other vegetation having a caliper (diameter) of six inches or greater at four feet above grade.

iii. Date, north arrow, scale, names, and addresses of all persons listed as owners on the most recently recorded deed.

iv. Name, address, email address, and telephone number of project designer, engineer, surveyor, and/or planner, if applicable.

**FINDING:** The Applicant has included in the master plan application all the above required existing conditions information, as applicable, in Exhibit 1 of the application. The City has confirmed that none of the following have been identified on the subject properties, and as such, these are not included in the existing site conditions mapping: FEMA floodplains, national wetlands inventory, local wetlands inventory, riparian corridors, river areas of special interest, waterway overlay zone, and streams.

### 3. Proposed Master Plan Submittal Requirements.

a. Narrative that describes the following:

- i. Development boundary subject to proposed Master Plan. May also reference submitted maps or diagrams;
- ii. Project description;

**FINDING:** A project description is included in Exhibit 2 of the application and the section titled "Introduction to the Master Plan" in Exhibit 1 of the application. The details of the OSU-C Master Plan are laid out in numerous diagrams included in this submittal, including building uses, phasing plans, street layout/connectivity, water/sewer plans, conceptual grading, pedestrian/bicycle connectivity, and landscaping/open space, which are referenced throughout this document.

Figure 2.7.3502 in the proposed OSU-Cascades Special Planned District (see Exhibit 3 of the application) depicts the campus planning districts and development boundary subject to the proposed Master Plan. The outermost boundaries shown on this figure

represent the proposed future OSU-Cascades Campus, all included with the Master Plan submittal.

**iii. Description, approximate location, and approximate timing of each proposed phase of development. The phasing plan may be tied to necessary infrastructure improvements. May also reference submitted maps or diagrams;**

**FINDING:** Given the size of the Master Plan Area, the complexity of the project, fluctuations in enrollment, the public/private development anticipated in the Innovation District and, lastly, the uncertainty of public funding for the OSU-Cascades Campus, the phasing plan for the Master Plan Area is intentionally flexible. While the timing of construction and exact parameters of an individual phase may fall within a multi-year development window, the infrastructure necessary to support each phase is clearly defined in the phasing plan and will be in place at the time of occupancy. The proposed phasing plan and associated mapping is included in Exhibit 4 of the application.

Phasing of the OSU-Cascades Campus has been identified in four primary sections, as represented in the table below, and associates quantity of population with space development. Phase Four B includes additional academic space and student housing; however, these facilities do not provide any additional student capacity for the University. Total student capacity through the buildout of the facilities is in Phase Four A.

Phasing of the OSU-Cascades campus has been identified in four primary sections and associates quantity of population with space development. The timing and duration of each phase will be dependent on multiple factors including growth rate of student enrollment and availability of project funding.

Phase 1 is divided in two developments: Phase 1A and Phase 1B.

Phase 1A includes: a 55,000 gsf academic building; a potential 55,000 gsf innovation partnership building; and campus infrastructure that includes primary road access from SW Simpson, primary utility infrastructure, and additional parking for 220 to 350 automobiles.

Phase 1B includes: a 22,500 gsf student success center (phase one); a 166-bed student residence; campus infrastructure that includes secondary road access and utility infrastructure; and additional parking.

Phase 2 includes: a 55,000 gsf academic building; a 40,000 gsf recreation facility (phase one) and recreation field; 249-bed student residences; campus infrastructure that include primary and secondary roadways; additional parking for 390 to 490 automobiles; central utility plant; a 40,000 gsf assembly building; and potentially 142,000 gsf of innovation partnership development facilities plus multi-family vertical “middle market” housing.

Phase 3 includes: 110,000 gsf of additional academic space; an 18,000 gsf dining facility; student residences with 265 additional beds; campus infrastructure that include primary and secondary roadways; additional parking for 290 to 360 automobiles; a 52,800 gsf early learning center; and potentially 42,000 gsf of innovation partnership development facilities plus multi-family vertical “middle market” housing.

Phase 4 is divided in two developments: Phase 4A and Phase 4B.

Phase 4A includes: 110,000 gsf of additional academic space; a 35,000 gsf student success center (phase two); a potential 55,000 gsf expansion of recreation facility (phase two) and recreation fields; student residences with 661 additional beds; additional parking for 610 to 760 automobiles; photovoltaic energy production facilities; and potentially 141,000 gsf of partnership development facilities plus multi-family vertical “middle market” housing.

Phase 4B includes: 30,000 gsf of research space; student residences with 346 additional beds; and the potential for additional multi-family “middle market” housing in the form of townhomes.

**Campus Phasing Projections**

	10 Acres 2020	Phase One 2024	Phase Two 2028	Phase Three 2031	Phase Four A 2034	Phase Four B 2036	Total
Academic	58,500	55,000	55,000	110,000	110,000	30,000	418,500 gsf
Campus Life	13,500	22,500	80,000	18,000	90,000	-	224,000 gsf
Campus Residence	87,000	63,000	94,500	97,500	235,000	111,000	688,000 gsf
Campus Support (CUP)	-	-	17,000	-	-	-	17,000 gsf
<b>Incremental Growth:</b>		<b>517</b>	<b>517</b>	<b>1,034</b>	<b>1,034</b>	<b>-</b>	
Total Student Capacity	1,890	2,407	2,924	3,958	4,992	4,992	
Incremental Campus Beds	314	166	249	265	661	345	2,000 beds
	17%	20%	25%	25%	33%	40%	
Innovation Partners		55,000	142,000	42,000	141,000	-	380,000 gsf
ELC		-	-	52,800	-	-	52,800 gsf
Middle Market Housing							-
Units of Housing		-	72	42	187	45	346 units

**iv. How the proposed water, sewer, and street system will serve the size and type of development and uses planned for this area;**

**FINDING:** *Water:* OSU-Cascades submitted a water analysis with estimated water flows to the City for review, projecting a high efficiency water demand of 154,000 gpd during the school year. This water analysis, mapping, SWA Certificate and supporting documentation is included in Exhibit 5 of the application. The campus will include 8”-12” diameter water mains looped through the campus, and connecting to the City system’s large diameter pipes to the east and west. Findings for these improvements are addressed below under BDC 3.4.400.

The water mains described above will be routed and looped through the campus connecting to the City’s existing 12-inch water mains in Mt. Washington Drive, Simpson



Avenue, and Century Drive and the existing 8-inch water mains on the existing campus, to serve all campus facilities.

*Sewer:* OSU-Cascades submitted a sewer analysis with estimated flows to the City for review, projecting an average daily flow of 171.5 gpm for a peak summer day. Sewer service will be provided via 6"-8" diameter collection lines in main campus roads and utility corridors. These will gravity feed to the low points in the campus system. From that point, they will be collected and either pumped to connect to the City collection system, or first treated and recycled in a future on-campus system. Any recycled water system will be developed to meet state and local codes, and water from it will be used for toilet flush, irrigation and mechanical equipment, as appropriate. An onsite generator will be provided for emergency back-up of the pumps. Gravity sewer, pump stations, and pressure facilities will be installed. A set of utility corridors have been established, under streets and/or dedicated multi-use paths, as shown in the mapping in Exhibit 5 of the application.

*Street System:* The on-campus transportation system is generally depicted in Figure 2.7.3503.A in Exhibit 3 of the application, which designates primary campus streets, secondary campus streets, shared use campus streets and controlled access drives. Figure 2.7.3503.A shows the proposed future connections to City streets, general roadway alignments and roadway typical section options. The Transportation Impact Analysis (TIA) is included as Exhibit 15 of the application, which demonstrates how the proposed street system will serve the proposed OSU-Cascades Campus on the subject properties.

**v. How the location and sizing of water and sewer facilities on site will be consistent with existing and planned facilities;**

**vi. How water flow volumes will be provided to meet fire flow and domestic demands;**

**FINDING:** The water mains described above will be routed and looped through the campus connecting to the City's existing 12-inch water mains in Mt. Washington Drive, Simpson Avenue, and Century Drive and the existing 8-inch water mains on the existing campus, to serve all campus facilities. Gravity sewer, pump stations, and pressure facilities will be installed, as noted above. A set of utility corridors have been established, under streets and/or dedicated multi-use paths, as shown in the mapping in Exhibit 5 of the application.

**vii. The function and location of any private utility system;**

**FINDING:** OSU-Cascades seeks to create a 'net-zero' campus through investments in energy conservation and renewable and low-carbon energy production, as well as established water recycling practices. The Master Plan identifies an approach to energy and water management to serve these goals, but will also tie into established conventional systems, including City water and sewer, as well as energy distribution

utilities. The energy systems (see Exhibit 6 of the application for diagrams) are planned to comprise:

- Highly efficient buildings
- A geo-exchange field, to provide heating and cooling to most campus buildings
- A central utility plant with boilers to supplement the heat from the geo-exchange field
- Solar panels (photovoltaic) on most campus buildings and site-mounted, to ultimately supply up to 100% of the electrical demand of the campus.

The stormwater systems are planned to:

- Treat stormwater locally, with facilities distributed around the campus.
- Collect and recycle water on the campus, for appropriate reuse: toilet flushing, irrigation of the limited areas on campus that may require it, and some mechanical equipment.

**viii. Compliance with the applicable approval criteria set forth at BDC 4.5.200 Community Master Plan, BDC 4.5.300 Institutional Master Plan, and BDC 4.5.400 Employment Master Plan;**

**FINDING:** The responses to BDC Chapter 4.5.300 (below) respond to all the relevant approval criteria for Institutional Master Plans set forth in BDC 4.5.300(E).

**ix. Types of residential uses and planned densities; and**

**FINDING:** OSU-Cascades plans to develop several types of residential uses on the campus. Housing options are planned to include the following (see Exhibit 7 of the application):

- Traditional dormitory rooms, generally serving the underclass population.
- Student housing set in apartment-style housing.
- “Middle market” and “market rate” housing in a traditional vertical mixed-use setting in the Innovation District.
- “Middle market” housing in townhome, condominium, or multi-family configurations in the Residential District.

Ground-floor residential uses are proposed in the Residential District. Residential uses in the Innovation District will be within traditional vertical mixed-use buildings. Compliance with the residential density requirements is outlined in findings below in BDC 2.3.300.C.

**x. Bend Comprehensive Plan Map compliance analysis which explains how plan designation acreages in the Bend Comprehensive Plan Map designations for the subject site or sites, including minimum and maximum residential density ranges, are implemented by the Master Plan, including rearranging the plan designations and or**

**zoning that retains the same total area of all plan designations on the subject site or within one percent of the same total acres. All other changes must be processed concurrently as a Comprehensive Plan amendment and zone change.**

**FINDING:** The Bend Comprehensive Plan designates the entire Master Plan area as Mixed-Use Urban (MU). Because the entire Master Plan area is designated Mixed Use, the Master Plan application does not propose to rearrange any uses on the property; findings for compliance of the proposed Master Plan uses with the Mixed-Use Urban designation and its implementing MU zone is set forth below under BDC 2.3.200.

- b. Scaled maps or diagrams that include the following information (as applicable):**
  - i. Development boundary;**
  - ii. Phasing plan;**
  - iii. Conceptual site plan including the following:**
    - (A) General land uses;**
    - (B) Approximate building envelopes and square footage;**
    - (C) Vehicle, biking, and walking circulation system, including cross sections, and where these facilities will connect with the existing and planned system;**
    - (D) General location and size of areas to be conveyed for public use (e.g., schools, recreational areas, parks, fire stations, and other public uses) in accordance with the City of Bend, the Bend Parks and Recreation District Parks, Recreation, and Green Spaces Comprehensive Plan, and the School Facility Plan, latest editions, and other open space areas as required by this Chapter;**
    - (E) Transit routes and facilities;**
    - (F) Parking, loading, and service areas including loading and service areas for waste disposal;**
    - (G) North arrow and scale; and**
    - (H) Other information necessary to show how the conceptual site plan meets applicable criteria.**
  - iv. Water and sewer facilities to serve the Master Plan area, including line sizes, general location of routes, and how the lines will tie into adjacent areas and facilities;**
  - v. General location of streets and water and sewer lines illustrated on abutting vacant land and developable land and all contiguous property under common ownership. This illustration is not binding on the abutting properties;**
  - vi. Grading concept plan (for hillside or sloping properties, or where extensive grading is anticipated);**
  - vii. Landscape concept plan and tree preservation plan in accordance with BDC Chapter 3.2, Landscaping, Street Trees, Fences and Walls;**
  - viii. Architectural concept plan (e.g., information sufficient to describe architectural styles, building heights, and general materials); and**

**ix. Sign concept plan (e.g., locations, general size, style, and materials of signs).**

**FINDING:** Maps and diagrams addressing all of the above elements of the proposed Master Plan are included in exhibits submitted with the application, as indicated below:

<i>Master Plan Element</i>	<i>Location</i>
Conceptual site plan, with development boundary and general land uses	Figure 2.7.3502 in Exhibit 3, Exhibit 8
Approximate building envelopes and square footage	Exhibit 8
Vehicle network, transit routes/facilities, and cross sections	Figure 2.7.3503.A in Exhibit 3
Biking and walking circulation system	Exhibit 9
Parking and maneuvering areas	Figure 2.7.3504.C in Exhibit 3, Exhibit 8
Loading and service areas	Figure 2.7.3504.G in Exhibit 3, Exhibit 8
Water and sewer facilities	Exhibit 5
General location of streets and water and sewer lines illustrated on abutting vacant land and developable land and all contiguous property under common ownership	Exhibit 1
Grading concept plan	Exhibit 10
Landscape concept plan & tree preservation plan	Exhibit 11
Architectural concept plan	Exhibit 12
Sign concept plan	Exhibit 13

- c. Draft Development Code text, figures, and tables in a format prescribed by the City, which proposes changes to the development standards and zoning district requirements intended to implement the Major Master Plan. The draft text, figures, and tables must also include any proposed districts, street layouts, and cross-sections that vary from standards.**

**FINDING:** Exhibit 3 of the application includes development standards specific to each of the proposed campus districts as well as the proposed right of way cross sections. Primarily the proposed development standards relate to setbacks, block length, location of parking areas and street frontage standards. The alternate standards are discussed in greater detail below in response to BDC 4.5.300(E)(2).

- d. A letter or other written documentation from the Bend Metro Park and Recreation District which indicates that the applicant has met with the District to discuss the proposed Master Plan, and provided the District an opportunity to review the design for options to enhance existing parks and trails, and develop new parks and trails.**

**FINDING:** OSU-Cascades met with Bend Metro Park and Recreation District leadership on June 30, 2017 to discuss the University's proposed Master Plan, with a specific focus on open space, trails, and recreation facilities. BPRD provided a letter documenting this meeting (See Exhibit 14 of the application).

- e. A letter or other written documentation from the Bend-La Pine School District which indicates that the applicant has met with the District to discuss the proposed Master Plan, and provided the District an opportunity to review the Master Plan area for compliance with the School Facility Plan, latest edition.**

**FINDING:** OSU-Cascades met with Bend-La Pine School District leadership on July 27, 2017 to discuss the University's proposed Master Plan and opportunities for coordination with BLPS. BLPS provided a letter (see Exhibit 14 of the application) addressing this meeting and subsequent conversations.

- f. Transportation analysis in compliance with BDC Chapter 4.7. Transportation Analysis.**

**FINDING:** Exhibit 15 of the application is the Applicant's transportation impact analysis (the "OSU-Cascades TIA"), prepared by Kittelson and Associates. The responses below to BDC Chapter 4.7 address how the Applicant's transportation impact analysis is consistent with the requirement of BDC Chapter 4.7, identify the anticipated impacts of the project on the City's transportation system and recommend mitigation to address significant impacts of the project on the transportation system.

- g. Institutional and Employment Master Plans must submit a Transportation and Parking Demand Management (TPDM) Plan in compliance with BDC Chapter 4.8, Transportation and Parking Demand Management (TPDM) Plan.**

**FINDING:** Exhibit 16 of the application is the Applicant's Transportation and Parking Demand Management Plan (the "TPDM"), prepared by Kittelson and Associates. The responses to BDC Chapter 4.8 below address the requirements of BDC Chapter 4.8, the specific elements of the Applicant's TPDM and how the TPDM is consistent with the approval criteria set forth in BDC Chapter 4.8.

- h. Water and Sewer Capacity Analysis.**

**FINDING:** OSU-Cascades submitted a water and sewer capacity analysis with estimated flows to the City for review, projecting a water demand of 154,000 gpd during the school year and average daily sewer flow of 171.5 gpm for a peak summer day. On December 8, 2017, the City provided a signed SWA Certificate (SWA 17-5655). This water and sewer analysis, mapping, SWA Certificate and supporting documentation is included in Exhibit 5 of the application.

- i. Information required by BDC 2.7.400 Water Overlay Zone, BDC 2.7.700 Upland Areas of Special Interest Overlay Zone, BDC 3.5.200 Outdoor Lighting Standards, and/or BC Chapter 5.50 Noise, as applicable.**

**FINDING:** The subject property does not include any area within the Waterway Overlay Zone. One of the subject properties within the Master Plan (1757 SW Simpson Ave) includes an upland area of special interest (ASI), which is subject to the requirements of BDC 2.7.700, as outlined below.

- j. Copies of all existing covenants and restrictions, and general description of proposed restrictions or covenants (e.g., for common areas, access, parking, etc.).**

**FINDING:** Portions of the Master Plan area are currently subject to the Declaration of Covenants, Conditions and Restrictions for Century Washington Center, attached as Exhibit 18 of the application. No other similar CC&Rs currently apply to the property. At the present time, the Applicant does not propose to adopt CC&Rs for the Master Plan area, however, should the Applicant elect to sell parcels within the Innovation District or elsewhere in the Master Plan area, the Applicant anticipates that it will record CC&Rs against the property prior to sale to ensure that future development of any privately-owned property within the Master Plan area is consistent with the adopted Master Plan.

- k. A Title Report prepared within the previous 90 days.**

**FINDING:** Title reports were prepared for each parcel within the proposed Master Plan on November 6, 2017 and November 7, 2017, within the previous 90 days. These title reports are included in Exhibit 19 of the application.

#### **4.5.300 Institutional Master Plan**

##### **B. Applicability.**

- 1. Institutional Master Plans in conformance with this section may be submitted for any property or combination of properties three acres or larger in size.**
- 2. Unless exempted below, Institutional Master Plans in conformance with this section are required for any property or combination of adjacent properties under common ownership at the date of adoption of this code for the following:**
  - a. Institutions of Higher Education: 10 acres or larger.**
  - b. All other Institutions: 20 acres or larger.**
- 3. Exemptions. Unless the applicant elects to apply for an Institutional Master Plan, the following are exempt:**

- a. **The property is part of a Special Planned District in BDC Chapter 2.7, Special Planned Districts.**
- b. **Cemeteries and public maintenance facilities in existence prior to 2016.**
- c. **The City determines that the Master Plan category is a Community Master Plan or Employment Master Plan.**

**FINDING:** The Applicant's proposed Master Plan covers a total of approximately 128 acres, and includes the existing 10-acre campus approved in 2014. Under BDC 4.5.300.B.1, the Applicant has submitted an Institutional Master Plan for the "combination of property" owned by OSU-Cascades and Deschutes County south of Simpson Avenue. OSU-Cascades is under contract to purchase the property subject to the Master Plan and owned by Deschutes County. The county will retain property north of Simpson Avenue, which is zoned RM. The property owned by the county north of Simpson Avenue is not part of this application, nor will it be subject to the Master Plan. A property line adjustment application submitted by Deschutes County to the City of Bend to shift an existing property line such that the two separate legal lots are delineated by Simpson Avenue was recently recorded (PZ-17-0815; CS19605). The Applicant anticipates that the transaction with the county will close during the processing of the Master Plan application.

### **C. Review Process.**

#### **2. Major Institutional Master Plans. Major Institutional Master Plans are processed as follows:**

- a. **Step 1. The Planning Commission makes a recommendation to the City Council on an application for a Major Institutional Master Plan. The text of a Major Institutional Master Plan must be included in BDC Chapter 2.7, Special Planned Districts in compliance with BDC Chapter 4.6 Land Use District Map and Text Amendments. The City Council is the final review authority on such applications (TYPE III Process).**
- b. **Step 2. Upon approval of the Major Institutional Master Plan, and prior to the commencement of Step 3, the applicant must submit a Final Major Institutional Master Plan to the City in an electronic format specified by the City. The Final Major Institutional Master Plan must depict the proposal as approved and must incorporate all conditions of approval contained in the decision. The Major Institutional Master Plan denotation for the subject site will be shown on the Zoning Map. The denotation on the Zoning Map may be added or removed administratively by staff upon approval or withdrawal of the Major Institutional Master Plan.**
- c. **Step 3. The approval of a land division(s) and/or Site Plan Review application(s) (TYPE II process).**

**FINDING:** The proposed Master Plan is properly characterized as a “Major Institutional Master Plan” and defined by BDC Chapter 1.2 as a “Master plan, major” because the Master Plan proposes deviations to certain development standards and zoning district requirements. The Applicant is not seeking to deviate from the review process outlined above. The Applicant anticipates that it will file Site Plan Review applications for development within Phase 1 shortly after City Council approval of the Master Plan.

**D. Submittal Requirements. In addition to the submittal requirements of BDC 4.5.100.E, the following information must be submitted as deemed applicable by the Development Services Director based on the size, scale, and complexity of the development:**

- 1. Narrative that defines and summarizes the organizational mission and objectives. The statement must describe the projective population that will be served by the institution including size and distinctive cohorts (e.g., faculty, staff, clients, patients, and students) and any anticipated changes in the size or composition of that population associated with different phases of development. It must also specify any services or facilities available to the general public.**

**FINDING:** A narrative that summarizes OSU-Cascades’ mission and objectives, including projected population and building square footages associated with phases of development, is included in Exhibit 20 of the application.

- 2. Summary of the facilities related to the proposed Institutional Master Plan.**

**FINDING:** The OSU-Cascades Master Plan consists of core academic, administrative, co-curricular, housing, and support space for a planned enrollment of 5,000 headcount students. The space projections also identify additional spaces that are beyond the core needs of the campus, but that support the vision and mission of the university. These additional spaces, such as recreation facilities and child care, could be developed in partnership with local entities. A project description is included in Exhibit 2 of the application.

The space needs model utilized to plan the needed university space applied the national space-planning guidelines of the Council for Education Facility Planners International (CEFPI)—the most widely accepted higher education space planning guidelines in the United States—together with OSU guidelines. The model projected a need for additional space (in addition to the existing 10-acre campus) totaling 1,200,000 gross square feet (GSF); this additional space includes 605,000 GSF of non-residential space and 595,000 GSF of residential space for 1,700 new student residential beds.

The OSU-Cascades Master Plan is comprised of four major districts, as shown in Figure 2.7.3502 in Exhibit 3 of the application, including the Core Campus District, Innovation District, Recreation District, and Residential District. Primary building uses are identified in Exhibit 8.



The Core Campus District will contain the majority of academic and campus life programs with some residential and partnership buildings. This district will develop in phases and gradually integrate with the other campus areas.

The Innovation District will be an urban mixed-use district comprised of strategic industry and research partners, vertical multi-family “middle-market” housing, and small-scale retail. The Innovation District will integrate university academic programs and research with industry and entrepreneurs.

The Recreation District will incorporate a large area of recreation facilities, surface parking, solar arrays, and the central utility plant. A future Early Learning Center providing child care services along with a potential partnership for a small K-5 school will be located in this district to maximize use of shared recreational facilities.

The Residential District will be a residential village on the quieter western side of the campus with townhome “middle market” housing, student housing on the east edge, trails, and natural areas.

### **3. Description of the following:**

#### **a. General location of all existing and proposed uses and onsite circulation plans;**

**FINDING:** The existing OSU-Cascades campus is located in the northwest corner of the Chandler/14th Street roundabout, which is the southeast corner of the proposed 128-acre campus. The existing OSU-Cascades 10-acre campus represents the first phase of development, which was largely completed in 2017. It includes the following buildings: Tykeson Hall, a 43,650-sf academic center; an 86,000-sf Residence Hall that accommodates approximately 314 beds; and a 27,000-sf Dining/Academic Building. A fourth building, the Bend Science Station, is currently under construction.

Exhibit 8 includes the proposed Master Plan building envelopes and building uses. Figure 2.7.3503.A depicts the proposed onsite vehicle circulation and Exhibit 9 depicts the proposed pedestrian and bicycle onsite circulation.

#### **b. Approximate floor area of proposed structures;**

**FINDING:** Exhibit 8 of the application includes a table and an associated figure that lists existing building square footages and the estimated ranges of floor areas for all the proposed structures within the Master Plan.

#### **c. Approximate height of proposed structures;**

**FINDING:** Exhibit 8 of the application includes a table that itemizes each existing and proposed structure, listing the estimated range of number of floors for each structure. Academic structures are proposed to be two to four floors high, while residential buildings and Innovation District buildings are generally proposed to be two to five floors

high. No building is proposed to be greater than 5 floors high. All existing and proposed structures are proposed to be no greater than the allowed 65-foot building height within the MU zone.

- d. Approximate number and general location of parking spaces on-site and those off-site in compliance with BDC Chapter 3.3, Vehicle Parking, Loading and Bicycle Parking and BDC Chapter 4.8, Transportation and Parking Demand Management (TPDM) Plan;**

**FINDING:** The OSU-Cascades TPDM is submitted as Exhibit 16 of the application. Compliance with BDC 3.3 and 4.8 are set forth in findings below. Figure 2.7.3504.H in Exhibit 3 of the application depicts the general possible locations of the on-site vehicle parking.

- e. A description of on-site housing and any dedicated off-site housing facilities to be developed as part of the Institutional Master Plan, including the total number of users that may be accommodated in such facilities; and**

**FINDING:** No off-site housing facilities are proposed as a part of this Institutional Master Plan. On-site housing includes both student housing as well as “middle market” rental housing in the form of vertical multi-family development and townhomes. 2,000 beds of student housing and 346 units of “middle market” housing is proposed. The proposed general distribution of the housing is shown on the figure in Exhibit 7 of the application. The 2,000 beds of student housing can accommodate up to 2,000 students.

The precise configuration and types of units for the “middle market” rental housing are unknown at this time, however, the University has assumed the middle market rental housing would accommodate approximately 692 users in 346 housing units.

- f. Public safety.**

**FINDING:** The proposed OSU-Cascades public safety plan is in Exhibit 21 of the application.

- 4. Design Guidelines for new and renovated buildings and structures including materials, height, bulk, massing, and colors.**

**FINDING:** Conceptual design guidelines are located in Exhibit 12 of the application.

- 5. Open space must be shown on the conceptual site plan and may include parks, pavilions, multi-use paths within a minimum 20-foot wide corridor, squares and plazas, areas of special interest, tree preservation areas, and recreational facilities.**

**FINDING:** Paths/trails, plazas, meadow areas, forested areas, campus greens and recreation fields are proposed in the plan, as shown in Exhibit 11 of the application.

**E. Approval Criteria.** The City may approve, approve with conditions, or deny the proposed institutional master plan application based on meeting all of the following criteria:

- 1. The proposed land uses within the institutional master plan must be consistent with the Bend Comprehensive Plan Map designations. If rearranging the plan designation locations and/or zoning are proposed as part of the major institutional master plan application, the major institutional master plan must retain the same total area of all plan designations on the subject site or within one percent of the same total acreage consistent with the allocations prescribed by the existing plan designations.**

**FINDING:** The entire area subject to the OSU-Cascades Master Plan is designated as Mixed-Use Urban (MU) under the Bend Comprehensive Plan. The City's MU zone is one of two zones that implement the Mixed Use comprehensive plan designation. Consistent with Comprehensive Plan Policy 11-18, the subject property is identified as a special need site for a university. Consequently, the City's Mixed-Use Urban zone—which specifically allows Institutions of Higher Education as an outright permitted use is the only appropriate zone to apply to the subject property. All proposed land uses within the Master Plan area are uses permitted outright in the Mixed-Use Urban zone. Consequently, all uses are consistent with the Bend Comprehensive Plan Map designations for the property. The applicant does not propose to rearrange any plan designation locations or zoning.

- 2. The applicant has demonstrated that the standards and zoning district requirements contained in BDC Titles 2, Land Use District Administration, and 3, Design Standards, are capable of being met during Site Plan or Land Division Review, except as proposed to be modified by the applicant as part of a Major Institutional Master Plan. Where the applicant has proposed deviations to the above standards and/or zoning district requirements as part of a Major Institutional Master Plan, the applicant has demonstrated:**
  - 1. That granting a deviation to the BDC standards and/or zoning district requirements will equally or better meet the purpose of the regulation proposed to be modified; or**
  - 2. That granting a deviation to the BDC standards and/or zoning district requirements is necessary due to topographical constraints or other unique characteristics of the property or specific development type proposed by the master plan, and**
- c. That any impacts resulting from the deviation are mitigated to the extent reasonably practical.**

**FINDING:** The Applicant has proposed several deviations from the zoning district requirements contained in BDC Title 2 and BDC Title 3. These deviations are discussed immediately below. Additionally, where deviations are sought, the deviations are codified into the proposed OSU-Cascades Overlay Zone code.

With respect to the standards in BDC Title 2 and BDC Title 3 for which no deviations are sought, the applicant will be subject to the regulations in effect at the time of Site Plan Review for each phase of the project. BDC Titles 2 and 3 largely impose development standards (e.g., height, setback, landscaping, parking, architectural, lot, block length) on the project. There is nothing inherent in the overall design of the campus that would preclude compliance with BDC Titles 2 and 3. For example, no building is proposed to exceed the 65-foot height standard. The applicant's parking analysis demonstrates that the parking requirements for the entire campus can be met on-site, which sufficient additional capacity to provide an additional 30% parking capacity over and above City requirements.

Given the preliminary nature of an approved master plan under BDC Chapter 4.5, and the general standard of BDC 4.5.300.E.2, there is no specific requirement for the applicant to show compliance with Site Plan Review standards—only that the standards are *capable* of being met. A review of the existing standards of Titles 2 and 3 and the capability of meeting those standards with the proposed master plan are presented in findings later in this document.

As the overall Master Plan demonstrates, it is possible to meet the applicable development standards at the time of Site Plan Review approval because there is nothing inherent in the Master Plan which would preclude compliance with BDC Titles 2, 3 and the OSU-Cascades Overlay Zone. Therefore, the Applicant has met the requirements of BDC 4.5.300.E.2. In addition to this finding, in connection with the findings associated with the applicable provisions of BDC Titles 2 and 3 below, the applicant further demonstrates how the proposal will be capable of meeting the standards of BDC Titles 2 and 3.

The applicant is seeking deviations from the following sections of the Bend Development Code (BDC). Each standard is first identified by its BDC reference, together with the text of the provision at issue and findings addressing BDC 4.5.300(E)(2). The proposed OSU-Cascades Master Plan Overlay Zone Code text (Exhibit A of the proposed ordinance) contains the alternate development standards that will apply to each Campus District for purposes of Site Plan Review applications filed after Master Plan Approval.

Future development within the Master Plan must comply with the standards of Titles 2 and 3 in effect at the time of application submittal or any superceding provisions set forth in the OSU-Cascades Overlay Zone code.

### **BDC 2.3.300 Development Standards for which Deviations Sought:**

## Table 2.3.300 Mixed-Use District Development Standards

Maximum Front Yard Setback: The MU zone requires a maximum front yard setback of 10 feet.

**FINDING:** The Applicant proposes to deviate from the 10-foot maximum setback requirement for the entire campus. The OSU-Cascades Overlay Zone will include the following standard in lieu of the 10-foot setback:

*B. Maximum Front Yard Setback. Due to the unique nature of an Institution of Higher Education and the campus setting of the OSU-Cascades Campus, no maximum front yard setback shall apply, provided, however, where a building is set back more than 10 feet from a public or private right of way, in addition to any landscaping required by BDC 2.7.3504.I, one or more of the following treatments shall be included in the setback area between the building and the street:*

- 1. Sidewalks or multi-use paths 10 feet or wider;*
- 2. Improved plazas and pedestrian areas;*
- 3. Outdoor dining and/or gathering areas;*
- 4. Specialty landscaping, including water treatment-oriented landscaping;*
- 5. Native landscaping, woodland forest areas;*
- 6. Traditional campus greens, quadrangle or park areas; and*
- 7. Parking and Maneuvering Areas as allowed by BDC 2.7.3504.C*

In order to grant the deviation, the following standards apply:

- a. That granting a deviation to the BDC standards and/or zoning district requirements will equally or better meet the purpose of the regulation proposed to be modified; or
- b. That granting a deviation to the BDC standards and/or zoning district requirements is necessary due to topographical constraints or other unique characteristics of the property or specific development type proposed by the master plan, and
- c. That any impacts resulting from the deviation are mitigated to the extent reasonably practical.

The deviation to the standard 10-foot maximum setback is justified due to a combination of topographical constraints and, more importantly, the unique characteristics of an institution of higher education campus. Unlike a traditional mixed-use development, the Core Campus element of the Master Plan features a combination of traditional academic buildings, student housing and student related facilities (e.g., student success center, dining halls, health and wellness center). OSU-Cascades' vision for the campus, and the Core Campus district in particular, is to provide a traditional college campus setting with extensive pedestrian facilities, including multi-use paths, campus greens, native areas, and water treatment landscape features. This unique development type warrants a deviation from the 10-foot maximum setback.

The purpose of the setback as set forth in BDC 2.3.300.A.1 is to place buildings “close to the street to create a vibrant pedestrian environment, slow traffic, provide a storefront character to the street, support future transit service, and encourage walking. The setback standards are flexible to encourage public spaces between sidewalks and building entrances (e.g., extra-wide sidewalks, plazas, squares, outdoor dining areas, and pocket parks).” BDC 2.3.300.A.1.c already permits the expansion of this setback to accommodate “approved usable public space with pedestrian amenities” so the proposed deviation is consistent with the purpose and implementation of the setback. In terms of “impacts resulting from the deviation” because the BDC already allows increases to the setback, there are no “impacts” from this requested deviation. That said, the 10-foot maximum setback can only be exceeded if one or more of the features identified above is placed between the building and the street. These features are wholly consistent with BDC 2.3.300.A.1.c and will provide a vibrant pedestrian environment between buildings and the street. Although the deviation applies campus-wide, the deviation will primarily apply to the Core Campus. The placement of vibrant pedestrian features will mitigate any impacts of the deviation and will be consistent with the approach set forth in BDC 2.3.300.A.1.c.

### **2.3.400 Site Layout and Building Orientation**

#### **B. Parking. In the MU zone, parking and maneuvering areas shall be prohibited between the street and the building.**

**FINDING:** The Applicant proposes to deviate from this standard in limited locations on the campus. As shown on Figure 2.7.3550.B of the OSU-C Overlay Zone code, the Applicant has identified eight areas on campus where deviations are necessary from the parking and maneuvering requirements of BDC 2.3.400.B.

In order to grant the deviation, the following standards apply:

- a. That granting a deviation to the BDC standards and/or zoning district requirements will equally or better meet the purpose of the regulation proposed to be modified; or
- b. That granting a deviation to the BDC standards and/or zoning district requirements is necessary due to topographical constraints or other unique characteristics of the property or specific development type proposed by the master plan, and
- c. That any impacts resulting from the deviation are mitigated to the extent reasonably practical.

The deviation is warranted for several reasons. First, with respect to the deviations sought for the parking areas in the Innovation District, the deviation is necessary due to the unique characteristics of the property and development type. The Innovation District is planned to be developed along a park-like spine that includes a connection to the 15th Street bikeway, large open space and plaza areas, and a vast pedestrian network. Buildings on the west side of the Innovation District will have double frontage, with the primary public spaces facing the interior of the spine/park setting. This results in the rear

of the building necessarily being required to accommodate parking, with access from the street to the west of these buildings. Given the double frontage aspect of these buildings, the need for parking and the desire to maintain a pedestrian environment within the Innovation District, the deviation from the parking standard is warranted.

Regarding the deviations in the Recreation District, the deviation is necessary because the central parking area is a large component of the University's parking program, covers a large area of the property and is located next to the proposed Central Utility Plant. Given the size of the parking area, and the relatively small size of the Central Utility Plant, there is no feasible way to provide parking in any location other than between the building and Simpson Avenue and the new access road. The situation is unique given the large distance between the internal spine road and Simpson Avenue. Therefore, there is no practical way to locate all of the parking behind the Central Utility Plant building. Regarding the parking associated with the Early Learning Center, given its central location and its associated parking, there is no practical way to avoid locating this parking without it being considered to be "between the building" and Simpson Avenue—even though there is a considerable distance between the parking area and Simpson Avenue.

Regarding the deviations in the Campus District, the deviation is necessary because both the unique topography in the vicinity and the unique nature of a college campus development warrant a deviation. Given the location of the buildings near the bowl and the fact that the buildings will largely have double frontage, there is no practical alternative than to permit parking and maneuvering in certain areas between the street and the building.

### **BDC 2.3.500 Architectural Standards**

**A. In the MU and MN Districts, building facades that are oriented to the street and are within the maximum front setback standard under BDC 2.3.300 (referred to as "street walls") shall be designed to provide visual interest for pedestrians as follows:**

- 1. Ground-floor windows must be installed for at least 50 percent of the length of the street wall and have an area equal to 60 percent of the ground-floor wall area of the street wall. Ground-floor wall area includes all wall areas up to 10 feet above finished grade. Windows are required to be transparent to foster both a physical and visual connection between activities in the building and pedestrian activities on the street.**
- 2. Weather protection shall be provided along 50 percent of the street wall and at all street-facing entrances. Weather protection projections may include but are not limited to awnings, marquees, balconies, overhangs, or building appendages. Weather projections are required to extend five feet over the sidewalk in order to meet this standard and must not obstruct or prevent the placement of street trees, tree canopies or other improvements within the public right-of-way.**

**FINDING:** This standard requires that building facades that are oriented to the street and are within the maximum front setback are required to contain a certain amount of glazing and weather protection. OSU-Cascades has identified eight buildings that will be unable to meet the glazing and weather protection standards due to their proposed locations. Figure 2.7.3540.A of the OSU-C Overlay Zone code identify the buildings that will not be subject to the glazing and weather protection standards.

In order to grant the deviation, the following standards apply:

- a. That granting a deviation to the BDC standards and/or zoning district requirements will equally or better meet the purpose of the regulation proposed to be modified; or
- b. That granting a deviation to the BDC standards and/or zoning district requirements is necessary due to topographical constraints or other unique characteristics of the property or specific development type proposed by the master plan, and
- c. That any impacts resulting from the deviation are mitigated to the extent reasonably practical.

The only building in the Recreation District subject to the deviation is the Central Utility Plant. Given that the plant will not generally be utilized by students, guests or parties other than University staff, and will be dedicated to utility services there is little reason to impose this standard. Moreover, the unique nature of a utility plant, as compared to an academic building, provides the basis for the deviation.

The buildings in the Core Campus District warrant a deviation due to the combination of topography as the property leads to the bowl as well as the unique nature of the campus buildings in that location. The academic buildings in the bowl are generally considered to have double frontage due to the topography and the desire to have their primary frontage oriented to the bowl. This unique situation would require street walls on both sides of the building, which makes practical use of the building problematic.

### **BDC Chapter 3.1 Lot, Parcel and Block Design, Access and Circulation**

BDC Chapter 3.1 imposes several requirements of the formation of blocks, block length, block perimeter, and access points to the City's transportation network.

**FINDING:** As part of the OSU-C Overlay Zone, the Applicant is proposing to establish the transportation network for the entire campus, including internal and external connections. By establishing the overall transportation network, the OSU-C Overlay Zone will also set the block length and block perimeter standards and identify the access points from campus to the City's transportation network. Given the size of the campus, the significant topographical constraints, the need for multiple access points and the unique nature of a college campus, the Applicant seeks to modify the relevant



standards of BDC Chapter 3.1 and replace such standards with a set of standards tailored to the campus. The provisions of BDC 2.7.3540 of the OSU-Cascades Overlay Zone code will control over any conflicting standards in BDC Chapter 3.1.

In order to grant the deviations from BDC Chapter 3.1, the following standards apply:

- a. That granting a deviation to the BDC standards and/or zoning district requirements will equally or better meet the purpose of the regulation proposed to be modified; or
- b. That granting a deviation to the BDC standards and/or zoning district requirements is necessary due to topographical constraints or other unique characteristics of the property or specific development type proposed by the master plan, and
- c. That any impacts resulting from the deviation are mitigated to the extent reasonably practical.

Given that block length, block perimeter, street connectivity, block formation and new lot and parcel access are all interrelated and dependent upon each other, the deviation findings apply equally to all. There are several reasons for seeking deviations to these standards. First, topography on the site is a significant limiting factor. Topography on the south end of the campus makes direct connections to Chandler Avenue highly impracticable, if not impossible. Second, the overall design concept for the OSU-Cascades campus is to provide an innovative college campus design, with ample open spaces, developed plazas, green spaces, pedestrian connections and pathways, recreation facilities and large areas of natural vegetation and forest. These design concepts are unique and do not lend themselves well to the grid pattern envisioned by BDC Chapter 3.1. That said, while a grid pattern is not feasible for the OSU-Cascade Campus, the campus provides sufficient vehicular and pedestrian connections throughout the campus and provides thoughtful connections to the City's larger transportation network.

The primary impact of the deviations to BDC Chapter 3.1 relate to the western portion of the Core Campus not having a north/south vehicular connection to Chandler Avenue. This impact is mitigated through the provision of multiple pedestrian connections as well as a direct building connection to Chandler Avenue in which pedestrians can get from Chandler Avenue to the bowl portion of campus. Similarly, in the Recreation District, where block lengths are intentionally large to accommodate recreation and parking facilities, ample pedestrian connections are maintained in mid-block locations to break up the block length. Overall, the ample provision of pedestrian and bicycle facilities mitigate the deviations to BDC Chapter 3.1.

#### **4.5.300.E. Institutional Master Plan, Approval Criteria (continued)**

**3. The Institutional Master Plan complies with BDC Chapter 4.7, Transportation Analysis and meets all the approval criteria in BDC Chapter 4.8, Transportation and Parking Demand Management (TPDM) Plan.**

**FINDING:** The findings in the sections below under BDC Chapter 4.7 and BDC Chapter 4.8 demonstrate compliance with these two chapters.

**4. Existing water and sewer facilities have adequate capacity to serve the proposed development in compliance with the Collection Systems Master Plan and the Water System Master Plan, latest editions, or adequate facilities will be installed prior to occupancy or use.**

**FINDING:** OSU-Cascades submitted a water and sewer capacity analysis with estimated flows to the City for review, projecting a water demand of 154,000 gpd during the school year and average daily sewer flow of 171.5 gpm for a peak summer day. On December 8, 2017, the City issued a formal memo (SWA 17-5655), responding that the City's water and sewer facilities are adequate to serve the estimated demand. This water and sewer analysis, mapping and supporting documentation is included in Exhibit 5 of the application.

**5. The Institutional Master Plan provides multi-modal connections on-site in compliance with the Bend Urban Area Transportation System Plan (TSP) and the Bend Parks and Recreation District Parks, Recreation, and Green Spaces Comprehensive Plan, latest editions, and existing and planned trail systems adjacent to the Institutional Master Plan are continued through the entire Institutional Master Plan.**

**FINDING:** The 2016 amendments to the Bend Transportation System Plan (the "2016 TSP") do not identify any new arterials, connectors or other local streets on the subject property. See Figure 9.4 of the 2016 TSP. The "Urban Area Bicycle and Pedestrian System", shown on 2016 TSP Figure 9.5, identifies two north/south and one east/west "Future Shared Roadway" on the campus. The proposed campus transportation system is consistent with the TSP's Bicycle and Pedestrian System requirements. The only difference between the proposed transportation system and Figure 9.5 of the 2016 TSP is the location on the connection of the western north/south connection to Chandler Avenue. Due to significant topographical constraints, the connection is located on Mt. Washington Drive, at the Metolius Drive intersection. The 2016 TSP does not require that roads be located in the areas specifically identified on the TSP maps. Indeed, the TSP maps acknowledge that roadway alignments are "general in nature" and that the precise location of roadways will be subject to further review and compliance with City road standards. Because the campus transportation system provides east/west and north/south connections in the general location as set forth on Figure 9.5, and includes many more multi-modal connections than identified on Figure 9.5 of the 2016 TSP, the proposed roadway system is consistent with the 2016 TSP.

The Bend Parks and Recreation District Parks, Recreation, and Green Spaces Comprehensive Plan does not show any specific connections across the campus. That

said, the University has indicated that it is willing to assist the district in making connections across the campus should the district determine that such connections would be helpful in implementing the Bend Parks and Recreation District Parks, Recreation, and Green Spaces Comprehensive Plan.

**6. The Institutional Master plan must provide and maintain a minimum of 10 percent of the gross area as open space in compliance with BDC 4.5.300.D.5.**

**FINDING:** The proposed Master Plan includes significantly greater than the minimum 10 percent of gross area as open space. The Recreation District includes approximately 50% open space. The Innovation District includes approximately 45% open space. The Core Campus District includes approximately 55% open space. The Residential District includes approximately 50% open space. The total campus includes approximately 50% open space. See Exhibit 11 of the application for the campus open space concepts.

**7. The Institutional Master Plan, when located in an Opportunity Area and includes residential designated land, complies with the density and housing mix in BDC 4.5.200.E.3.**

**FINDING:** Although the OSU-Cascades Campus is within an Opportunity Area, the area has not been assigned any residentially designated land. Consequently, the density and housing mix standards of BDC 4.5.200.E.3 do not apply. Instead, the residential density standards of BDC 2.3.300.C apply, and are discussed below under the findings for that standard.

**8. In lieu of the approval criteria in BDC 4.6.300 Quasi-Judicial Amendments, Major Institutional Master Plan applications that do not propose a Bend Comprehensive Plan amendment must demonstrate compliance with the following:**

- a. Approval of the request is consistent with the relevant Statewide Planning Goals that are designated by the Planning Director or designee; and
- b. Approval of the request is consistent with only the relevant policies of the Bend Comprehensive Plan Chapter 11, Growth Management that are designated by the Planning Director or designee.

**FINDING:** The Master Plan does not propose to amend the Bend Comprehensive Plan; consequently, in lieu of the approval criteria set forth in BDC 4.6.300, the following criteria apply:

Statewide Planning Goals

As discussed under each goal, the Statewide Planning Goals largely impose obligations on local governments to develop programs, policies and implementation measures consistent with the requirements of the Statewide Planning Goals. Therefore, Goal 1 is met.

*Goal 1 To develop a citizen involvement program that insures the opportunity for citizens to be involved in all phases of the planning process.*

**FINDING:** The City's acknowledged citizen involvement program for quasi-judicial amendments is codified in BDC Chapter 4.1. The first step for citizen involvement is the public meeting required by BDC 4.1.215. As previously noted, the applicant held a public meeting on November 15, 2017. Notice of the public meeting was provided to property owners located within 500 feet of the subject property and to the Century West, River West, Summit West, and Southern Crossing Neighborhood Associations. The applicant has submitted documentation from the public meeting. Type III land use applications are also noticed by the City pursuant to BDC 4.1.400, which ensures that citizens are informed of the opportunity to participate in a public hearing.

*Goal 2 Land Use Planning To establish a land use planning process and policy framework as a basis for all decision and actions related to use of land and to assure an adequate factual base for such decisions and actions.*

**FINDING:** As required by Goal 2, the City of Bend has adopted criteria and procedures to evaluate and make decisions regarding land use applications. The City reviews Development Code Amendment requests based on established regulations and policies and prepares detailed findings. Such findings allow a decision based on factual data, ultimately for City Council adoption. The City of Bend has adopted land use procedures to render decisions as required by this Goal. The applicant has submitted sufficient evidence as outlined in subsequent findings in this report and the submitted project narrative. Therefore, the City will have an adequate factual base to make a decision on this application. Therefore, this goal is met.

*Goal 3 Agricultural Lands To preserve and maintain agricultural lands.*

*Goal 4 Forest Lands To conserve forest lands by maintaining the forest land base and to protect the state's forest economy by making possible economically efficient forest practices that assure the continuous growing and harvesting of forest tree species as the leading use on forest land consistent with sound management of soil, air, water, and fish and wildlife resources and to provide for recreational opportunities and agriculture.*

**FINDING:** There are no designated agricultural lands and forest lands within the City of Bend. Therefore, Goals 3 and 4 do not apply.

*Goal 5 Natural Resources, Scenic and Historic Areas, and Open Spaces: To protect natural resources and conserve scenic and historic areas and open spaces.*

**FINDING:** The only natural resource identified on the property and contained within any official City inventory is in the southwest corner and is a rock outcropping referenced as Upland Area of Special Interest Site No. 32 (the "ASI" site"). The ASI site on the property is slated for preservation and the applicant has proposed development consistent with the City's ASI development standards.

Other than the ASI site, which is to be preserved under the Master Plan, the subject property does not include any inventoried Goal 5 resources. Although a portion of the property includes a pumice mine, neither the City of Bend nor Deschutes County have identified the pumice mine in a Goal 5 inventory or otherwise identified the mine area as a significant mineral or aggregate site. Moreover, the City's 2016 Buildable Land Inventory, identifies the property as buildable employment land, while other elements of the Bend Comprehensive Plan identify the area as an "Opportunity Area" or a "Special Site" reserved for university uses. Therefore, Goal 5 is met.

*Goal 6 Air, Water and Land Resources Quality: To maintain and improve the quality of the air, water and land resources of the state.*

**FINDING:** Air and water quality are regulated by the Oregon Department of Environmental Quality. The Bend Development Code includes regulations for the Waterway Overlay Zone (WOZ) and Areas of Special Interest (ASI), which has been acknowledged by the Department of Land Conservation and Development. The subject property is not located within the WOZ and includes one small ASI in the southwestern portion of the site, as noted above. As part of the Site Plan Review process, the applicant will be required to provide evidence of sufficient water supply to the site. Therefore, Goal 6 is met.

*Goal 7 Areas Subject to Natural Hazards: To protect people and property from natural hazards.*

**FINDING:** The Bend Comprehensive Plan has not identified any areas subject to natural hazards in the immediate vicinity of the site. That said, the City did evaluate the rise of wildfire in the most recent Urban Growth Boundary expansion. The Bend Comprehensive Plan amendments as part of the UGB expansion were acknowledged by DLCDC. These amendments included a policy commitment with Policies 10-18 and 11-5 to adopt strategies to reduce wildfire hazards to land inside the City and included in the Urban Growth Boundary. The Bend Fire Department implements the Fire Code and the Building official implements the Structural Code, which takes into consideration seismic risk and snow load. The City Engineer implements the Clearing, Grading, and Erosion Control regulations in Title 16 of the Bend Code. Based on this finding, Goal 7 is met.

*Goal 8 Recreational Needs: To satisfy the recreational needs of the citizens of the state and visitors and, where appropriate, to provide for the siting of necessary recreational facilities including destination resorts.*

**FINDING:** The Bend Parks and Recreation District (BPRD) has adopted the Bend Parks and Recreation District Parks, Recreation, and Green Spaces Comprehensive Plan which addresses the recreational needs of the community and serves as a guide for determining future recreational facility needs. The University received documentation from BPRD that "according to the District's Neighborhood Parks Plan, there is no need for a neighborhood park in this service area." However, the proposed OSU-Cascades

master plan will include athletic fields and green spaces that will serve the recreational needs of the University as well as the greater community. Based on this finding, Goal 8 is met.

*Goal 9 Economic Development: To provide adequate opportunities throughout the state for a variety of economic activities vital to the health, welfare, and prosperity of Oregon's citizens.*

**FINDING:** Goal 9 imposes an obligation on local governments to adopt comprehensive plans and implementing policies that support a wide variety of economic development opportunities. As part of the UGB process, and in direct response to the requirements of Goal 9, the City adopted the 2016 Bend Economic Opportunities Analysis (the "EOA"). The EOA stresses in several locations the need to develop a 4-year university in Bend and specifically identifies the subject property as the site selected for a 4-year university. See, e.g., EOA 45-46. In addition, the City adopted a policy commitment through Plan Policy 11-18 to establish the OSU Cascades site as satisfying a special site need for a university (See also Plan Figure 11-6). By seeking to establish a 4-year university on the site identified by the City of Bend, the current proposal is consistent with Goal 9 and the City's implementation measures through the EOA. Goal 9 has been met.

*Goal 10 Housing: To provide for the housing needs of citizens of the state.*

**FINDING:** As is the case with most Statewide Planning Goals, Goal 10 largely imposes obligations on local governments to provide an adequate supply of housing for all income levels. The OSU-Cascades Master Plan accomplishes this goal by providing multi-family "middle market" housing and student housing on property that the City of Bend has not allocated a minimum housing density. By providing both student housing (up to 40% of the student population) and a sizeable amount of multi-family "middle market" housing, the OSU-Cascades Master Plan is consistent with Goal 10's requirement to "provide for the housing needs of citizens of the state." This proposal for housing further supports the City achieving the housing mix identified in the City's adopted 2016 Housing Needs Analysis (See Appendix K to the Comprehensive Plan). The Housing Needs Analysis identified a need for additional multi-family attached housing. Goal 10 has been met.

*Goal 11 Public Facilities and Services: To plan and develop a timely, orderly and efficient arrangement of public facilities and services to serve as a framework for urban and rural development.*

**FINDING:** The proposed Development Code Amendment is consistent with the public facilities and services goal that requires the City to plan and develop land in a timely, orderly, and efficient fashion, based upon the availability of public services. All needed public facilities and services are available to the subject property. Water and sanitary sewer service is available via existing City infrastructure located in the adjacent streets and capacity exists within these two systems. An established network of streets surrounds the property. The OSU-Cascades Traffic Impact Analysis identified traffic

mitigation measures to address impacts to the surrounding transportation system. Emergency services are available through the City of Bend Fire and Police Departments. The subject property is also located within the Bend-LaPine School District. No amendments are required to the City's adopted water, sewer collection, and transportation public facility plans to support the proposal. Goal 11 has been met.

*Goal 12 Transportation: To provide and encourage a safe, convenient and economic transportation system.*

**FINDING:** Goal 12 imposes the requirement of local governments to develop, maintain and update transportation plans consistent with the planning and implementation guidelines of Goal 12. There are no specific obligations imposed on private development. That said, in a general sense, the purpose of Goal 12 is to ensure efficient transportation systems that take into account a variety of transportation modes. The OSU-C Traffic Impact Analysis (TIA) and Transportation and Parking Demand Management Plan (TPDM) both demonstrate a commitment to providing new and improved transportation facilities in the City of Bend that will serve vehicular, pedestrian and bicycle transportation needs, all consistent with the general requirements of Goal 12.

*Goal 13 Energy Conservation: Land and uses developed on the land shall be managed and controlled so as to maximize the conservation of all forms of energy, based upon sound economic principles*

**FINDING:** Although Goal 13 generally imposes obligations on local governments to develop plans and implementing measures that conserve energy, the OSU-Cascades Master Plan and the new OSU-Cascades Overlay Zone standards demonstrate that the Applicant is dedicated to developing a "net zero" project that not only conserves energy but, in fact, produces energy and provides significant opportunities for reuse of wastewater.

*Goal 14 Urbanization: To provide for an orderly and efficient transition from rural to urban land use, to accommodate urban population and urban employment inside urban growth boundaries, to ensure efficient use of land, and to provide for livable communities.*

**FINDING:** The subject property lies within the city limits and the City's Urban Growth Boundary in an area where urban levels of service are currently provided. Therefore, this goal is not applicable to the proposed Development Code Amendment.

*Goal 15, Willamette River Greenway*

*Goal 16, Estuarine Resources*

*Goal 17, Coastal Shorelands*

*Goal 18, Beaches and Dunes*

*Goal 19, Ocean Resources*

Goals 15 through 19 are not applicable to the proposed Development Code Amendment application because the subject property does not include any of these features or resources.

### Bend Comprehensive Plan Chapter 11, Growth Management

The following policies apply the Campus Master Plan:

*11-1 The City will encourage compact development and the integration of land uses within the Urban Growth Boundary to reduce trips, vehicle miles traveled, and facilitate non-automobile travel.*

**FINDING:** The Master Plan includes a variety of measures and development types that are designed to reduce vehicle trips, reduce vehicle miles traveled and reduce the reliance on the automobile. For example, the integration of multi-family “middle market” housing, university uses and the employment opportunities within the Innovation District allow students, employees and residents (both student and market rate tenants) to enjoy all the elements of the overall campus without the need to use a car or use the City’s transportation system. The Innovation District, as a classic vertical mixed-use development, will reduce vehicle trips by permitting employees and residents to obtain services and entertainment options without the need for a car. Recreation uses, located throughout the campus, allow residents, guests, students and on-campus housed students to utilize recreation features without the need to use a car. On-site and off-site connections to existing and new multi-modal transportation networks will allow students, employees and guests to travel to and from the campus by bike or other non-vehicular methods. Together, the overall campus development and the connections to the non-vehicular transportation network will reduce trips, vehicle miles traveled and encourage the use on non-automobile travel.

*11-2 The City will encourage infill and redevelopment of appropriate areas within Bend’s Central Core, Opportunity Areas and transit corridors (shown on Figure 11-1).*

**FINDING:** The OSU-Cascades Campus is a prime example of a significant brownfield redevelopment<sup>1</sup>. Moreover, it is located within the Central Westside/Century Drive “Opportunity Area” in the Bend Comprehensive Plan and is specifically identified for the development of a 4-year university (See Plan Policy 11-18). Chapter 11 of the Comprehensive Plan, Growth Management, identifies nine (9) Opportunity Areas, including the Central Westside/Century Drive Area, as a location within the city that is appropriate for new growth. By redeveloping a pumice mine and a landfill, OSU-Cascades’ master plan is consistent with Policy 11-2.

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<sup>1</sup> Brownfields are defined as real property where expansion or redevelopment is complicated by actual or perceived environmental contamination. Brownfields can be cleaned up and redeveloped for new industries, businesses, housing and open space that creates jobs (Oregon DEQ).



*11-3 The City will ensure that development of large blocks of vacant land makes efficient use of land, meets the City's housing and employment needs, and enhances the community.*

**FINDING:** The OSU-Cascades property is a “large block of vacant land” and has been identified in the City’s 2016 Buildable Lands Inventory as available for employment uses. For purposes of the 2016 Economic Opportunities Analysis (EOA), the City study likewise identified the area as suitable for a 4-year university (See also Policy 11-18, Figure 11-6). The City has not allocated any specific amount of housing to the OSU-Cascades property. Consequently, by providing both multi-family middle market housing and on-campus student housing (both traditional dormitory and apartments), OSU-Cascades is providing housing in a manner that will make it easier for the City to meet its overall housing needs, including providing the “missing middle” housing. For purposes of employment, the OSU-Cascades Master Plan will provide a 4-year university in the location identified in the Bend Comprehensive Plan and provide additional employment opportunities in the Innovation District.

*11-4 Streets in the Centers and Corridors, Employment Districts, Neighborhoods, and Opportunity Sites will have the appropriate types of pedestrian, biking, and transit scale amenities to ensure safety, access, and mobility.*

**FINDING:** This policy is implemented through the City’s development standards. That said, the on-site pedestrian, biking and transit elements of the Master Plan exceed the requirements of the BDC. Transit stops will be located adjacent to campus on SW Century Drive and will be located internal to the campus, while the pedestrian and bicycle amenities are located throughout the campus and at a greater density than would be found in a traditional grid development. These facilities in particular will be located both on-street and on off-street dedicated paths.

*11-6 The City will encourage vertical mixed use development in commercial and mixed use zones, especially where those occur within the Central Core, Opportunity Areas and along transit corridors.*

**FINDING:** Although the Bend Comprehensive Plan identifies the OSU-Cascades property as a special site for a 4-year university and does not identify areas for vertical mixed use development, in addition to the university, the Innovation District will include a large amount of traditional vertical mixed-use development which will include multi-family middle market housing, research space, office space, retail and university partnership areas.

*11-18 The City has identified a need for a special site for a university as part of the Urban Growth Boundary Process. At this time, Oregon State University is developing plans for a Bend campus. If OSU’s plans are approved by the City, their campus will meet this identified need. The campus site currently being developed is between Century Drive, Mt. Washington Drive and Simpson Avenue (see Figure 11-6). Further expansions of the university within this area of the City are also being considered. Such a designation for this area does not preclude land uses other than institutional.*

**FINDING:** This policy is directly applicable to the OSU-Cascades property and specifically provides that the site will meet the City's identified need for a site for a 4-year university. The location set forth in Policy 11-18 includes the entire 128-acre site. Policy 11-18 specifically references the Master Plan area as the area slated for development of an expanded campus. Moreover, this policy does not limit the use of the site solely to institutional uses and expressly allows the uses contemplated in the Innovation District and the Residential District. The Bend Comprehensive Plan does not specify a minimum residential density for the Master Plan area.

#### **4.5.300.E. Institutional Master Plan, Approval Criteria (continued)**

**9. If the Major Institutional Master Plan proposal contains a zone change request to bring the zoning into compliance with the Bend Comprehensive Plan designation, the zone change is subject to the approval criteria of BDC 4.6.300(C).**

**FINDING:** The Applicant has submitted a concurrent application (PZ-18-0005) to amend the underlying zoning from RS, SM and CL to MU, which is consistent with the Bend Comprehensive Plan designation. Consequently, BDC 4.6.300(C) applies in this instance and is addressed in the report for the concurrent rezone application.

**10. If the Major Institutional Master Plan proposal contains a proposed amendment to the Bend Comprehensive Plan map or text, the amendment is subject to the approval criteria of BDC 4.6.300(B).**

**FINDING:** The proposed Institutional Master Plan does not contain a proposed amendment to the Bend Comprehensive Plan map or text.

#### **4.5.300 Institutional Master Plan (continued)**

**F. Periodic Institutional Master Plan Status Report. Every five years or sooner from the date of the Institutional Master Plan approval, the Institution must submit an update to the Planning Division. This update must provide a description of all projects that: (1) have been completed since the most recent update; (2) are ongoing, including a description of the status and estimated timetables for completion of such projects; (3) are scheduled to begin in the upcoming 24 months, including estimated timetables for the commencement, progress, and completion of such projects; and, (4) are no longer being considered by the Institution. In addition, the Institution must submit an updated site plan. The update will be presented to the Planning Commission, but will not require a public hearing. The status report will no longer be required if the Institutional Master Plan is built out and additional development is not contemplated.**

**FINDING:** A Periodic Institutional Master Plan Status Report will be required to be submitted by the Applicant every five years in compliance with this section.

#### **G. Duration of Approval.**

- 1. An approved Institutional Master Plan will remain valid indefinitely unless withdrawn by all owner(s) of property within the Institutional Master Plan. The City may deny withdrawal when a switch to otherwise applicable standards would not be in the public interest because of sufficient development under the Institutional Master Plan. Standards and regulations identified in the approved Institutional Master Plan will control all subsequent site development as long as the approved Institutional Master Plan is valid. If alternative standards and regulations are not specifically identified in the approved Institutional Master Plan, the applicable City standard at the time any development application is submitted will apply.**

**FINDING:** Upon approval of the Master Plan, the Master Plan and the standards of the OSU-Cascades Overlay Zone will control all subsequent development on the OSU Campus. Some of the ongoing conditions of approval for the PZ-14-0210 Site Plan Review approval for the initial 10-acre site will remain as outlined below.

**Recommended Condition of Approval:** *Condition 1, 23-24, and 27-29 of PZ-14-0210 remain in effect unless modified at a later date. Conditions 25 and 26 of PZ-14-0210 will remain in effect until completion of the Phase 1 transportation improvements identified in Table 2.7.3570.D of the OSU-Cascades Overlay Zone after which time they will no longer apply.*

- 2. The duration of approval for an Institutional Master Plan must coincide with the timeline outlined in the approved phasing plan and in accordance with the time frames studied in the Transportation Analysis and Water and Sewer Capacity Analysis for the Institutional Master Plan. Site plan review or land division applications submitted consistent with or earlier than as provided in an approved phasing plan will not require an updated Transportation Analysis and Water and Sewer Capacity Analysis as part of the development application. Infrastructure capacity may be reserved for the Institutional Master Plan site for up to 15 years or as specified in an approved phasing plan.**

**FINDING:** The Applicant's infrastructure studies (sewer, water, transportation) identify 2034 as the build-out year for the OSU-Cascades Campus. The Applicant estimates that all Site Plan Review applications for the full build-out of the campus will be submitted no later than 2034, which would secure infrastructure capacity in sewer, water and transportation facilities for all site plan applications filed through 2034. In addition, with respect to transportation facilities, to ensure sufficient capacity, the Applicant plans to construct all required transportation infrastructure prior to 2034. Presently, OSU-Cascades anticipates that any development post 2034 would not add student capacity or increase demand on transportation facilities, but would provide

additional on-site facilities for existing students (e.g., additional student housing options, administrative facilities, etc.) For purposes of clarity, the Applicant is requesting that the approved phasing plan reserve infrastructure capacity (sewer, water, transportation) through and including 2034 and all Site Plans Review Applications filed pursuant to the Applicant's phasing plan to December 31, 2034.

**3. The time period set forth in subsection (G) of this section will be tolled upon filing of an appeal to LUBA and must not begin to run until the date that the appellate body has issued a final order.**

**FINDING:** The time period set forth in subsection (G) of this section regarding the duration of the master plan approval will be suspended upon the potential filing of an appeal to Land Use Board of Appeals (LUBA) and must not begin to run until the date that the appellate body has issued a final order.

## **TITLES 2 AND 3, LAND USE DISTRICTS AND DESIGN STANDARDS**

As noted above, BDC 4.5.300.E.2 requires the Applicant to demonstrate the standards of BDC Titles 2 and 3 are "capable of being met" during subsequent Site Plan Review or land divisions review. This standard does not require the Applicant to demonstrate actual compliance with all standards and requirements of BDC Titles 2 and 3. For example, where the code imposes a 10-foot setback requirement, the Applicant for a master plan is not required to show that each building meets the 10-foot setback. Such a showing would be impossible at the master plan stage where the precise location of buildings is not known. Rather, where the requirement is to demonstrate the capability to comply with a standard, an Applicant must merely demonstrate that it is *feasible* to meet the standard. As discussed above under BDC 4.5.300.E.2, this is accomplished through the imposition of a condition of approval requiring compliance with BDC Titles 2 and 3 at the time of Site Plan Review application submittal as well as a showing that it is possible or not infeasible to meet the existing standard.

### **CHAPTER 2.3 – MIXED-USE ZONING DISTRICTS (ME, MR, PO, MU, and MN)**

**B. Applicability. The standards of this chapter apply to all development in the Mixed-Use Zoning Districts.**

**FINDING:** The proposal is a master plan for an institution of higher education within the Mixed-Use Urban zone. Therefore, the standards of this chapter apply.

For purposes of BDC Chapter 2.3, the Applicant's overall development plan demonstrates that it is possible to meet all development standards, except those standards for which the Applicant has sought a deviation and applied new standards through the OSU-Cascades Overlay Zone. Standards not identified below are not relevant to the BDC 4.5.300.E.2 analysis because the relevant standard either applies to a situation not contemplated by the master plan or is not relevant at the master planning stage.

**2.3.200 Permitted and Conditional Uses.**

**A. Permitted and Conditional Uses.** The land uses listed in Table 2.3.200 are allowed in the Mixed-Use Districts, subject to the provisions of this chapter. Only land uses that are listed in Table 2.3.200 and land uses that are approved as “similar” to those in Table 2.3.200 may be permitted or conditionally allowed. The land uses identified with a “C” in Table 2.3.200 require Conditional Use Permit approval prior to development, in accordance with BDC Chapter 4.4.

**Table 2.3.200  
Permitted and Conditional Uses**

<b>Land Use</b>	<b>ME</b>	<b>MR</b>	<b>PO</b>	<b>MU</b>	<b>MN</b>
<b>Residential</b>					
Single-family detached dwelling	N	P	L [see subsection (C)(1) of this section]	N	N
Attached single-family townhomes*	L [see subsection (C)(1) of this section]	P	L [see subsection (C)(1) of this section]	P	P
Two- and three-family housing*	L [see subsection (C)(1) of this section]	P	L [see subsection (C)(1) of this section]	P	P
Multifamily residential*	L [see subsection (C)(1) of this section]	P	L [see subsection (C)(1) of this section]	P	P
<b>Commercial</b>					
Retail sales and service	L [see subsection (C)(2) of this section]	L [see subsection (C)(2) of this section]	N	P	L [see subsection (C)(2) of this section]

Land Use	ME	MR	PO	MU	MN
Retail sales and service (auto oriented*)	P	N	N	N	N
Restaurants/food and beverage services					
– without drive-through	P	P	P	P	P
Offices and clinics	P	P	P	P	P
Lodging (e.g., *bed and breakfast inns, hostels, timeshare)	P	P	N	P	P
Hotel/motels	P	P	N	P	C
– with conference center	P	P	N	P	N
Day care	P	P	P	P	P
<b>Public and Institutional</b>					
Parks and open space	P	P	P	P	P
Institutions for higher education	P	P	P	P	C
*Utilities (above ground)	P	P	P	P	P

**FINDING:** OSU-Cascades is proposing an institution of higher education<sup>2</sup> within the Mixed-Use Urban zone, a permitted use per the Bend Development Code. The proposed OSU-Cascades Overlay Zone code (Exhibit A of the ordinance) notes that “all permitted uses in the MU zone shall be permitted in the OSU-C Overlay Zone” and “all conditional uses in the MU zone shall be conditional uses in the OSU-C Overlay Zone.” Only uses that are allowed by code are proposed. The OSU-Cascades Overlay Zone code lists proposed uses within the master plan area, all of which are allowed by the current MU code. All proposed uses within the master plan area are permitted uses in the MU zone. The Applicant is capable of meeting this standard at future Site Plan Review.

**B. Limitations. The following limitations apply to those uses identified as “L” in Table 2.3.200:**

- 1. Commercial and Public Parking. In the MU Zone, commercial or public parking in a parking structure shall be permitted. Surface parking lots for commercial and public parking as a stand-alone use (not accessory to another use on the site) shall require a conditional use permit.**

<sup>2</sup> The Applicant notes that Table 2.3.300 identifies “Institutions for higher education,” while the BDC 1.2 definition refers to “Institutions of higher education.” For purposes of this narrative, the BDC 1.2 definition: “Institutions of higher education” will be utilized.

**FINDING:** The proposed OSU-Cascades Campus will utilize both structured parking and surface parking. Parking for the Innovation District will include surface parking, covered parking, underground structured parking and on-street parking. Surface parking lots are proposed to serve the parking needs of the campus outside of the Innovation District.

Parking areas are proposed as shown in Figure 2.7.3550.A of the OSU-C Overlay Zone code. All of the proposed parking (structured and surface) are accessory uses to the University and Innovation District and were sized based on the TPDM analysis and estimated University parking needs; none of the parking areas are stand-alone uses.

**2.3.300 Development Standards.**

The following table provides the numerical development standards within the Mixed-Use Districts. Additional standards specific to each district follow within a separate section of this chapter.

**Table 2.3.300**

**Mixed-Use District Development Standards**

<b>Standard</b>	<b>MU</b>
<b>Minimum Front Yard Setback</b>	<b>None</b>
<b>Maximum Front Yard Setback (see subsection (A)(1) of this section)</b>	<b>10 feet</b>
<b>Rear Yard Setback</b>	<b>None/10 feet (see subsection (A)(2) of this section)</b>
<b>Side Yard Setback</b>	<b>None/10 feet (see subsection (A)(2) of this section)</b>
<b>Lot Coverage</b>	<b>None</b>
<b>Building Height (see subsection (B) of this section)</b>	<b>65 feet</b>
<b>Minimum Residential Density</b>	<b>Subject to RM Zone minimum density (see subsection (C) of this section)</b>
<b>Maximum Residential Density</b>	<b>None</b>

**FINDING:** *Maximum Front Yard Setback* - Due to the unique nature of an institution of higher education and the campus setting of the OSU-Cascades Campus, OSU-Cascades is seeking a deviation from this code requirement. The proposed OSU-

Cascades Overlay Zone code (Exhibit A of the proposed ordinance) notes that: “no maximum front yard setback shall apply, provided, however, where a building is set back more than 10 feet from a public or private right of way, in addition to any landscaping required by BDC 2.7.3504.I, one or more of the following treatments shall be included in the setback area between the building and the street:

1. Sidewalks or multi-use paths 10 feet or wider;
2. Improved plazas and pedestrian areas;
3. Outdoor dining and/or gathering areas;
4. Specialty landscaping, including water treatment-oriented landscaping;
5. Native landscaping, woodland forest areas;
6. Traditional campus greens, quadrangle or park areas; and
7. Parking and Maneuvering Areas as allowed by BDC 2.7.3504.C.

*Rear/Side Yard Setback* - The only residential zone abutting the proposed OSU-Cascades Campus Master Plan area is along its frontage with Mt. Washington Drive. As this is frontage, it is not defined as a rear or side yard. As such, the proposed Master Plan area has no rear or side yards abutting a residential zone and the 10-foot setback does not apply.

*Building Height* - All existing and proposed structures within the master planned area are less than 65 feet high, in compliance with this standard. The details of each building height will be refined during Site Plan Review, however, they will comply with this standard.

**A. Setbacks. Building setback standards provide building separation for fire protection/security, building maintenance, sunlight and air circulation, noise buffering, and visual separation. Building setbacks are measured from the building footprint to the respective property line. The setback standards outlined in Table 2.3.300 apply to all new buildings and any building expansion, including primary structures and accessory structures.**

**1. Front Yard Setbacks. In some of the Mixed-Use Districts, buildings are placed close to the street to create a vibrant pedestrian environment, slow traffic, provide a storefront character to the street, support future transit service, and encourage walking. The setback standards are flexible to encourage public spaces between sidewalks and building entrances (e.g., extra-wide sidewalks, plazas, squares, outdoor dining areas, and pocket parks). The standards also encourage the formation of solid blocks of commercial and mixed-use buildings for walkable Mixed-Use Districts.**

**a. General Standards. See Table 2.3.300, Mixed-Use District Development Standards.**

**b. Maximum Setback Calculation. Conformance with the maximum setback standard is achieved when one or both of the following is met:**





**(D) Mechanical structures such as heat pumps, air conditioners, and emergency generators are not allowed.**

**FINDING:** Due to the unique nature of an institution of higher education and the campus setting of the OSU-Cascades Campus, OSU-Cascades is seeking a deviation from the maximum front yard setback code requirement. The proposed OSU-Cascades Overlay Zone code (Exhibit A of the proposed ordinance) notes that: “no maximum front yard setback shall apply, provided, however, where a building is set back more than 10 feet from a public or private right of way, in addition to any landscaping required by BDC 2.7.3504.I, one or more of the following treatments shall be included in the setback area between the building and the street: No buildings in excess of 65 feet are proposed. The Applicant’s overall Master Plan demonstrates that it is possible to meet this height limit during future Site Plan Review.

1. Sidewalks or multi-use paths 10 feet or wider;
2. Improved plazas and pedestrian areas;
3. Outdoor dining and/or gathering areas;
4. Specialty landscaping, including water treatment-oriented landscaping;
5. Native landscaping, woodland forest areas;
6. Traditional campus greens, quadrangle or park areas; and
7. Parking and Maneuvering Areas as allowed by BDC 2.7.3504.C.

**f. Other special setbacks in conformance with BDC 3.4.200(J) may apply.**

**2. Side and Rear Yard Setbacks.**

**a. ME, MU and MN Zones. There is no rear or side yard setback required, except when abutting a Residential Zone. In such cases, the rear or side yard setback is 10 feet. Building step back standards in subsection (B)(4) of this section may also apply.**

**FINDING:** The proposed OSU-Cascades Campus will not abut (as defined in Chapter 1.2 of the BDC) a residential zone, as it is separated from the residential zones along the north and west frontages by a roadway.

**B. Height. All buildings in the Mixed-Use Districts shall comply with the height standards contained in Table 2.3.300 except as described below or in compliance with a variance approval.**

**FINDING:** All existing and proposed structures within the master planned area are less than 65 feet high, in compliance with this standard. Exhibit 8 of the application includes a table that itemizes each existing and proposed structure, listing the estimated range of number of floors for each structure. Academic structures are proposed to be two to four floors high, while residential buildings and Innovation District buildings are generally proposed to be two to five floors high. No building is proposed to be greater than 5 floors high. The details of each building height will be refined during Site Plan Review; however, they will comply with this standard.

- 1. Height Bonus for Vertical Mixed Use.** In the ME, MU and MN Zones the maximum height may be increased by 10 feet above the maximum allowed height when residential uses are provided above the ground floor (“vertical mixed use”), except for properties abutting a residentially designated district. The building height increase for residential uses applies only if the top floor is residential and does not apply to buildings that have variance approval to exceed the permitted height.

**FINDING:** The current Master Plan does not include a height bonus for vertical mixed use, however, OSU-Cascades may elect to utilize this code allowance in the future, if demand requires it.

- 2. Height Bonus for Affordable Housing.** An increase in building height not to exceed 10 feet above the height of the zoning district may be allowed for multifamily housing when the additional units gained by the height increase are affordable housing units in conformance with BDC 3.6.200(C), except for properties abutting a residentially designated property. This shall not be combined with the increase in building height for vertical mixed use under subsection (B)(1) of this section.

**FINDING:** A height bonus for affordable housing is not proposed as part of this Master Plan application. However, OSU-Cascades may elect to utilize this code allowance in the future, if demand requires it.

- 3. Building Height Step-Backs Abutting a Residentially Designated District.** In the ME, MU, and MN Zoning Districts, portions of the building subject to subsection (B) of this section that exceed 35 feet in height or the height limit of the abutting residentially designated district, whichever is greater, shall step back one foot from side or rear lot lines abutting a residentially designated district for each foot the building height exceeds 35 feet or the height limit of the abutting residentially designated district.

**FINDING:** The proposed OSU-Cascades Campus will not abut a Residential Designated District as it is separated from adjacent residential zones by roadways. No rear or side yards within the proposed Master Plan will abut a residential zone.

- C. Residential Density.** The following density standards apply to all new developments for residential uses in the Mixed-Use Districts. The density standards are intended to ensure efficient use of buildable lands and provide for a range of needed housing, in conformance with the Comprehensive Plan. In the Mixed-Use Zones, residential density standards apply to any portions of the development where ground-floor residential uses are proposed. Area used to calculate residential density includes all area dedicated to parking and landscaping required for the ground-floor residential uses. Where ground-floor residential uses are part of a mixed-use development, area used to calculate residential density does not include land dedicated to right-of-way.

1. **MN and MU Zoning Districts. The minimum residential density standards of the RM Zone apply.**
2. **There is no minimum residential density standard for “vertical” mixed use.**
3. **Maximum residential density is controlled by the applicable lot coverage and building height standards.**

**FINDING:** Ground-floor residential uses are proposed in the Residential District. Residential uses in the Innovation District will be within traditional vertical mixed-use buildings. The traditional dormitory student housing does not qualify as “residential development” because these types of dormitory units do not qualify as “dwelling units” given their lack of individual kitchen facilities. Consequently, the only residential development subject to the density standard of this section is the townhome “middle market” housing and student apartment housing within the Residential District. Consequently, for purposes of calculating density and identifying the “portions of the development where ground-floor residential uses area proposed, the City should use the acreage of the Residential District. The size of the Residential District is 7 acres. OSU-Cascades plans to develop 45 townhome units for townhome “middle market” housing and provide 140 beds in the form of student housing apartments. The apartments are anticipated to range from studio (1 bed) to quad (4 beds) apartments. The total number of each type of unit has not been determined, however, OSU-Cascades anticipates a range between 40 and 95 total apartment units to accommodate the 140 beds. Thus, the total unit count would range between 85 and 140 units. On a 7-acre site this would equate to a density range of between 12 and 20 units per gross acre—well within the RM density range of 7.3 - 21.7 units per gross acre.

#### **D. Other Requirements.**

1. **Buffering. A 10-foot-wide landscape buffer is required along the side and rear property lines between nonresidential uses and any adjacent residentially designated districts. The buffer is not in addition to (may overlap with) the side and rear setbacks required in subsection (A) of this section. The buffer shall provide landscaping to screen parking, service and delivery areas and walls without windows or entries. The buffer may contain pedestrian seating but shall not contain trash receptacles or storage of equipment, materials, vehicles, etc. The landscaping standards in BDC Chapter 3.2, Landscaping, Street Trees, Fences and Walls, provide other buffering requirements where applicable.**

**FINDING:** The proposed OSU-Cascades Campus will not abut a residential zone as it is separated from adjacent residential zones by a roadway. No rear or side yards within the proposed Master Plan will abut a residential zone.

2. **Outdoor and rooftop mechanical equipment as well as trash cans/dumpsters shall be architecturally screened from view. Heating, ventilation and air conditioning units shall have a noise attenuating barrier to protect adjacent Residential Districts from mechanical noise.**

**FINDING:** The Applicant has not proposed any deviations from this requirement. As such, the Applicant will necessarily be subject to the regulations then in effect at the time of Site Plan Review for each phase of the project. There is nothing inherent in the overall design of the campus that would preclude compliance with this standard. As conditioned above, the Applicant must comply with the applicable provisions of BDC Titles 2 and 3, or the superseding provisions of the OSU-Cascades Overlay Zone, at the time of Site Plan Review approval. Solar panels on rooftops are not considered mechanical equipment, and therefore do not require architectural screening.

**3. Building and Fire Codes. All developments shall meet applicable fire and building code standards. Larger setbacks than those listed above may be required due to the proposed use and/or storage of combustible materials.**

**FINDING:** The Applicant has not proposed any deviations from this requirement. As such, the Applicant will necessarily be subject to the regulations then in effect at the time of site plan review for each phase of the project. There is nothing inherent in the overall design of the campus that would preclude compliance with this standard. As conditioned above, the Applicant must comply with the applicable provisions of BDC Titles 2 and 3, or the superseding provisions of the OSU-Cascades Overlay Zone, at the time of Site Plan Review approval.

**E. Landscaping. Development in the MU and MN Zones is exempt from the minimum landscaping area requirements of BDC 3.2.300(C). All other standards of BDC Chapter 3.2 are applicable.**

**FINDING:** The OSU-Cascades conceptual landscaping plan and characterization of landscape types is in Exhibit 11 submitted with the application. Although the MU zone is exempt from the landscaping area requirements of BDC 3.2.300C per BDC 2.3.300, the University's conceptual plan includes significant landscaping, including campus greens, water treatment landscaping, meadows, native woodlands/forests and tree preservation areas. The site landscape concept is to highlight the campus' location in Bend and Central Oregon, reflecting the local ecological and cultural context. The OSU-Cascades Campus site is characterized by Central Oregon native woodland and scrub landscapes; site planting is intended to be compatible with this native palette.

The single proposed landscaping deviation is to exempt those parking lots that will serve a dual purpose for energy generation with photovoltaic (PV) arrays, as trees and large shrubbery adjacent to the PV arrays would significantly reduce the energy generation potential of the facility.

With the exception of the above noted deviation, the OSU-Cascades Campus will necessarily be subject to the landscaping regulations then in effect at the time of Site Plan Review for each phase of the project. There is nothing inherent in the overall design of the campus that would preclude compliance with this standard. As conditioned above, the Applicant must comply with the applicable provisions of BDC Titles 2 and 3, or the superseding provisions of the OSU-Cascades Overlay Zone, at the time of Site Plan Review approval.

### **2.3.400 Site Layout and Building Orientation.**

**In addition to the site layout and building orientation standards of BDC 2.2.500, all of the following standards shall apply to new and expanded development within the Mixed-Use Districts, unless otherwise specified in this code, in order to reinforce streets as public spaces and encourage alternative modes of transportation, such as walking, bicycling and transit.**

**A. Walkway Connections. Walkways may be installed in setbacks as necessary to provide direct and convenient pedestrian circulation between developments and neighborhoods. Walkways shall conform to the standards in BDC Chapter 3.1, Lot, Parcel and Block Design, Access and Circulation.**

**FINDING:** The proposed pedestrian access and circulation plan is shown in Exhibit 9 submitted with the application. The design of these facilities will be further refined during Site Plan Review and will comply with the standards in BDC Chapter 3.1, Lot, Parcel and Block Design, Access and Circulation. The Applicant has not proposed any deviations from this requirement. As such, the Applicant will necessarily be subject to the regulations then in effect at the time of Site Plan Review for each phase of the project. There is nothing inherent in the overall design of the campus that would preclude compliance with this standard. As conditioned above, the Applicant must comply with the applicable provisions of BDC Titles 2 and 3, or the superseding provisions of the OSU-Cascades Overlay Zone, at the time of Site Plan Review approval.

### **B. Parking.**

**1. In the MU and MN Zones, parking and maneuvering areas shall be prohibited between the street and the building.**

**FINDING:** Due to the large size of the site, the large number of proposed structures, double frontages of some structures and the significant topographical challenges on the site, OSU-Cascades is seeking a deviation from this code requirement in some areas internal to the campus where it is not feasible for all parking and maneuvering areas to not be located between a street and building, as identified in Figure 2.7.3550.B of the OSU-C Overlay Zone code.

### **2.3.500 Architectural Standards.**

**All developments in the Mixed-Use Districts are subject to commercial design review, BDC 2.2.600, or BDC 2.1.900, Architectural Design Standards, for multifamily residential uses, as applicable, and shall be reviewed for conformance with the standards in this section unless otherwise specified in this code.**

**A. In the MU and MN Districts, building facades that are oriented to the street and are within the maximum front setback standard under BDC 2.3.300 (referred to**

as “street walls”) shall be designed to provide visual interest for pedestrians as follows:

1. **Ground-floor windows must be installed for at least 50 percent of the length of the street wall and have an area equal to 60 percent of the ground-floor wall area of the street wall. Ground-floor wall area includes all wall areas up to 10 feet above finished grade. Windows are required to be transparent to foster both a physical and visual connection between activities in the building and pedestrian activities on the street.**

**FINDING:** Due to the large size of the site and the variety of structure uses, OSU-Cascades is seeking a deviation for this requirement for some of the proposed buildings, as shown in Figure 2.7.3540.A of the OSU-C Overlay Zone code. Numerous other buildings are proposed to meet this requirement, including all buildings in the Innovation District.

2. **Weather protection shall be provided along 50 percent of the street wall and at all street-facing entrances. Weather protection projections may include but are not limited to awnings, marquees, balconies, overhangs, or building appendages. Weather projections are required to extend five feet over the sidewalk in order to meet this standard and must not obstruct or prevent the placement of street trees, tree canopies or other improvements within the public right-of-way.**

**FINDING:** Due to the large size of the site and the variety of structure uses, OSU-Cascades is seeking a deviation for this requirement for some of the proposed buildings, as shown in Figure 2.7.3540.A of the OSU-C Overlay Zone code. Numerous other buildings are proposed to meet this requirement, including all buildings in the Innovation District.

## **CHAPTER 2.7 SPECIAL PLANNED DISTRICTS**

### **2.7.700 Upland Areas of Special Interest Overlay Zone**

- D. **Development Standards. The ASI Boundary is delineated by the outside edge of the boundary line shown on the Bend Comprehensive Plan Map and the City Zoning Map. No development as defined in this chapter shall occur within an Upland Area of Special Interest boundary unless expressly permitted by the provisions of this chapter.**

**FINDING:** The current proposal (zone change and master plan) is not an activity subject to review per BDC 2.7.700.B.2, however, these standards will be applied during the Site Plan Review application submittal and review processes. As demonstrated in Exhibit 11 of the application, the ASI in the southwest corner of the OSU-Cascades Campus is planned to be preserved, with no proposed structures, tree removal, grading, or utilities, in compliance with BDC 2.7.700.

The Applicant has not proposed any deviations from the requirements of BDC 2.7.600, BDC 2.7.700, BDC 3.5.200 or BC 5.50. As such, the Applicant will necessarily be subject to the regulations then in effect at the time of Site Plan Review for each phase of the project. There is nothing inherent in the overall design of the campus that would preclude compliance with this standard.

## **CHAPTER 3.1 LOT, PARCEL AND BLOCK DESIGN, ACCESS AND CIRCULATION**

### **3.1.200 Lot, Parcel and Block Design.**

**B. Applicability.** New development shall be consistent with the provisions of this chapter and other applicable sections of this code.

**C. General Requirements for Lots and Parcels.**

- 1. Depth and width of new lots or parcels shall meet the minimum standards specified for the zoning district. Where no minimum standards are specified, the depth and width shall be adequate to provide for the off-street service and parking facilities required by the type of use and development contemplated.**

**FINDING:** This application does not include any land division; no new lots are proposed. Block lengths are determined by the proposed transportation system, demonstrated in Figure 2.7.3560.A of the OSU-C Overlay Zone code.

- 2. On steep slopes, increased lot or parcel sizes may be required to avoid excessive cuts, fills and steep driveways.**

**FINDING:** This application does not include any land division; no new lots are proposed. Block lengths are determined by the proposed transportation system, demonstrated in Figure 2.7.3560.A of the OSU-C Overlay Zone code. The proposed transportation system and block lengths include consideration of steep slopes on the site.

- 3. On tracts containing watercourses or rock outcroppings, increased lot or parcel sizes may be required to allow adequate room for development and protection of the topographic or natural feature.**

**FINDING:** This application does not include any land division; no new lots are proposed. The site does include an area of rock outcroppings that is identified as an Area of Significant Importance (ASI), which has been preserved in the proposed master plan.

- 4. Each lot or parcel shall abut upon a street other than an alley for the minimum width required for lots or parcels in the zone, except:**
  - a. For lots or parcels fronting on the bulb of a cul-de-sac, the minimum frontage shall be 30 feet;**



- b. For approved flag lots or parcels, the minimum frontage shall be 20 feet;**
- c. For lots or parcels in zero lot line developments, the minimum frontage shall be 20 feet; and**
- d. In zones where a minimum frontage width is not specified, the minimum frontage requirement shall be 50 feet.**

**FINDING:** This application does not include any land division; no new lots are proposed or created. The minimum frontage requirement for the Mixed-Use Urban zone is not specified. Frontage and block length requirements are proposed to be determined by the proposed transportation system, demonstrated in Figure 2.7.3560.A of the OSU-C Overlay Zone code.

- 5. All side lot or parcel lines shall be at right angles to the street lines or radial to curved streets for at least one-half the lot or parcel depth wherever practical.**

**FINDING:** This application does not include any land division; no new lots are proposed or created, therefore, the proposal does not change the location or orientation of any side lot or parcel lines.

- 6. Corner lots or parcels shall be at least five feet more in width than the minimum lot width required in the zone.**

**FINDING:** This application does not include any land division; no new lots are proposed or created. Further, block lengths are determined by the proposed transportation system, demonstrated in Figure 2.7.3560.A of the OSU-C Overlay Zone code.

- 7. All permanent utility service to lots or parcels shall be provided from underground facilities. The developer shall be responsible for complying with requirements of this section, and shall:**
  - a. Make all necessary arrangements with the utility companies and other persons or corporations affected by the installation of such underground utilities and facilities in accordance with rules and regulations of the Public Utility Commission of the State of Oregon.**
  - b. All underground utilities and public facilities installed in streets shall be constructed prior to the surfacing of such streets.**

**FINDING:** The Applicant has not proposed any deviations from the undergrounding requirements of this section. As such, the Applicant will be subject to the regulations then in effect at the time of Site Plan Review for each phase of the project. There is nothing inherent in the overall design of the campus that would preclude compliance with this standard. As conditioned above, the Applicant must comply with the applicable provisions of BDC Titles 2 and 3, or the superseding provisions of the OSU-Cascades Overlay Zone, at the time of Site Plan Review approval.

**D. Street Connectivity and Formation of Blocks.** To promote efficient multi-modal circulation along parallel and connecting streets throughout the City, developments shall produce complete blocks bounded by a connecting network of streets, in accordance with the following standards:

- 1. New development shall construct and extend planned streets (arterials, collectors and locals) in their proper projection to create continuous through streets and provide the desirable pattern of orderly developed streets and blocks. Streets shall be developed within a framework that is established in the Bend Urban Area Transportation System Plan and any applicable Special Area Plan, Refinement Plan, Master Neighborhood Development Plan or other adopted or approved development plan. Where such plans do not provide specific block length and perimeter standards, the requirements listed below shall apply:**

**FINDING:** The 2016 TSP does not identify any new arterials, connectors or other local streets on the subject property. See Figure 9.4 of the 2016 TSP. The “Urban Area Bicycle and Pedestrian System”, shown on 2016 TSP Figure 9.5, identifies two north/south and one east/west “Future Shared Roadway” on the campus. The proposed campus transportation system is consistent with the requirements of the TSP’s Bicycle and Pedestrian System requirements. The only difference between the proposed transportation system and Figure 9.5 of the 2016 TSP is the location on the connection of the western north/south connection to Chandler Avenue. Due to significant topographical constraints, the connection is located on Mt. Washington Drive, at the Metolius Drive intersection. The 2016 TSP does not require that roads be located in the areas specifically identified on the TSP maps. Indeed, the TSP maps acknowledge that roadway alignments are “general in nature” and that the precise location of roadways will be subject to further review and compliance with City road standards. Because the campus transportation system provides east/west and north/south connections in the general location as set forth on Figure 9.5 of the 2016 TSP, and includes many more multi-modal connections than those identified in that figure, the proposed roadway system is consistent with the 2016 TSP. Lastly, for purposes of future Site Plan Reviews, the Applicant will be required to comply with the OSU-Cascades Overlay code and, in particular, Figure 2.7.3560.A which establishes the transportation network for the OSU-Cascades Campus.

- 2. Block lengths and perimeters shall not exceed the following standards as measured from centerline to centerline of through intersecting streets.**
  - a. Six hundred sixty feet block length and 2,000 feet block perimeter in all Residential Zones;**
  - b. Four hundred feet block length and 1,500 feet block perimeter in the Central Business District, Convenience Commercial, Mixed-Use Riverfront and Professional Office Districts;**
  - c. Six hundred sixty feet block length and 2,640 feet block perimeter for all other Commercial, Industrial and Mixed Employment Districts;**

- d. **An exception may be granted to the maximum block length and/or block perimeter by the Review Authority if the applicant can demonstrate that the block length and/or block perimeter cannot be satisfied due to topography, natural features, existing development or other barriers, or it is unreasonable to meet such standards based on the existing pattern of development, or other relevant factors. When an exception is granted, the Review Authority may require the land division or site plan to provide blocks divided by one or more access corridors in conformance with the provisions of BDC 3.1.300, Multi-Modal Access and Circulation. Access corridors shall be located to minimize out-of-direction travel by pedestrians and bicyclists and shall meet all applicable accessibility standards.**

**FINDING:** As set forth above under the findings for BDC Chapter 4.5, the OSU-Cascades Overlay Zone standards will control block length standards in place of those in this section. At the time of Site Plan Review approval, the Applicant will necessarily have to comply with the block length standards imposed by the OSU-Cascades Overlay Zone.

3. **New street connections to arterials and collectors shall be governed by BDC 3.1.400, Vehicular Access Management.**

**FINDING:** As set forth above under the findings for BDC Chapter 4.5, the OSU-Cascades Overlay Zone standards will control new street connections in place of those in this section. At the time of Site Plan Review approval, the Applicant will necessarily have to comply with the new street connection standards imposed by the OSU-Cascades Overlay Zone.

4. **Except as otherwise provided in an approved Master Planned Development, private streets, where allowed by this code, shall be constructed to public standards and shall contain a public access easement along the length and width of the private facility if required to satisfy the block length and perimeter standards.**

**FINDING:** Streets within the Master Plan property are proposed to be private. The OSU-Cascades Overlay Zone includes a series of street sections that will govern the cross-sections of all streets within the campus. All private streets will include an access easement as required by this section. All roadways shall be constructed to City of Bend construction standards (pavement, curb, sidewalks), with varying asphalt/concrete and base depths permitted as designed by a registered geotechnical engineer and approved by the City Engineer.

- E. **New Lot and Parcel Access. In order to protect the operations and safety of arterial and collector roadways, access management is required during lot and parcel development. New lots and parcels created through land division that have frontage onto an arterial or collector street shall provide alternative options for access as indicated below:**

- 1. Residential lots or parcels not intended for multifamily housing shall provide alley access to the individual lots fronting onto the arterial or collector.**
  - a. Exception to Residential Alleys. The Review Authority may determine that an alley is impractical due to physical or topographical constraints. In this situation, double frontage lots may be permitted.**

**FINDING:** This application does not include any land division or creation of new lots. Further, OSU-Cascades is seeking a zone change to bring the subject property into compliance with the City's Comprehensive Plan, which will result in a mixed-use urban zone; no residential lots will remain.

Three roadways abutting the proposed campus are designated as minor arterials in the Bend TSP: Mt Washington Drive, Simpson Avenue, and 14<sup>th</sup> Street. While no lots are proposed to be designated or zoned residential, the proposed residential district on the west side of the proposed campus includes a single onsite access point from campus streets to the proposed multi-family housing, rather than multiple access points onto Mt. Washington Drive.

- 2. Nonresidential and multifamily housing lots or parcels shall provide other access alternatives to the individual lots that abut the arterial or collector street.**
  - a. Double frontage lots or parcels of adequate depth to accommodate the future use may be permitted. The creation of double frontage lots does not relieve the property owner from their responsibilities to construct and maintain the sidewalk and park strip on the nonaccess side.**
  - b. When a lot or parcel has frontage onto two or more streets, access shall be provided first from the street with the lowest classification.**

**FINDING:** As set forth above under the findings for BDC Chapter 4.5, the OSU-Cascades Overlay Zone standards will control new street connections both internal and external to campus. As shown on Figure 2.7.3560.A of the OSU-C Overlay Zone code, no buildings on campus will take access directly from any adjacent arterial or collector.

- 3. The land division shall also provide for local street grid connections to the arterial and collector street in accordance with the block length and perimeter standards of this section.**

**FINDING:** No land division is proposed with this application. The private street connections to the surrounding transportation system will be governed by the vehicular circulation system set forth in the master plan (Figure 2.7.3560.A of the OSU-C Overlay Zone code).

### 3.1.300 Multi-Modal Access and Circulation.

**B. On-Site Pedestrian Facilities.** For all developments except single-family and duplex dwellings on their own lot or parcel, pedestrian access and connectivity shall meet the following standards:

**1. Pedestrian ways shall:**

- a. Connect all building entrances within the development to one another.**
- b. Connect all parking areas, storage areas, recreational facilities, common areas (as applicable), and adjacent development to the building's entrances and exits.**
- c. Extend throughout the development site, and connect to all future phases of development, adjacent trails, public parks and open space areas whenever possible as described in subsection (C) of this section, Off-Site Multi-Modal Facilities.**

**FINDING:** The proposed campus pedestrian network is included in Exhibit 9 of the application. Every building entrance is connected by at least one accessible sidewalk or path. All parking areas, storage areas, recreational facilities, common areas and other uses are connected by at least one accessible sidewalk or path. The design and placement of each pedestrian way will be determined during the Site Plan Review design process, including connections to existing pedestrian and bike facilities.

- d. Connect or stub to adjacent streets and private property, in intervals no greater than the block perimeter standards.**

**FINDING:** Connections to adjacent streets and the associated block lengths will be consistent with the pedestrian network established by the OSU-Cascades Overlay Zone District.

- e. Provide pedestrian facilities within developments that are safe, accessible, reasonably direct and convenient connections between primary building entrances and all adjacent streets, based on the following:**
  - i. Convenient and Direct.** A route that does not deviate unnecessarily from a straight line or a route that does not involve a significant amount of out-of-direction travel for users.
  - ii. Safe.** Bicycling and pedestrian routes that are free from hazards and safely designed by ensuring no hidden corners, sight-obscuring fences, dense vegetation or other unsafe conditions.
  - iii. Accessible.** All pedestrian access routes shall comply with all applicable accessibility requirements.
  - iv. Primary Entrance Connection.** A pedestrian access route shall be constructed to connect the primary entrance of each building to the adjacent streets. For commercial, industrial, mixed-use, public, and institutional building entrances, the primary entrance is the main

**public entrance to the building. In the case where no public entrance exists, connections shall be provided to each employee entrance. For multifamily and triplex dwellings, the “primary entrance” is the front door (i.e., oriented toward the street). For buildings in which each unit does not have its own exterior entrance, the “primary entrance” may be a lobby, courtyard or breezeway which serves as a common entrance for more than one dwelling and be accessible.**

**FINDING:** Exhibit 9 of the application identifies the complete pedestrian network to be established on the campus. Site Plan Review applications will refine the specific locations of the connections as the campus is developed, but the overall network will be as generally identified on Exhibit 9. Compliance with accessibility standards will be measured at Site Plan Review stage.

**2. On-Site Pedestrian Facility Development Standards. On-site pedestrian facilities shall meet the following standards:**

**a. On-site pedestrian walkways shall have a minimum width of five feet.**

**FINDING:** All on-site pedestrian walkways are proposed to be five feet or greater.

**b. Pedestrian walkways shall be lighted in conformance with BDC 3.5.200, Outdoor Lighting Standards.**

**FINDING:** The Applicant has not proposed any deviations from this lighting requirement. As such, the Applicant will necessarily be subject to the regulations then in effect at the time of Site Plan Review for each phase of the project. There is nothing inherent in the overall design of the campus that would preclude compliance with this standard. As conditioned above, the Applicant must comply with the applicable provisions of BDC Titles 2 and 3, or the superseding provisions of the OSU-Cascades Overlay Zone, at the time of Site Plan Review approval.

**c. Switchback paths shall be required where necessary to meet the City’s adopted accessibility requirements and City of Bend Standards and Specifications. Accessible alternate routes such as ramps and/or lifts shall be provided when required.**

**FINDING:** Exhibit 9 of the application identifies the complete pedestrian network to be established on the campus. Site Plan Review applications will refine the specific locations of the connections as the campus is developed, but the overall network will be as generally identified on Exhibit 9 of the application. Compliance with accessibility standards will be measured during Site Plan Review. Given the significant topography standards on the south and west edge of campus, switchback routes may be provided and, where necessary, alternate routes will be provided.

**d. The City may require landscaping adjacent to a pedestrian walkway for screening and the privacy of adjoining properties. The specific landscaping requirements shall balance the neighbors’ privacy with the**

**public safety need for surveillance of users of the public walkway. Tall, sight-obscuring fences or dense landscaping thick enough to conceal hazards are prohibited.**

**FINDING:** The proposed campus only abuts neighboring properties at the eastern boundary north of Donovan Avenue. No pedestrian walkways are proposed within the Innovation District along the eastern boundary.

- e. Vehicle/Walkway Separation. Where walkways are parallel and abut a driveway or street (public or private), they shall be raised six inches and curbed, or separated from the driveway/street by a five-foot minimum landscaped strip. Special designs may be permitted if this five-foot separation cannot be achieved.**

**FINDING:** The Applicant has not proposed any deviations from this requirement. All the proposed onsite street sections with sidewalks include a curb and raised sidewalk, in compliance with this standard (see Section 2.7.3560.A in the OSU-Cascades Overlay Zone code). There is nothing inherent in the overall design of the campus that would preclude compliance with this standard. As conditioned above, the Applicant must comply with the applicable provisions of BDC Titles 2 and 3, or the superseding provisions of the OSU-Cascades Overlay Zone, at the time of Site Plan Review approval.

- f. Housing/Walkway Separation. Pedestrian walkways shall be separated a minimum of five feet from all residential living areas on the ground floor, except at building entrances. Separation is measured from the walkway edge to the closest dwelling unit. The separation area shall be landscaped in conformance with the provisions of BDC Chapter 3.2, Landscaping, Street Trees, Fences and Walls. No walkway/building separation is required for commercial, industrial, public, or institutional uses.**

**FINDING:** The Applicant has not proposed any deviations from this requirement. As such, the Applicant will necessarily be subject to the regulations then in effect at the time of Site Plan Review for each phase of the project. There is nothing inherent in the overall design of the campus that would preclude compliance with this standard. As conditioned above, the Applicant must comply with the applicable provisions of BDC Titles 2 and 3, or the superseding provisions of the OSU-Cascades Overlay Zone, at the time of Site Plan Review approval.

- g. Walkway Surface. Walkway surfaces shall be concrete and conform to accessibility requirements. Asphalt, brick/masonry pavers, or other durable surface that makes a smooth surface texture, and conforms to accessibility requirements, may be allowed as determined by the City. Multi-use paths and trails (i.e., for bicycles and pedestrians) shall be the same materials. (See also BDC 3.4.200, Transportation Improvement Standards.)**

**FINDING:** The Applicant has not proposed any deviations from this walkway surface requirement. As such, the Applicant will necessarily be subject to the regulations then in effect at the time of Site Plan Review for each phase of the project. There is nothing inherent in the overall design of the campus that would preclude compliance with this standard. As conditioned above, the Applicant must comply with the applicable provisions of BDC Titles 2 and 3, or the superseding provisions of the OSU-Cascades Overlay Zone, at the time of Site Plan Review approval.

**4. Developments subject to development review shall construct sidewalks within and abutting the subject property along public and private streets.**

**FINDING:** Exhibit 9 of the application identifies the complete pedestrian network to be established on the campus. Site Plan Review applications will refine the specific locations of the connections as the campus is developed, but the overall network will be as generally identified on Exhibit 9, and demonstrates that sidewalks will be constructed within and abutting the entire campus.

**C. Off-Site Multi-Modal Facilities.**

- 1. Developments subject to development and having an access corridor alignment shown on the City of Bend Urban Area Bicycle and Pedestrian System Plan shall dedicate either right-of way or an access easement to the public for a primary or connector multi-use as outlined below.**
  - a. Primary multi-use paths shall be in the alignment shown on the City of Bend Urban Area Bicycle and Pedestrian System Plan to the greatest degree practical unless, with consideration of recommendations from the Bend Park and Recreation District, an alternate alignment is approved by the City through the development review process.**

**FINDING:** The “Urban Area Bicycle and Pedestrian System”, shown on 2016 TSP Figure 9.5, identifies two north/south and one east/west “Future Shared Roadway” on the campus. The proposed campus transportation system is consistent with the requirements of the TSP’s Bicycle and Pedestrian System requirements. The only difference between the proposed transportation system and Figure 9.5 of the 2016 TSP is the location on the connection of the western north/south connection to Chandler Avenue. Due to significant topographical constraints, the connection is located on Mt. Washington Drive, at the Metolius Drive intersection. The 2016 TSP does not require that roads be located in the areas specifically identified on the TSP maps. Indeed, the TSP maps acknowledge that roadway alignments are “general in nature” and that the precise location of roadways will be subject to further review and compliance with City road standards. Because the campus transportation system provides east/west and north/south connections in the general location as set forth on Figure 9.5, and includes more multi-modal connections than identified on Figure 9.5 of the 2016 TSP, the proposed roadway system is consistent with the 2016 TSP. Lastly, for purposes of future Site Plan Reviews, the Applicant will be required to comply with the OSU-



Cascades Overlay Zone and, in particular, Figure 2.7.3560.A, which establishes the transportation network for the OSU-Cascades Campus.

- b. Connector multi-use paths may be required for pedestrians and bicycles at or near mid-block where the block length exceeds the maximum length required by BDC 3.1.200, Lot, Parcel and Block Design. Connector multi-use paths may also be required where cul-de-sacs or dead-end streets are permitted, to connect to other streets, and/or to other developments.**

**FINDING:** The proposed campus transportation system is consistent with the requirements of the TSP's Bicycle and Pedestrian System requirements. Because the campus transportation system provides east/west and north/south connections in the general location as set forth on Figure 9.5 of the 2016 TSP, and includes more multi-modal connections than identified on Figure 9.5, the proposed roadway system is consistent with the 2016 TSP. Lastly, for purposes of future Site Plan Reviews, the Applicant will be required to comply with the OSU-Cascades Overlay code and, in particular, Figure 2.7.3560.A, which establishes the transportation network for the OSU-Cascades Campus.

- c. Primary and Connector Multi-Use Path Dedication and Construction. Primary and Connector multi-use path alignments shall be dedicated and constructed in accordance with the City's Design Standards and Construction Specifications.**

**FINDING:** There are no Primary or Connector Multi-Use Paths located on the campus. The shared roadway systems identified on the 2016 TSP will be private streets.

### **3.1.400 Vehicular Access Management.**

- B. Applicability. This section shall apply to vehicular access for all properties that abut public and private streets.**
- C. Approval of Access Required. Proposals for new access shall comply with the following procedures:**
  - 1. Permission to access City streets shall be subject to review and approval by the City based on the standards contained in this chapter and the provisions of BDC Chapter 3.4, Public Improvement Standards. Access will be evaluated and determined as a component of the development review process.**

**FINDING:** Figure 2.7.3560.A of the OSU-Cascades Overlay code identifies the complete transportation network to be established on the campus and identifies the locations of all connections with the City's street network.

**D. Traffic Study Requirements.** A transportation impact analysis (TIA) may be required under BDC Chapter 4.7, Transportation Analysis, for certain types and intensities of development proposals and to determine access restrictions of driveways onto arterial and collector roadways.

**FINDING:** Future Site Plan Review applications will not be subject to the TIA requirement under the provisions of BDC 4.5.300.G, provided such applications are consistent with the approved campus phasing plan.

**E. Conditions of Approval.** To ensure the safe and efficient operation of the street and highway system, the City may require the closing, consolidation, or relocation of existing curb cuts or other vehicle access points, recording of reciprocal access easements (i.e., for shared driveways and cross access routes), development of frontage or backage streets, installation of traffic control devices, and/or other mitigation measures that comply with this code, the City's Standards and Specifications, and are approved by the City.

**FINDING:** The City may apply conditions of approval of this nature at the time of future Site Plan Review application submittals.

**E. Access Management Requirements.** Access to the street system shall meet the following standards:

1. Except as authorized under subsection (F)(4) of this section, lots and parcels in all zones and all uses shall have one access point. Single-family dwellings on corner lots at the intersection of two local streets may have one access point per frontage.
2. If a lot or parcel has frontage on two or more streets of different street classifications, the property shall access the street with the lowest classification.
3. For lots or parcels abutting an alley, access may be required to be taken from the alley. Outside of the Downtown Wall Street/Bond Street couplet, the City may determine that an alley is not an adequate roadway for primary access if both of the following criteria are met:
  - a. The alley does not provide adequate or sufficient access to the proposed development; and
  - b. Access to the higher classification roadway will be safe.
4. **Additional Access Points.** An additional access point may be allowed when it is demonstrated that the additional access improves on-site circulation, and does not adversely impact the operations of the transportation system. If the second access point is only available to an arterial or collector roadway, the City may require one or more of these conditions of approval:

- a. **Locating the access the maximum distance achievable from an intersection or from the closest driveway(s) on the same side of the street;**
  - b. **Installation of turn restrictions limiting access to right-in and right-out when the new access would be located within 200 feet of an existing or planned traffic signal or roundabout and no left turn lane exists to accommodate left turn storage on the arterial or collector;**
  - c. **Establishing a shared access with an adjoining property when possible; and/or**
  - d. **Establishing a cross access easement with an adjoining property when possible.**
5. **Access Spacing Requirements. The maximum distance achievable between two driveways or a driveway and an intersection shall be provided. Access spacing shall accommodate City of Bend Standards and Specifications for curb reveal between driveway apron wings.**

**FINDING:** Figure 2.7.3560.A of the OSU-Cascades Overlay code establishes the entire transportation network for the campus. It identifies all connections and access points to the City's transportation network. Future Site Plan Review applications will refine the precise location of these connections and will control over the requirements of this section.

6. **Access Operations Requirements. Backing from an access onto a public street shall not be permitted except for single-family, duplex or triplex dwellings backing onto a local street or for any use when backing into an alley if adequate backing distance is provided. The design of driveways and on-site maneuvering and loading areas shall include the anticipated storage length for entering and exiting vehicles, in order to prevent vehicles from backing into the flow of traffic on the public street or causing unsafe conflicts with on-site circulation.**

**FINDING:** No streets or buildings are planned to be constructed in a manner that would result in the need for any vehicle to back onto a street.

7. **Driveways shall be designed and located to provide a vehicle in the driveway with an unobstructed view of the roadway for a sufficient distance as required by City Standards and Specifications or the American Association of State Highway and Transportation Officials (AASHTO) policy on intersection sight distance requirements as determined by the City.**
8. **Driveway widths, designs, and materials shall comply with City of Bend Standards and Specifications.**

**FINDING:** All driveways approved at the Site Plan Review stage will demonstrate compliance with the driveway standards of this chapter.

**F. Shared Access.** For traffic safety and access management purposes, the number of driveway and private street intersections with public streets shall be minimized by the use of shared driveways with adjoining lots where feasible. The City may require shared driveways as a condition of development approval in accordance with the following standards:

- 1. Shared Driveways and Frontage Streets.** Shared driveways and frontage streets are encouraged, and may be required to consolidate access onto a collector or arterial street. When shared driveways or frontage streets are required, they shall be stubbed to adjacent developable land to indicate future extension. For the purpose of this code, stub means that a driveway or street temporarily ends at the property line, and shall be extended in the future as the adjacent property develops, and developable means that a property is either vacant or it is likely to redevelop.

**FINDING:** Figure 2.7.3560.A of the OSU-Cascades Overlay code establishes the entire transportation network for the campus. It identifies all connections and access points to the City's transportation network. Future Site Plan Review applications will refine the precise location of these connections and will control over the requirements of this section.

- 2. Access Easements.** Access easements for the benefit of affected properties shall be recorded for all shared driveways, including walkways, at the time of final plat approval or as a condition of development approval.
- 3. Cross Access.** Cross access is encouraged, and may be required between contiguous sites in the Public Facilities, Mixed-Use, Commercial and Industrial Zones and for multifamily housing developments in the Residential Zones in order to provide for direct circulation between sites and uses for pedestrians, bicyclists and drivers and to enable compliance with the collector and arterial access management requirements of this chapter.

**FINDING:** Figure 2.7.3560.A of the OSU-Cascades Overlay code establishes the entire transportation network for the campus. It identifies all connections and access points to the City's transportation network. Future Site Plan Review applications will refine the precise location of these connections and will control over the requirements of this section.

**G. Driveway Widths.** Driveway openings (or curb cuts) shall be the minimum width necessary to provide the required number of vehicle travel lanes (10 feet minimum width for each travel lane). When obtaining access to off-street parking areas backing onto a public street shall not be permitted except for single-family, duplex or triplex dwellings backing onto a local street or when

backing into an alley for all uses if adequate backing distance is provided. The following standards provide adequate site access, minimize surface water runoff, and avoid conflicts between vehicles and pedestrians.

1. **Single-family, two-family, and three-family residential uses shall have a minimum driveway opening width of 10 feet, and a maximum width of 24 feet. Wider driveways may be necessary to accommodate approved paved recreational vehicle pads; however, the driveway opening or connection to the street shall not be wider than 24 feet.**
2. **Multifamily developments shall have a minimum driveway opening width of 20 feet, and a maximum width of 30 feet. The dimension may exceed 30 feet if the City Engineer determines that more than two lanes are required based on the number of trips generated or the need for turning lanes.**
3. **Other Uses. Access widths for all other uses shall be based on 10 feet of width for every travel lane, except that driveways providing direct access to parking spaces shall conform to the parking area standards in BDC Chapter 3.3, Vehicle Parking, Loading and Bicycle Parking. Driveway aprons serving industrial uses and heavy commercial uses may be as wide as 35 feet.**
4. **Driveway Aprons. Driveway aprons shall be installed between the street and the private drive. Driveway apron design and location shall conform to City of Bend Standards and Specifications and the City's adopted accessibility standards for sidewalks and walkways.**

**FINDING:** All driveways approved at the Site Plan Review stage will demonstrate compliance with the driveway standards of this chapter at the time of development review.

- I. **Fire Access and Parking Area Turn-around. A fire equipment access drive shall be provided for any portion of an exterior wall of the first story of a building that is located more than 150 feet from an existing public street or approved fire equipment access drive as measured around the building. Parking areas shall provide adequate aisles or turn-around areas for service and delivery vehicles so that all vehicles may enter the street in a forward manner (except for single-family dwellings and alleys that provide adequate backing width).**

**FINDING:** Based on the current campus design at full buildout, the City does not anticipate the need for any fire turnaround areas. However, since the roadways will be built out in phases, some roadways will be longer than 150 feet without a turnaround. However, these stubbed streets do not provide access to structures and a turnaround will not be required for these stubbed streets. Consistency with this standard will be ensured through future development review for specific construction activity.

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

**FINDING:** Based on the current campus design, the City does not anticipate any issues with compliance with this requirement.

**K. Barricades. Except as otherwise provided in an approved Master Planned Development, gates, barricades or other devices intended to prevent vehicular and/or pedestrian access shall not be installed across any approved driveway or private street that provides access to multiple properties except when required by the City to restrict vehicle access to an arterial or collector street.**

**FINDING:** The Applicant is proposing that the shared roadway servicing the bowl of the campus be access controlled to limit vehicular traffic to the bowl. Although gates or bollards will be employed to control access, pedestrian and bicycle traffic will not be impacted by the closure. Future compliance with this standard will be an ongoing obligation of the Applicant.

**L. Construction. The following development and maintenance standards shall apply to all driveways and private streets. The City of Bend Standards and Specifications document shall prevail in the case of conflicting rules related to the design and construction of public infrastructure.**

- 1. Surface Options. Driveways, required parking areas, aisles, and turn-arounds may be paved with asphalt, concrete or comparable surfacing or a durable nonpaving material (e.g., grass-crete, eco-stone) may be used to reduce surface water runoff and to protect water and air quality. Gravel is not allowed.**
- 2. Surface Water Management. When an impervious surface is used, all driveways, parking areas, aisles and turn-arounds shall have on-site collection or infiltration of surface waters to prevent the flow of stormwater onto public rights-of-way and abutting property. Surface water facilities shall be constructed in conformance with City specifications. Durable nonpaving materials (e.g., grass-crete, eco-stone) are encouraged to facilitate on-site infiltration of stormwater.**

**FINDING:** The Applicant has not proposed any deviations from these requirements. As such, the Applicant will be subject to the regulations in effect at the time of Site Plan Review for each phase of the project. There is nothing inherent in the overall design of the campus that would preclude compliance with these standards. As conditioned above, the Applicant must comply with the applicable provisions of BDC Titles 2 and 3, or the superseding provisions of the OSU-Cascades Overlay Zone, at the time of Site Plan Review approval.

### 3.1.500 Clear Vision Areas.

- B. Applicability.** In all zones, clear vision areas as described below and illustrated in Figures 3.1.500.A and 3.1.500.B shall be established at the intersection of two streets, an alley and a street, a driveway and a street or a street and a railroad right-of-way in order to provide adequate vision of conflicting traffic movements as well as street signs. These standards are applicable to public and private streets, alleys and mid-block lanes, and driveways.
- C. Standards.** The clear vision areas extend across the corner of private property from one street to another. The two legs of the clear vision triangle defining the private property portion of the triangle are each measured 20 feet back from the point of intersection of the two corner lot lines, special setback line or access easement line (where lot lines have rounded corners, the lot lines are extended in a straight line to a point of intersection). Additional clear vision area may be required at intersections, particularly those intersections with acute angles, as directed by the City Engineer, upon finding that additional sight distance is required (i.e., due to roadway alignment, etc.).

There shall be no fence, wall, vehicular parking, landscaping, building, structure, or any other obstruction to vision other than a street sign post, pole (e.g., power, signal, or luminaire pole) or tree trunk (clear of branches or foliage) within the clear vision area between the height of two feet and eight feet above the level of the curb. In cut sections, embankments shall be graded to comply with these requirements.

#### **D. Exceptions.**

- 1. In all zones, at the intersection of an alley and a street or a driveway and a street, the minimum length of the two legs of the clear vision triangle defining the private property portion shall be 10 feet.**

**FINDING:** The Applicant has not proposed any deviations from this requirement. As such, the Applicant will necessarily be subject to the regulations then in effect at the time of Site Plan Review for each phase of the project. There is nothing inherent in the overall design of the campus that would preclude compliance with this standard. As conditioned above, the Applicant must comply with the applicable provisions of BDC Titles 2 and 3, or the superseding provisions of the OSU-Cascades Overlay Zone, at the time of Site Plan Review approval. Therefore, since it is “possible” to meet future development standards, the Applicant has met the requirements of this section.

- 2. In all Commercial Zones, except the CB Zone, at the intersection of an alley and a street or a driveway and a street the minimum length of each of the two legs shall be 15 feet.**
- 3. In the CB Zone, the clear vision area does not apply.**

**FINDING:** The proposed zone of the subject properties is Mixed-Use Urban (MU), not a commercial zone, therefore this standard does not apply.

## **CHAPTER 3.2 LANDSCAPING, STREET TREES, FENCES AND WALLS**

**FINDING:** The OSU-Cascades conceptual landscaping plan and characterization of landscape types is in Exhibit 11 of the application. Although the MU zone is exempt from the landscaping area requirements of BDC 3.2.300C per BDC 2.3.300, the University's conceptual plan includes significant landscaping, including campus greens, water treatment landscaping, meadows, native woodlands/forests and tree preservation areas. The site landscape concept is to highlight the campus' location in Bend and Central Oregon, reflecting the local ecological and cultural context. The OSU-Cascades Campus site is characterized by Central Oregon native woodland and scrub landscapes; site planting is intended to be compatible with this native palette.

The single landscaping deviation proposed is to exempt those parking lots that will serve a dual purpose for energy generation with photovoltaic (PV) arrays, as trees and large shrubbery adjacent to the PV arrays would significantly reduce the energy generation potential of the facility.

With the exception of the above noted deviation, the OSU-Cascades Campus will necessarily be subject to the landscaping regulations then in effect at the time of Site Plan Review for each phase of the project. There is nothing inherent in the overall design of the campus that would preclude compliance with this standard. As conditioned above, the Applicant must comply with the applicable provisions of BDC Titles 2 and 3, or the superseding provisions of the OSU-Cascades Overlay Zone, at the time of Site Plan Review approval. Therefore, since it is "possible" to meet future development standards, the Applicant has met the requirements of this section.

## **CHAPTER 3.3 VEHICLE PARKING, LOADING AND BICYCLE PARKING**

### **3.3.300 Vehicle Parking Standards for On-Site Requirements.**

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

- A. Off-Street Parking Requirements. The number of required off-street vehicle parking spaces shall be determined in accordance with the following standards. Off-street parking spaces may include spaces in garages, carports, parking lots, and/or driveways if vehicles are not parked in a vehicle travel lane (including emergency or fire access lanes). In applying the exceptions and reductions listed in subsections (B), (C), and (D) of this section, reductions and exceptions may be combined except where otherwise specified. Where a fractional number of spaces results, the required number of spaces shall be rounded down to the nearest whole number.



**Table 3.3.300  
Required Off-Street Vehicle Parking Spaces**

<b>Use</b>	<b>Minimum Requirement</b>
<b>Residential</b>	
All residential uses within the CB and MU Zoning Districts	1 space per dwelling unit
Duplex and triplex	1-bedroom units – 1 space per unit
	2- or more bedroom units – 2 spaces per unit
Multifamily residential	Studio units or 1-bedroom units – 1 space/unit
	2-bedroom units – 1.5 spaces per unit
	3- or more bedroom units – 2 spaces per unit
	Retirement complexes for seniors 55 years or older – 1 space per unit
Single-family, attached or detached, including a manufactured home on individual lot.	2 parking spaces per dwelling unit
<b>Commercial</b>	
All commercial uses within the CB and MU Zoning Districts	1 space per 500 square feet of gross area
<b>Public and Institutional Uses</b>	
Child care facility	1 space per 2 employees; a minimum of 2 spaces is required
Community and regional parks and recreational facilities	1 space per 10,000 square feet of gross area or 1 space per 1,000 square feet of building floor area, whichever is greater, or as required by a Conditional Use Permit
Neighborhood parks and recreational facilities	None except as required for accessibility compliance or as required by a Conditional Use Permit
Institutions of higher education	1 space per 5 off-campus students 1 space per 10 on-campus students 1 space per 2.1 employees

Use	Minimum Requirement
<b>Miscellaneous</b>	
Unspecified Uses	For uses not specified in Table 3.3.300, the Review Authority must determine the minimum number of required parking spaces as part of the development review process accompanying the proposed use, based upon similar uses listed in this table.
Transportation and Parking Demand Management (TPDM) Plan	Institutional and Employment Master Plans must provide a Transportation and Parking Demand Management (TPDM) Plan in compliance with BDC Chapter 4.5, Master Planning and Development Alternatives and BDC Chapter 4.8. Transportation and Parking Demand Management (TPDM) Plan. All other development applications may choose to develop a TPDM Plan in compliance with BDC Chapter 4.8 Transportation and Parking Demand Management (TPDM) Plan.

**B. Credit for On-Street Parking.**

1. **The amount of off-street parking required may be reduced by one off-street parking space for every on-street parking space abutting the development, up to 50 percent of the requirement, except as specified in subsections (B)(1)(a) and (b) of this section.**
  - a. **Uses within the CB Zone shall not receive credit for on-street parking, but have the option to pay a fee in lieu of providing off-street parking per BDC 3.3.200.**
  - b. **For uses within the MU and MN Zones, the amount of off-street parking required may be reduced by one off-street parking space for every on-street parking space abutting the development, up to 100 percent of the requirement.**
  
2. **On-street parking shall follow the established or approved configuration of existing on-street parking, except that angled parking may be allowed for some streets, where permitted by City, ODOT and/or County standards. One on-street parking space shall be defined as follows:**
  - a. **Parallel parking, each 24 feet of uninterrupted curb, where allowed;**
  - b. **Forty-five-degree diagonal, each with 14 feet of curb, where allowed;**
  - c. **Ninety-degree (perpendicular) parking, each with 12 feet of curb, where allowed;**

- d. **Curb space must be connected to the lot that contains the use;**
- e. **Parking spaces will not obstruct a required clear vision area or violate any law; and**
- f. **On-street parking spaces credited for a specific use may not be used exclusively by that use, but shall be available for general public use at all times. No signs or action limiting general public use of on-street spaces is permitted.**

**FINDING:** The Transportation and Parking Demand Management Plan (TPDM), submitted as Exhibit 16 of the application, responds to all parking standards for the campus. Once approved, the TPDM will guide parking requirements on campus.

Table 5 of the TDPM outlines the minimum parking requirements for the varied uses proposed on the OSU-Cascades campus. A supplemental memo (Kittelson; March 7, 2018) also submitted with the application breaks down the parking requirements by phase, as shown below.

At full buildout, 2,208 parking spaces are required, per Table 3.3.300. BDC 4.8 (more specifically Table 4.8.500) allows OSU-Cascades to reduce the amount of parking constructed, as credit for implementing specific trip and parking reduction measures. OSU-Cascades is eligible for a 20-percent reduction of the minimum parking required by BDC 3.3.300, which is equal to a 442-space reduction, to 1,766 parking spaces.

A minimum of 1,691 parking spaces will be provided on the site. An additional 75 spaces will be provided on Chandler Avenue abutting the site, as allowed under BDC 3.3.300.B.1. A total of 1,766 parking spaces will be provided, meeting the minimum parking requirement. Five percent of those spaces (a minimum of 100 spaces up to 193 spaces) will be reserved for carpool/vanpool spaces as demand warrants. In addition, 4 to 12 car sharing/fleet parking spaces will be provided, based on market demand.

**Table 5. Summary of Parking Requirements and Proposed Number of Parking Spaces by Phase**

User Type	Metric	Rate	Phase 1	Phase 2	Phase 3	Phase 4
			Resulting Number of Spaces Needed	Resulting Number of Spaces Needed	Resulting Number of Spaces Needed	Resulting Number of Spaces Needed
On-campus Students	Students	0.1	48	73	99	200
Off-campus Students (FTE)	Students	0.2	385	439	593	598
Campus Employees	FTEs	0.48	127	154	208	263
MM Housing	Dwellings	1.0	0	72	114	346
Innovation District	1,000 Sq. Ft.	2.0	84	343	401	658
Early Learning Center	Employees	1.0	0	0	88	88
Recreation Center	1,000 Sq. Ft.	1.0	0	0	0	55
<b>Total Parking Spaces Required (Before Reduction)</b>			<b>644</b>	<b>1,081</b>	<b>1,503</b>	<b>2,208</b>
<b>Total Parking Spaces Required (With 20% Reduction per BDC)</b>			<b>515</b>	<b>865</b>	<b>1,202</b>	<b>1,766</b>
<i>Proposed Capacity for University Parking</i>			<i>450 - 560</i>	<i>540 - 670</i>	<i>720 - 900</i>	<i>880 - 1,100</i>
<i>Proposed Capacity for Non-University Parking*</i>			<i>90 - 110</i>	<i>390 - 490</i>	<i>500 - 620</i>	<i>950 - 1,190</i>
<b>Total Range of Proposed Parking Capacity with Master Plan</b>			<b>540 – 670</b>	<b>930 – 1,160</b>	<b>1,220 – 1,520</b>	<b>1,830 – 2,290</b>

\*Non-University Parking Spaces refer to those included in the Master Plan associated with the supporting uses, including the Innovation District, Early Learning Center, Recreation Center, and Middle Market Housing.

**Table 6: Parking Supply Inventory (Spaces)**

Type of Spaces	OSU-C	Comments
On-street Spaces	75	Estimated future capacity on Chandler Avenue, as allowed by code.
On-site Spaces	1,691	Minimum parking supply. OSU-C will monitor parking to ensure needs are met.
Carpool/Vanpool	5%	A minimum of 100 spaces and up to 193 spaces will be reserved for carpool/vanpool spaces as demand warrants.
Carsharing/Fleet	4-12	Will vary based on market demand.
Bikes	Up to 1,200	Storage will vary based on demand. Additional spaces will be provided, should demand exceed supply.

Source: OSU-C

As shown in Table 5 above (and in the submitted supplemental March 7<sup>th</sup> Kittelson memo), the minimum parking requirement will be provided concurrent with each phase. A range of parking capacity is provided, indicating that additional capacity is possible in each phase if demand warrants, even up to the parking requirement under BDC 3.3.300 without any parking reductions allowed.

Table 4 of the TPDM (shown below) indicates the peak parking demand occurs between 2 and 3 pm, consistent with the afternoon peak hour for trip generation. This peak hour parking demand occurs on a typical weekday when school is in session and other planned land uses on the campus are fully occupied. Upon full buildout, the peak hour parking demand will be 2,053 parking spaces. This estimate incorporates a shared-use parking system to maximize the efficiency in the use of the spaces, and complementary transportation demand management strategies. As shown above, the

master plan has capacity to accommodate this peak hour parking demand at full buildout. Should the need for additional parking be evidenced by a 93% full threshold, the City may require the installation of additional parking spaces to reduce the utilization of parking spaces to 90%.

**Table 4: OSU-C Anticipated Parking Demand by Time of Day**

Time of Day	Anticipated Peak Parking Demand <sup>(1)</sup>
7:00 – 8:00 AM	1,583
8:00 – 9:00 AM	1,753
9:00 – 10:00 AM	1,925
10:00 – 11:00 AM	1,933
11:00 AM – 12:00 PM	1,937
12:00 – 1:00 PM	1,884
1:00 – 2:00 PM	1,811
<b>2:00 – 3:00 PM</b>	<b>2,053</b>
3:00 – 4:00 PM	1,951
4:00 – 5:00 PM	1,827
5:00 – 6:00 PM	1,720
6:00 – 7:00 PM	1,436
7:00 – 8:00 PM	1,314

Sources: OSU-C for demand rates by university population type  
 ITE Parking Generation, 4<sup>th</sup> Edition for demand rates by land use and time of day  
 (1) This estimate considers the benefits of a shared-use parking system and complementary TDM strategies

Therefore, since it is possible to meet future development standards, the Applicant has met the requirements of this section.

**C. Parking Location and Shared Parking.**

- 1. Location. Vehicle parking is allowed only on approved streets, within garages, carports and other structures, or on driveways or parking lots that have been developed in conformance with this code. Specific locations for parking are indicated within the individual land use districts for some land uses (e.g., the requirement that parking be located to side or rear of buildings, with access from alleys, for some uses). Required off-street parking shall not be located within the front yard setbacks except for single-family dwellings, ADUs, duplexes and triplexes.**

**FINDING:** Parking locations identified in future Site Plan Review applications will comply with the overall site plan and parking areas shown on Figure 2.7.3550.A of the OSU-C Overlay Zone code.

- 2. Screening. Commercial or industrial off-street parking which adjoins a residentially designated district shall be effectively screened by a fence and landscaping with a minimum width of 10 feet unless otherwise specified in this code.**

**FINDING:** The proposed Master Plan does not include any commercial or industrial off-street parking adjoining/abutting a residentially designated district. Therefore, this standard does not apply.

- 3. Off-Site Parking. Except for single-family dwellings, the vehicle parking spaces required by this chapter may be located on another parcel of land when commercial off-site parking is permitted in the underlying zone, provided the parcel is within 1,000 feet of the use it serves and the amount of off-site parking does not exceed the minimum amount of parking required for the intended use. The distance from the parking area to the use shall be measured from the nearest parking space to a building entrance, following a sidewalk or other pedestrian route. The right to use the off-site parking must be evidenced by a recorded deed, lease, easement, or similar written instrument.**

**FINDING:** No off-site parking areas are proposed as part of the campus development. The OSU-Cascades Overlay Zone clarifies where parking will be located on campus based on the location of the underlying development.

- 4. Mixed-Use Developments. If more than one type of land use occupies a single structure or parcel of land, the total requirements for off-street automobile parking shall be 95 percent of the sum of the requirements for all uses, unless it can be shown that the peak parking demands are actually less (i.e., the uses operate on different days or at different times of the day). In that case, the total requirements shall be reduced accordingly. (See subsection (C)(5) of this section, Shared Parking.)**
- 5. Shared Parking. Required parking facilities for two or more uses, structures, or parcels of land may be satisfied by the same parking facilities used jointly, to the extent that the owners or operators show that the need for parking facilities does not materially overlap (e.g., uses primarily of a daytime versus nighttime nature, or of a weekday vs. weekend nature); and provided, that the right of joint use is evidenced by a binding agreement that is tied to the land or similar written instrument establishing the joint use. The binding agreement may restrict future changes to use of the property. Shared parking is encouraged.**

**E. Maximum Number of Parking Spaces.** The number of parking spaces provided by any particular use in ground surface parking lots shall not exceed the required minimum number of spaces provided by this section by more than 50 percent. Spaces provided on-street, or within the building footprint of structures, such as in rooftop parking, or under-structure parking, or in multi-level parking above or below surface lots, shall not apply toward the maximum number of allowable spaces. Parking spaces provided through “shared parking” also do not apply toward the maximum number.

**FINDING:** The TPDM identifies all parking needs for the campus, the peak hour demand for parking and the nature of shared parking for the entire campus. Once approved, the TPDM will control parking standards on campus.

**3.3.600 Bicycle Parking Standards.**

All uses that are subject to Site Development Review shall provide bicycle parking, in conformance with the following standards, which are evaluated during Site Development Review. This section does not apply to single-family, two-family, and three-family housing (attached, detached or manufactured housing), home occupations or other developments with fewer than 10 vehicle parking spaces.

**A. Number of Bicycle Parking Spaces.** A minimum of one bicycle parking space per use is required for all uses subject to Site Development Review. Table 3.3.600 lists additional standards that apply to specific types of development:

**Table 3.3.600  
Required On-Site Bicycle Parking**

College, university or trade school	1 space for every 10 motor vehicle spaces plus 1 covered space for every dormitory unit. Colleges and trade schools shall provide one bicycle parking space for every 10 motor vehicle spaces plus one space for every dormitory unit. Fifty percent of the bicycle parking spaces shall be sheltered under an eave, overhang, independent structure, or similar cover.
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**FINDING:** Based upon the 2,208 required parking spaces (without the allowed 20 percent reduction), 221 bicycle parking spaces are required. In addition, a total of 955 covered bicycle parking spaces are required (1 for each dormitory unit). A total of 1,176 bicycle parking spaces are required. As shown above in Table 6 (and also in the March 7<sup>th</sup> Supplemental Memo), the Applicant has indicated that 1,200 bicycle parking spaces will be provided.

As required by the proposed OSU-Cascades Overlay Zone code (Exhibit A of the proposed ordinance), each Site Plan Review application will demonstrate compliance with the bicycle parking standards set forth in BDC 2.7.3504.F. The required number of parking spaces for each Site Plan Review application may be located adjacent to

buildings approved through the Site Plan Review application or located in areas subject to a prior Site Plan Review approval provided that the Applicant demonstrates that the alternate location will better serve the OSU-Cascades Campus population.

The Applicant has not proposed any deviations from this requirement. As such, the Applicant will necessarily be subject to the regulations then in effect at the time of Site Plan Review for each phase of the project. There is nothing inherent in the overall design of the campus that would preclude compliance with this standard. As conditioned above, the Applicant must comply with the applicable provisions of BDC Titles 2 and 3, or the superseding provisions of the OSU-Cascades Overlay Zone, at the time of Site Plan Review approval. Therefore, since it is “possible” to meet future development standards, the Applicant has met the requirements of this section.

Pursuant to BDC 2.7.3550.C, the number of bicycle parking spots for each Site Plan Review application will be determined at the time of Site Plan Review application and the required bicycle parking areas may be located adjacent to buildings associated with the Site Plan Review or in other nearby areas if a more convenient location is warranted.

## **CHAPTER 3.4 PUBLIC IMPROVEMENT STANDARDS**

**C. Compliance with Standards. All public improvements constructed as part of a development or to comply with a condition of development approval shall comply with all applicable standards, including but not limited to any standards and specifications adopted by the City applicable to public works or public improvements. The provisions of this chapter prevail over any inconsistent standard or specification unless the applicable standard is modified or waived under BDC 3.4.150.**

**FINDING:** Public improvements required as part of the campus development will be finalized during Site Plan Review approvals through subsequent phases of the campus. All public improvements, including those imposed as a condition of approval of the Master Plan application, will necessarily have to comply with the requirements of this section. There is nothing inherent in the Master Plan application which would prevent the Applicant from complying with this standard at the time of construction.

**D. Conditions of Development Approval. No development shall occur unless required public facilities are in place or guaranteed. Improvements required to be constructed by the developer as a condition of development approval, when not voluntarily accepted by the applicant, shall be roughly proportional to the impact of development on public facilities and services. Findings in the development approval shall indicate how the required improvements are related to and roughly proportional to the impact. The City may deny an application if required public improvements are not in place, or the City may impose conditions of approval tying the timing of construction and/or**



**occupancy of a proposed development to anticipated public improvements without requiring the applicant to construct the public improvements.**

**FINDING:** As conditioned below under BDC 4.8, off-site mitigation will be required concurrent with the impacts on the transportation system, as outlined in the City's Traffic Analysis memo (BP-17-5592). Subsequent Site Plan Review approvals will govern the timing and scope of the required water and sewer improvements, as outlined in the City's Utility Analysis Memo (SWA 17-5655).

**3.4.200 Transportation Improvement Standards.**

**A. Development Requirements. No development shall occur unless the development has frontage or approved access to a public or private street, in conformance with the provisions of BDC Chapter 3.1, Lot, Parcel and Block Design, Access and Circulation, and the following standards are met:**

- 1. Streets within or adjacent to a development shall be improved in accordance with the Bend Urban Area Transportation System Plan (TSP), provisions of this chapter and other pertinent sections of this code.**

**FINDING:** All the subject properties have frontage or access to a public or proposed private street. The proposed OSU-Cascades Overlay code includes a vehicular network map (Figure 2.7.3560.A), which is proposed to designate the general roadway locations and block lengths for the master planned site. The 2016 TSP does not identify any new arterials, connectors or other local streets on the subject property. See Figure 9.4 of the 2016 TSP. The "Urban Area Bicycle and Pedestrian System", shown on 2016 TSP Figure 9.5, identifies two north/south and one east/west "Future Shared Roadway" on the campus. The proposed campus transportation system is consistent with the requirements of the TSP's Bicycle and Pedestrian System requirements. The only difference between the proposed transportation system and Figure 9.5 of the 2016 TSP is the location on the connection of the western north/south connection to Chandler Avenue. Due to significant topographical constraints, the connection is located on Mt. Washington Drive, at the Metolius Drive intersection. The 2016 TSP does not require that roads be located in the areas specifically identified on the TSP maps. Indeed, the TSP maps acknowledge that roadway alignments are "general in nature" and that the precise location of roadways will be subject to further review and compliance with City road standards. Because the campus transportation system provides east/west and north/south connections in the general location as set forth on Figure 9.5, and includes more multi-modal connections than identified on Figure 9.5 of the 2016 TSP, the proposed roadway system is consistent with the 2016 TSP.

- 2. Development of new streets, and additional street width or improvements planned as a portion of an existing street, shall be improved in accordance with this section, and public street right-of-way and private street easements shall be dedicated to the City, Deschutes County or the Oregon Department of Transportation.**

**FINDING:** The proposed OSU-Cascades Overlay code includes a vehicular network map (Figure 2.7.3560.A) that designates proposed onsite private roadways as primary, secondary, shared use or controlled access. Typical roadway cross sections are included for each proposed roadway classification. Upon approval, the proposed OSU-Cascades Overlay Zone text will be incorporated into BDC Chapter 2.7 - Special Planned Districts, which will result in OSU-Cascades Special Street Standards.

Public street right-of-way and public access easements over private streets will be dedicated to the City, as required by code. OSU-Cascades has not proposed any deviations from this right-of-way and easement requirement. As such, the Applicant will be subject to the regulations that are in effect at the time of Site Plan Review for each phase of the project. There is nothing inherent in the overall design of the campus that would preclude compliance with this standard. As conditioned above, the Applicant must comply with the applicable provisions of BDC Titles 2 and 3, or the superseding provisions of the OSU-Cascades Overlay Zone, at the time of Site Plan Review approval. Therefore, since it is “possible” to meet future development standards, the Applicant has met the requirements of this section.

**C. Creation of Rights-of-Way for Streets and Related Purposes. Streets shall be created through the approval and recording of a final subdivision or partition plat; except the City may approve the creation of a public right-of-way by acceptance of a deed, where no plat will be recorded; and provided, that the street is deemed essential for the purpose of implementing the Bend Urban Area Transportation System Plan, and the deeded right-of-way conforms to this code. All deeds of dedication shall be in a form prescribed by the City and shall name “the public” as grantee.**

**FINDING:** The Applicant does not propose to create any public streets on the subject property. Should the Applicant later elect to subdivide the property and create public streets, it will be bound by this standard.

**D. Creation of Vehicular Access and Public Utility Easements. The City may require a vehicular access and public utility easement established by deed when the easement is necessary to provide for vehicular access and circulation and/or provision of public utilities in conformance with BDC Chapter 3.1, Lot, Parcel and Block Design, Access and Circulation, or other sections of this code. Access easements shall be created and maintained in accordance with the Uniform Fire Code Section 10.207 and City of Bend Standards and Specifications.**

**FINDING:** All private streets and adjacent sidewalks must be within a public access easement. All proposed City of Bend water and sewer facilities and franchise utilities must be within a public utility easement.

**E. Street Location, Width and Grade. Except as noted below, the location, width and grade of all streets shall conform to the City of Bend Standards and Specifications document, the provisions of this chapter and an approved**

**street plan or subdivision plat. Street location, width and grade shall be determined in relation to existing and planned streets, topographic conditions, public convenience and safety, and in appropriate relation to the proposed use of the land to be served by such streets.**

- 1. Street grades shall be designed and/or constructed as approved by the City Engineer in accordance with the design standards in Tables A through E in this section.**

**FINDING:** Proposed onsite streets are proposed to be private streets, which are required to comply with Table D of this section. Table D requires that no private street, whether residential or commercial, have a grade greater than 10 percent. All proposed roadways on the OSU-Cascades Campus meet this standard, as no roadway grades are proposed to be greater than 10 percent. The Applicant will be subject to the regulations then in effect at the time of Site Plan Review for each phase of the project. There is nothing inherent in the overall design of the campus that would preclude compliance with this standard. As conditioned above, the Applicant must comply with the applicable provisions of BDC Titles 2 and 3, or the superseding provisions of the OSU-Cascades Overlay Zone, at the time of Site Plan Review approval. Therefore, since it is “possible” to meet future development standards, the Applicant has met the requirements of this section.

- 2. Traffic controls on roads under State jurisdiction shall be determined by the Oregon Department of Transportation.**

**FINDING:** The proposed Master Plan area does not include or abut any roadways under State jurisdiction. Further, the TIA did not identify any offsite roadways or intersections under State jurisdiction requiring mitigation due to the Master Plan proposal.

#### **I. Future Street Plan and Extension of Streets.**

- 1. When a street plan has been developed and adopted by City Council along with an area plan, such as a Refinement Plan, that street plan shall guide the location and spacing of future streets pursuant to City of Bend Standards and Specifications.**

**FINDING:** No street plan has been developed and adopted by City Council for the master plan area. The Central Westside Plan Phase I Report identifies the same street plan that is adopted in the 2016 TSP, as shown as the “Urban Area Bicycle and Pedestrian System”, shown on 2016 TSP Figure 9.5, which identifies two north/south and one east/west “Future Shared Roadway” on the campus.

- 2. Spacing between local/local street intersections shall conform to the spacing standards contained in the City’s Standards and Specifications document and BDC Chapter 3.1, Lot, Parcel and Block Design, Access and Circulation. This standard applies to four-way and three-way (offset)**

**intersections. Offset local street alignments shall be at least 125 feet distance between the centerlines of the streets.**

**FINDING:** The proposed OSU-Cascades Overlay code includes a vehicular network map (Figure 2.7.3560.A) for the OSU-Cascades Campus that designates proposed general onsite private roadway and intersection locations, spacing, and block lengths. Upon approval, the proposed OSU-Cascades Overlay Zone text will be incorporated into BDC Chapter 2.7 - Special Planned Districts, which will result in OSU-Cascades Special Street Standards.

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

**FINDING:** All abutting streets that border the campus will be extended through the campus to the extent practicable. The alignment of the 17<sup>th</sup> Street right-of-way does not align with the proposed OSU-Cascades main entrance on Simpson Avenue. However, this right-of-way is currently not improved. If this street is eventually improved within the existing right-of-way to connect to Simpson Avenue, extension of the right-of-way south of Simpson Avenue would continue through the Bend Parks and Recreation District property. Therefore, the Applicant is presently unable to make the connection to the 17<sup>th</sup> Street right-of-way north of Simpson Avenue. However, if 17<sup>th</sup> Street is slightly reconfigured to align with the main OSU-Cascades entrance immediately west of the Bend Parks and Recreation District property under a future subdivision of the undeveloped property north of Simpson Avenue, then 17<sup>th</sup> Street could be continued directly into the subject property.

Similarly, 18<sup>th</sup> Street is not continued south into the campus, although a connection is proposed to the west of 18<sup>th</sup> Street, approximately 475 feet to the west, providing sufficient intersection separation. The connection is preferable to avoid cut through traffic in the adjacent neighborhood and to avoid the creation of a new four-way intersection on Simpson Avenue. Moreover, a direct north-south connection directly south of the existing intersection of 18<sup>th</sup> Street and Simpson Avenue would preclude the development of large recreation facilities in the Recreation District as proposed by the Applicant.

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

**FINDING:** The proposed transportation network for the campus provides direct connections to all surrounding areas, including all planned and existing commercial and neighborhood facilities. Connections to the east provide direct access to Century Drive/14<sup>th</sup> and commercial areas in the vicinity. The Skyline Sports Complex is adjacent to the subject property across Mt. Washington Drive between the future Metolius Drive connection and Chandler Avenue. The future Metolius Drive connection to Mt. Washington Drive and future sidewalk improvements on Mt. Washington Drive will provide access to this adjacent park. An existing pedestrian crossing of Mt. Washington Drive is provided southeast of the Chandler intersection. A private school and a public middle school (Cascade Middle School) are located immediately east and south of Skyline Park. The improvements noted above also provide access to these school facilities. In addition, the connection to 15<sup>th</sup> Street will provide access to the parks north of Simpson Avenue.

**5. In order to promote efficient vehicular and pedestrian circulation throughout the City, the design of developments and alignment of new streets shall conform to the standards in BDC Chapter 3.1, Lot, Parcel and Block Design, Access and Circulation.**

**FINDING:** The proposed OSU-Cascades Overlay code includes a vehicular network map (Figure 2.7.3560.A) that designates proposed onsite private roadways as primary, secondary, shared use or controlled access. Typical roadway cross sections are included for each proposed roadway classification. The proposed vehicular network also designates roadway alignments and vehicular access to public streets. Upon approval, the proposed OSU-Cascades Overlay Zone text will be incorporated into BDC Chapter 2.7 - Special Planned Districts, which will result in OSU-Cascades Special Street Standards.

**N. Existing Rights-of-Way. Whenever existing rights-of-way adjacent to or within a property are of less than standard width, additional rights-of-way shall be provided at the time of subdivision or site development, in conformance with Tables A through E in this section.**

**FINDING:** The Applicant has not proposed any deviations from this right-of-way requirement. As such, the Applicant will be subject to the regulations then in effect at the time of Site Plan Review for each phase of the project. There is nothing inherent in the overall design of the campus that would preclude compliance with this standard. As conditioned above, the Applicant must comply with the applicable provisions of BDC Titles 2 and 3, or the superseding provisions of the OSU-Cascades Overlay Zone, at the time of Site Plan Review approval. Therefore, since it is “possible” to meet future development standards, the Applicant has met the requirements of this section.

**3.4.300 Public Use Areas.**

**Public open space and parks contribute to the livability of a growing community. They provide space for outdoor recreation and habitat for urban wildlife. These**

urban spaces are maintained and managed by the Bend Metro Park and Recreation District (BMPRD). Future public use areas are evaluated through the City's land use application process.

- A. Neighborhood Parks.** The following standards will be used to evaluate a proposed development to determine if the property includes an area that is suitable for a neighborhood park. Upon meeting these standards, the developer shall enter into negotiations with the Bend Metro Park and Recreation District regarding district purchase of land within the property proposed for development for construction of a neighborhood park.
- 1. The subject property is located within a service area identified on the Neighborhood Parks Plan Map adopted by the Bend Metro Park and Recreation District as needing neighborhood parks.**
  - 2. The property proposed for development is 10 acres or larger in area.**
  - 3. The Bend Metro Park and Recreation District has indicated that the subject property contains a sufficient area that is suitable for neighborhood park development based on the Bend Metro Park and Recreation District Neighborhood Park Classification and Development Standards.**

**FINDING:** OSU-Cascades met with Bend Metro Park and Recreation District leadership on June 30, 2017 to discuss the University's proposed Master Plan, with a specific focus on open space, trails, and recreation facilities. BPRD provided a letter (See Exhibit 14 of the application) documenting compliance with this criterion and noting that, "according to the District's Neighborhood Parks Plan, there is no need for a neighborhood park in this service area."

#### **3.4.400 Sanitary Sewer and Water Service Improvements.**

- A. Sewers and Water Mains Required.** Sanitary sewers and water mains shall be installed to serve each new development and to connect developments to existing mains in accordance with the City's construction specifications as described in the City of Bend Standards and Specifications document and the applicable Bend Comprehensive Plan policies.
- B. Sewer and Water Plan Approval.** Construction of sewer and water improvements shall not commence until the City Engineer has approved all sanitary sewer and water plans in conformance with City of Bend Standards and Specifications.
- C. Public Facility Plan Improvements.** Proposed sewer and water systems shall be sized to accommodate additional development within the area as projected by the Water and Sewer Public Facility Plans. The developer may be entitled to system development charge credits and reimbursement for the improvements if eligible under the applicable provisions of the Bend Code.

**FINDING:** *Water:* OSU-Cascades submitted a water analysis with estimated water flows to the City for review, projecting a high efficiency water demand of 154,000 gpd during the school year. The campus will include 8"-12" diameter water mains looped through the campus, and connecting to the City system's large diameter pipes to the east and west.

The water mains described above will be routed and looped through the campus connecting to the City's existing 12-inch water mains in Mt. Washington Drive, Simpson Avenue, and Century Drive and the existing 8-inch water mains on the existing campus, to serve all campus facilities.

*Sewer:* OSU-Cascades submitted a sewer analysis with estimated flows to the City for review, projecting an average daily flow of 171.5 gpm for a peak summer day.

OSU-Cascades submitted a water and sewer capacity analysis with estimated flows and mainline locations with pipe sizes to the City for review. The City determined that the proposed sewer system will provide adequate capacity and the proposed water system will meet both domestic and fire flow demand. In addition, both systems have sufficient capacity in the existing/surrounding system with the buildout of the master plan. On December 8, 2017, the City issued a signed SWA Certificate (SWA 17-5655), approving the proposed water and sewer facilities, with conditions that will be imposed during Site Plan Review of future development. The water and sewer analysis, mapping, SWA Certificate and supporting documentation is included in Exhibit 5 of the application.

The Applicant has not proposed any deviations from this sewer and water plan approval requirement. As such, the Applicant will be subject to the regulations then in effect at the time of Site Plan Review for each phase of the project. There is nothing inherent in the overall design of the campus that would preclude compliance with this standard. As conditioned above, the Applicant must comply with the applicable provisions of BDC Titles 2 and 3, or the superseding provisions of the OSU-Cascades Overlay Zone, at the time of Site Plan Review approval. Therefore, since it is "possible" to meet future development standards, the Applicant has met the requirements of this section.

### **3.4.500 Storm Drainage Improvements.**

- A. Storm Drainage Improvements Required. Storm drainage facilities shall be depicted on City-approved engineered construction drawings and installed to serve each new development in accordance with applicable City construction specifications as described in the City of Bend Standards and Specifications and BC Title 16, Grading, Excavation, and Stormwater Management.**
  
- B. Accommodation of Upstream Drainage. Drainage facilities shall be designed and constructed to accommodate increased runoff so that discharge rates existing before the proposed development shall not be increased, and accelerated channel erosion will not occur as a result of the proposed land**

disturbance or development activity. Such facilities shall be subject to review and approval by the City Engineer.

- C. Effect on Downstream Drainage.** Where it is anticipated by the City Engineer that the additional runoff resulting from the development will overload an existing drainage facility, the City shall withhold approval of the development until provisions have been made for improvement of the potential condition or until provisions have been made for management of additional runoff caused by the development in accordance with City of Bend Standards and Specifications. Drainage shall not be directed to an existing watercourse, channel, stream or canal. Storm drainage facilities shall comply with applicable State and Federal regulatory requirements.
- D. Easements for Existing Watercourses.** Where an existing watercourse traverses a development, such as a natural watercourse, drainage way, channel or stream, or any other existing drainage facility including but not limited to irrigation canals, laterals and associated ditches, there shall be provided and recorded an easement conforming substantially with the lines of such existing watercourses and such further width as will be adequate for conveyance and maintenance, as determined by the City Engineer.
- E. Easements for Developed Drainage Facilities.** Where new drainage facilities are provided that include elements located outside the dedicated public right-of-way, such facilities shall be located within an area provided for in a recorded easement. The easement shall be adequate for conveyance and maintenance as determined by the City Engineer.

**FINDING:** There are no existing watercourses traversing the subject property. The Applicant has not proposed any deviations from these storm drainage requirements. As such, the Applicant will be subject to the regulations then in effect at the time of Site Plan Review for each phase of the project. There is nothing inherent in the overall design of the campus that would preclude compliance with this standard. As conditioned above, the Applicant must comply with the applicable provisions of BDC Titles 2 and 3, or the superseding provisions of the OSU-Cascades Overlay Zone, at the time of Site Plan Review approval. Therefore, since it is “possible” to meet future development standards, the Applicant has met the requirements of this section.

#### **3.4.600 Utilities.**

- A. Underground Utilities.** All utility lines including, but not limited to, those required for electric, communication, lighting and cable television services and related facilities, shall be placed underground, except for surface-mounted transformers; surface-mounted connection boxes and meter cabinets; temporary utility service facilities during construction; and high capacity electric lines operating at 50,000 volts or above, which may be placed above ground.



**The following additional standards apply to all development, in order to facilitate underground placement of utilities:**

- 1. The developer shall make all necessary arrangements with the serving utility to provide the underground services. All above-ground equipment shall not obstruct clear vision areas and safe intersection sight distance for vehicular traffic in conformance with BDC Chapter 3.1, Lot, Parcel and Block Design, Access and Circulation.**
- 2. The City reserves the right to approve the location of all surface-mounted facilities.**
- 3. All underground utilities, including sanitary sewers and storm drains installed in streets by the developer, shall be constructed prior to the surfacing of the streets.**
- 4. Stubs for service connections shall be long enough to avoid disturbing the street improvements when service connections are made.**

**B. Easements. Easements shall be provided and recorded for all underground utility facilities where required by the City.**

**FINDING:** The Applicant has not proposed any deviations from this underground utility or easement requirements. As such, the Applicant will be subject to the regulations then in effect at the time of Site Plan Review for each phase of the project. There is nothing inherent in the overall design of the campus that would preclude compliance with this standard. As conditioned above, the Applicant must comply with the applicable provisions of BDC Titles 2 and 3, or the superseding provisions of the OSU-Cascades Overlay Zone, at the time of Site Plan Review approval. Therefore, since it is “possible” to meet future development standards, the Applicant has met the requirements of this section.

#### **3.4.700 Easements.**

**A. Requirement. Easements for sewer facilities, storm drainage, water facilities, street facilities, electric lines or other public/private utilities shall be dedicated on a final plat, or other instrument approved by the City.**

**B. Provision. The developer or applicant shall make arrangements with the City, the applicable district and each utility franchise for the provision and dedication of utility easements necessary to provide full services to the development.**

**C. Standard Width. The City’s standard width for exclusive public main line utility easements shall be 20 feet, unless otherwise specified by the utility company, applicable district, or City Engineer.**

**FINDING:** The Applicant has not proposed any deviations from this easement requirement. As such, the Applicant will necessarily be subject to the regulations then in effect at the time of site plan review for each phase of the project. There is nothing

inherent in the overall design of the campus that would preclude compliance with this standard. As conditioned above, the Applicant must comply with the applicable provisions of BDC Titles 2 and 3, or the superseding provisions of the OSU-Cascades Overlay Zone, at the time of Site Plan Review approval. Therefore, since it is “possible” to meet future development standards, the Applicant has met the requirements of this section.

## **CHAPTER 3.5 OTHER DESIGN STANDARDS**

### **3.5.200 Outdoor Lighting Standards.**

- A. Intent.** It is the intent of this section to allow citizens, businesses, and public agencies in Bend to illuminate residential, commercial, industrial, and public areas, roadways and walkways with lighting fixtures appropriate to the need while using such illumination in a way that preserves urban vistas and is directed onto and is confined to the property from which it is generated.
- B. Outdoor Lighting Fixtures Subject to This Section.** Light fixtures subject to the standards in subsection (C) of this section are outdoor artificial illuminating devices, outdoor fixtures, lamps and other similar devices, permanently installed or portable, used for flood lighting, general illumination or advertisement. Such devices shall include, but are not limited to, lights for:
- 1. Buildings and structures;**
  - 2. Recreational areas;**
  - 3. Parking lot and maneuvering areas;**
  - 4. Landscape areas;**
  - 5. Streets and street signs;**
  - 6. Product display area;**
  - 7. Building overhangs and open canopies;**
  - 8. Holiday celebrations;**
  - 9. Construction lights.**

**FINDING:** The Applicant has not proposed any deviations from these lighting standards. As such, the Applicant will necessarily be subject to the regulations then in effect at the time of Site Plan Review for each phase of the project. BDC Title 3.5.200 imposes development standards on the project for outdoor lighting. There is nothing inherent in the overall design of the campus that would preclude compliance with this standard. As conditioned above, the Applicant must comply with the applicable provisions of BDC Titles 2 and 3, or the superseding provisions of the OSU-Cascades Overlay Zone, at the time of Site Plan Review approval. Therefore, since it is “possible” to meet future development standards, the Applicant has met the requirements of this section.

## **TITLE 4 APPLICATIONS AND REVIEW PROCEDURES**

## CHAPTER 4.7 TRANSPORTATION ANALYSIS

### 4.7.300 Process.

A. The following steps describe the process for assessing the transportation system:

**Step 1.** The applicant must prepare and submit a Transportation Facilities Report in accordance to BDC 4.7.400 containing the following information organized as follows:

- a. Description of the development;
- b. Trip generation;
- c. Transportation demand management;
- d. Major intersections;
- e. Trip distribution;
- f. Transportation facilities evaluation.

**Step 2.** The City Engineer will review and evaluate the Transportation Facilities Report in accordance to BDC 4.7.400(D) to determine if a Transportation Impact Analysis is required. If a Transportation Impact Analysis is not required, the applicant may submit a development application including the Transportation Facilities Report. If a Transportation Impact Analysis is required, see Step 3. Step 1 and Step 3 may be combined.

**Step 3.** If required after Step 2 or if the applicant chooses to do so concurrently with Step 1, the applicant must prepare and submit a Transportation Impact Analysis in accordance with BDC 4.7.500 containing the following information organized as follows:

- a. Study area;
- b. Study analysis years;
- c. Study time periods;
- d. Traffic counts;
- e. Future traffic forecasts;
- f. Operations analysis methodology;
- g. Arterial and collector left turn, median refuge, and right turn lane assessment;
- h. Safety review;
- i. Walking, biking and transit friendly developments;
- j. Proportionate share contribution.

**Step 4.** If no significant impacts are identified, the applicant may submit a development application including the Transportation Impact Analysis and may also have to pay a proportionate share contribution if required under BDC 4.7.700, Proportionate Share Contribution. Development with significant impacts will be required to propose mitigation in compliance with BDC 4.7.600,

**Significant Impacts and Mitigation Measures, as part of the development application and may also have to pay a proportionate share contribution if required under BDC 4.7.700, Proportionate Share Contribution. If mitigation measures have been determined for any significant impacts, then the applicant must include the Transportation Impact Analysis with the mitigation measures identified as part of a development application.**

**FINDING:** The Applicant's traffic engineering firm, Kittelson and Associates ("Kittelson" or "KAI") met with City transportation staff on numerous occasions prior to the submittal of the Transportation Impact Analysis (the "OSU-C TIA"). In the context of discussions between City staff and Kittelson, the City confirmed that a TIA would be required and that the TIA could be combined with the Transportation Facilities Report (the "TFR"). Consequently, the OSU-C TIA includes both the TFR and the TIA. The OSU-C TIA is included as Exhibit 15 of the application and contains all of the required substantive elements of this section.

#### **4.7.400 Transportation Facilities Report.**

**A. Applicability. A Transportation Facilities Report will be required when a development involves one or more of the following:**

- 1. Land division application;**
- 2. Site Plan Review application;**
- 3. Master Plan;**
- 4. Bend Comprehensive Plan map amendment;**
- 5. Other development proposals as determined by the City Engineer.**

**B. Preparation. The Transportation Facilities Report must be prepared by a licensed Professional Engineer especially qualified in civil or traffic engineering by the State of Oregon. It is the responsibility of the Engineer to provide enough detailed information for the City Engineer to determine if a Transportation Impact Analysis is required.**

**C. Contents of the Transportation Facilities Report.**

- 1. Description of the Development. Provide a description of the development sufficient to understand the proposed development's size, uses, operations, and interaction with the transportation system. At a minimum, the description must include both qualitative and quantitative descriptions, such as scale of development, day-to-day operations, deliveries, staffing, customer base (visitors, patients, employees, students, etc.), peak hours of operation, and identification of site access and on-site circulation needs.**

**FINDINGS:** As discussed above, the OSU-C TIA includes both the TIA and the TFR. Kittelson and Associates prepared the OSU-C TIA and it is signed and stamped by several licensed professional engineers. The OSU-C TIA includes a description of the Master Plan in conformance with the requirements of this section.

2. **Trip Generation.** Provide a trip generation description for the proposal with the following applicable information:
  - a. **Trip Credits and Vested Trips.** If trip credits are being utilized from the existing on-site development or from a separate development approval, the trip generation description shall provide supporting documentation of those trip credits, and documentation of the authority to use those trip credits for the development proposal.
3. **Base Trip Generation Rates.** The City Engineer will determine which of the following to use for the base trip generation rates:
  - i. **Local data;**
  - ii. **Average trip generation rates from the latest edition of the publication Trip Generation by the Institute of Transportation Engineers (ITE); or**
  - iii. **Other method approved by the City.**

The procedure for identifying local trip generation rates shall comply with the guidelines for “Conducting a Trip Generation Study” in the ITE Trip Generation document.

- c. **Bend Comprehensive Plan Amendments.** For Bend Comprehensive Plan amendment applications, the trip generation shall represent a reasonable build-out scenario supported through citation of nearby existing site trip generation rates and densities in order to ensure reasonable trip generation comparisons. If the Bend Comprehensive Plan amendment is accompanied by a concurrent Site Plan Review application, the trip generation for the site plan review application may be utilized instead. The amendment must comply with the Transportation Planning Rule, OAR 660-012-0060.
- d. **Pass-by Trips.** Adjustments for pass-by trips may be applied depending on the adjacent transportation facility and City Engineer approval. The published average pass-by rate will typically be allowed for those land use categories that are provided in the ITE Trip Generation publication. Pass-by trips must always be accounted for in the site access analyses and sufficiently documented. Pass-by trip maps must be created for each pass-by route separately rather than a single combined map.
- e. **Site Internalization/Trip Sharing.** Demonstrate how the site reduces vehicle trips through site design, including parking supply, land use mixes, and densities that promote reduced rates based upon those elements. City review of the proposal based on guidance from the state’s Transportation Planning Rule may result in trip generation reductions.

**FINDING:** The OSU-C TIA addresses all of the above elements, with the exception of the provisions applicable to comprehensive plan amendments because no such amendments are proposed as part of this application.

- 3. Transportation and Parking Demand Management (TPDM) Plan. In compliance with BDC Chapter 4.5, Master Planning and Development Alternatives, Institutional and Employment Master Plans must develop a TPDM Plan. All other development applications may choose to develop a TPDM Plan. The proposed measures of the TPDM Plan will be evaluated to determine trip generation reduction rates. See BDC Chapter 4.8, Transportation and Parking Demand Management (TPDM) Plan.**

**FINDING:** In compliance with BDC Chapter 4.5, Kittelson and Associates prepared the Transportation and Parking Demand Management (TPDM) Plan for OSU-Cascades. The TPDM is included in Exhibit 16 of the application. Findings related to the TPDM are set forth below under BDC Chapter 4.8.

- 4. Major Intersections. From each access point (driveway or street) of the development onto and along the transportation system for a distance of one mile, identify the major (collector and arterial) intersections on a map.**

**FINDING:** The OSU-C TIA addresses all required intersections within the study area and, at the direction of the City Engineer, included the Reed Market/Bond intersection even though it is outside the one-mile study area.

- 5. Trip Distribution. Provide a trip distribution description and map that contains the following information:**
  - a. Trip distribution assignments that replicate overall origin/destination patterns, including the major intersections identified in subsection (C)(4) of this section. Existing field count turning movement patterns are to be used as a guide for trip assignments as appropriate. The assignment should be adjusted to reflect future funded transportation facilities, improvements or services that are authorized in the Transportation System Plan and for which funding is in the City's approved Capital Improvements Program (CIP), the Statewide Transportation Improvement Program (STIP) or other approved funding plan.**
  - b. Description of truck delivery routes, including over-dimensional loads if applicable, of travel to and from the site for a distance of one mile. The distance may be extended to identify freight routes for freight-intensive sites or those that generate over-dimensional loads.**

**FINDING:** The OSU-C TIA addresses the trip distribution requirements of this section and, prior to preparation of the OSU-C TIA, Kittelson and the Applicant discussed the trip distribution model with City staff.

- 5. Transportation Facilities Evaluation. The report must evaluate and document the following for compliance with this code, the Transportation System Plan and the City of Bend Standards and Specifications:**
  - a. The existing transportation system infrastructure serving the site within the study area. The evaluation must include any future funded transportation system elements included in the City’s approved five-year Capital Improvement Program, Statewide Transportation Improvement Program or other approved funding plan.**
  - b. The following right-of-way information along the frontage of the proposed development:**
    - i. Compliance with the required right-of-way width for the roadway classification.**
    - ii. Compliance with the required street widths.**
    - iii. Compliance with the required right-of-way or easement width for all trail and access corridors.**
    - iv. Compliance with the required street frontage elements including curbs, bike facilities, park strips, sidewalks, driveways and driveway aprons, as well as curb ramps. All applicable elements shall be accessible per the City of Bend Standards and Specifications.**
  - c. The following access information:**
    - i. Legal access and recorded easements for all driveway and access systems serving the site. For all driveways and new intersections created by the development, intersection sight distance measurements must be provided for all movements into and out of the proposed accesses. Field measurements should be used wherever possible, although plan measurements from civil drawings may be utilized, particularly for planned intersections or driveways. Measurements need to account for vertical and horizontal curvature, grades, landscaping, and right-of-way limitations. Sight distance measurements shall comply with City of Bend Standards and Specifications for the posted speed of the road or as approved by the City Engineer.**
    - ii. For arterial and collector street accesses and new street connections document the location of all existing driveways and street connecting points within 300 feet of the frontage of the property. Provide a driveway conflicting movement diagram and assessment showing overlapping conflicts with nearby existing driveways and street intersections.**

- d. **The following on-site circulation and/or street plan access information:**
  - i. **The proposed street layout and determine if it matches the Transportation System Plan and if it matches into abutting and nearby approved development street layouts, abutting and nearby master plans or special planned areas and requirements of this code and provides for logical orderly development of adjoining properties.**
  - ii. **Truck circulation and entry/egress assessment including routing, turning movement, and delivery needs for all truck and emergency service vehicles. Identify any proposed special truck accommodations for freight service.**
  - iii. **Necessary public access, shared access, and shared parking easements are in place or will be required to be in place.**
  
- e. **The following existing and planned walking, biking and transit facilities and infrastructure serving the site from each access point (driveway or street) of the proposed development onto and along the transportation system for a distance of one-quarter mile:**
  - i. **Location of all sidewalks, curb ramps, bike lanes, paths, crosswalks, pedestrian signal heads, push buttons, related signage, striping, and transit facilities along with pedestrian paths of travel between the transit facility and the site and to the buildings on the site.**
  - ii. **Barriers, deficiencies and high-pedestrian demand land uses including schools, parks, parking, senior housing facilities, and transit facilities.**
  
- f. **Truck circulation and entry/egress including routing, turning movement, and delivery needs for all truck and emergency service vehicles. Identify any proposed special truck accommodations for freight service.**

#### **D. City Review and Evaluation.**

1. **If it is determined that any of the infrastructure or facilities are missing or substandard as identified in the Transportation Facilities Report, then the applicant will be required to comply with BDC Title 3, Design Standards, and with the City of Bend Standards and Specifications.**

**FINDING:** The OSU-C TIA identifies all of the relevant transportation and circulation elements as required above and identifies all deficiencies in the City's transportation network. Emergency vehicle access is demonstrated in Exhibit 22 of the application.

2. **Based on information provided in the Transportation Facilities Report, the City Engineer will notify the applicant in writing if the Report is complete, and if not, what additional evaluation information is required. If no additional information is needed, the City Engineer will notify the applicant**



whether a Transportation Impact Analysis is required. The City Engineer will determine if a Transportation Impact Analysis is required by considering the following criteria:

**a. Operations.**

- i. Poor roadway configuration and/or alignment, or capacity deficiencies that are likely to be compounded as a result of the proposed development;**
- ii. Proposed street design creates inadequate circulation and does not minimize cut-through traffic or accommodate orderly development of adjacent properties;**
- iii. It is anticipated that the current or projected increase in trip generation of the roadway system in the vicinity of the proposed development will exceed the minimum operational criteria in BDC 4.7.500(B)(6); and**
- iv. Potential improvements to accommodate freight.**

**b. Safety.**

- i. Existing safety issues;**
- ii. Projected increase in trip generation that may have the potential to impact the safety of the existing transportation system; and**
- iii. A traffic safety hazard is created or exacerbated on any street, roadway segment, or intersection within the study area as a direct result of the proposed development.**

**c. Walking, Biking and Transit Facilities.**

- i. Potential impacts to priority walking and biking routes, school routes, transit connectivity and multimodal street improvements identified in the Transportation System Plan;**
- ii. Bike access to site has gaps and/or the bike lane is dropped, missing, or otherwise unusable; and**
- iii. Identified transit facilities and/or their pedestrian paths of travel between the transit facility and the site and to the buildings on site are not complete and additional analysis may be required.**

**3. In all instances, a Transportation Impact Analysis must be submitted for any proposed development that:**

- a. Considers modification, installation, or removal of any traffic control device; or**
- b. Forecasts net increase in site traffic volumes greater than 100 average daily vehicle trips or off-site major intersections are impacted by 15 or more peak-hour vehicle trips per lane group within one mile.**

**FINDING:** As discussed above, the City and the Applicant agreed that a TIA would be required for this project. The OSU-C TIA was prepared for this project and is included as Exhibit 15 of the application. The OSU-C TIA incorporates comments received from the City prior to preparation of the TIA.

#### **4.7.500 Transportation Impact Analysis.**

**A. Preparation.** If the City Engineer determines that a Transportation Impact Analysis is required, it must be prepared by a licensed professional engineer especially qualified in traffic engineering by the state of Oregon. The applicant's engineer shall consult with the City Engineer prior to preparing the Transportation Impact Analysis to determine the level of details to be included in the analysis.

#### **B. Contents of the Transportation Impact Analysis Report.**

- 1. Study Area.** The study area must include all site access and adjacent roadways and intersections. The study area must also include all off-site major intersections impacted by 15 or more peak-hour vehicle trips per lane group within one mile of the site. The City Engineer must approve the defined study area prior to commencement of the Transportation Impact Analysis. The City Engineer may choose to waive the study of certain intersections if deemed unnecessary.

**FINDING:** Consistent with this section, the study area for the OSU-C TIA consists of all site access points, adjacent roadways and intersections, and all off-site intersections impacted by 15 or more peak-hour vehicle trips per lane group within a one-mile driving distance of the site. A map of the study area and study intersections is shown in Figure 7 of the OSU-C TIA (submitted as Exhibit 15 of the application). While the Reed Market Road/Bond Street intersection is beyond the one-mile radius, it is included in the analysis.

Connection to Century Drive approximately 600 feet south of Simpson Avenue (at intersection node 18 of the TIA) is not proposed in this master plan. If this connection were created, a traffic analysis would be required at the intersection to determine the need for a northbound left turn lane, the need for turn restrictions, and any requirements for a safe pedestrian crossing. 60 feet of right-of-way through private property to the OSU site would be required without removing the required parking for fronting businesses.

- 2. Study Analysis Years.** The analysis shall be performed for all study roadways and intersections for the following years with and without the proposed development:
  - a. Existing conditions (current year);**
  - b. Year of completion of the final phase (for phased projects, intermediate phases may be required to be analyzed); and**

- c. **For an amendment to a functional plan, the Bend Comprehensive Plan, or a land use regulation the analysis year shall reflect the Transportation Planning Rule OAR 660-012-0060 requirements but in no case shall the analysis year be less than 10 years from the date of the preparation of the Transportation Impact Analysis. An analysis for an amendment to a functional plan, the Bend Comprehensive Plan or land use regulation must use the City of Bend’s model as determined by the City Engineer.**

**FINDING:** Enrollment of 5,000 students and development of the supporting land use is anticipated to be reached by 2034. Accordingly, to meet City analysis requirements and to ensure proper infrastructure sizing, the following years were analyzed:

- **Year 2016 Conditions (Existing Conditions):** Existing conditions demonstrates how the campus is operating with Fall 2016 student enrollment (1,040 students) under current conditions.
- **Year 2034 Background Conditions:** The future background conditions analysis demonstrates how the transportation network operates in 2034 without the build-out of the OSU-Cascades Campus. The traffic associated with the previously approved 10-acre site (enrollment of 1,890 students) is included in the background traffic for this scenario.
- **Year 2034 Build Conditions:** The future build conditions analysis demonstrates how the transportation network operates in 2034 with the full build-out of the OSU-Cascades Campus, including a total enrollment of 5,000 students and the build-out of other supporting uses on the site.

The campus will be built out in several phases before reaching potential full buildout in 2034. The phasing plan is organized around the student growth and anticipated funding cycles of the University.

**3. Study Time Periods. Within each study year, an analysis must be performed for the following time periods:**

- a. **Weekday p.m. peak hour (i.e., one hour between 4:00 p.m. and 6:00 p.m.); and**
- b. **Additional time periods may be required based on City Engineer direction for the following:**
  - i. **Peak hour of the generator (i.e., peak hour for the proposed development);**
  - ii. **Peak hour of nearby generator sites (e.g., a non-school site may study a nearby school’s peak hour); and**
  - iii. **Peak hour of cumulative nearby generators.**

4. **Traffic Counts. Once the study periods have been determined traffic counts must be done as follows:**
  - a. **Counts must be taken Tuesday through Thursday;**
  - b. **Counts may need to be adjusted as required by the City Engineer to reflect seasonal, schools, or other variations in traffic;**
  - c. **Unless approved by the City Engineer, counts must be no more than 12 months old from the date of development application submittal;**
  - d. **Additional hours of classified turning movement counts may be required based on City Engineer direction for the following:**
    - i. **To determine compliance with traffic signal or all-way stop warrants;**  
**or**
    - ii. **To determine the extent of over-capacity conditions.**
  - e. **Counts must include passenger cars, trucks, bikes and pedestrians. If high pedestrian and/or bike traffic is expected to be generated by the proposed development, as determined by the City Engineer, the Transportation Impact Analysis must consider improvements and connectivity to existing and proposed facilities.**

**FINDING:** The OSU-C TIA includes the analysis of both the weekday p.m. peak hour (4:30 – 5:30 p.m.) and the weekday afternoon peak hour (2:30 – 3:30 p.m.). Summary of the traffic count data demonstrated that the overall system peak hour occurred between 4:30 p.m. and 5:30 p.m. Therefore, 4:30 – 5:30 p.m. was used for the p.m. peak hour analysis. Several roadways within the study area on the west side of Bend are heavily influenced by local school traffic, which peaks around school start and dismissal periods. As documented in the TIA for the 10-acre OSU-Cascades site, 24-hour traffic count data was used to analyze hourly profiles for the three major roads surrounding the OSU-Cascades site. The highest combined volume period occurs during the typical school dismissal period between 2:30 and 3:30 p.m. Traffic volumes during this period are approximately 15% higher than the morning peak hour.

#### **5. Future Traffic Forecasts.**

- a. **Traffic Forecast for Projects and Project Phasing.**
  - i. **Traffic forecast shall include all projects within the study area that have received approvals for development (master plans, land divisions, site plans, conditional use permits, and similar approvals). They shall be identified, and their traffic generation included as cumulative traffic in the study. Proposed projects in the study area that have been submitted to the City for processing, but not yet approved, may also be included at the discretion of the City Engineer. The City Engineer will also specify an annual growth rate to be applied to existing volumes to account for other general traffic growth in and around the study area.**

- ii. For phased developments, the traffic forecasts for the year of completion of each phase shall be calculated to be field counts plus traffic from projects within the study area that have received approvals for development (approved master plans, land divisions, site plans, conditional use permits, and similar approvals), plus an annual growth factor which would factor the existing counts up to the analysis year.
- b. **Build-Out Studies for Bend Comprehensive Plan Amendments and Zone Changes.**
  - i. Traffic projections for build-out scenarios must utilize the current transportation model used by the City or other approved model as approved by the City Engineer. The applicant's Engineer shall use the model projections post processed using NCHRP 255 as the basis for determining turning-movement volumes for the required intersection analysis. A manual assignment of the project traffic added to the build-out traffic may typically be used to determine total future traffic, as approved by the City Engineer.

**FINDING:** Section 2 of the OSU-C TIA explains that, for purposes of calculating background traffic, the OSU-C TIA takes into account in-process and future developments, including the recent UGB expansion. Section 5 of the OSU-C TIA (Exhibit 15 of the application) addresses the University phasing plan and forecasts traffic and related impacts based on the phasing schedule set forth in the Master Plan.

## **6. Operations Analysis Methodology.**

- a. **The operations analysis must include the following:**
  - i. **Software inputs must utilize field conditions (e.g., measured field peak hour factor, saturation flow rates, lane utilization percentages, lane configurations, actual signal phasing and timing, and truck percentages). Other references and the City of Bend Standards and Specifications may be required to be utilized as approved by the City Engineer;**
  - ii. **An operations analysis for roundabouts performed in conformance with the City's Roundabout Operational Analysis Guidelines;**
  - iii. **An operations analysis for traffic signal and stop controlled intersections performed in conformance with the most recent version of the Highway Capacity Manual (HCM), the City of Bend Standards and Specifications or other reference approved by the City Engineer;**
  - iv. **Identify intersection operations in a table including volume to capacity ratios, delay, and queuing for critical movements as well as for the intersection as a whole including the following:**

- (A) Delays for two-way and four-way stop controlled study intersections including delays for lane groups, approaches, and intersections as a whole;
  - (B) Ninety-fifth percentile queue projected to block nearby critical system elements such as adjacent traffic signals, roundabouts, or at-grade rail crossings, or such that line of sight safety issues are identifiable; and
  - (C) Volume to capacity ratio for any approach or for the intersection as a whole for signalized and roundabout controlled study intersections.
- v. Microsimulation modeling and analysis using a calibrated model for the transportation corridor as defined must be performed for interconnected traffic signals. Calibration must include field measured saturation flow rates, existing timing and phasing rotations, peak hour factors, available queue storage and queuing; and
- b. The operations analysis must use existing transportation system conditions (intersection control type and street roadway geometry). Committed funded transportation facilities may also be considered in the analyses. Committed funded transportation facilities means future funded transportation facilities, improvements or services that are authorized in a local transportation system plan and for which funding is in the approved Capital Improvements Program (CIP), the Statewide Transportation Improvement Program (STIP) or other approved funding plan.
- c. **Operations Standards.** The intersection analyses provided in the Transportation Impact Analysis will be evaluated for safety deficiencies and queuing deficiencies and compliance with this code, the Transportation Planning Rule, the Bend Urban Area Transportation System Plan, any applicable development agreements, and regional transportation system plans. Intersections under the jurisdiction of the Oregon Department of Transportation shall also be evaluated using the ODOT Analysis Procedures Manual for compliance with the Oregon Highway Plan. Intersections under the jurisdiction of Deschutes County that are outside the Urban Growth Boundary shall also be evaluated for compliance with Deschutes County Code. Intersections that do not comply with the criteria listed in those documents will be considered to have significant impacts for purposes of BDC 4.7.600.

**FINDING:** The OSU-C TIA includes the operational analysis and elements as required under the above sections.

- d. **Projects are considered to have significant impacts on the arterial-collector system for purposes of BDC 4.7.600 as identified below:**

- i. **Two-Way Stop Control.** Average delay for the critical lane group for approaches of an arterial or collector to another arterial or collector with greater than 100 peak hour trips is greater than or equal to 50 seconds during the peak hour;
  - ii. **All-Way Stop Control.** Average delay for the collector to collector and higher order intersection as a whole is greater than or equal to 80 seconds during the peak hour;
  - iii. **If the ninety-fifth percentile queue exceeds the existing available storage or is projected to block nearby critical system elements such as adjacent traffic signals, roundabouts, or at-grade rail crossings, or such that line of sight safety issues are identifiable; or**
  - iv. **For signalized and roundabout collector to collector and higher order intersections under the jurisdiction of the City, the volume-to-capacity ratio for the intersection as a whole is greater than or equal to 1.0 during the peak hour.**
- e. **Intersections under ODOT Jurisdiction.**
- i. **In addition to the City operations standards, intersections on ODOT facilities will also be required to comply with ODOT mobility targets. Coordination with ODOT is required in the study process.**

**FINDING:** As described in the OSU-C TIA in greater detail, the overall project is anticipated to have significant impacts on the arterial-collector system at several intersections. With respect to ODOT, there are no intersections on ODOT facilities within the approved study area. The nearest ODOT facilities (Colorado/Arizona Parkway Ramps) are located nearly ½ mile beyond the study area. Similarly, the Reed Market Parkway Ramps are over ½ mile beyond the study area. The Oregon Transportation Planning Analysis Unit (TPAU) assisted with the completion of a Travel Demand Model (TDM) for the campus and surrounding land use assumptions. In-process and future developments, including the recent UGB expansion, were included in the model analysis and are reflected in the no-build and build out scenarios in the OSU-C TIA.

**7. Arterial and Collector Left Turn, Median Refuge, and Right Turn Lane Assessment. Meeting the following criteria does not automatically require a pedestrian refuge or a turn lane to be installed. The City Engineer has the final determination during the review of proposed mitigation on the installation of a pedestrian refuge or a turn lane based on safety and operations of the system.**

- a. **A median refuge assessment and a left and right turn lane assessment on arterial and collector streets must include the following information:**
  - i. **An assessment using Table 11 of the Safety Effects of Marked Versus Unmarked Crosswalks at Uncontrolled Locations Final**

**Report and Recommended Guidelines (FHWA Publication Number HRT-04-100, September 2005);**

- ii. **An assessment using the Left and Right Turn Lane Criteria in the ODOT Analysis Procedures Manual (APM); and**
  - iii. **Provide the ninety-fifth percentile queue length for left, right and through turning vehicles.**
- b. Projects are considered to have significant impacts for purposes of BDC 4.7.600 if Table 11 of the Safety Effects of Marked Versus Unmarked Crosswalks at Uncontrolled Locations Final Report and Recommended Guidelines identifies a candidate site(s) for the installation of a marked crosswalk or other needed pedestrian improvements at uncontrolled locations.**
- c. If the proposed development meets the criteria in the APM or exceeds the ninety-fifth percentile queue length for left or right turning vehicles, then the City Engineer has the final determination whether it is a significant impact for purposes of BDC 4.7.600.**

**FINDING:** The OSU-C TIA includes the required assessment on arterial and collector streets for median refuge islands, left-turn lanes, and right-turn lanes. The analysis was completed using 2034 PM build-out traffic volumes. The analysis concludes that enhanced pedestrian crossings are warranted at the access points along Century Drive and Simpson Avenue. An existing pedestrian refuge island is provided at the existing OSU-Cascades access on Century Drive at Donovan Avenue. Pedestrian refuge islands are not currently provided at the future access points along Century Drive and Simpson Avenue.

Left-turn lanes are warranted at both Century Drive access points, the center and west access points along Simpson Avenue, and both access points along Mt. Washington Drive. Existing left-turn lanes are provided at the Century Drive access points. However, left-turn lanes do not exist at the future access points along Simpson Drive and Mt. Washington Drive. In addition, a right-turn lane is warranted at the main access point along Century Drive. This right-turn lane does not exist currently.

The 17<sup>th</sup> Street right-of-way north of Simpson Avenue does not align with the proposed main OSU entrance. OSU's access to Simpson Avenue will be permitted to be a full access intersection until the time the 17<sup>th</sup> Street's extension north of Simpson Avenue is improved. The northern property developer may choose to realign the 17<sup>th</sup> Street right-of-way north of Simpson Avenue to align with the OSU entrance. However, if the intersections remain staggered after development of the property north of Simpson Avenue, it will be a condition of the northern property's developer to construct a median in Simpson Avenue to reduce vehicular and multi-modal conflicts. This may result in a future restriction of turning movements at OSU's entrance at that future date, pending a future traffic study.

## **8. Safety Review.**



- a. **For the study area or those locations required by the City Engineer, document and review crash data from the ODOT Crash Analysis and Reporting Section (ODOT-CARS). Crash data can be requested directly from ODOT or the Bend Urban Area Metropolitan Planning Organization. Crash data must provide a five-year history of ODOT reported crashes and must be presented in tabular and crash diagram form. Crash data must include the following information:**
  - i. **Crash histories and a calculated crash rate;**
  - ii. **Crash patterns (was there an identifiable pattern to the crashes), crash types, and crash patterns affecting proposed development trips; and**
  - iii. **Whether any location within the study area is included within published safety studies, such as the Oregon Department of Transportation Safety Priority Index System lists, ODOT Safety Action Plan, or the City’s Arterial and Collector Multimodal Safety Study.**
  
- b. **Projects are considered to have significant impacts for purposes of BDC 4.7.600 if there is a crash pattern, one or more fatalities or severe injury crashes, one or more reported crashes per 1,000,000 entering vehicles, or if it is included within a published safety study.**

**FINDING:** Table 14 of the OSU-C TIA summarizes the total crashes, severity of crashes, and crash rate per million entering vehicles (MEV) at the study intersections. If an intersection did not experience any crashes during the study period, it was not listed. There were 98 total crashes at the study intersection locations within the 5-year study period, none of which were fatal crashes. According to BDC 4.7.500.(B)(8)(b), “projects are considered to have a significant impact if there is a crash pattern, one or more fatalities or severe injury crashes, one or more reported crashes per 1,000,000 entering vehicles, or if it is included within a published safety study.” None of the intersections experienced a crash rate above this threshold.

## **9. Walking, Biking and Transit Friendly Developments.**

- a. **Public and Private Schools (K-12), Colleges and Universities. Provide an analysis of walking, biking and transit facilities along and across arterial and collector roadways which accommodate safe, accessible and convenient access to and from the school. Elementary schools shall analyze the facilities within one mile of the school. All other schools, colleges and universities shall analyze the facilities within 1.5 miles of the school.**
  
- b. **All Other Uses. Provide an analysis of walking, biking and transit facilities, including street crossings and access ways, which accommodate safe, accessible and convenient access from within new**

residential areas, planned developments, shopping centers, and commercial districts and residential areas, parks, shopping centers and transit facilities within one-quarter of a mile of the development. Residential developments must also provide the analysis to elementary schools within one mile and all other schools, colleges and universities within 1.5 miles of the development.

- c. **Projects are considered to have significant impacts for purposes of BDC 4.7.600 if:**
  - i. **A project fails to provide accessible and safe pedestrian and bike connections (i.e., curb extensions, pedestrian refuges, striping and/or signage) to schools, residential areas, parks, shopping areas, transit facilities and adjacent streets; or**
  - ii. **The project disrupts existing or planned biking or walking facilities or conflicts with the adopted Bend Urban Area Bicycle and Pedestrian System Plan.**

**FINDING:** Section 4 of the OSU-C TIA, beginning at page 79, identifies and evaluates the multi-modal network on the proposed campus as well as the connections to the wider network required by this section. The study identifies deficiencies in the system and recommends improvements to complete the nearby system.

**10. Proportionate Share Contribution. Provided proportionate share calculations in compliance with BDC 4.7.700, Proportionate Share Contribution.**

**FINDING:** In the development of the OSU-C TIA, the City has not identified any intersection within the study area that is subject to the proportionate share contribution requirements of BDC 4.7.700.

**4.7.600 Significant Impacts and Mitigation Measures.**

- A. Applicability. When significant impacts are identified as part of the Transportation Impact Analysis, mitigation measures must be included to address those impacts.**
- B. Preparation. Prior to proposing mitigation, the applicant's engineer shall consult with the City Engineer regarding potential mitigation options. The proposed mitigation and a concept-level drawing of the final intersection form must be prepared and submitted prior to a development application being deemed complete, unless approved otherwise by the City Engineer. Mitigation measures may be proposed by the applicant or recommended by ODOT or Deschutes County in circumstances where a state or county facility will be impacted by a proposed development. Deschutes County and/or ODOT must be consulted to determine if improvements proposed for their facilities comply with their standards and are supported by the respective agencies.**

**C. Intersection Operation Standards.** If the Transportation Impact Analysis shows that the operation standards at the intersection will be exceeded or if the intersection already exceeds the standards, the applicant will be required to provide mitigation measures in compliance with subsection (F) of this section impacts.

**RESPONSE:** The OSU-C TIA identified several intersections within the approved study area that will exceed operational standards with buildout of the project. Select intersections affected by the increased traffic would fail to meet mobility standards in 2034 with or without the project. As required by this section, in consultation with the City Engineer, the Applicant has proposed mitigation to remedy the significant impacts.

**D. Unique Situations.**

1. **Development proposals within Master Planned Developments or Special Planned Areas, as described in BDC Chapter 4.5, Master Planning and Development Alternatives, where a Transportation Mitigation Plan has been approved, may exceed the operation standards at affected intersections as long as the proposed development is consistent with the approved Transportation Mitigation Plan.**
2. **Widening to accommodate additional travel lanes will not be permitted in the following situations:**
  - a. **Intersections and streets that are already constructed consistent with the Bend Urban Area Transportation System Plan (TSP) including streets identified by the TSP as “not being authorized for lane expansion”;**
  - b. **Intersections and streets located within or directly adjoining the City’s Central Business District or historic district;**
  - c. **Where no physical mitigation is available to improve intersection operations to the performance standard; or**
  - d. **Where improvements may result in unacceptable tradeoffs to other modes of travel.**

**FINDING:** The adopted OSU-C Overlay Zone contains a Transportation Mitigation Plan in conformance with this section. Via adoption, and future compliance with the Plan, the City has determined that all significant impacts have been adequately mitigated.

**E. Timing of Improvements.**

1. **Unless a unique situation is identified in subsection (D) of this section, Unique Situations, mitigation shall be in place at the time of final platting of a land division, or at the time of final occupancy for commercial, industrial, institutional, mixed use, multi-family housing, triplex buildings and all other**

development. Mitigation for phased developments must be in place at the time specified in the approved decision.

**Exception:** Construction of emergency services access requirements may be needed earlier.

2. **Development proposals within Master Planned Developments or Special Planned Areas, as described in BDC Chapter 4.5, Master Planning and Development Alternatives, where a Transportation Mitigation Plan has been approved, shall refer to the Plan for the extent and timing of improvements.**

**FINDING:** The OSU-C TIA identifies the required improvements as well as the timing of the construction of those improvements. The adopted Transportation Mitigation Plan in the Overly Zone contains all required future improvements.

**F. Mitigation Measures. Mitigation measures must consider all users and include all or a combination of the following mitigation measures as approved at the discretion of the City Engineer, to mitigate the impacts of the proposed development.**

1. **Construct Transportation Mitigation.**

- a. **The intersection form will be determined through the City's Intersection Form Evaluation Framework located in the City's Roundabout Evaluation and Design Guidelines document.**
- b. **Mitigation must include the construction of the full intersection infrastructure and control required to bring the intersection into compliance with this code, the Bend Urban Area Transportation System Plan, and the City of Bend Standards and Specifications. Final intersection improvements, including type and geometry, will be determined by the City Engineer.**
- c. **Intersection improvements must improve corridor operations in terms of progression and reduced corridor delay, and must be shown to cause no significant adverse impact to the corridor during integrated corridor operations.**
- d. **Mitigation in the form of street widening must be constructed in conformance with the street classification of the Bend Urban Area Transportation System Plan and the cross-sections contained in this code or the City of Bend Standards and Specifications. As part of the development review process, the City Engineer may approve an alternate cross section if it meets operations standards.**
- e. **Intersection and street improvements must balance operations and safety for all modes of travel. Walking and biking accommodations must be considered as part of any improvement.**

**FINDING:** The OSU-C TIA identifies the required mitigation and has consulted with the City regarding the mitigation. In addition, a third-party consultant reviewed the TIA and

the required mitigation. As discussed in the OSU-C TIA, the Applicant has elected to make certain improvements at the Columbia/Simpson intersection in excess of what would otherwise be required to mitigate the project's impacts in exchange for not making improvements to the Reed Market/Bond and Galveston/14<sup>th</sup> intersections as authorized under BDC 4.7.600D. The roundabouts at Simpson/Columbia and Columbia/Colorado will comply with all City construction and operational requirements.

All off-site transportation mitigation requirements are listed by phase in Table 2.7.3570.D of the OSU-Cascades Overlay code. This table summarizes the off-site mitigation measures that are required per the City's Transportation Review memo BP-17-5592.

## **2. Construct Interim Transportation Mitigation.**

- a. Construct Interim Mitigations. Interim mitigation measures may include but are not limited to upgraded operations controls, interconnected signals, signage, striping, pedestrian refuge, etc.**

**FINDING:** No interim transportation improvements are planned.

- b. Improved signal timing and phasing may be achieved by installing the necessary communications and field equipment that would provide the increased capacity necessary to achieve the operation standards. For this to be acceptable as an interim measure, the applicant shall demonstrate through a field calibrated corridor operations model approved by the City Engineer that the proposed signal timing and phasing will provide the additional capacity necessary to meet the concurrency standards. Timing and phasing communications and field equipment are subject to approval of the City Engineer and/or ODOT.**

**FINDING:** No signal timing adjustments are contemplated or required.

- 3. Transportation and Parking Demand Management (TPDM) Plan. Implement an approved TPDM Plan in compliance with BDC 4.7.400(C)(3), Transportation and Parking Demand Management (TPDM) Plan and BDC Chapter 4.8. Transportation and Parking Demand Management (TPDM) Plan.**

**FINDING:** OSU-Cascades has developed a TPDM Plan (Exhibit 16 of the application). As explained elsewhere in this section, the OSU-C TIA does not take into consideration any trip reductions based on TDM measures.

- 4. Walking, Biking and Transit. In addition to accommodating walking and biking as part of the intersection and street improvement mitigation, walking, biking and transit improvements may be considered as potential mitigation measures, particularly when they reduce the number of study area generated vehicle trips. Mitigation improvements may include**

accessible sidewalks, pedestrian refuges, bike lanes, curb extensions, traffic control devices, curb ramps, striping, signage and other elements. Negative impacts of intersection and street mitigation measures on walking and biking infrastructure, such as on crosswalks and roadway shoulders, must be avoided, minimized, and/or mitigated themselves. The City may require accessibility improvements, including compliant curb ramps along the proposed development and including safe and accessible paths of travel to and from the development, depending on the type and impacts of the development.

**FINDING:** OSU-Cascades is proposing a significant amount of walking, biking and transit improvements, both internal to the campus and via connections to the wider pedestrian and transit system. The addition of a transit stop on campus will serve to reduce the number of study area generated vehicle trips by making transit more convenient for students, employees, residents and Innovation District partners. However, as explained elsewhere in this section, the OSU-C TIA does not take into consideration any trip reductions based on TDM measures.

5. **Payment in Lieu of Construction.** If infrastructure construction is required above, the City may elect to accept a payment in an amount equal to the cost estimated by the City for the design, right-of-way acquisition, utility relocation and construction cost of the improvements in lieu of actual construction. The City will use these funds on the impacted corridor to improve multi-modal safety, operations and to relieve congestion. Once the City accepts a payment in lieu of construction, the proposed development may proceed even if the impact of the proposed development causes the operation standards to be exceeded.

**FINDING:** At the present time, OSU-Cascades and the City do not contemplate the payment of any funds in lieu of construction of off-site mitigation.

6. **Alternate Location Mitigation.** Mitigation strategies at alternative locations or affecting alternative modes of travel may be proposed by the applicant and may be accepted by the City Engineer. At a minimum, the proposed improvements should meet the following criteria:
  - a. The overall improvements proposed should be proportional to the impacts created by the application;
  - b. The proposed improvement strategies must address a critical need or issue within the study area such as safety, connectivity, system capacity, and parallel routes;
  - c. The locations proposed for improvement must be within the study area;
  - d. The proposed improvements must not already be, or be in the process of being, a condition of approval of another development; and
  - e. All applicable analysis requirements for the primary location(s) shall apply to the analysis of the alternative location(s).

**FINDING:** The OSU-C TIA identified two intersections that will fail to meet mobility standards with or without the project. The Reed Market/Bond and Galveston/14<sup>th</sup> intersections both fail to meet the City’s mobility standards. There is, however, no identified mitigation for either intersection. Both are significantly constrained due to topography, existing development or City policies discouraging or outright prohibiting lane additions. Moreover, the Reed Market/Bond intersection is outside of the 1-mile study area imposed by BDC Chapter 4.7.

Given that there is no identified solution, in lieu of making improvements to these intersections, the Applicant has proposed improvements at the Simpson/Columbia intersection which are in excess of what is required to mitigate the impacts of the project on this intersection. The OSU-C TIA concludes that a small diameter roundabout at this intersection would provide adequate mitigation for the anticipated impacts of the overall campus development. However, in recognition that there are no identified “fixes” to the Galveston/14<sup>th</sup> and Reed Market/Bond intersections, the Applicant has proposed to construct a full roundabout at the Simpson/Columbia intersection as “alternate location mitigation.” This mitigation, along with the other significant impact mitigation discussed above and contained in the Transportation Mitigation Plan (e.g., TPDM, alternate mobility improvements, etc.), have been determined by the City to be roughly proportional to the impacts of the development, particularly considering the difficulties of mitigating the development’s impacts on the intersections of Galveston/14<sup>th</sup> and Reed Market/Bond. The Simpson/Columbia improvement clearly addresses a critical need at this intersection in terms of capacity, connectivity and safety. The intersection is within the study area. The roundabout improvement is not presently a condition of another development. Under City of Bend Ordinance No. NS-2224 (attached as Exhibit 25 of the application), the City of Bend has obligated Bend Parks and Recreation District or their successor to construct a roundabout at the intersection if development occurs on Parcels 1, 2 or 3 of Partition Plat No. 2008-06 other than the Pavilion. Consequently, although the underlying property carries a potential future obligation to construct a roundabout, the obligation is not a “condition of approval for another development.” There is no certainty that the obligation will ever be triggered because, presently, there is no development proposal for the underlying property.

- 7. Suspend the Mobility Standard. The City Manager may suspend the mobility standard for a particular intersection or series of intersections under the City’s jurisdiction when the intersection(s) may be in a condition that interim mitigation is not practical due to the large scale of the improvements or the City desires to maintain the current intersection’s form. In such cases, developments impacting the intersection(s) do not have to analyze or mitigate impacts on the intersection(s). The City Manager will issue a written statement providing the duration and reason for the suspension of the mobility standard, and will maintain a list of all intersections where the mobility standard has been suspended. Suspending the mobility standard is not a limited land use decision or a land use decision.**

**FINDING:** Because the master plan area is subject to an approved Transportation Mitigation Plan under BDC 4.7.600D, the suspension of mobility standards at affected intersections is not necessary.

#### **4.7.700 Proportionate Share Contribution.**

Each proposed development that submits a Transportation Impact Analysis will be required to contribute a proportionate share of the costs of the final improvements to the transportation system that will be required as a result of the cumulative impact that various developments combined will have on the intersections. Developments must contribute their proportionate share or contribution for all intersections within the analysis area. The City may use the proportionate share contributions for multi-modal improvements on the transportation corridor and surrounding system if the improvement project benefits safety and operations and helps to reduce congestion. Proportionate share calculations must be submitted with the Transportation Impact Analysis. Proportionate share calculations are calculated based on the ratio of development trips to growth trips for the anticipated cost of the full Bend Urban Area Transportation System Plan intersection infrastructure. The formula is provided below:

**Proportionate Share Contribution = [Net New Trips/Planning Period Trips– Existing Trips)] x Estimated Construction Cost**

**Net new trips are the total entering trips that are proposed to be added to the analysis area intersection by the development.**

**Exception: Intersections within the analysis area that are included in the City’s Capital Improvement Plan or that are on the most current System Development Charge (SDC) fiscally constrained project list are exempt from proportionate share contribution.**

**FINDING:** The City has not identified any intersections in the study area that would be subject to the proportionate share contribution.

## **CHAPTER 4.8 TRANSPORTATION AND PARKING DEMAND MANAGEMENT (TPDM) PLAN**

### **4.8.200 Applicability.**

**In compliance with BDC Chapter 4.5, Master Planning and Development Alternatives, Institutional and Employment Master Plans must develop a TPDM Plan. All other development applications may choose to develop a TPDM Plan.**

### **4.8.300 Preparation.**



**The TPDM Plan must be prepared by a transportation planner, or licensed professional engineer especially qualified in civil or traffic engineering by the State of Oregon.**

#### **4.8.400 Review Process.**

**The TPDM Plan must be reviewed concurrently with an associated development application using the review procedures required for the development application.**

**FINDING:** The TPDM Plan for the OSU-Cascades Master Plan was prepared by Phill Worth, a principal transportation planner with Kittelson & Associates, Inc. Further, the preparation of the TPDM plan was supervised by Wayne Kittelson, a licensed professional engineer in the State of Oregon. The TPDM Plan is included as a part of the present Master Plan application and will therefore be reviewed as part of the overall development review.

#### **4.8.500 Submittal Requirements.**

**In addition to the submittal requirements of Chapter 4.7, Transportation Analysis the proposed TPDM Plan must include the following information as deemed applicable by the Development Services Director:**

**TPDM goals, objectives and policies.**

**FINDING:** Exhibit 16 of the application includes a section related to the goals, objectives and policies of the TPDM Plan.

**Proposed types and approximate number of users (e.g., residents, employees, students, customers, patients, visitors, clients, and deliveries).**

**FINDING:** Table 1 of the TPDM Plan includes a section identifying the types on number of users of the entire campus development, including OSU-Cascades students, employees, housing residents, Innovation District employees.

**Anticipated mode of travel by users (vehicle, biking, walking and transit).**

**FINDING:** The TPDM Plan includes a section identifying the anticipated mode of travel by all users.

**Anticipated parking demand by time of day and/or demand by user.**

**FINDING:** The TPDM Plan includes a section identifying the anticipated parking demand by time of day and demand by the specific type of user (e.g., student, employee, Innovation District user, etc.). Table 4 identifies the 2:00 pm to 3:00 pm hour as the peak hour for parking demand.

### **Anticipated parking utilizing shared spaces.**

**FINDING:** The TPDM Plan includes a discussion regarding the use of shared parking among the various users of the overall campus.

### **Proposed number of on and offsite parking spaces, including carpool, vanpool, car share and bike parking.**

**FINDING:** The TPDM Plan identifies the required number of parking spaces under the BDC, the reduction in parking spots based on approved TPDM measures and explains that the campus will reserve space for additional parking over and above what is required by the BDC if OSU-Cascades determines that additional parking is warranted.

### **Parking and trip demand analysis.**

**FINDING:** The TPDM Plan includes a discussion regarding parking and trip demand analysis. In large part, the TPDM Plan mirrors the demand/trip analysis set forth in the OSU-C TIA.

### **Estimated daily trip generation and peak hour of trips for the proposed use based on the ITE trip generation rates (note: this may not be the PM Peak of 4:00-6:00 p.m.; e.g., an institution of higher education may have a peak hour of use that is different than the PM peak hour).**

**FINDING:** The TPDM Plan utilizes the same base data set forth in the OSU-C TIA to estimate daily trip generation and peak hour trips.

### **Proposed trip and parking reduction measures in BDC Table 4.8.500 according to the following requirements:**

- 1. A maximum trip generation reduction rate of 25 percent for the peak hour of use will be considered for combined Trip Reduction Measures. If the TPDM Plan including the applicant's proposed trip reduction measures and rates are approved by the City, the approved trip generation reduction rates will be applied to the applicant's Transportation Facilities Report in BDC Chapter 4.7 Transportation Analysis.**
- 2. A minimum of three parking reduction measures must be proposed.**
- 3. The number of vehicle parking spaces may be reduced up to 20 percent of the minimum requirements in BDC Table 3.3.300, Required Off-Street Vehicle Parking Spaces.**

**FINDING:** Table 9 of the TPDM Plan identifies the Trip and Parking Reduction Measures to be implemented by OSU-Cascades. For purposes of trip reduction, despite the allowance that City will consider the trip generation forecast be reduced by an amount up to 25% based on approved TDM measures, OSU-Cascades has not taken

credit for any TDM trip reduction. As a consequence, the OSU-C TIA reflects the full trip generation based on the ITE categories set forth in the OSU-C TIA and the TPDM Plan. OSU-Cascades' approach represents a very conservative approach and, consequently, over estimates trip generation by 25%. OSU-Cascades fully supports TDM measures, and will implement such measures as part of the TPDM Plan; however, to ensure a conservative approach to trip generation, OSU-Cascades has elected not to reduce trip generation by the permitted 25 percent.

With respect to parking reduction, under the TPDM Plan, OSU-Cascades is permitted to reduce parking requirements by an amount not to exceed 20%. That said, on the Core Campus, OSU-Cascades will implement 8 separate TDM measures that, collectively, could reduce parking demand by 40%. Within the Innovation District, OSU-Cascades will implement 6 separate TDM measures. Given that the BDC only permits a 20% reduction, for purposes of BDC Chapter 4.8, OSU-Cascades will rely on the following TDM measures to achieve the 20% reduction:

- 5% Provide on-site showers and lockers free of charge.
- 5% Provide enclosed bike lockers and/or fenced, covered bike storage areas and/or a designated bike storage area inside a building.
- 5% Project is located within 1/4 mile of a transit facility and employer participates in CET's Group Bus Program.
- 5% Provide a bike-share program or free use of bikes on-site that is available to all tenants/employees of the site.

Total: 20% reduction.

#### **A description of how the proposed measures will reduce the development's trips and parking demands.**

**FINDING:** Section J of the TPDM Plan (Exhibit 16 of the application) describes how the TPDM measures will reduce parking demand on the OSU-Cascades Campus.

#### **A description of how the proposed measures will be achieved and maintained over the life of the project.**

**FINDING:** Sections J and K of the TPDM Plan (Exhibit 16 of the application) identify how the measures will be achieved and maintained over the life of the project. While OSU-Cascades plans to implement all of the measures identified in the TPDM Plan over the life of the campus, for purposes of achieving the 20% reduction, OSU-Cascades has selected four measures that it believes are the easiest to enforce, monitor and maintain over time. For example, conditions of approval may be imposed at each Site Plan Review application which implement the identified TPDM measures.

#### **Site plan that designates the following TPDM measures, if applicable:**

**External: Carpool, vanpool and car share parking areas, paid parking areas, bike parking areas, and land dedicated, planned or for existing transit facilities and bus shelters.**

**Internal: Showers/lockers, bike storage areas, information boards/kiosks and on-site support services.**

**FINDING:** As discussed above, conditions of approval may be imposed at the Site Plan Review stage to ensure that the internal and external TPDM measures adopted by OSU-Cascades are included, as relevant, at each subsequent site plan approval.

**TPDM Plan Designated Contact. The contact is responsible for administering carpool and vanpool ride-matching services and promotional programs and updating information (e.g., transit routes and schedules; carpool, vanpool and car share information; bike lanes, routes and paths and facility information; and alternative commute subsidy information) on a board/kiosk that is located in a prominent location. The City must be provided with a current name and phone number of the designated contact.**

**FINDING:** The TPDM identifies the OSU-Cascades Transportation Program Manager as the designated contact. The current contact information is as follows:

Casey Bergh / Transportation Program Manager  
Oregon State University – Cascades  
DINE 108, 1500 SW Chandler Avenue  
Bend, OR 97702  
T: 541-322-2036  
casey.bergh@osucascades.edu

#### **Enforcement and monitoring program.**

**FINDING:** Section N of the TPDM Plan includes the enforcement and monitoring element of the TPDM Plan. Again, the selected TPDM measures are objective standards that are easily enforced through conditions of approval at subsequent Site Plan Review approval stages. In addition, for those elements not relied on to achieve the 20% reduction, but which will be implemented by OSU-Cascades, Section N of the TPDM Plan (Exhibit 16) includes the enforcement and monitoring provisions associated with these measures.

#### **4.8.600 Approval Criteria.**

**A. In addition to the approval criteria for the development application, the review authority of the development application will approve, approve with conditions or deny the TPDM Plan based on all of the following criteria:**

**The TPDM Plan demonstrates that the measures provide transportation options and reduce the demand for parking; and**

**FINDING:** Exhibit 17 of the application includes excerpts from six papers in scholarly research journals, which demonstrate that the TPDM measures adopted by OSU-Cascades reduce the demand for parking. The first article, P. C. Bueno, Gomez, J, Peters, J, Vassallo, J. *Understanding the Effects of Transit Benefits on Employees' Travel Behavior: Evidence from the New York-New Jersey Region*, Transportation Research Part A: Policy and Practice, Volume 99, Pages 1-13, May 2017, explains that commuters offered public transportation benefits are about 9 times more likely to take public transportation than to drive and 3 times more likely to choose walking or cycling over driving. Additionally, compared to individuals receiving no subsidies, individuals with cyclist showers, lockers, or bike parking at work are 50 times more likely to commute by bicycle. In fact, bike-related benefits were identified as the most important factor explaining the decision of cycling to work. The second article, B. Boyd, Chow, M., Johnson, R., Smith, A., 2003. *Analysis of Effects of Fare-Free Transit Program on Student Commuting Mode Shares at University of California at Los Angeles*. Transp. Res. Rec. 1835 (1), 101–110 demonstrates that public transport subsidization increased bus users by 50% and reduced solo drivers by 9%. Finally, in DeMaio, Paul. 2009. *Bike-sharing: History, Impacts, Models of Provision, and Future*. Journal of Public Transportation, 12 (4): 41-56, demonstrates that bike sharing programs has had the effect of raising bike mode share between 1.0 - 1.5 percent in cities with pre-existing low cycling use.

Together, these three articles provide substantial evidence to support the conclusion that the measures adopted by OSU-Cascades in its TPDM program reduce the demand for parking by reducing single-occupancy travel to and from the University.

**The TPDM measures are feasible and appropriate for the project, considering the proposed use or mix of uses and the project's location, size, and hours of operation.**

**FINDING:** As discussed above, out of the eight TPDM measures that OSU-Cascades plans to implement as part of the TPDM program, for purposes of achieving the 20% reduction for parking, OSU-Cascades has elected to apply the most easily enforceable and feasible measures. For example, it is both feasible and appropriate to provide on-site showers and lockers free of charge throughout the OSU-Cascades Campus, including Innovation District partners and Core Campus buildings. These facilities may be conditioned throughout the campus buildout to ensure that at each stage of development appropriate facilities are in place to meet anticipated demand for showers and lockers. Similarly, the provision of lockers, fenced areas and interior storage facilities are likewise appropriate for all areas of the campus and can also be developed and conditioned as Site Plan Review applications area approved for future phases. The proximity of the campus to existing transit facilities, and the anticipated addition of on-campus transit facilities support the conclusion that the 5% reduction for transit is appropriate. Transit currently operates during peak University demand (mid-afternoon) and service is only anticipated to grow as Bend increases population. Finally, the bike share program is one that is similarly easy to enforce through the imposition of conditions at Site Plan Review approval. Bike share locations are anticipated to be

spread throughout the campus as it develops. The TPDM Plan is included as Exhibit C of the proposed ordinance.

#### **4.8.700 Ongoing Participation.**

**The applicant is required to commit to ongoing participation in the TPDM Plan in its deeds, Codes, Covenants and Restrictions and is subject to on-going monitoring and tracking of the activities undertaken to implement the approved measures and their results.**

**FINDING:** Although OSU-Cascades will not employ the use of deeds, codes, or CC&Rs to enforce the OSU-Cascades TPDM program, because the University will maintain ownership of the Innovation District, it can enforce the TPDM measures through lease agreements and, to the extent that property is conveyed to third parties, through the use of CC&Rs or deed restrictions. Conditions of approval for specific Site Plan Review applications can similarly impose these obligations on specific development.

#### **4.8.900 Reporting.**

**At the request of the City, a report documenting the TPDM plan's activities undertaken to implement the approved measures and their results must be submitted to the Development Services Director at the responsibility of the applicant.**

**FINDING:** The City will require an annual TDPM report summarizing the management and operations activities of the transportation and parking system; current TPDM measures; performance against the University's goals, objectives and measures; actions taken during the year; and recommendations going forward. Section N of the TPDM Plan outlines these monitoring measures.

**CONCLUSIONS:** Based on the findings in this report, the BDC text amendment to create the OSU-Cascades Overlay Zone meets all applicable BDC criteria, policies of the Bend Urban Area Comprehensive Plan, Oregon Statewide Planning Goals, and the Transportation Planning Rule.

**ADOPTION:** The City Council adopts the findings and conditions of approval in this exhibit (PZ-18-0004).

**CONDITIONS OF PREVIOUS APPROVAL:** Conditions 1, 23-24, and 27-29 of PZ-14-0210 remain in effect for the initial 10-acre site unless modified at a later date. Conditions 25 and 26 of PZ-14-0210 will remain in effect until completion of the Phase 1 transportation improvements identified in Table 2.7.3570.D of the OSU-Cascades Overlay Zone after which time they will no longer apply.

