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Purpose and Context

In June of 2016, the University of Washington Bothell and Cascadia College initiated a new Campus Master Plan (CMP). Developed in coordination and cooperation with the City of Bothell and the community, this CMP establishes a shared Long-term Vision for the campus, serving as the basis for future development and regulatory action.

The CMP accounts for contiguous properties acquired or controlled by the institutions, which have been recently incorporated into the Campus District in the City of Bothell’s 2016 Comprehensive Plan Update.

The CMP defines a flexible framework to guide land use, physical development and infrastructure investments. It establishes a campus-wide Development Allowance for academic building area in gross square feet (GSF Cap), distributed throughout campus within six unique Development Areas, and a Parking Allowance outlining the maximum number of parking stalls provided on campus. It incorporates Development Standards that serve as the basis for jurisdictional evaluation and approval of future development.

The illustrative Long-term Campus Vision conceptualizes a campus that has realized the development capacity included herein. It is based upon current understanding of conditions affecting or influencing campus growth, and is presented with the full understanding that these conditions will change over time. The CMP establishes overarching Guiding Principles and more detailed Design Principles that complement the Development Standards and will inform and guide both design teams and campus design oversight processes, serving as the foundation for ultimate realization of the Campus Vision.

The CMP is organized into six Sections. Sections 1 through 4 review campus and institutional history and growth profiles, establish campus development capacity and culminate by detailing the Long-term Campus Vision and underlying Design Principles.

UW Bothell and Cascadia College internal review and approval processes for development projects and ongoing planning decisions are described in Section 5. Section 6 includes City of Bothell Development Regulations, a description of jurisdictional review and approval processes and detailed mitigation commitments negotiated during the CMP Process.

Collectively, these components of the CMP will provide clarity and transparency of both purpose and process for the long-term campus development for the University of Washington, Cascadia College and City of Bothell communities.
Guiding Principles

The Guiding Principles identify a shared vision for actions and outcomes that meet multiple objectives to ensure that land use and capital investment decisions support the institutional missions of UW Bothell and Cascadia College. They were developed to guide both the planning process and implementation of the Campus Master Plan and are organized into six categories:

GUIDING PRINCIPLE NO. 1: COHESIVE CAMPUS CHARACTER

The physical setting of the campus expresses the institutional values and commitment to educational excellence, with regard to contextual integration within the surrounding community and region. The architectural expression of buildings, landscapes and circulation patterns should be context-driven to enhance the character and quality of the campus while retaining the identity of each institution and providing a welcoming and user-friendly experience for first-time and daily users.

GUIDING PRINCIPLE NO. 2: DURABLE AND ADAPTABLE FACILITIES

Ongoing demands to maximize the versatility of space must be considered in the design of academic buildings to meet evolving program needs. Buildings should be designed with flexible interiors to allow for the reconfiguration of space over time without major structural or utility modifications and infrastructure should be provided to meet current and future technology needs.

GUIDING PRINCIPLE NO. 3: ENRICHED CAMPUS COMMUNITY EXPERIENCE

Providing a vibrant, student-centered campus with ease of access and amenities that encourage the interdisciplinary exchange of ideas and discovery is vital to achieving academic excellence. Maximizing resources and co-location opportunities to meet the needs of commuting and residential students through inclusiveness and equity will enrich the student experience. Providing resources and co-location opportunities for faculty and staff to socially and academically interact with each other and with students will help enhance a culture of learning, innovation and partnership.

GUIDING PRINCIPLE NO. 4: ENHANCED ENVIRONMENTAL AND HUMAN HEALTH

The commitment of both UW Bothell and Cascadia College to environmental protection, sustainability, and the well-being of students, staff, faculty, and the surrounding community is integral to the Campus Master Plan. Energy conservation, natural daylight and ventilation, efficient use of resources, preservation of environmentally valuable features, and a mix of vibrant and passive open spaces are all means of enhancing the environmental and human health of campus and community. The campus’ environmental resources and critical habitats will continue to be managed in a manner that promotes academic, research and partnership opportunities for UW Bothell, Cascadia College and the community-at-large.

GUIDING PRINCIPLE NO. 5: INTEGRATION WITH THE CITY OF BOTHELL

Considerations for enrollment growth of UW Bothell and Cascadia College and the physical development of the campus to meet space needs require close collaboration and connectivity with the City of Bothell’s long-range vision. Development along the edges of campus should acknowledge, and where appropriate, complement adjacent uses relative to scale and proximity. Pedestrian and bicycle connections between the campus and downtown core should continue to be strengthened.

GUIDING PRINCIPLE NO. 6: MOBILITY, ACCESS AND SAFETY

Safe, efficient, and effective movement of people and vehicles (including personal, service, emergency and transit) to and through campus requires regular monitoring and management. Sufficient and appropriately located parking, transit connectivity, universally accessible pathways, and intentionally designed intersections and crossings are necessary both on and off campus, requiring close collaboration with the City of Bothell and local transit agencies.
The Campus Area Summary (Figure 1-1) details both existing conditions and anticipated space needs for UW Bothell and Cascadia College, guiding the establishment of a Development Allowance (GSF Cap) for campus of 1,800,000 GSF under this Campus Master Plan. This equates to 1,042,368 Net New GSF of campus Academic Uses (excludes parking facilities). The resulting net new GSF cap assumes that functions currently housed in off-site leased space would be accommodated on campus in the Long-term Campus Vision buildout.

For the purposes of the CMP, facilities supporting Academic Uses are defined as “all facilities which relate to and support instruction and research and the needs of students, faculty and staff.” The Campus Master Plan Development Allowance incorporates the assessed needs for both non-housing related academic space and on-site student housing to accommodate 10,000 on-campus student FTE, consistent with original enrollment targets established by the state legislature.

Academic space needs (excluding housing) were evaluated based on benchmark data comparing total Gross Square Feet (GSF) to on-campus student full-time equivalents (FTE) from peer institutions of both UW Bothell and Cascadia College. This key metric is represented as GSF/FTE. For planning purposes, a target benchmark of 150 GSF/FTE was established based on peer data research (see Figure 3-1, page 36). The combined UW Bothell and Cascadia College metric of 94 GSF/FTE falls well below the planning benchmark of 150 GSF/FTE suggesting that current facilities are undersized for the existing enrollment, and supporting anecdotal stakeholder input that programs are currently “bursting at the seams” of existing facilities. This also suggests that near-term facility development is needed to ‘decompress’ the use of existing facilities in order to better serve current programs and enrollment levels. At the same time, bringing off-campus uses back onto campus is desirable to maximize operational efficiencies and pedagogical engagement.

On-site student housing needs were determined to accommodate ten to twenty percent (10-20%) of the UW Bothell student population. Assuming a total UW Bothell enrollment of 6,000 FTE, a student housing allowance of 300,000 GSF is established to support between 600-1,200 student residents on campus in a mix of traditional and apartment style housing.
**DEVELOPMENT AREAS**

To ensure development is equitably distributed across campus with a desirable mix of buildings and open space, the campus is divided into six Development Areas (A-F, figure 1-3).

Each area is assigned a maximum net new GSF Development Area Cap (shown below), the sum of which exceeds the CMP Development Allowance GSF. This provides campus-wide flexibility for locating new development relative to building adjacencies and programmatic needs, allowing the campus to be nimble in adapting to current and future opportunities and demands. All Academic Uses are permitted in every Development Area, with the exception of student housing which is not permitted on land owned by UW Bothell/CC within Development Area C.

Future building development is not permitted within the Wetland or Wetland Buffer areas. Trails, boardwalks or other features to enable pedestrian access to Wetland areas may be permitted.

**MAXIMUM NET NEW GSF PER DEVELOPMENT AREA**

<table>
<thead>
<tr>
<th>Area</th>
<th>GSF</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>293,100 GSF</td>
</tr>
<tr>
<td>B</td>
<td>407,200 GSF</td>
</tr>
<tr>
<td>C</td>
<td>144,800 GSF</td>
</tr>
<tr>
<td>D</td>
<td>295,900 GSF</td>
</tr>
<tr>
<td>E</td>
<td>425,800 GSF</td>
</tr>
<tr>
<td>F</td>
<td>10,000 GSF</td>
</tr>
</tbody>
</table>

**PARKING ALLOWANCE**

UW Bothell and Cascadia College currently utilize 2,292 on-campus parking stalls and an additional 158 stalls associated with nearby leased properties. Based on past and ongoing analysis, a Parking Allowance of 4,200 total stalls on campus is established as a planning assumption for 10,000 FTE. This equates to 1,708 net new parking stalls to support the Long-term Campus Vision.

Figure 1-4 indicates potential parking distribution ranges (in stalls) for anticipated parking zones on campus. Parking would be a mix of surface and structured lots.

The original 1995 Campus Master Plan predicted a total future parking demand of 4,200-6,600 parking stalls to support 10,000 student FTE. Annual on campus traffic utilization studies have demonstrated steadily decreasing parking demand rates over time, largely due to increased transit service and use, resulting in a presumed total need significantly less than originally anticipated.
LONG-TERM CAMPUS VISION: REINFORCE CORE & GROW NORTH

The illustrative plan shown in figure 1-5 represents the Long-term Campus Vision for UW Bothell and Cascadia College. The CMP focuses near-term development at the campus core while seeking to grow northward over time, strategically leveraging the development capacity and potential of campus property immediately south of Boardline Boulevard and west of NE 110th Street to strengthen connections to downtown Bothell and create a new front door to campus. This northward growth generally follows campus topography, emphasizing equitable access for all campus users in a wide range of pedestrian and transportation modes.

The Campus Master Plan establishes a set of Design Principles for new development illustrated through a series of frameworks relative to the Built Environment and Open Space, Mobility, and Utilities and Infrastructure. These Design Principles evolve from, reinforce and support the Guiding Principles.

Throughout the CMP, Long-term Campus Vision graphics are labeled “for illustrative purposes only.” UW Bothell and Cascadia College recognize that myriad factors and conditions influencing campus development will change significantly over time.

The CMP identifies and reflects a current understanding of such factors and conditions. While future campus development will follow the Design Principles and Development Regulations included herein, it is a certainty that the campus plan that evolves over time will ultimately differ from this Long-term Campus Vision.

FIGURE 1-5: LONG-TERM CAMPUS VISION PLAN KEY

UW BOTHELL FACILITIES (EXISTING)
1. UW1 (Founders Hall)
2. UW2 (Commons Hall)
3. UW3 (Discovery Hall)
5. Sarah Simonds Green Conservatory

CASCADIA COLLEGE FACILITIES (EXISTING)
6. CC1
7. CC2
8. CC3

SHARED FACILITIES (EXISTING)
9. Chase House
10. Truly Ranch House
11. Central Utility Plant
12. Library 1
13. Library 2
14. Library Annex
15. Activity & Recreation Center (ARC)
16. North Creek Event Center

PROPOSED FACILITIES
18. Corporation Yard
19. Residence Hall/Campus Dining
20. Academic Building (UW4)
21. Library Expansion
22. ARC Expansion
23. Potential Residence Hall
24. Academic Building (CC4)
25. Academic Building
26. Academic Building
27. Academic Building
28. Satellite Physical Plant
29. Academic/Housing
30. Academic Building
31. Academic/Housing

SHARED STRUCTURED PARKING (EXISTING)
A. South Parking Garage
B. North Parking Garage

PROPOSED SHARED STRUCTURED PARKING
C. South Parking Garage Expansion
D. West Parking Garage
NEAR-TERM DEVELOPMENT PLAN

The CMP includes a Near-term Development Plan that identifies a handful of projects assumed to be completed in the next six to ten years as funding becomes available. The University of Washington Bothell and Cascadia College receive funding for academic buildings from the state legislature. The funding for higher education is difficult to acquire and oversubscribed with substantial needs across the State of Washington. During the past ten years, UW Bothell and Cascadia College received funding for only one academic building each, and it is anticipated that each institution would continue to receive funding at a similar pace in the future. A small number of projects are funded by alternative sources, primarily supporting student life and minor improvements.

CAMPUS DESIGN REVIEW PROCESS

CAMPUS DISTRICT REGULATIONS

Sections 5 and 6 of the Campus Master Plan outline the processes and regulations that will guide proposed development within the campus boundaries.

Campus Design Review Processes (Section 5) describes internal campus review and approval processes and is included to provide clarity around the alignment of these processes with jurisdictional review and approval processes as described in Section 6. The purpose of the Campus District Regulations is to:

- Protect and promote public health, safety and general welfare, and to guide the use of land consistent with the goals and vision of the University of Washington Bothell’s and Cascadia College’s Campus Master Plan (CMP).
- Increase awareness of land use activities and their impacts, and to coordinate necessary review processes.
- Provide adequate light, air, access, and open space; conserve the natural environments; maintain a compatible scale within a campus development area; and enhance the pedestrian and streetscape environment.
- Seek to achieve an efficient use of campus property without major disruption of the natural environment and to organize development to serve students, faculty and staff.
- Establish a process and criteria for determining measures required to mitigate development impact.

While Design Principles seek to support the Guiding Principles, Campus District Regulations define conformance with, or departure from City of Bothell Municipal Code relative to allowed uses, building orientation, height limits, buffers, setbacks, maximum GSF per Development Area, vegetation, light and glare, building modulation, noise, odors, parking, wetland restoration, public realm, signs and banners, storm water, telecommunications, temporary facilities, and tree retention and replacement.

PROPOSED FACILITIES

18. Corporation Yard
19. Residence Hall/Campus Dining
20. Academic Building (UW4)
22. ARC Expansion
24. Academic Building (CC4)

UW LEASED FACILITIES (EXISTING)

L1. Husky Hall
L2. Beardslee Building
L3. Beardslee Crossing

SHARED STRUCTURED PARKING

A. South Parking Garage
B. North Parking Garage
FIGURE 1-7: LONG-TERM CAMPUS VISION RENDERING

- Existing Buildings
- New Buildings
- Pedestrian Pathways

*GRAPhICS ARE FOR ILLUSTRATIVE PURPOSES ONLY*
Site History

University of Washington Bothell and Cascadia College are co-located on a 135-acre site approximately a half-mile east of downtown Bothell core, adjacent to the intersection of State Route 522 and Interstate 405. The campus and its resident institutions are unique in the State of Washington in terms of both physical setting and planning history. This section provides a high level historical summary, to serve as a basis of understanding the history of this site and the evolution of the co-located campus development.

**EARLY SETTLEMENT**

“The earliest known residents of the Sammamish River and what would become Bothell were a Native American tribe that called themselves s-tsah-PAHBSH or “willow people.” These were members of a larger group called hah-chu-RAHBSH or “people of the lake” and the Duwamish Tribe. The Willow People built a permanent settlement of cedar longhouses they called Ish-WAH-dees along a river the Americans would call Squak and Sammamish at the north end of Lake Washington.

The Sammamish River -- also called Sammamish Slough and Squak Slough -- remained unoccupied until the summer of 1870 when Columbus S. Greenleaf and George R. Wilson filed claims and built cabins. By 1876, eight families had settled along the banks of the river, which meandered between Lake Sammamish and Lake Washington through marshes.

**PRE BOTHELL INCORPORATION**

By the end of the nineteenth century, non-indigenous settlement of Bothell was underway. The Bothell Pioneer Cemetery had been established a decade earlier in 1889. The primary economy relied on logging and emerging agricultural uses. The lowland areas of the present-day campus, along North Creek, were marshy wetlands.

A railway spur built to move coal swept past the campus along what is now Beardslee Boulevard, around to the north side of Beckstrom Hill (see Figure 2-1). The route of NE 180th Street heading southward at 113th Avenue NE had already been established as a primary road eastward out of Bothell and towards Woodinville. The Chase House was constructed along this road in 1885.

**INCORPORATION THROUGH POST-WAR**

The town of Bothell, named after a Pennsylvania settler, was incorporated in 1909. By the mid-1930’s, significant logging of the region had occurred, and a majority of the present-day campus had been cleared, as had the area now referred to as the Sunrise Valley View (SVV) neighborhood and Beckstrom Hill north of Beardslee Boulevard (then PN Frease Road). North Creek had been channelized and the marshy wetlands largely converted to agricultural use.

By 1954 (figure 2-3), the urban center of Bothell had grown outward. More auto-oriented residential developments had begun forming in the Sunrise Valley View neighborhood, and new residential streets had emerged on Beckstrom Hill. A large stand of trees still straddled the future west campus property line on the wooded uplands, mostly following the steeper topography down the hill. Another stand of trees remained at the eastern base of the hill near the Chase House.
Institutional Evolution

CO-LOCATION
The creation of the UW Bothell and Cascadia College campus was a result of state-wide planning efforts in the late 1980’s to address regional population growth and increasing demand for post-secondary education.

In 1989, the Washington State Legislature authorized the creation of two upper division UW branch campuses (Tacoma and Bothell) in order to address “insufficient and inequitable access to upper division baccalaureate education” within the state. In 1990, UW Bothell was founded, holding its first classes in leased space in the Canyon Park Business Center, with a student enrollment of 126 and 13 founding faculty.

Also in 1990, the State Board for Community and Technical Colleges (SBCTC) identified north King County and south Snohomish County as encompassing an area with the most significant recent growth combined with the least access to a community college. Cascadia Community College was founded in 1994 and remains the youngest college in the system.

A study by the Washington State Higher Education Coordination Board (HECB) led to a recommendation to co-locate the new community college with UW Bothell in an innovative partnership to deliver both higher education and workforce training within the same geographic area, using land judiciously and realizing cost savings through shared amenities. A separate SBCTC study identified the Boone-Truly Ranch in Bothell as the preferred site for a new community college. These recommendations led to the completion of the first Campus Master Plan (CMP) in 1995. This CMP envisioned a shared campus on the Boone-Truly Ranch site and guided the initial phases of campus development.

In 1996, a portion of the 500-acre Boone-Truly Ranch (Figure 2-6) was sold to the State of Washington. The upland portions of this 128-acre plot (since expanded) of picturesque land overlooked what would become restored and protected wetlands and encompassed views of the Cascade mountain range beyond.

In 2006, the Washington State Legislature changed the mission of the UW branch campuses to full four-year institutions. In 2014, “Community” was dropped from the name, and in 2015 Cascadia College offered its first Baccalaureate programs.

The 1995 CMP included many goals that remain relevant today, including:
- Create one sense of place while balancing each institution’s identity
- Integrate campus and natural resource functions
- Leverage natural resources: restoration, preservation, research, education
- Provide accessible, multi-modal transportation options
- Connect hillside & lowland areas with vegetation & buildings
- Provide flexible and adaptable facilities
- Foster partnerships and connections with the Bothell community

In 1995, the State of Washington purchased the large Boone-Truly Ranch in Bothell, in order to co-locate (then small) UW Bothell with Cascadia College. As planning was underway, the Truly Ranch House was relocated to its present location to make way for the central campus promenade. While the Chase House remained in its present location, 21 existing structures, and their site infrastructure were demolished to make way for the campus.

UV Bothell and Cascadia College also embarked on an ambitious project to restore former cattle-grazing pastures to the wetland that once existed. This included a massive engineering effort to redirect North Creek from the straight channel, to a naturally-shaped river delta; bounded by I-405 on its east edge and the natural topography of the campus hill on the west, the wetland restoration was the largest project of its kind in Washington State at the time.

The original campus property did not include the Husky Hall building, the “Marvin properties” to the west, or Husky Village. NE 185th Street provided direct pedestrian and bicycle access between downtown Bothell and the site.
2002
The early 2000s marked the most intensive period of construction activity in the campus’ history, including completion of the North Creek restoration project (2002) and commencement of first phase of campus development. Over 400,000 gross square feet of academic buildings were constructed along with two parking garages. A primary vehicle entrance was constructed off of Beardslee Boulevard, creating a level route through the site along Campus Way, connecting the north and south garages.

In addition to the south garage, the entire property south of NE 180th Street was cleared to accommodate extensive surface parking lots and a central utility plant (CUP). This initial infrastructure investment has shaped a number of the development decisions in this Campus Master Plan.

The first phase of construction oriented campus buildings along the topography. UW1 and CC1 were placed along the west side of Campus Way, while fronting and defining a new Campus Promenade to the west, the central pedestrian spine of the new campus.

2012
In 2009, WSDOT widened the south entrance with an exit ramp and signalized intersection with SR-522. The work required a substantial soil nailed retaining wall and hillside excavation to allow for the six-lane curved drive and pedestrian walkway. Also completed in 2009, CC3 became the third Cascadia College building.

Starting in 2011, UW Bothell purchased and began leasing adjacent properties to accommodate the rapidly growing student population. This includes: the 2011 purchase of Husky Village (student housing); the 2011 lease of the Campus View Apartments across Beardslee Boulevard; the 2011 lease-option of Beardslee Professional Building (classrooms); the lease of Beardslee Crossing (Administrative Offices); the 2012 lease-option of Husky Hall (a small office building to the south of NE 185th); and a warehouse along SR-522 (storage with loading dock access).
Today’s Campus (2017)

Between 2012 and 2015, the campus added UW Bothell’s Discovery Hall, a STEM lab and classroom building; UW Bothell’s Sarah Simonds Green Conservatory (SSGC); and shared student life amenities, such as the Activities and Recreation Center (ARC) and the adjacent sports complex.

Additional facilities are in the planning or funding request phases and include:

- UW4 Academic Building
- CC4 Academic Building
- UW Bothell Student Housing and Dining
- Corporation Yard (shared)
- Parking (shared, structured and/or surface)

FIGURE 2-10: AERIAL PHOTOGRAPH OF SITE, 2017

FIGURE 2-11: VIEW OF DISCOVERY HALL FROM CRESCENT WALK
JURISDICTIONAL CONTEXT
The UW Bothell/Cascadia College campus was developed under a Planned Unit Development (PUD) finalized with City of Bothell in 1998. The PUD established the development requirements and review and approval criteria for any proposed development on campus and has since been modified six separate times as development occurs. The CMP will serve, in conjunction with a development agreement between City of Bothell, as the primary tool governing jurisdictional evaluation and approval for future projects.

ZONING
To address the rapid urbanization of Downtown Bothell nearby, in 2005 the City of Bothell created a subarea zone with its own comprehensively planned regulations, separate from the standard Bothell zoning template. The campus property is regulated within this subarea as a Campus District (C) zone as shown in the partial City of Bothell Zoning map (Figure 2-12).

It should be noted that several parcels recently acquired or leased since the 2010/2011 Campus Master Plan (Husky Village, Husky Hall, Marvin properties, shown hatched) were recently incorporated into the Campus District as part of the 2016 City of Bothell Comprehensive Plan Amendment process in anticipation of a forthcoming development agreement.

LANDSCAPE BUFFERS AND SETBACKS
The Bothell Municipal Code places specific requirements upon development within the Campus District. Notably, height limits in general and specific setback, landscape buffer and height restrictions for portions of campus abutting single-family residential zones.

These requirements are described in detail in Section 6, Campus District Regulations.
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SECTION 03
Growth Profile
Growth and Development

ENROLLMENT AND PHYSICAL GROWTH

Figure 3-2: UW Bothell/CC Enrollment & Development Timeline documents the growth of UW Bothell and Cascadia College since classes were first offered at the current location in 2000 through present day, 2017. This timeline charts on-campus student FTE with GSF of constructed buildings (excluding parking and housing) and the resulting GSF/FTE ratio for each institution. Key development and planning milestones are also included.

For the first five years on the new campus, the UW Bothell and Cascadia College had modest enrollment growth and adequate space for instruction. However, in 2006 when UW Bothell converted from a two-year to a four-year institution, UW Bothell enrollment began to accelerate and the GSF/FTE metric began to decrease without the addition of new facilities. From 2008 to 2010 the two institutions added over 1,650 student FTEs, growing 46% in two years. During this same period, only a single building (CC3, completed in 2009) was added to absorb the spike in enrollment growth. UW Bothell began leasing facilities off-campus in subsequent years through 2015, however the GSF/FTE ratio, while stable, never reached the targeted benchmarks.

The original 1995 Campus Master Plan (Figure 3-1) does not provide a detailed description of how the quantity of facilities (total GSF) required to support 10,000 student FTEs was determined. However, at the direction of the Legislature, UW Bothell converted to a four-year institution in 2006 and Cascadia joined many of its peer institutions in offering baccalaureate degrees in 2015. As a result, an increased demand for spaces not traditionally required for the original two-year commuter schools has emerged. Pedagogical change and the recent emphasis on Science, Technology, Engineering, and Math (STEM) programs have dramatically increased the need for laboratory and research space to support instruction and student and employee demand, and to attract qualified faculty members. UW Bothell is still primarily a commuter campus, but is trying to meet the changing needs of students and their families, increasing the opportunity for on-campus student housing and a wide array of student life spaces (dining, recreation, etc.) that were not anticipated in earlier planning efforts. The 2010/2011 Campus Master Plan (CMP) reflects these opportunities, and for the first time includes student housing in its long-range planning. This thinking led to the acquisition of Husky Village student apartments in 2011. The CMP also indicated (for the first time) long-range demand exceeding the 1.14 million GSF anticipated in the 1995 Campus Master Plan; the 2010 plan calls for 1.24 million GSF exclusive of housing and parking, and also identifies additional unquantified needs such as a health center and research space that would ultimately push the GSF higher.

FIGURE 3-1: CAMPUS PLANNING HISTORY

1995 CAMPUS MASTER PLAN WITH 2003 UPDATE
Planning Assumptions: 10,000 student FTE
1,143,800 GSF (114 GSF/FTE)*
4,200 parking stalls**
No housing anticipated

2006 CAMPUS FACILITIES MASTER PLAN
Planning Assumptions: 10,000 student FTE
1,017,442 GSF (102 GSF/FTE)*
3,700 parking stalls**
No housing anticipated

2010/2011 MASTER PLAN
Planning Assumptions: 10,000 student FTE
1,242,500 GSF (124 GSF/FTE)
4,150 parking stalls**
900-1,500 student housing beds**
Additional unquantified needs**

*No programmatic basis provided for these quantities
**Not included in GSF quantities
A facilities benchmarking study (Figure 3-3) was used to evaluate Academic space needs in total Gross Square Feet (GSF) relative to on-campus student full-time equivalents (FTE), allowing for broad comparisons to peer institutions of similar size and character. Neither housing nor structured parking were included in establishing the metrics in this study. On-campus shared facilities were also allocated proportionately by FTE when looking at metrics for a single institution.

For the purposes of the CMP, facilities supporting Academic Uses are defined as “all facilities which relate to and support instruction and research and the needs of students and faculty.” WSU Vancouver, WSU Tri-Cities, and UW Tacoma provide the most relevant comparisons for UW Bothell; they are all public institutions with relatively small enrollment levels. Larger institutions like Western Washington University, UW Seattle and Washington State University (all of which have significantly higher GSF/FTE ratios) were not deemed appropriate comparisons.

Similarly, Cascadia College was evaluated based on both the State Board for Community and Technical College’s (SBCTC) published benchmark of 150 GSF/FTE as well as the system-wide average of 153 GSF/FTE.

Clarification of the difference between FTE and head count – the actual number of students registered – is warranted. Since most UW Bothell students are full-time, there is typically little difference in these statistics: 5,420 FTE versus 5,735 headcount in fall 2016.

Cascadia College serves a different demographic and typically sees more part-time students and thus a greater difference between these two statistics: 2,471 on-campus FTE versus 3,551 headcount in fall 2016.

FTE is the accepted standard for planning and programming of academic facilities; however, it is important to consider this issue globally. Parking demand, for example, is generally driven by number of people on campus during peak times, rather than FTE. As a result, the campus’ approach to addressing parking demand relies on regularly updated transportation surveys rather than FTE or head count.

UW Bothell, at 90 GSF/FTE, is nearly 40% lower than the weighted average (151) of its peers, providing some objective evidence for the anecdotal reports of its smaller student population. Assuming a total enrollment of 6,000 FTE, a student housing allowance of 300,000 GSF, or 225,848 net new GSF will support up to 1,200 student residents on campus in a mix of traditional and apartment style housing.

The Campus Master Plan Development Allowance incorporates the assessed needs for both non-housing related academic space and on-site student housing to accommodate 10,000 on-campus student FTE, consistent with original enrollment targets established by the state legislature. Using a combined planning target of 150 GSF/FTE for UW Bothell and Cascadia College, the Development Allowance (GSF Cap) for campus is 1,800,000 GSF under this Campus Master Plan. This equates to 1,042,368 net new GSF of campus Academic Uses. The resulting net new GSF cap assumes that functions currently housed in off-site leased space would be accommodated on campus in the Long-term Campus Vision buildout.
Existing Campus Plan

Figure 3-4 (opposite page) represents the current campus configuration. Detailed analyses of existing conditions are included in Section 4; a summary description is included below.

Campus topography generally falls away from west to east, with the large restored floodplain wetland occupying the flat, northeastern portion of the site and bordered by the North Creek Trail. The current campus boundary is shown, and includes a small portion of land south of SR 522, accessed by the North Creek Trail, and adjacent to the Sammamish River.

Campus development has generally occurred parallel to site topography, with initial academic phases organized along Campus Way (to the east) providing vehicular and bicycle access and Campus Promenade (west) serving as the main pedestrian campus spine. UW Bothell operated buildings are generally located to the south and Cascadia College operated buildings to the north, with primary shared-use facilities (Library, Activities and Recreation Center, buildings 12-16) located between at the central campus core.

More recent construction phases including CC3 (10) and UW3 (3) have begun to build and connect further west and upslope, each including significant plaza development connected by the Crescent Path. This and other pedestrian pathways provide for convenient accessible access in the north and south directions, while strategic building and elevator placement allows for accessible travel in the east-west direction.

Campus operations and maintenance functions and facilities, are generally shared between UW Bothell and Cascadia College. Primary facilities functions occur at the Central Utility Plant (11), Chase House (9) and Corporation Yard (17).

Parking is also a shared function, with primary structures (A & B) located near the south and north entrances respectively. Additional surface lots are also located across campus.

UW Bothell also controls and/or owns and operates several facilities on- and off-campus. Husky Village (4, owned) and Campus View Apartments (L4, leased) provide apartment style housing for UW Bothell students. Husky Hall (L1) and two leased spaces at Beardslee Crossing (L2) are leased by UW Bothell and house administrative space. Administrative and Instructional functions are also housed in the leased Beardslee Building (L2). Finally, athletic fields and facilities are located adjacent to the ARC (15) and the North Creek Trail.

UW BOTHELL FACILITIES
1. UW1 (Founders Hall)
2. UW2 (Commons Hall)
3. UW3 (Discovery Hall)
4. Husky Village
5. Sarah Simonds Green Conservatory

CASCADIA COLLEGE FACILITIES
6. CC1
7. CC2
8. CC3

SHARED FACILITIES
9. Chase House
10. Truly Ranch House
11. Central Utility Plant
12. Library 1
13. Library 2
14. Library Annex
15. Activity & Recreation Center (ARC)
16. North Creek Event Center
17. Corporation Yard

UW BOTHELL LEASED FACILITIES
L1. Husky Hall
L2. Beardslee Building
L3. Beardslee Crossing
L4. Campus View Apartments
L5. SR-522 Warehouse

SHARED STRUCTURED PARKING
A. South Parking Garage
B. North Parking Garage
SECTION 04

Campus Vision and Design Principles

LONG-TERM CAMPUS VISION ................................................... 42
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Long-term Campus Vision

Figure 4-1 represents the Long-term Campus Vision for UW Bothell and Cascadia College, a bold physical framework for the full build-out of campus to accommodate 10,000 FTE. It represents an understanding that near term development will reinforce and expand the campus core, while seeking to grow northward over time, strategically leveraging the development capacity and potential of campus property immediately south of Beardisie Boulevard and west of NE 110th Street to strengthen connections to downtown Bothell and create a new front door to campus.

This northward growth generally follows campus topography, emphasizing equitable access for all campus users in a wide range of pedestrian and transportation modes. While development to the south of the core is permitted under this plan, it was deemed non-desirable at this time to develop on and displace the much needed and expensive to replace parking facilities in this vicinity of campus.

The Campus Master Plan reflects the total assumed need for full build-out of 1,042,368 Net New GSF as allowed by the Development Allowance. To ensure development is equitably distributed across campus with a desirable mix of buildings and open space, the campus is divided into six development areas, A-F (as shown in Figure 4-3). Each area is assigned a maximum net new GSF Development Area Cap (as included in Section 5), the sum of which exceeds the CMP Development Allowance GSF. This provides campus-wide flexibility for locating new development relative to building adjacencies and programmatic needs, allowing the campus to be nimble in adapting to current and future opportunities and demands. All Academic Uses are permitted in every Development Area, with the exception of student housing which is not permitted on land owned by UW Bothell/Cascadia College within Development Area C. The illustrative Long-term Campus Vision represents current thinking regarding placement of housing clusters as well as UW Bothell and Cascadia College academic facilities.

Guiding principles were created to identify a shared vision for actions and outcomes to meet multiple objectives ensuring that land use and capital investment decisions can support the institutional missions of UW Bothell and Cascadia College. They were developed to guide both the planning process and implementation of the Campus Master Plan and are organized into six categories: Cohesive Campus Character, Durable and Adaptable Facilities, Enriched Campus Community Experience, Enhanced Environmental and Human Health, Integration with City of Bothell, Mobility Access and Safety.

UW BOTHELL FACILITIES (EXISTING)
1. UW1 (Founders Hall)
2. UW2 (Commons Hall)
3. UW3 (Discovery Hall)
5. Sarah Simonds Green Conservatory

CASCADIA COLLEGE FACILITIES (EXISTING)
6. CC1
7. CC2
8. CC3

SHARED FACILITIES (EXISTING)
9. Chase House
10. Truly Ranch House
11. Central Utility Plant
12. Library 1
13. Library 2
14. Library Annex
15. Activity & Recreation Center (ARC)
16. North Creek Event Center

PROPOSED FACILITIES
18. Corporation Yard
19. Residence Hall/Campus Dining
20. Academic Building (UW4)
21. Library Expansion
22. ARC Expansion
23. Potential Residence Hall
24. Academic Building (CC4)
25. Academic Building
26. Academic Building
27. Academic Building
28. Satellite Physical Plant
29. Academic Housing
30. Academic Building
31. Academic Housing

SHARED STRUCTURED PARKING (EXISTING)
A. South Parking Garage
B. North Parking Garage

PROPOSED SHARED STRUCTURED PARKING
C. South Parking Garage Expansion
D. West Parking Garage
FIGURE 4-2: LONG-TERM CAMPUS VISION RENDERING

- Existing Buildings
- New Buildings
- Pedestrian Pathways

GRAPHICS ARE FOR ILLUSTRATIVE PURPOSES ONLY
CHARACTER
Future development will take cues from existing structures and open space to maintain and strengthen a common sense of place as an academic setting, while enabling a sense of identity for each institution. Building design will support a consistent campus experience, considering aspects such as placement, orientation, massing, roof forms, and materiality and will be subject to a consistent campus design review process and approvals. Outdoor spaces will be designed to enhance the experiential quality of campus with welcoming points of entry and gathering areas, connected by a network of universally accessible pathways, prioritizing the pedestrian over other modes of travel.

DURABILITY
Buildings will be designed for a long life and a loose fit, anticipating change of use over time. Consideration for usefulness and flexibility in structural systems, building utility infrastructure and daylighting will ensure quality spaces for a variety of occupants and uses over time. Material selections should emphasize both durability and maintainability.

COMMUNITY
An enhanced built environment composed of shared open spaces and student-centered amenities will foster deeper collaboration and innovation. Near term development of student housing and dining at the campus core and corresponding redevelopments of Campus Way into a vibrant, pedestrian-oriented environment will fundamentally change and enliven the eastern edge of campus, paralleling and expanding upon many of the desired characteristics of the Campus Promenade. Northward extension of the Campus Promenade over time, accessibly linking a series of formal outdoor gathering areas that foster dynamic student, faculty and staff interaction with naturalized open spaces that foster a contemplative connection to nature. Development of a new urbanized edge of campus at Beardslee Boulevard offers an opportunity for active engagement and interaction between campus and downtown Bothell.

STEWARDSHIP
Building design will stress sustainable practices to the greatest degree practicable, including energy and resource efficiency, and healthy systems and environments. Natural campus environments are organized by three campus zones that generally follow the topography: upland forest, managed campus landscape, and floodplain wetlands. Campus features reinforce the interconnected nature and functionality of these zones through vegetation, creation and preservation of view corridors, and constructed stormwater solutions that complement rather than subvert natural hydrological systems. Campus Crossing, a new iconic open space north of the current campus core, physically connects all three zones and envisions preservation of existing upland wetlands as part of a visible stormwater conveyance system ultimately linking to the floodplain North Creek wetlands below.

PARTNERSHIP
Long term partnership and collaboration with the City of Bothell is critical for achieving both unique and shared institutional goals. Application of Campus District Regulations and Design Principles included in the CMP provide a functional framework for managing growth in a way that fosters positive working relationships. Long term development opportunities, as envisioned, will enhance connectivity and engagement, creating amenities and uses that are assets to both the campus and broader Bothell communities.

MOBILITY
Campus growth along topographic lines envisions significant improvements in equitable pedestrian access and safety. Planning and development of a future transit center in conjunction with City of Bothell and regional transit agencies offers not only improved transit access (and corresponding reduced parking demand over time) but also separation and careful reconfiguration of transportation modes on campus, always emphasizing pedestrian mobility as the defining campus experience.

RELATED GUIDING PRINCIPLE:

GUIDING PRINCIPLE NO. 1: COHESIVE CAMPUS CHARACTER
GUIDING PRINCIPLE NO. 2: DURABLE AND ADAPTABLE FACILITIES
GUIDING PRINCIPLE NO. 3: ENRICHED CAMPUS COMMUNITY EXPERIENCE
GUIDING PRINCIPLE NO. 4: ENHANCED ENVIRONMENTAL AND HUMAN HEALTH
GUIDING PRINCIPLE NO. 5: INTEGRATION WITH THE CITY OF BOTHELL
GUIDING PRINCIPLE NO. 6: MOBILITY, ACCESS AND SAFETY
FOCUS AREA OVERVIEW
The illustrative bird’s-eye views on the following pages describe in greater detail features of the Long-term Campus Vision. For this purpose, the campus is divided into five Focus Areas, referenced in Figure 4-3 and described below. Three illustrative renderings are also included to help explain and clarify the Campus Vision:

FOCUS AREA 1: CAMPUS CORE
This view focuses on the development of the Academic Campus Core west of Campus Way and upslope toward the west campus boundary.

FOCUS AREA 2: STUDENT LIFE
Student Life focused development east of and including Campus Way is presented in this view. The illustrative rendering imagines an improved and pedestrian-focused environment along Campus Way.

FOCUS AREA 3: CAMPUS CROSSING
This view focuses on Campus Crossing, the proposed iconic open space physically connecting the Campus Core with the future Beardslee Commons area of campus to the north, and functionally connecting the Upland Forest landscape with the Floodplain Wetlands below and to the east along an interconnected riparian habitat. An illustrative rendering looking north across the Crossing conveys the vision of crossing through the naturalized landscape.

FOCUS AREA 4: BEARDSLEE COMMONS
The reimagined front door to campus is enabled by an extensive redevelopment of the Husky Village property proposed in the Beardslee Commons view. A widened Beardslee Boulevard with enhanced transit and cycling mobility functions is featured, as is an enhanced pedestrian environment activated by academichousing mixed-use development fronting the right of way with a central plaza connecting south toward campus along the Promenade. An illustrative rendering of this environment demonstrates the mixed modal connections that could be made available at the gateway to campus.

FOCUS AREA 5: SOUTH ENTRANCE
This view studies the primarily service components of campus adjacent to the southern campus entry, including a Corporation Yard developed adjacent to the Chase House and future expanded parking facilities.
FOCUS AREA NO. 1: CAMPUS CORE

The Long-term Campus Vision anticipates densification and development of the Campus Core in the near-term, as shown in this illustrative bird’s-eye view looking southwest. UW4 and CC4, both STEM buildings currently in planning, are envisioned to be preserved to the greatest extent practical.

Future development (beyond Near-term) includes a Library Addition adjacent to the Crescent Path, an academic addition to the north of CC2, and a new academic building on Campus Way overlooking the athletic fields.

The campus landscape continues to evolve to support the identity of the campus, as one that embraces its natural surroundings, with buildings that sit within their setting. Efforts to expand the native conifer tree canopy throughout the campus core, within parking lots, and between buildings that transition steep slopes will nestle the campus in the forest.

Landsapes between buildings paralleling the promenade and Campus Way can continue to evolve to support human permeability, supporting teaching opportunities with ecologically rich plantings that provide food, materials, or other benefits to people.
FOCUS AREA NO. 2: STUDENT LIFE

This illustrative bird’s-eye view (looking northwest) features near-term development of student life amenities east of Campus Way and overlooking the floodplain wetlands to the east. A new Residence and Dining Hall sits east of UW1 and south of an expanded Activities and Recreation Center (ARC) creating the potential for a vibrant, student-centered campus district. Significant redevelopment of Campus Way is also envisioned (Figure 4-6) by limiting vehicular traffic and emphasizing pedestrian and cycling mobility. Enhanced landscapes incorporate a balance of hard and soft surfaces while integrating stormwater management landscape features.

Long-term development could include the development of an additional housing or academic building just south of the athletic fields and north of the North Creek Events Center.
FIGURE 4-6: CAMPUS WAY RENDERING

GRAPHICS ARE FOR ILLUSTRATIVE PURPOSES ONLY

STORM WATER TREATMENT AND ENHANCED PLANTING

PROPOSED STUDENT RESIDENCE HALL AND DINING COMMONS

PERVIOUS PAVING
FOCUS AREA NO. 3: CAMPUS CROSSING

Campus Crossing is envisioned and illustrated as an iconic open space bridging between the campus core to the south and a future developed Beardslee Commons to the north, while ecologically connecting the upland forest to the floodplain wetlands. The Campus Promenade extends through Campus Crossing creating an accessible connection through Beardslee Commons and to Beardslee Boulevard beyond. A secondary pedestrian pathway with stairs connects the North Creek Trail to the Beardslee Commons development.

A new east-west pedestrian walkway extends down the slope at the southern edge of the Crossing, extending as a boardwalk into the Floodplain Wetland, allowing access to portions of the wetland not currently visible. Enhancements to the three existing upslope/pocket wetlands are envisioned as a way to demonstrate ecological (and educational) value and function of these unique features in this interconnected campus landscape.

The illustrative rendering (Figure 4-8) on the following pages depicts the view looking north along Campus Promenade as it traverses Campus Crossing.
FIGURE 4-8: CAMPUS CROSSING RENDERING
GRAPHICS ARE FOR ILLUSTRATIVE PURPOSES ONLY
FOCUS AREA NO. 4: Beardslee Commons

A key component of the Long-term Campus Vision as illustrated is the comprehensive redevelopment of the existing Husky Village site into a new campus gateway at Beardslee Boulevard with accessible pedestrian connections to the Campus Core to the south. Beardslee Commons is envisioned as a new front door to the campus incorporating mixed-use retail, housing and academic functions as well as enhanced transit and cycling mobility features, all enabling a vibrant, pedestrian oriented environment along Beardslee Boulevard.

A plaza is proposed as a gathering space and terminus of the Campus Promenade, with a new secondary path downslope (by stairs) across 110th Avenue NE and connecting to the North Creek Trail beyond. A new Campus quadrangle is framed by new academic buildings west of the Promenade, and new Central Utility Plant serving these new developments is located near the intersection of NE 185th Street and Beardslee Boulevard.

The illustrative rendering (Figure 4-10) on the following pages depicts the view of a proposed Beardslee Commons area looking northeast along Beardslee Boulevard.
FIGURE 4-10: BEARDSLEE COMMONS RENDERING

GRAPHICS ARE FOR ILLUSTRATIVE PURPOSES ONLY
FOCUS AREA NO. 4: SOUTH ENTRANCE

This illustrative bird’s-eye view depicts proposed reconﬁguration of campus service circulation and functions adjacent to the south campus entrance from SR 522. A new Corporation Yard project is planned as a component of the Near-term Development Plan, located adjacent to the existing Chase House (listed on the National Historic Register). New loading and warehouse functions at this location would eliminate through-campus delivery truck trafﬁc and the corresponding need for trucks to navigate steep roadways during inclement weather. A new roadway spur north of the Corp Yard is envisioned to provide service access to the proposed Residence and Dining Hall to the north.

A future South Parking Structure expansion is also envisioned in the Campus Service area to meet long-term parking needs for the campus.
Near-term Development Plan

The CMP includes a Near-term Development Plan that identifies a handful of projects assumed to be completed in the next six to ten years as funding becomes available. The University of Washington Bothell and Cascadia College receive funding for academic buildings from the state legislature. The funding for higher education is difficult to acquire and oversubscribed with substantial needs across the State of Washington. During the past ten years, UW Bothell and Cascadia College received funding for only one academic building each and it is anticipated each institution would continue to receive funding at a similar pace in the future. A small number of projects are funded by alternative sources, primarily supporting student life, parking and minor improvements.

Additional facilities currently in the planning or funding request phase and anticipated to be completed within the next six to ten years include:
- Corporation yard
- Parking (structured and/or surface)
- UW Academic Building
- CC Academic Building
- UW Bothell Student Housing and Dining

The Near-term Plan also identifies a possible expansion to the Activities and Recreation Center. While formal planning or funding requests have not commenced for this project, it is feasible as a student funded project that an ARC Expansion could be developed within this timeframe.

UW BOTHELL FACILITIES (EXISTING)
1. UW1 (Founders Hall)
2. UW2 (Commons Hall)
3. UW3 (Discovery Hall)
4. Husky Village
5. Sarah Simonds Green Conservatory

CASCADIA COLLEGE FACILITIES (EXISTING)
6. CC1
7. CC2
8. CC3

SHARED FACILITIES (EXISTING)
9. Chase House
10. Truly Ranch House
11. Central Utility Plant
12. Library 1
13. Library 2
14. Library Annex
15. Activity & Recreation Center (ARC)
16. North Creek Event Center

PROPOSED FACILITIES
18. Corporation Yard
19. Residence Hall/Campus Dining
20. Academic Building (UW4)
22. ARC Expansion
24. Academic Building (CC4)

UW LEASED FACILITIES (EXISTING)
L1. Husky Hall
L2. Beardslee Building
L3. Beardslee Crossing

SHARED STRUCTURED PARKING
A. South Parking Garage
B. North Parking Garage

FIGURE 4-12: NEAR-TERM DEVELOPMENT PLAN KEY

EXISTING BUILDINGS
NEW BUILDINGS
PEDESTRIAN PATHWAYS
GRAPHICS ARE FOR ILLUSTRATIVE PURPOSES ONLY
Built Environment and Open Space Framework

The built environment of campus is instrumental in establishing a vibrant and welcoming campus experience, deeply rooted in a sense of place, celebrating the unique Bothell setting and co-location aspects of UW Bothell and Cascadia College.

The Campus Master Plan accommodates the need for increased development capacity necessary to meet the demands relative to academic instruction and student life. The increased capacity is distributed throughout campus in the Development Areas, but for purposes of this plan, is primarily illustrated by densifying the main core of campus and expanding northward, engaging the campus more directly with Beardslee Boulevard, and by extension, downtown Bothell. Both areas of development hold to Design Principles established and built upon from the original Campus Master Plan, including the engagement of the built environment with the natural environment.
TOPOGRAPHY
The topography of campus is significant, with over 140 feet of grade change between the neighboring wooded uplands and the restored North Creek wetland. These steep slopes, as high as 30%, provide both opportunities and challenges for the campus, while fully informing its organization.

The topography generally slopes from the west property line, bordering residential neighborhoods, to the northeast and east down to the North Creek wetland. Buildings and outdoor circulation generally follow the arc of this hillside, taking advantage of views toward Woodinville and the Cascade Range in the distance.

While the first phase of buildings are oriented parallel to the topography, accessibility routes to higher and lower elevations were limited. The construction of Discovery Hall in 2014, which sits perpendicular to the grade, and the Activities and Recreation Center (ARC) in 2015 introduced the use of elevators within buildings to improve access across campus slopes.

FIGURE 4-13: RELATIONSHIP TO TOPOGRAPHY: BUILDING ORIENTATION PARALLEL AND PERPENDICULAR TO TOPOGRAPHY

FIGURE 4-14: BOTHELL TOPOGRAPHY

DESIGN PRINCIPLE: TOPOGRAPHY
The Long-term Campus Vision is anchored and organized by the land. Buildings are built either parallel or perpendicular to the topography (Figure 4-14), reinforcing and providing major pedestrian pathways while enhancing views.
GEOTECHNICAL CONSIDERATIONS
As the property spans the crest of a prominent hill through its intersection with a marshy lowland and creek, the soil profile of the campus varies greatly depending on location.

The campus hosts the final run of North Creek before flowing into the Sammamish River. The North Creek Wetlands area is wide and flat, an accumulation of thousands of years of drainage and silt. In general, the higher elevations yield more stable, better-draining, sandy loam. Slopes approach 30% in places, but are mostly flat at the top of the hill. The area between Campus Way and the North Creek Wetland has known poor soils, which are liquefaction prone, adding a cost premium for new development to include enhanced foundation systems.
HYDROLOGY

Groundwater conditions at the site are highly variable due to variable soil conditions and geologic anomalies. There are two water tables: a perched water table on top of unweathered glacial till, and a more regional water table in the advance outwash sands and gravels and transitional beds above and/or below the lacustrine silt/clay deposits. The permeability of the advance outwash and some of the interbedded transitional beds is relatively high, resulting in potential for significant seepage flow. Groundwater on the Campus fluctuates as a function of season, precipitation, and other factors. Subsurface drains have been installed in many areas of the Campus to capture seepage flows. These subsurface drains have been tied into the clean water system, ultimately being conveyed into the North Creek wetland.

On the newly acquired Husky Village and currently leased Husky Hall sites, the soil conditions and hydrology are similar to the rest of campus. Glacial till soils with variable materials over the top result in poor infiltration and lateral migration based on topography. The Husky Hall site generally drains to the north and east. The Husky Village site generally drains toward the existing detention pond. The east side of the Husky Village site (east of the pond) flows east towards the North Creek wetland on the east side of 110th Ave NE.

DESIGN PRINCIPLE: HYDROLOGY

The Long-term Campus Vision supports the integration of hydrological flows with new development. The campus must pay special attention to stormwater runoff quality and quantity due to its proximity to North Creek and its associated wetlands. Stormwater drainage and treatment should be expressed and visibly integrated into new development to minimize erosion, contribute water to campus plant material, clean stormwater and slow its flow before it enters the North Creek wetland, and provide visual interest. Pervious paving should be considered wherever practicable to reduce the need for stormwater infrastructure.

The Discovery Hall stormwater system should be considered a precedent for future campus projects in the way it integrates roof runoff into the site design, making use of the steep topography to express the flow of water and direct it into a rain garden before it is piped to the North Creek wetland below.

RELATED GUIDING PRINCIPLES:

ENRICHED CAMPUS COMMUNITY EXPERIENCE

ENHANCED ENVIRONMENTAL AND HUMAN HEALTH

FIGURE 4-16: DISCOVERY HALL STORMWATER

FIGURE 4-17: HYDROLOGY, CAMPUS VISION
WETLANDS

The most significant natural feature of the campus is the large, 58-acre North Creek Wetland, which is the result of a significant restoration project that occurred shortly after the property was acquired by the State and is regulated by the State of Washington and the Army Corps of Engineers. North Creek was redirected from its former linear channel to meander through the site on a more natural course. A secondary channel was also created to accommodate higher flow rates and a large area of standing water collects above the former channel course. A substantial buffer limits development within 100 feet of the wetland and with the exception of the Sarah Simonds Green Conservatory and an interpretive boardwalk (educational venues), there is no development within the North Creek Wetland.

Three upland/pocket wetland areas have also been identified on campus. The southernmost wetland lying within the development reserve was previously mitigated and could be removed without further jurisdictional decision. Members of the campus community, however, have expressed both the ecological and educational value of these wetlands as distinct in character and function from the North Creek Wetlands below.

Access to the wetlands should be increased for both the campus community and communities at large. A new wetland overlook is proposed in association with the Campus Crossing, connecting it visually to the natural environment and physically providing another point of access between Campus Way and the North Creek Trail. Development of a perimeter trail around the North Creek wetland is also indicated in the Long-term Campus Vision.

RELATED GUIDING PRINCIPLES:

ENHANCED ENVIRONMENTAL AND HUMAN HEALTH
The campus contains three primary vegetation zones: upland forest along the western edge of campus and portions of the hillside, managed landscape throughout the developed portions of campus, and floodplain wetland throughout the eastern portion of campus.

The Upland Forest Zone (Figure 4-20) features a coniferous forest that is an evocative remnant of what stood on this part of campus for millennia. It is dominated by Douglas fir, western red cedar and other native plants, and plays a significant role for habitat as well as campus identity. This area also contains small isolated wetlands which contribute to storm water control, research, and education.

The Intentional Landscape Zone (Figure 4-21) contains varied intentional landscape typologies. Primary circulation corridors, access to facilities, and hard or soft gathering areas provide the backbone and structure for this zone of campus. The vegetation serves more of a supporting role, as remnants of native forests that provide connective tissue between more naturalized areas, cultivated landscapes that offer educational benefits, or simply aesthetic beauty. Some areas have been specifically designed to support student life in the form of large or small gathering areas, such as the new Discovery Hall Plaza and offer very little in the form of vegetation, while others have transformed over time to integrate aspects of curriculum such as Cascadia’s Food Forest.

Intentional landscapes have developed in subtly different styles for each institution. While the approach to landscape designs for both UW Bothell and Cascadia are based in native plant selection and sound environmental practices, landscapes surrounding Cascadia buildings tend to have a naturalistic character, while those surrounding UW Bothell buildings tend to be more manicured.

The Floodplain Wetlands (Figure 4-22) constructed between 1997-2002 with the realignment of North Creek are a rich and well-functioning ecosystem that has significant value for habitat – including migrating salmon and many other species. The area was planted with a heavy focus on early successional species such as red alder and black cottonwood, supplemented with native shrubs and herbaceous plants that require full conditions allow. The Sarah Simonds Green Conservatory is located on the western edge of the wetland, supporting education, research, and public outreach through demonstration beds and facilities to raise native plants for the ongoing maintenance of the wetlands.
### DESIGN PRINCIPLE: CAMPUS VEGETATION

The Long-term Campus Vision preserves and expands the distinct campus vegetation zones: the Upland Forest, the Managed Landscape, and the Floodplain Wetlands. The proposed Campus Crossing is the focal point of these strategies, providing visual, physical and functional connectivity between these vibrant landscapes up and downslope, and extending them northward to reenvision a redeveloped Beardslee Commons site.

The campus seeks to protect as much of the original extents of the Upland Forest as possible in a contiguous block. This will provide a rich natural backdrop and Northwest identity to the campus, a buffer to nearby residential areas and a valuable resource as a student learning environment. Where disturbance to Upland Forest areas is unavoidable, mitigation should seek to improve forest health, protecting root zones and campus hydrology, while restoring the forest understory to a more native condition and planting new trees in disturbed areas.

New development will be inserted carefully into the forest and new pathways and roads will be minimized. Development should prioritize preservation and/or restoration of native planting buffers and drainage systems in upland areas in order to contribute to the overall ecological health of the landscape.

In areas of the core campus where Intentional Landscapes dominate, plazas with multi-functioning landscape should be developed as new buildings are constructed. Site-specific stormwater treatment, including stormwater swales, detention, and local constructed wetlands will be required to manage on-site stormwater and should be developed to provide high-performance landscapes that support natural ecological processes while also contributing to the beauty and function of the campus. New native or climate-adapted plantings should be incorporated to support the ecological health of the campus and provide opportunities for outdoor learning and experimentation. Campus Way and the proposed student housing area, in particular, should be enriched with dense native planting that helps disperse and absorb stormwater flow from above, and mitigates and treats runoff from new development.

In quads and other spaces defined by new buildings, pockets of a more traditional campus greenspace, with lawns and shade trees, are appropriate, reflecting the intensity of student use. These can include walkways and programmable spaces for outdoor learning, informal seating, or places for art or expressions of campus identity. Variations in landscape styles (manicured vs. naturalistic), reflecting each institution’s culture and traditions, should be encouraged.

### RELATED GUIDING PRINCIPLES:

**COHESIVE CAMPUS CHARACTER**

**ENHANCED ENVIRONMENTAL AND HUMAN HEALTH**

In quads and other spaces defined by new buildings, pockets of a more traditional campus greenspace, with lawns and shade trees, are appropriate, reflecting the intensity of student use. These can include walkways and programmable spaces for outdoor learning, informal seating, or places for art or expressions of campus identity. Variations in landscape styles (manicured vs. naturalistic), reflecting each institution’s culture and traditions, should be encouraged.

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**COHESIVE CAMPUS CHARACTER**

**ENHANCED ENVIRONMENTAL AND HUMAN HEALTH**

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Physical Context

TREE CANOPY

The tree canopy is highly valued as a defining character of the campus, is used as a learning resource for environmental science curriculum, and serves important ecological functions supporting habitat and stormwater management functions. Development impacts on site hydrology have been observed and studied, and though it is not entirely predictable, mature stands of trees that become isolated by development have declined. Other areas of campus where soil have become severely compacted due to construction activities have also suffered from poor planting conditions that are unsupportive of new tree plantings.

Development of the CMP included completion of a Level 1 limited visual assessment of the campus’ tree stands (excluding the North Creek wetland and buffer area), which built upon previous inventories from 2010, 2015, and 2016. The assessment delineates stands of trees and evaluates them based on their degree of ecological value. The number of significant trees, greater than 8-inch diameter at standard height (DSH), was also estimated using aerial photography, past surveys, and visual assessments. It’s estimated there are approximately 525 significant trees within the campus boundary, excluding the wetland and its buffer.

The ecological value of trees stands was rated between low and moderate. Ecological value is defined by benefits the trees provide, such as wildlife habitat, stormwater mitigation, carbon storage, aesthetic value, and more. Because coniferous trees maintain foliage year-round, they generally have a higher ecosystem value. Foliage intercepts rainwater that would otherwise fall on the ground and contribute to stormwater runoff and/or soil erosion. Additionally, larger trees generally offer greater ecosystem benefits for a variety of reasons including the ability to intercept more water and store larger amounts of carbon. The following defines the factors that guided the ecological value rating, low to moderate:

LOW: Low tree density with trees predominantly 12 inches DSH or smaller; smaller sized canopies either due to low live crown ratio or tree stature; lower ratio of coniferous trees to deciduous trees; some trees may be in poor condition; relatively few understory plantings or vegetation; highly maintained areas (leaf removal, frequent mowing and edging, blowing, weeding, etc.); lower soil volume, like planters surrounded by pavement (examples: parking lots, landscape strips)

MODERATE: Trees growing in groves of 8 trees or more; a mix of tree sizes up to 20 inches DSH; moderately sized canopies; balance of coniferous trees and deciduous trees; majority of trees in fair to good condition; lawn areas and/or understory vegetation present; moderately maintained areas (mowed infrequently, woodchip mulch used, no blowing or edging); greater soil volume like lawn areas, or large planting beds.
Physical Context

In addition to the natural, forested areas of campus, there is habitat value in more heavily-used parts of campus, which may at first seem to be marginally natural. Tree canopies of all species are potential avian habitat, while smaller mammals use interstitial landscapes. Larger species like deer may use campus landscapes at night to traverse between the North Creek wetlands and upland forest, so campus lighting plans should consider this possibility. Edge conditions, or ecotones, are particularly rich mixing zones for wildlife, for example, the edge of North Creek Trail, or where the Upland Forest zone meets more constructed campus landscapes.

The Long-term Campus Vision emphasizes balance between the need for physical growth and the importance and ecological value of existing tree stands to the campus character. Significant portions of existing mature tree stands in the wooded uplands are proposed to be preserved. Care should be taken during planning, design and construction to minimize tree removal and to ensure the long-term health of trees that will be maintained.

When tree removal is necessary, care should be taken to leverage the inherent ecological and cultural value of the removed materials. An array of potentials for repurposing should be considered ranging from use in habitat restoration and conservation projects to harvesting the wood for a wide variety of re-use (furniture, building materials, artwork, etc.), preferably on or in the immediate vicinity of campus.

RELATED GUIDING PRINCIPLES:
- COHESIVE CAMPUS CHARACTER
- ENHANCED ENVIRONMENTAL AND HUMAN HEALTH

DESIGN PRINCIPLE: TREE CANOPY
The Long-term Campus Vision emphasizes balance between the need for physical growth and the importance and ecological value of existing tree stands to the campus character. Significant portions of existing mature tree stands in the wooded uplands are proposed to be preserved. Care should be taken during planning, design and construction to minimize tree removal and to ensure the long-term health of trees that will be maintained.

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RELATED GUIDING PRINCIPLES:
- COHESIVE CAMPUS CHARACTER
- ENHANCED ENVIRONMENTAL AND HUMAN HEALTH

DESIGN PRINCIPLE: HABITAT
Future campus development should seek opportunities to either preserve, restore or expand habitat.

RELATED GUIDING PRINCIPLE:
- DURABLE AND ADAPTABLE FACILITIES
The UW Bothell / Cascadia College campus benefits from the fact that nearly two-thirds of its existing on-campus building stock was constructed over a three year period in multiple phases. The consistency of building massing and materiality, integration of built form and open space, and respect for access to the natural environment evident in the original campus design created a unique and powerful campus character, one that has been successfully maintained even as it has evolved during subsequent campus development phases. A significant strength and asset of development has been the creation of a single sense of place that balances the identity of each institution.

This Campus Master Plan accommodates the need for increased capacity and growth that respects the planning principles established in the original CMP and that guided initial campus development. Increased capacity comes from two areas: by densifying the main core of campus into areas that previous master plans have identified, and by creating a new node of academic development on the parcels which currently hold Husky Village and Husky Hall adjacent to Beardslee Boulevard.

The incorporation of Husky Village and Husky Hall properties into the campus boundary has created both challenges and opportunities for an expanding campus. Both Husky Village and Husky Hall were an expedient means to meet growing demand for increasing and evolving services, yet each suffers from a lack of connectivity and aesthetic and functional cohesion with the original campus core.

The Long-term Campus Vision imagines growth and development over time that will seamlessly integrate these new campus zones into a built environment reflecting appropriately evolved yet cohesive campus character. It also calls for a densified campus core that maintains an appropriate balance of building and open space, and of infrastructure and environment that are essential to the current campus character. Analysis and Design Principles that follow will help guide the campus toward realization of this vision.

Densifying the core of campus allows for academic expansion while also meeting the needs of student life by placing residence hall-style housing to the east of Campus Way. The placement of housing in this location creates synergy with the adjacent Activities and Recreation Center (ARC) and serves as a catalyst to transform Campus Way into a pedestrian orientated experience (Figure 4-29). By concentrating after-hours activity along Campus Way and to the east, a student life precinct of the campus is created. The benefits from adjacency to fields, food service and recreation make this location ideal. The result is a compact and engaged 24/7 student experience at the campus core, far removed from adjacent residential neighborhoods.

Development along Beardslee Boulevard brings the campus to the community and invites the community into the campus. A new pedestrian “front door” at the intersection of the Campus Promenade and Beardslee celebrates both institutions’ identities by providing two gateway buildings and open plaza hardscape for gathering (Figure 4-30). These buildings anticipate open and activated first floor programs which intend to engage not only the campus community, but the Bothell community at large.

The extension of the existing Campus Promenade along the topography from the north allows for this new front door to directly link to the heart of campus, creating clear wayfinding in a series of linked quadrangles and open spaces. This new pedestrianized experience extends existing patterns of the campus into a northern development which engages the urban edge and transforms the suburban campus into one which is engaged with and visible to the larger community.
BUILT ENVIRONMENT AND OPEN SPACE FRAMEWORK

Built Environment Design Principles

DESIGN PRINCIPLE: COMPLEMENTARY MATERIALS

To support a cohesive campus character and strong campus identity, the UW Bothell and Cascadia Campus should maintain a consistent and complementary materials palette across each subsequent building and landscape addition. Exterior building cladding should take cues from existing building materials on campus in terms of color, materiality and usage of these materials. Brick shall complement the blended brick in existing buildings. When utilizing the shed roof form, the roof shall be clad in standing seam metal. Metal cladding and accent paint color and window frame color shall also complement existing conditions across campus. Complementary Material Design Principle should not be construed to limit the use of advancements in building envelope technology, but should guide the design teams to consider harmony in color, texture and scale when proposing exterior designs. The Campus Master Plan encourages design responses which support a consistent campus experience, rather than an accumulation of various exterior materials, colors and radical forms.

RELATED GUIDING PRINCIPLES:

COHESIVE CAMPUS CHARACTER
ENRICHED CAMPUS COMMUNITY EXPERIENCE

DESIGN PRINCIPLE: ROOF DESIGN AND MECHANICAL SCREENING

Due to the sloping nature of the campus, roofs are the fifth “elevation” and should be treated as such. The original campus buildings were designed with iconic shed roofs finished with standing seam metal. Subsequent buildings have utilized “low-sloped to drain” roofs with parapets. These two roof forms are the preferred forms to be utilized on all subsequent campus buildings. In each case, mechanical unit screening should be treated architecturally. When shed roofs are used, mechanical units are best located below and enclosed under these roofs. When parapet roof forms are used, roof top mechanical should be fully screened in an architectural enclosure.

RELATED GUIDING PRINCIPLES:

COHESIVE CAMPUS CHARACTER
ENRICHED CAMPUS COMMUNITY EXPERIENCE

DESIGN PRINCIPLE: SUSTAINABILITY / LEED CERTIFICATION

State funded capital projects are required to achieve a minimum of LEED Silver Certification, however recent projects for both UW Bothell and Cascadia College have exceeded this baseline target: CC3 achieved a LEED Platinum rating and Discovery Hall (W403) achieved LEED Gold certification. Capital budgets draw from finite resources; however, future capital projects should, as practicable within the context of project budgets, establish sustainability goals that strive to exceed state-mandate minimums and encourage design and construction teams to prioritize sustainable strategies. Alternatively funded projects such as student housing, that are not required to meet state mandated thresholds should similarly be encouraged to establish aggressive targets.

RELATED GUIDING PRINCIPLES:

ENHANCED ENVIRONMENTAL AND HUMAN HEALTH

RELATED GUIDING PRINCIPLES:

ENRICHED CAMPUS COMMUNITY EXPERIENCE
Built Environment Design Principles

**DESIGN PRINCIPLE: ACTIVE FAÇADES**
Facility planning and design should carefully consider the relationship between ground floor building uses and adjacent exterior pathways. Building programming should consider interior functions’ ability to ‘activate’ adjacent exterior environments, and vice versa. Creating such ‘synergy of use’ patterns can create ‘see and be seen’ interior and exterior environments that appeal to students and offer the added benefit of creating safe, passively supervised spaces.

**RELATED GUIDING PRINCIPLE:**
- **DURABLE AND ADAPTABLE FACILITIES**
- **MOBILITY, ACCESS AND SAFETY**

**DESIGN PRINCIPLE: RESOURCE CONSERVATION AND HEALTHY MATERIALS**
Appropriate material selection is an important component of broader sustainability goals. Where practicable within budget constraints, design and construction teams should consider repurposed materials or materials with recycled or rapidly renewing content that do not sacrifice durability or performance.

Materials transparency is an emerging design and construction trend, with increasing pressure being leveraged on materials manufacturers to publicly disclose material content or manufacturing processes that are potentially harmful during manufacturing or during and after installation. Certification standards such as the Living Building Challenge have established ‘red lists’ of products and materials that should be avoided. As this movement continues to emerge and develop, design and construction teams should be encouraged to follow current best practices to ensure materials and product selection that do not negatively impact the health and welfare of those involved in the manufacturing, installation or use of the products.

**RELATED GUIDING PRINCIPLE:**
- **ENHANCED ENVIRONMENTAL AND HUMAN HEALTH**

**DESIGN PRINCIPLE: CONNECTIVITY (NOT ISOLATION)**
When planning building expansion, connectivity with other buildings should focus on creating shared entry plazas which give a sense of community and promote the crossing of pathways throughout the day. The more people you know and recognize on campus the safer you will feel.

**RELATED GUIDING PRINCIPLE:**
- **ENHANCED ENVIRONMENTAL AND HUMAN HEALTH**

**DESIGN PRINCIPLE: SNUGNESS**
Snugness is a concept of safety that provides for small, defensible spaces, protects a person’s back and eliminates a sense of vulnerability. Both inside and out, snugness can be employed to create comfortable spaces (booths and nooks or quiet gardens) where someone can let down their defenses, relax and restore.

**RELATED GUIDING PRINCIPLE:**
- **MOBILITY, ACCESS AND SAFETY**
The amount of open space on campus is significant given the relatively low development density, and is highly defined by the topographic conditions of campus. In general, it can be defined as a mix of naturalized, forested areas surrounding a more concentrated network of smaller designed open spaces.

**VIEW CORRIDORS**

The formalized open spaces associated with the developed portion of campus provide opportunities for large and small groups to gather and are often an extension of the Campus Promenade running north-south. Three primary open spaces define the core of campus: the gardens, patio and lawn at the north end of the promenade framed by Cascadia College facilities (see 1 in Figure 4-32); the lawn and plaza at the south end of the promenade framed by UW Bothell facilities (2); and the hillside west of the library, defined by a remnant forest and secondary pathway (3).

Additionally, more utilitarian types of open spaces such as the transit center and associated flagpole landscape, the sports fields, and the wooded detention pond at Husky Village support structured uses and functions, while the landscapes around the Truly House and Chase House provide garden-like outdoor areas.

The configuration of buildings and public open spaces within the campus core have been consciously developed to frame and preserve views to the North Creek wetland and Cascade mountain range beyond, providing a strong sense of place rooted in the Pacific Northwest. In addition, more proximate views to, from and along the Campus Promenade acknowledge naturalized portions of the campus. This integrates nature into the built environment while also directing views between open spaces, aiding in wayfinding and providing a sense of identity unique to each institution but cohesive in character.

The Long-term Campus Vision maintains as an organizing principle the use of view corridors serving as visual and physical connectors, bounded by buildings, between the forested uplands and floodplain wetlands. This is most visibly achieved through the development of the Campus Crossing, which links the uplands forest and the floodplain wetlands with an iconic open space. This space not only provides a gathering and reflection point for the entire campus, it has the ability to provide a connected habitat, linking small pockets of existing wetlands in the upper portions of campus to the larger North-Creek wetlands below. This repaired and enhanced habitat is seen to be a restorative environment that is fully accessible by students, faculty, staff and the community and will give structure and identity to the campus as a whole.
Open Space Design Principles

DESIGN PRINCIPLE: INTEGRATION WITH THE NATURAL ENVIRONMENT AND ACCESS TO NATURE

Future campus development should adhere to the intent and goals of the Campus Crossing: outdoor environments that are both meaningful and functional at varying scales, serving to encourage contact and interaction on multiple levels between campus occupants and the surrounding environment. Doing so will have myriad benefits: health and wellbeing of campus community; educational and research opportunities for students and faculty; and unique outdoor experience and campus engagement for the broader community.

RELATED GUIDING PRINCIPLES:

- ENHANCED ENVIRONMENTAL AND HUMAN HEALTH
- DURABLE AND ADAPTABLE FACILITIES

DESIGN PRINCIPLE: HARDSCAPE

Guidelines for new campus hardscapes, or paved areas include:

- Hardscapes should be provided to promote gathering, but generally be balanced with greenscapes as appropriate; further, hardscape design should generally incorporate green/planted materials.
- Grading should seek to minimize impacts to upland forest areas. Walls should visually blend into the natural character of the campus.
- New hardscaped areas should complement the design palette of the existing central campus Plaza, the Promenade and Codex Plaza, using similar stone and simple paving patterns.
- Pervious paving should be used where possible, particularly in areas adjacent to the wetlands.
- The redevelopment of Campus Way as a pedestrian-oriented “spine” of circulation, paralleling the Promenade, offers an opportunity to create a singular linear campus space integrated with future building entries.
- Pedestrian walkways are a combination of concrete and brick pavers. The North Creek trail is asphalt currently, but new or re-routed sections could be paved with pervious asphalt to allow stormwaterfiltration.
- Pervious pavement should be evaluated for efficacy and considered campus wide in order to help mitigate storm water flow.

RELATED GUIDING PRINCIPLES:

- ENHANCED ENVIRONMENTAL AND HUMAN HEALTH
- DURABLE AND ADAPTABLE FACILITIES
- ENRICHED CAMPUS COMMUNITY EXPERIENCE
- COHESIVE CAMPUS CHARACTER
Open Space Design Principles

DESIGN PRINCIPLE: BUILT ENVIRONMENT AND OPEN SPACE FRAMEWORK

Open Space

Design Principles

### BUILT ENVIRONMENT AND OPEN SPACE FRAMEWORK

**Open Space Design Principles**

- Advantage of views, shade or protection from rain. Furnishings may reflect the distinct character of adjacent buildings. This consistency and contextual consideration both enhances the campus’s image and can help reduce maintenance costs. Selection of furnishings should also consider recycled content, durability and lifespan.

**Related Guiding Principles:**

- **Enhanced Environmental and Human Health**
- **Enriched Campus Community Experience**
- **Durable and Adaptable Facilities**

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**DESIGN PRINCIPLE: SITE FURNISHINGS**

Site furnishings are important elements of the campus exterior public realm. They help define campus character and improve collegial communication and interaction by providing places to gather, study and socialize. Furnishings should be selected and located to establish the continuity of campus, enhance circulation and take

- **Guidelines for new campus lighting include:**
  - Exterior lighting should be selected and located to establish the continuity of campus, enhance circulation and provide adequate illumination to allow for safe access and use of exterior spaces.
  - Walks and paths should be illuminated with pedestrian-scaled lighting. In-ground, up-lighting should be avoided.
  - Site flood lighting is discouraged given its stark appearance and light spill-over to neighboring properties and wetlands area.

**Related Guiding Principles:**

- **Durable and Adaptable Facilities**
- **Coherent Campus Character**
- **Mobility, Access and Safety**

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**DESIGN PRINCIPLE: LIGHTING**

Guidelines for new campus lighting include:

- Light illuminating from fixtures should be cast downward with full cut-off shades to preserve dark skies and to reduce impacts to wildlife, particularly birds.
- Use minimum lighting levels required by code and campus standards; focus on contrast ratios versus standard foot candle light levels.
- Consider lighting to enhance the aesthetic qualities of the campus and highlight special building features.
- Coordinate lighting locations and pole heights with tree locations and constructed elements.

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**Related Guiding Principles:**

- **Durable and Adaptable Facilities**
- **Coherent Campus Character**
- **Mobility, Access and Safety**
Perceptions of safety vary and should be carefully considered in all design responses. By day the campus can be made to feel safer by providing clear sight lines and by avoiding pathways through hidden areas masked by trees or blank building facades. Further strategies include “eyes on the street” by providing activating facades facing pedestrian walkways, creating a sense of community and concentration of activity (safety in numbers). By night, campus pathway lighting should provide illumination to the human face to ensure facial recognition.

**DESIGN PRINCIPLE:**
**VISIBILITY AND SAFETY**

Support visual and verbal eye contact by planning buildings and programs to engage entrances through personal interactions. Knowing that support is just inside a campus door will help to give students, faculty and staff the reassurance that help is nearby. In addition, this active and passive supervision gives timely support in a true emergency.

**DESIGN PRINCIPLE:**
**SUPERVISION AND GREET**

The new “front door” at the intersection of the Campus Promenade and Beardslee Boulevard enlivens the streetscape and signals entry to the downtown. These campus buildings should provide an open and activated first floor which intends to engage not only the campus community, but the Bothell community at large. They may serve as active players in the city fabric, integrating academia and commerce.
Mobility Framework

**DYNAMIC WALK RADIUS**
Topography and physical barriers, both natural and man-made, limit the distance one can travel on foot in a given period of time. A typical walking distance study overlays 5, 10, and 15 minute walk radii on a map with concentric circles measuring 1/4, 1/2, and 3/4 miles respectively. Figure 4-32 indicates adjusted walking times, taking into account topography and other natural or man-made considerations. SR-522, Beardslee Boulevard and the East North Creek wetland act as limitations or barriers to pedestrians.

From the center of the campus promenade (the library), pedestrians can access most of the core campus within 5 minutes; however, grades and challenging street crossings limit the ability to access all of Husky Village or the Marvin properties. The Beardslee Professional Building (housing leased academic facilities), the Sammamish River Trail and the Sunset Valley View neighborhood can all be reached within 10 minutes. UW Bothell administrative functions at Beardslee Crossing as well as most of the retail and service amenities of downtown Bothell can be reached within 15 minutes.

**NE 180th Street and Valley View Road**
currently provide secondary pedestrian access to downtown from southern portions of the Campus Core; measures could be considered to make this route more appealing and used.

**DESIGN PRINCIPLE:**
**ENHANCE PEDESTRIAN CONNECTIONS WITH DOWNTOWN BOTHELL**
Development at the campus perimeter should feature pedestrian oriented environments that promote ease of pedestrian access to and from Bothell’s downtown core per the vision elements of the Bothell Downtown Subarea Plan & Regulations.

**RELATED GUIDING PRINCIPLE:**
**INTEGRATION WITH THE CITY OF BOTHELL**

*FIGURE 4-33: DYNAMIC WALK RADIUS AND PEDESTRIAN AMENITIES, EXISTING*
- 5 Minute Walk-time
- 10 Minute Walk-time
- 15 Minute Walk-time
- Downtown Amenities
- Trail Networks & Public Open Space
Pedestrian Circulation

PEDESTRIAN CIRCULATION ON CAMPUS

With the exception of the Campus Promenade and Crescent Path, many of the pedestrian routes follow roads and fire lanes. There are fewer dedicated paths that run cross-slope, such as the stair adjacent to Discovery Hall, and the walkway that leads into the North Creek wetland.

There are several connections between on-campus facilities and adjacent regional and local facilities. Following the North Creek Trail, individuals can walk north to Beardslee Boulevard, and the Beardslee Crossing commercial development, or they can walk south, under SR-522 and connect to the Sammamish River Trail. Locally, NE 180th Street and NE 185th Street also provide direct routes to downtown Bothell.

Note that routes are identified as accessible based on available data; determination of inaccessible routes is based on known or assumed information regarding grade and surface condition. Future development should confirm accessibility based on more detailed topographic information.

DESIGN PRINCIPLE: PRIORITIZE PEDESTRIAN EXPERIENCE

Care should be taken to enhance the pedestrian experience by prioritizing people walking over vehicle movements in all design responses. Pathways should consider the anticipated amount of pedestrian use and provide ample width to accommodate side by side conversations in two directions, at a minimum. Buildings and landscaping along pedestrian pathways should support the pedestrian experience by providing visual stimulus and variety.

RELATED GUIDING PRINCIPLES:

- DURABLE AND ADAPTABLE FACILITIES
- MOBILITY, ACCESS, AND SAFETY
MOBILITY FRAMEWORK

Pedestrian Circulation

ACCESSIBLE ROUTES ON CAMPUS

The site topography and lack of integration with recently acquired or leased parcels creates challenges in places for mobility impaired individuals. In general, north-south circulation within the campus core is well accommodated, however accessible east-west travel is only possible through buildings and their elevators. This requires careful operational planning to ensure continual access to these facilities. Also, no accessible route currently exists connecting the core of campus to NE 185th Street, Husky Hall, Husky Village, the Beardslee Building or Beardslee Crossing.

Unlike the perimeter conditions, the main campus promenade and crescent path offer an accessible route through campus with wide, level surfaces and minimal grade change. Likewise, Campus Way provides flat, generous sidewalks and curb ramps at crossings. Accessible parking spaces are distributed throughout campus in most lots and garages.

CAMPUS WAY

Campus Way is envisioned as a Pedestrian and Bicycle corridor, focusing on supporting the enhanced Student Life, Dining and Housing development along its eastern length. It is anticipated that over time, single occupant vehicles and parallel parking could be eliminated from Campus Way to be replaced by planting and pedestrian walkways. Fire and service access would be maintained along its entire length. Parallel parking areas would be replaced by planting and pedestrian plazas developed to link new development to existing building entries along the western edge.

CAMPUS PROMENADE

This is the most developed and constructed of all the pathways on campus and is interlinked with both the primary hardscapes and significant natural landscapes on campus. The Campus Promenade is planned to extend northward to Beardslee Boulevard, maintaining a consistent character along its entire length.

FIGURE 4-36: ACCESSIBLE ROUTES

- ADA Accessible Routes (Low Slope, Paved)
- Mechanical Assist (Elevators)
- ADA Parking
MOBILITY FRAMEWORK

Bicycle Circulation

The UW Bothell/Cascadia College campus is well-connected to a significant regional bicycle trail network. Most notable, the Sammamish River trail, with its connections to the Burke-Gilman trail, Marymoor Park and Lake Sammamish near Redmond, passes campus just south of SR-522. The North Creek bicycle trail passes under the Highway alongside the waterfront and emerges at the lower campus. The trail continues north, following the west edge of the North Creek wetland to Beardslee Boulevard, along the way there are intersecting paths that provide routes up to Campus Way.

In general, the primary routes for bicycles through campus travel in a north-south direction, following the topography. Bicycle racks are generally located at building entrances, concentrated along Campus Way, and skateboard racks are located at building interiors. Bicycle lockers and bicycle service stations are provided on campus.

NE 180th Street, while closed to campus vehicle traffic, offers a relatively level route towards downtown Bothell. Given it is accessed from the highest point on campus, it likely sees little bicycle traffic. Alternatively, cyclists can access downtown Bothell by heading west on 185th Street and follow Beardslee Boulevard, which is marked with bicycle travel lanes on both shoulders. Cyclists traveling north can ride on the North Creek trail, which parallels Beardslee Boulevard and follows the edge of the North Creek wetland, crosses I-405, and continues north toward Thrashers Corner.

Right-of-Way improvements along Beardslee Boulevard should include linkage between the North Creek trail and downtown Bothell. A cycle track (Figure 4-36) on the south side of Beardslee Boulevard could transition to bicycle lanes at a new signalized intersection at NE 185th Street.

Bicycle connections between the regional trail system/city street network and campus core will be encouraged by the campus as city improvements occur. New facilities should include covered bicycle storage near building entrances, with consideration given to improving circulation infrastructure to minimize bicycle/pedestrian conflicts.

### DESIGN PRINCIPLE: IMPROVED BICYCLE CONNECTIONS

Development of Campus Way should include a dedicated cycle lane in each direction to ensure safe mode mix. Planning for future bicycling infrastructure should also be coordinated with the City of Bothell Bicycle Master Plan, currently under development.

**Related Guiding Principles:**

- Integration with the City of Bothell
- Mobility, Access and Safety

### DESIGN PRINCIPLE: IMPROVED BICYCLE STORAGE

Ongoing campus development should include integration of a variety of bicycle storage facilities to encourage increased commuter ridership. Bicycle storage could include bicycle racks, lockers, or secure covered storage enclosures. The design of bicycle storage should complement the existing campus character in both material and scale.

**Related Guiding Principles:**

- Cohesive Campus Character
- Mobility, Access and Safety

**Figure 4-37:**

BICYCLE ROUTES, CAMPUS VISION

- Dedicated Bike Lane
- Existing Shared Bike/Vehicle Route
- Proposed Shared Bike/Vehicle Route
- Existing Shared Bike/Pedestrian Route
- Proposed Shared Bike/Pedestrian Route
- Existing Regional Trail
- Proposed Regional Trail
- Existing Bicycle Parking
- Proposed Bicycle Parking

*Graphics are for illustrative purposes only*
MOBILITY FRAMEWORK

Transit

FIGURE 4-38: CAMPUS RESIDENTS, EXISTING

- Cascadia Faculty
- Cascadia Students
- UW Bothell Faculty
- UW Bothell Students

ORIGINS OF CAMPUS COMMUTES

Based on data of the campus community, both UW Bothell and Cascadia College largely attract students and faculty that reside locally in Bothell. However, a sizable amount travel from other population centers in the region, most notably Seattle and Everett, but also Lynnwood, Snohomish, Kirkland, and Woodinville.

Each population center is represented proportionally, with a graphic percentage breakdown of students and faculty from each institution.

FIGURE 4-39: TRANSIT ROUTES TO AND FROM UW BOTHELL/CC CAMPUS, EXISTING

- 105: Bothell - Mariner P&R
- 106: Bothell - Mariner P&R
- 238: UW Bothell/Cascadia - Kirkland
- 312: Bothell - Seattle
- 372: Woodinville - University District
- 522: Woodinville - Seattle
- 535: Lynnwood - Bellevue
- 931: DART Bothell - Woodinville

REGIONAL TRANSIT SERVICE

The campus is well-served by transit, with eight routes connecting the campus to large population centers in King and Snohomish counties. Currently 21% of the campus population commutes via bus; most of the remaining population commutes to campus by car.

Routes serving campus and their respective operators are listed below; refer to Figure 39 for on-campus transit circulation.

SOUND TRANSIT
- 522 Woodinville - Seattle
- 535 Lynnwood - Bellevue

COMMUNITY TRANSIT
- 105 Mariner P&R - Bothell
- 106 Mariner P&R - Bothell

KING COUNTY METRO
- 238 UW Bothell/Cascadia - Kirkland
- 312 Bothell - Seattle
- 372 Woodinville - University District
- 931 DART Bothell - Woodinville
**MOBILITY FRAMEWORK**

**Transit**

**ON-CAMPUS TRANSIT CIRCULATION**
There are currently eight transit routes that serve campus, with approximately 500 total daily trips accessing Campus. All bus service comes through the north campus entrance. Accommodations for these buses include: two bus stop shelters located at the traffic circle at the north end of the campus promenade; a comfort station for drivers located on Campus Way below the library (per a service agreement between King County Metro and UW Bothell); and bus layover is accommodated at the south loop by the Chase House. This distribution of transit functions contributes to traffic and congestion on campus, as well as increased bus and pedestrian points of conflict.

**NEAR-TERM TRANSIT PLANS**
Sound Transit 3, approved by Washington voters in 2016 includes development of an improved transit center at the UW Bothell / Cascadia College campus as a component of the proposed 145th and SR 522 Bus Rapid Transit (BRT) project. Serving existing and future King County Metro and Community Transit (in addition to ST3 BRT) routes, this project can serve as a catalyst toward realizing the UW Bothell/VCCC Long-term Campus Vision. Design of the 145th/SR 522 BRT project has yet to commence, however it is scheduled for completion by 2024. It is anticipated that UW Bothell and Cascadia College will be active participants in the development of a proposed solution, along with City of Bothell, WSDOT and the various transit agencies.

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**FIGURE 4-40: TRANSIT ROUTES, EXISTING**

- Campus Bus Route
- Layover Area
- Campus Bus Stop
- Comfort Station
- Local Bus Route
- Local Bus Stop

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MOBILITY FRAMEWORK

Transit

TRANSIT SERVICE GOALS & CONCEPTS

In anticipation of the increased bus service to campus, the Long-term Campus Vision is flexible in nature and can accommodate a variety of transit solutions. To understand the potential impacts of increased transit service and how it relates to the increased density of campus proposed by the CMP, several meetings were convened with participants from UW Bothell, Cascadia College, the City of Bothell, King County Metro, Community Transit, Sound Transit, and WSDOT.

The outcome was a set of Multi-Agency Goals for the UW Bothell and Cascadia College Campus and downtown Bothell area as follows (see next page):

CAMPUS, CITY AND TRANSIT AGENCY GOALS

CAMPUS, CITY AND TRANSIT AGENCY GOALS

UW BOTHELL/CC CAMPUS MASTER PLAN TRANSIT & DEVELOPMENT GOALS

Maintain high level of service and connectivity from transit agencies to campus.

Minimize bus/vehicle/bike pedestrian congestion and conflicts on campus.

Promote maximum land use flexibility for future campus development strategies.

Create and reinforce a new “front” door to the UW Bothell/CC campus.

CITY OF BOTHELL COMPREHENSIVE PLAN AND TRANSIT GOALS

Establish NE 185th Street as the predominant east-west transit corridor per the Downtown plan (connection to campus could be 185th or Beardslee Boulevard east of 108th Ave NE) and consider service to the North Creek Regional Activity Center in plans for terminating transit lines using this corridor.

Improve a.m. and p.m. peak hour traffic flows along Beardslee Boulevard from NE 185th Street to I-405.

Reduce existing bus/vehicle/pedestrian congestion and conflicts on the City street network.

Improve bicycle circulation along Beardslee Boulevard from 110th Ave NE.

Maintain and improve service to the downtown core (and campus) by all of the planned BRT transit routes through Bothell.

TRANSIT AGENCY GOALS

Continue to serve existing demands with opportunity to increase service in the future as needed.

Complete transit center expansion at campus by 2024 per ST3 schedule (Community Transit may be later).

Provide layover (lengths listed below), comfort station and turn-around (current assumption is 5 out of 9 routes):

- Metro – 380’ peak-period, 280’ midday
- Community Transit – 120-180’
- ST – 120’

Design bus stops/layover stations to accommodate specific agency vehicle needs:

- Local routes could share space
- BRT requires branding and technology
- Inter-transit coordination required

Retain or improve transit speed and reliability.

Provide independent off-boarding ticket vending machines and ORCA readers.

Preference for Rapid Ride connection at NE 195th Street-I-405 with implementation of I-405 BRT only; some layover could then be moved to North Creek (KC Metro).

WSDOT GOALS

Maintain or improve I-405 and SR 522 level of service.
MOBILITY FRAMEWORK

Transit

TRANSPORT CENTER CONCEPTS

Multiple conceptual diagrams were developed and reviewed during several transit planning meetings. Two transit center concept diagrams are included in the CMP that represent ‘preferred options’ in terms of supporting UW Bothell/Cascadia College transit and development goals. They are intended to inform ongoing multiagency and jurisdictional transit planning efforts while maintaining flexibility toward consideration of additional options that may emerge.

BEARDSLEE TRANSIT HUB CONCEPT

OPERATIONAL ASSUMPTIONS

The Transit Center is located in eastbound and westbound lanes of widened Beardslee Boulevard. Layover would occur after transit nodes along route. Turnaround location and procedures are to be identified.

A capacity of 6-8 bays in each direction is assumed.

KEY CONSIDERATIONS

Transit access and circulation could be fully accommodated on Beardslee Boulevard.

No bus service would enter the campus via Campus Way or NE 185th Street Eastbound.

Transit stops would be located to ensure accessibility to parcels on the north side of Beardslee Boulevard.

Pedestrian accessibility would be facilitated by a direct and accessible pedestrian connection through the campus center (a minimal two-minute walk time increase).

Potential safety conflicts for westbound passengers crossing Beardslee Boulevard may require a crossing signal.

Transit-oriented academic development is proposed along Beardslee Boulevard.

Transit efficiency may increase or decrease depending on route’s need to layover or turnaround.

Improved bicycle circulation; a dedicated cycle track in the ROW would eliminate bus-bicycle conflicts in both directions.

NE 185TH STREET TRANSIT STATION CONCEPT

OPERATIONAL ASSUMPTIONS

The Transit Station would be located on campus with access from NE 185th Street. Design and construction would be integrated with a future academic building on or near the current location of Husky Hall.

Layover and turnaround will be provided within the Transit Station. Buses would no longer access NE 110th St. A new signal would be required at NE 185th St and Beardslee Blvd.

Pedestrian accessibility would be maintained with minimal walk time increase (1 min.) to access Station.

A direct and accessible pedestrian connection would be provided through the campus center.

Transit efficiency may increase or decrease depending on route’s need to layover or turnaround.

Improved bicycle circulation; a dedicated cycle track in the ROW would eliminate bus-bicycle conflicts in both directions.

KEY CONSIDERATIONS

Transit access and circulation would be fully accommodated within the Transit Station.

Flow and safety would be supported with the addition of a signal at the intersection at NE 185th Street and Beardslee Blvd.

Pedestrian accessibility would be maintained with minimal walk time increase (1 min.) to access Station.

A direct and accessible pedestrian connection would be provided through the campus center.

Transit efficiency may increase or decrease depending on route’s need to layover or turnaround.

Safety issues related to transit/vehicle/pedestrian conflicts would be greatly reduced over current conditions.
Vehicles

VEHICULAR CIRCULATION AND PARKING

The campus has two primary access points for vehicles and an internal roadway loop. A signaled intersection at the north end of campus on Beardslee Boulevard has turning lanes for travel in all directions. Cars entering campus follow the North Creek wetland buffer southward and arrive at a second signaled intersection on campus, where they can turn left down Campus Way to access the north garage, or continue south to reach the upper parking lots at the south end of campus. A second access point is provided from SR-522 at the south end of campus. When constructed, this entrance was assumed to become the primary point of vehicular access, being closest to the majority of campus parking.

The first come, first served style parking system often leads to excessive searching for open spaces at the most desired parking locations, increasing vehicle travel on campus. The through-campus circulation loop contributes to congestion at the traffic circle, particularly in the PM peak hour when transit service and vehicle exiting are at their peak, leading to increased pedestrian/vehicle conflicts along Campus Way and across 110th Street to 185th Street and Husky Village. Campus circulation along the western route is difficult during inclement weather due to steep grades.

The Long-term Campus Vision prioritizes pedestrian mobility and seeks to minimize vehicle/pedestrian conflicts. The redevelopment of Campus Way into a pedestrian oriented environment is a key feature of the CMP. Significant traffic calming measures should be incorporated to enhance safety and access and discourage through-campus vehicle traffic. Operational and facilities planning should accommodate reduced through-campus traffic flow, and use of the south entrance as the primary access point to campus should be encouraged through parking permitting strategies and other measures.

DESIGN PRINCIPLE:
WELL-INTEGRATED VEHICULAR CIRCULATION

The Long-term Campus Vision also imagines detaching the western vehicle route from the existing north campus entrance at 110th Ave NE and Beardslee Blvd. This and other measures are implemented to achieve the primary design principle of minimizing vehicle/pedestrian conflicts along the northward extension of the Campus Promenade to new development along Beardslee Blvd. A new vehicular access point is envisioned at NE 185th with limited through-campus access along the western route.

RELATED GUIDING PRINCIPLES:
MOBILITY, ACCESS AND SAFETY
MOBILITY FRAMEWORK

Parking

A majority of available parking (70%) is located at the south end of campus; half of those spaces are in the four-story south garage and the other half are distributed over several surface lots. While there are a few parallel spaces along Campus Way, the primary option for parking at the north end is the north garage. Additional surface parking is associated with Husky Hall and Husky Village, however those spaces are not accessible from the campus core as 185th Street is closed to traffic at the east end; access for those lots needs to be made from the west off of Beardslee Boulevard and 185th Street.

Traffic patterns are split between the two entrances based on the origin/destination of the trip area congestion (i.e. I-405 or Beardslee Boulevard), and the desired parking location. Recent surveys conducted in the fall of 2016 confirmed a split of 52/48% (north/south) during the AM and PM peak hours respectively.

Annual parking utilization counts show that the current on-campus peak parking results in a utilization of between 90-95% depending on the time of day. The higher utilization results in increased on-campus circulation and drivers looking for parking opportunities.

ADRESSING FUTURE PARKING DEMANDS

The cap for campus parking under the CMP is 4,200 stalls. Planning and implementation of additional parking, whether surface or structured, will be informed by ongoing annual parking surveys, ensuring that parking is optimized and based on actual usage and demand.

Parking will continue to be a critical component of campus infrastructure, even as the campus expands residential components. While construction of surface lots is economically appealing to meet near term demand, it is likely that some combination of surface and structured lots will be required to meet the Long-term Campus Vision. Construction of parking facilities is expensive and funding used to construct facilities is paid out of revenues generated from parking permits. The decision to construct surface parking on a potential future building site must consider the burden of replacement costs of such parking upon the future building project. The relative increase of impervious surfaces from added parking will need to be carefully considered and mitigated. Finally, distribution of future parking should reinforce the desire to utilize the south campus entrance as the primary point of vehicular access.
MOBILITY FRAMEWORK

Parking

Figures 4-46 and 4-47 show options studied for construction of both surface and structured parking lots. Surface lots are generally seen as a relatively low-cost solution for meeting near-term parking demand. Stormwater mitigation requirements for surface parking can be costly, however; careful consideration should be given to whether a near-term surface lot is a prime candidate for a future parking structure or academic building site. Replacement of the near-term surface parking will add significant costs to the future project budget.

Surface and structured parking locations shown here are not necessarily the only options available. Further study could confirm feasibility of other location options.

DESIGN PRINCIPLE: WELL-INTEGRATED PARKING

Location of parking – surface or structured – should not adversely affect other Design Principles. For example, parking should not be located within established view corridors.

Care should also be taken to properly screen parking areas from adjacent residential uses to reasonably mitigate visual impacts and impacts caused by light, glare or noise.

RELATED GUIDING PRINCIPLES:

MOBILITY, ACCESS AND SAFETY
Utilities and Infrastructure Framework

The intent of this study was to support development of the Long-term Campus Vision; however, it is recommended that consideration be given to preparing a more detailed Utilities Master Plan to inform future campus development.

STORMWATER

Stormwater management will be based on utilization of existing campus infrastructure, retrofitting of existing infrastructure, and the addition of new stormwater infrastructure needed to support the expansion of the current campus. The campus is committed to using the most current stormwater drainage requirements and practices, based on the current standards in place at the time of development. Stormwater management will include conveyance, water quality, and flow control. It is recommended that consideration be given to preparing a more detailed Utilities Master Plan to inform future campus development.

Flow control requirements will continue to be evaluated as the campus expands. Much of the campus is currently exempt from flow control, due to the proximity of discharge to North Creek and the Sammamish River. It has been technically demonstrated that during large storm events it is actually better to discharge stormwater to the Sammamish River ahead of the urban peak flows contributed by the North Creek drainage basin, to better stabilize overall flows. Additional buildings and campus development will result in more collection and diversion of groundwater. Groundwater diversion in the Uplands needs to be carefully considered to protect existing trees and vegetation. It is also recognized that additional groundwater will result in addition flow into the Lowlands, which needs to be balanced. This overall drainage strategy will continue to be evaluated as the campus expands and as storm drainage requirements change.

Low impact development (LID) considerations will be reviewed and utilized for stormwater management wherever possible, particularly alternatives and strategies to reduce overall runoff. LID considerations and alternative measures should also be considered to address overall water quality and to reduce contaminants. Regular maintenance of such facilities is also critical to overall system performance. Salmon Safe Certification was received by the campus in approximately 2008, and...
STORMWATER (CONT.)

has been maintained through present time. The original certification was largely based on the core infrastructure that has been installed, particularly stormwater systems and the overall wetland restoration area. The campus has been highly committed to regular maintenance and has made frequent adjustments to existing facilities (such as bioswales, etc.) as part of the re-certification process. New buildings/facilities that have been added have been designed and constructed to meet Salmon Safe requirements. As the Campus Master Plan develops and as new buildings/facilities are added, Salmon Safe requirements are planned to be met – based on the current program.

While the stormwater conveyance system was designed to handle the full build-out of the campus based on the Preliminary 1995 Master Plan, modifications will be required to support the proposed building locations in the 2017 Master Plan. Runoff from non-pollution generating surfaces will be conveyed to the wetland restoration area as currently configured. Runoff from new pollution generating surfaces (parking, roadways, etc.) will be collected by a system of catch basins and pipes, and conveyed to a new LID stormwater treatment facility prior to releasing to the existing drainage system. Runoff from pollution generating surfaces in association with new buildings will be collected locally and treated and detained (if required) using an approach to fit the expanding campus. Landscaped and natural areas will utilize a combination of catch basins, underdrains, and underground pipes to collect and convey other surface flows to the existing storm drainage system.

Stormwater systems will at a minimum be designed to the City of Bothell Design and Construction Standards based on the current standards in place at the time of development. Materials for the future phases will also be based on design and construction standards in place at time of development. See Stormwater Design Principles for additional information.

The existing stormwater treatment system is well documented, seeking to slow runoff from campus streets and buildings with a combination of low-impact development (LID) facilities, as described below, and thus avoid erosion, stream warming and pollution.

Low Impact Design (LID) attempts to minimize project effects by mimicking the site’s natural state as closely as possible. LID aims to capture, store, filter, evaporate, detain and/or infiltrate runoff as close to the source as possible and keep runoff on site. Infiltration systems are the first priority type as they provide for percolation and infiltration of stormwater into the ground, reducing the volume of stormwater runoff entering the storm drain system or nearby wetlands and contributing to groundwater recharge. Infiltration can provide multiple benefits, including pollutant removal, peak flow control, and minor stormwater runoff volume reduction through infiltration and evapotranspiration.

Design Principle: Stormwater

On hillsides, infiltrated runoff may seep a short distance down slope which could cause slope instability or result in nuisance seepage, which could affect the Upland Forest.

There are several existing landscaped bioswale facilities that capture and treat stormwater runoff and this system can be expanded with development. Pollutants are removed from runoff in these bioswales as the water passes through a biofiltration system through natural absorption and filtration by plants, soils, and microbes that live within the system. Bioswales on campus can provide multiple benefits, including pollutant removal, peak flow control, and minor stormwater runoff volume reduction through infiltration and evapotranspiration.

Some guidelines for stormwater treatment include:

- Grading should be designed to facilitate surface drainage, limit soil erosion, and avoid instability.
- Where possible, site development should maintain and enhance natural drainage patterns.
SANITARY SEWER
The existing campus sanitary sewer (gravity) system consists of 6-inch, 8-inch and 12-inch diameter pipes, manholes, and cleanouts. The northern portion of the site (all buildings north of the library) discharges to the existing King County maintained 60-inch diameter trunkline bisecting the site. The southern portion of the site (all buildings south of the library including the Truly House) discharges to the existing 24-inch diameter trunkline underneath SR-522. The existing 24-inch trunkline was recently (2013) renovated underneath SR 522 to accommodate existing and future sanitary sewer flows. A single sanitary lift station captures flow from the bottom floor of the Activities and Recreation Center building and discharges into the gravity line in Campus Way via force main.

To accommodate the build-out condition, a new sanitary sewer line will be installed along the regional trail to serve the new buildings at the south end of campus, east of Campus Way. Once this new line is installed, the bottom floor of the Activities and Recreation Center building can be served by gravity and the existing lift station can be decommissioned.

Near-term academic building UW4 will be served by extending the sewer line servicing UW3 (Discovery Hall). A new sewer line to serve near-term academic building CC4 will route to Campus Way to tie into the existing sewer main line in Campus Way. The area south of Beardlee Boulevard will be served by new sewer lines that tie into the existing King County maintained trunkline. Sanitary sewer systems will be designed to City of Bothell Design and Construction Standards. The sanitary sewer system will consist of appropriately sized PVC pipe, manholes, and cleanouts.

It is recommended that consideration be given to preparing a more detailed Utilities Master Plan to inform future campus development.

UTILITIES AND INFRASTRUCTURE FRAMEWORK

It is recommended that consideration be given to preparing a more detailed Utilities Master Plan to inform future campus development.
DOMESTIC WATER
The existing campus domestic water system consists of 6-inch, 8-inch and 12-inch diameter pipes. The existing water system generally consists of looped pipe routes. A loop south of NE 180th Street encompasses the South Garage and Physical Plant. A loop is formed along the main “spine” of the existing campus with a line running in Campus Way and a line routed along the west side of the buildings located along the west side of Campus Way connecting to water lines on the north and south ends to form the loop. Another loop is located in 110th Avenue NE, West Campus Lane, and NE 180th Street in the western part of campus. The campus water system is tied into City of Bothell water lines on the south end of campus, beneath SR-522 and west of 110th Avenue NE along 180th Street, and in the north at three locations along Beardslee Boulevard; one at NE 185th Street, one at the north entry to Husky Village, and one at 110th Avenue NE. Buildings are serviced from the nearest water main to the building.

To accommodate future improvements, the existing water system will need to expand. A new appropriately sized water line will need to be installed along the regional trail to complete a closed loop between Campus Way and 180th Street. The existing closed loop system around the South Garage, between 180th Street and the South Access, will be adjusted to accommodate the expansion of the South Garage. Near-term academic buildings UHV and CC4 will be served from existing adjacent water mains. The area south of Beardslee Boulevard will require rerouting of existing water lines to serve future buildings and align with future roadway infrastructure.

In addition to the new water lines, additional fire hydrants, fire department connections (FDC), and other appurtenances may be required to comply with City of Bothell requirements.

Water flow and system pressure will need to be confirmed with the City of Bothell water system model at each phase of development to ensure adequate accommodation can be made to support the build-out condition. Domestic water systems will be designed in accordance with the City of Bothell Design and Construction Standards.

It is recommended that consideration be given to preparing a more detailed Utilities Master Plan to inform future campus development.
Natural gas service to campus is straightforward, following a 6” pipe under NE 185th Street, where it enters, and travelling south along Campus Way and then back up NE 180th Street. Short spurs branch off the main line to service each building.

The future buildings on the east side of Campus Way can be served from the gas main in Campus Way. Near-term academic buildings UW4 and CC4 will be served from existing gas mains. The area south of Beardslee Boulevard will require the existing gas main along NE 185th Street to be rerouted along the new proposed roadway. Gas service to buildings in that area will be from Beardslee Boulevard or from a rerouted gas main on campus.

Gas service capacity will need to be confirmed with Puget Sound Energy to ensure adequate accommodation can be made to support the build-out condition.

It is recommended that consideration be given to preparing a more detailed Utilities Master Plan to inform future campus development.
CHILLED WATER

The existing chilled water plant major infrastructure was installed as part of the original campus design. The physical plant is located at the south end of the campus just west of the south parking garage and serves all of the original buildings of UW Bothell and Cascadia College campuses. The plant currently delivers 1,800 tons of nominal capacity, and has a future maximum capacity potential of approximately 3,750 tons. The major equipment associated with the plant are three chillers (1,000 tons, 500 tons and 300 tons), four cooling towers, individual condenser water pumps for each chiller, individual chilled water pump for each chiller, central campus chiller water pumps and a heat exchanger utilized for economizer conditions.

Direct buried chilled water supply and return piping originates as 18” piping at the central plant at the South Parking Garage. A 16” branch of this large service extends to the current north edge of the campus at the level of the existing buildings. In addition, the original design provided for future development to the west with a 16” valve branch located immediately north of the plant. The proposed campus development could be served by a variety of different means ranging from continued development of central chilled water infrastructure, development of the existing south chilled water infrastructure and creation of a new north condenser water infrastructure, or decentralized development. The campus vision depicted here would be comprised of the following three elements:

- Extension of a new branch of the existing south chilled water plant to the east of Campus Way NE.
- Once the existing 400 tons of spare chilled water capacity are allocated to new construction, expand the existing south chilled water plant capacity to accommodate new campus buildings drawing from the existing and the new east piping distribution.
- Development of a North Chilled Water Plant capable of serving between 400,000 and 600,000 square feet of new development north of the existing campus chilled water system. Interconnect the new system to the existing system for redundancy and partial load operation.

It is recommended that consideration be given to preparing a more detailed Utilities Master Plan to inform future campus development.
POWER

The campus is supplied with power from two separate feeds: the first, originating at the North Bothell Substation, enters campus via above-ground lines on NE 185th, which are routed underground at Husky Hall; the second power feed comes on overhead lines along Valley View Street, which are routed underground at the property boundary next to the cemetery. There is also a line that exits the campus at the south end, near the Chase House; this line serves the residential neighborhood south of SR-522 on the Sammamish River.

With the exception of Husky Hall and Husky Village, all lines through campus run underground, looping through campus down Campus Way and up NE 180th, with short spurs off to feed adjacent buildings.

Emergency Power is one of the most pressing utility issues facing the campus, which experiences several power outages (6-8 per year), mostly occurring during storms. While some buildings have backup generators, there is insufficient capacity to run the campus in the event of an outage.

Several high-level concepts were discussed during development of the CMP to address this issue. Given its complexity, however, much more detailed analysis is required to arrive at a preferred solution; it is recommended that such analysis be completed within the scope of a Campus Utilities Master Plan to guide infrastructure decisions around future campus development.

Strategies that warrant further consideration include:

- UW Bothell/CC purchase and operate the current PSE system in order to assume greater control of service and reliability. This approach would not address conditions where both campus feeds are experiencing outages.
- UW Bothell/CC in coordination with PSE install an Automatic Throw Over switch (ATO) that would transfer load from one feeder that loses power to the second feeder automatically. This approach also would not address conditions where both feeds are experiencing an outage.
- Consider a secondary, stand-alone power generation (for example diesel generators or co-generation by fuel cells) to provide power when the utility is absent.

It is recommended that consideration be given to preparing a more detailed Utilities Master Plan to inform future campus development.
TELECOMMUNICATIONS & DATA

The existing communications service provider cabling enters the campus from the west along Valley View Road via overhead lines, and transitions at the UW Bothell/CC property line to underground conduits via a vault located at the intersection of 110th Ave and 180th Street. The underground conduit path continues east along 180th Street and enters into the Central Utility Plant (CUP) building, where the campus demarcation and main distribution frame (MDF) is located. The contents of these conduits include fiber optic cabling for high speed internet service, copper cabling for analog telephone service, and coaxial cabling for community access television (CATV) service.

There is an existing Verizon-owned fiber optic cabling pathway that follows the same path along 180th Street continues past the CUP and exits the campus to the south past the Chase house. There is an agreement between UW Bothell/CC and Verizon that allows use of the campus conduit infrastructure. Additionally, there is a similar overhead service provider feed that enters the campus along 185th St, but is currently not in use by the campus.

Communications services to all buildings on campus are fed from the MDF in the CUP building via fiber optic and copper lines via the main communications underground duct bank and vault infrastructure that runs along Campus Way. The buildings are wired in a star pattern; meaning, there is a direct fiber/copper connection from the MDF room to the demarcation room in each building. The existing fiber optic cabling is sufficient for current and future needs of the existing buildings.

Cellular service inside buildings should be upgraded to provide consistent coverage. WiFi coverage should be provided within buildings and in all public open spaces on campus. Blue and yellow phones should be upgraded to an audible style to provide broadcasting abilities in case of emergency. Future housing should include UW networking, including upgrades at Husky Village.
REGIONAL DATA

The University of Washington Bothell and Cascadia College campus serves as a node on a high-speed fiber loop that circles Lake Washington, serving most of urban and suburban King County. The network was created in 2015; the service enters and leaves campus on overhead lines along Valley View Road, traveling underground along NE 180th Street to a router room in the physical plant building, which has generator backup. This configuration has allowed UW Bothell/CC to offload much of its IT infrastructure to the ‘cloud’, operated in part from the UW Seattle campus. Fiber serves as the backbone of campus internet service, with copper wire legs connecting the endpoints.

The campus enjoys broad, reliable wi-fi coverage in public spaces near buildings; however, service is dependent on power being supplied to routers, so it is not immune to outages.

In general, cellular network penetration is good outdoors on campus, but penetration into buildings is reported to be poor.
SECTION 05
Campus Design Review Process
Institutional Project Review Processes

Développement de processus de validation

Le processus de l'identification et des priorités pour les budgets est initié par l’université/colleges et implique plusieurs étapes avec une évaluation de l'impact sur le campus.

**Projet de dessin et environnement**

Le processus de validation des projets et des priorités pour les budgets est initié par l’université/colleges et implique plusieurs étapes avec une évaluation de l'impact sur le campus.

**Règles de validation**

Le processus de validation des projets et des priorités pour les budgets est initié par l’université/colleges et implique plusieurs étapes avec une évaluation de l'impact sur le campus.

**Affaires de l'Éducation**

Le processus de validation des projets et des priorités pour les budgets est initié par l’université/colleges et implique plusieurs étapes avec une évaluation de l'impact sur le campus.

**Bâtiment et circulation**

Le processus de validation des projets et des priorités pour les budgets est initié par l’université/colleges et implique plusieurs étapes avec une évaluation de l'impact sur le campus.

**Relations et coopération**

Le processus de validation des projets et des priorités pour les budgets est initié par l’université/colleges et implique plusieurs étapes avec une évaluation de l'impact sur le campus.
Prioritization and on-going review of campus wide transportation management strategies are critical to reducing the overall parking demand by encouraging alternative modes of transportation and minimizing transportation related impacts adjacent to campus.

Travel to campus occurs through personal vehicles, walking and biking, as well as transit. Intercept surveys were conducted on October 11 and 12, 2016 between 10 a.m. and 1:30 p.m. to identify how students, faculty, and staff travel to and from campus and the routes travelled. Figure 5-1 indicates the existing mode splits for the campus. As shown on the figure, the majority of travel to campus is currently via single occupancy vehicle (SOV). This higher SOV mode share is impacted by the combined population of the two institutions and the general commuter make-up of the campus. Limited on-campus housing is provided resulting a higher “commuter” population.

**Transportation Management Plan (TMP)**

Strategies have been summarized for seven main areas. Actual strategies implemented will depend on the nature of the population that is being targeted and the overall effectiveness of the strategy. On-going monitoring via online surveys or intercept surveys can provide important information which can inform changes or updates in the strategies.

**TRANSPORT**

A frequent, reliable and integrated transit network gives passengers the flexibility to travel to campus from locations throughout the region, providing convenient and reliable travel options other than driving alone. Continuing to partner with the local transit agencies to increase service, improve on-site amenities, and facilitate increased transit service will be essential for maximizing the use of this mode.

**SHARED-USE TRANSPORTATION**

Shared-use transportation includes a range of methods for providing flexible travel options through the sharing of transportation resources including cars and bikes. Shared-use mobility options are expanding and emerging including transportation network companies (TNCs) like Lyft and Uber and bike share which may make it easier to not own a vehicle. In addition, autonomous vehicles can greatly enhance safety for all modes.

**PARKING MANAGEMENT**

The Campus manages its parking supply in a variety of ways to reduce SOV travel. Paid parking is an important tool used to reduce demand, manage operations, and fund transportation options. Parking resources are managed holistically on a campus-wide basis. Students, faculty and staff are able to purchase parking permits or pay on a pay-per-use basis, depending on what best meets their needs. Parking is also available for daily users and visitors with payment at pay stations.

**BICYCLE**

Approximately 8 percent of the survey respondents indicated biking or walking was the primary mode of travel to the campus. While this is not a large percentage of the population, it is an important mode to accommodate and encourage increased ridership in the future. On-site amenities need to be developed in the future in response to increased population density. Partnerships with the local agencies to complete the “missing links” in the bike network would facilitate bicycle travel as a model of choice.

**PEDESTRIAN**

Although the walking mode split only constitutes 8 percent of the population surveyed, it is critical to maintaining a strong connection to the downtown core. The importance of these connections increases with the increase in student housing included in the Campus Master Plan.

**MARKETING AND EDUCATION**

Marketing and education are essential for encouraging and supporting travel behavior choices that help the Campus meet its SOV goals. The Campus participates in a number of marketing programs to inform students, staff, and faculty of commuting options.

**INSTITUTIONAL POLICIES**

The Campus can modify and implement institutional policies that promote different modes of travel and/or reduce vehicle trips on the transportation network. While the other TMP elements provide transportation choices, institutional policies are another means by which these measures can be implemented or supported at all levels of University and College leadership.

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**FIGURE 5-1:** EXISTING (2016) CAMPUS TRAVEL MODE SPLITS

<table>
<thead>
<tr>
<th>Mode</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive Alone</td>
<td>20.7%</td>
</tr>
<tr>
<td>Transit</td>
<td>7.8%</td>
</tr>
<tr>
<td>Walk or Bike</td>
<td>13.6%</td>
</tr>
<tr>
<td>Carpool</td>
<td>57.9%</td>
</tr>
</tbody>
</table>
SECTION 06

Campus District Regulations

JURISDICTIONAL PROJECT REVIEW PROCESSES ................................ 148
MITIGATION COMMITMENTS .................................................... 155
Jurisdictional Project Review Process

The following text sets forth standards and limits that are to be codified in the District Regulations in BMC 12.64.108 and used by the City to determine whether proposed campus development is consistent with the CMP. In addition, the following amendments are proposed to other sections of BMC 12.64:

Amend 12.64.001.A to read:

All regulations in the chapter shall apply, except that within the Campus District, the regulations of this chapter shall apply only to the extent such regulations are identified in BMC 12.64.108.

Add a new subsection 12.64.201.F (to track the language proposed for 12.64.108):

12.64.108 CAMPUS DISTRICT REQUIREMENTS

A. DISTRICT CHART

Academic uses are permitted, consisting of all principal and accessory uses that relate to and support instruction and research and the needs of students and faculty, including, but not limited to, classrooms, labs, faculty and administrative offices, lecture halls, museums, theatres, libraries, faculty/staff/student services, student housing (including dormitories and married student/family housing); transportation (including parking); open space; support facilities such as bookstores, food services, faculty club; athletic/recreation facilities; and facilities supporting maintenance of the campus. NOT PART OF PLANNED ACTION ORDINANCE

B. SPECIAL CAMPUS DISTRICT REQUIREMENTS

Development Review

These Campus District Regulations are the development regulations for University and College development within the Campus District boundary. In these regulations the University and/or College are referred to collectively and individually as the “Campus” while the physical site is referred to as the “campus.” The development regulations in this section are tailored to the campus and its local setting, and are intended to allow development flexibility and improve compatibility with surrounding uses. Temporary academic uses that do not involve development of a permanent structure are permitted without the need for a consistency determination. Temporary academic uses that do not involve development of a permanent structure are permitted without the need for a consistency determination by the City.

Development

As used throughout the Campus Master Plan, the word “development” means any Campus decision to undertake any action of a project nature within the campus boundaries, which will directly modify the physical environment and which is not exempt from SEPA.

Potential Development

The Campus Master Plan identified a total Campus need of 1.8 million gross square feet to serve 10,000 student full-time equivalents (FTEs). The campus at the time of approval of this Campus Master Plan comprises approximately 0.76 million gross square feet of development, and the total amount of additional development authorized is approximately 1.04 million gross square feet. The Campus District is divided into six Development Areas, plus the wetlands area, as shown in Figure 6-1. The potential net new amount allowed within each Development Area under this Campus Master Plan is shown in Figure 6-2 (page 150), however this potential net new gross square footage cannot be achieved within each Development Area because the total campus development cannot exceed 1.8 million gross square feet under this Campus Master Plan. Parking structures are not included within or subject to this limit on total campus development.

FIGURE 6-1: DEVELOPMENT AREAS

- Development Area Boundary
- Developable Campus Area
- North Creek Wetland Buffer
- North Creek Wetland

DEVELOPMENT REGULATIONS AND DEFINITIONS

Allowed Uses

The use of the campus is Academic. Description: All principal and accessory uses that relate to and support instruction and research and the needs of students and faculty, including, but not limited to, classrooms, labs, faculty and administrative offices, lecture halls, museums, theatres, libraries, faculty/staff/student services, student housing (including dormitories and married student/family housing); transportation (including parking); open space; support facilities such as bookstores, food services, faculty club; athletic/recreation facilities; and facilities supporting maintenance of the campus.
3. Gross area is computed by measuring from the outside faces of exterior walls, disregard corners, pilasters, buttresses, etc., which extend beyond the wall faces. Areas having less than a six-foot, six-inch clear ceiling height are excluded.

4. In addition to all the internal floored areas covered in section 2 above, gross area includes the following: mezzanines, penthouses, attics, enclosed porches, balconies, stairway landings, and portions of stairways, elevator shafts, and ducts (examples of building infrastructure) are counted as gross area on each floor through which they pass.

5. Odors: Ventilation devices and other sources of odors will be directed away from residential zoned property.

6. Parking lots and garages may contain temporary tent structures which are not considered buildings. Any existing or new temporary tent structures in the area are excluded from the Campus Master Plan gross square feet. Interstitial space is the space between floors for mechanical, electrical, and HVAC systems.

7. North Creek Restoration Area: The North Creek relocation and wetland restoration area was incorporated as a Native Growth Protection Area. No clearing, grading, construction or tree removal except for dead, diseased or hazardous trees, will occur, except for construction specifically authorized as part of stream relocation and restoration plans, the regional trail and overlooks and drainage and utility extensions.

8. To highlight the successful restoration of the wetlands and enhance educational opportunities for students of the campus, the previously disturbed area associated with the Savington Green Conservatory is excluded from the buffer requirements. Maintenance and building improvements are allowed. Creation and maintenance of a trail for educational access of the wetland is allowed.

9. Odors: Ventilation devices and other sources of odors will be directed away from residential zoned property.

<table>
<thead>
<tr>
<th>Development Area</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Uses:</td>
<td>Permitted</td>
<td>Permitted</td>
<td>Permitted (exception: dormitory not permitted)</td>
<td>Permitted</td>
<td>Permitted</td>
<td>Permitted</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Development Regulations:</th>
<th>60'</th>
<th>60'</th>
<th>60'</th>
<th>60'</th>
<th>100'</th>
<th>60'</th>
</tr>
</thead>
<tbody>
<tr>
<td>-30 landscaped buffer at campus boundary</td>
<td>Required</td>
<td>NA</td>
<td>Required</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>-Minimum Building setback at campus boundary</td>
<td>25' unless adjacent to single-family</td>
<td>Required</td>
<td>NA</td>
<td>Minimum Building setback to single-family exceeds 25' setback increase of 1' for each 1' increase of height.</td>
<td>0'</td>
<td>NA</td>
</tr>
<tr>
<td>-Maximum Net New Gross Square Footage Allowed</td>
<td>295,100</td>
<td>407,200</td>
<td>144,800</td>
<td>295,990</td>
<td>425,800</td>
<td>10,000</td>
</tr>
</tbody>
</table>

Notes: NA = not applicable and not required

ADDITIONAL REGULATIONS WITHIN DEVELOPMENT AREA D

Within Development Area D, uses that could serve the general public, such as a bookstore, shall be limited to a maximum size of 15,000 square feet unless the Campus demonstrates that a bigger space is needed.

A building proposed within Development Area D with a facade that is within 50 feet of the Beardslee right-of-way shall be consistent with the City’s district regulations for the General Downtown Corridor (GDC), except that (1) any Academic use is permitted, (2) the portion of any building that is more than 50 feet from the Beardslee right-of-way may comply with the maximum height in Figure 6-2; and (3) the City may grant one or more exceptions to the GDC regulations to the extent that the Campus’ application for a consistency determination demonstrates that such exception is consistent with the CPM and compatible with other nearby development on Beardslee.

Net New Gross Square Feet

Net new gross square feet is calculated by subtracting the amount of existing gross square feet and any gross square feet anticipated to be demolished in a Development Area from the total gross square feet of development identified for a particular Development Area in Figure 6-2.

Gross Square Footage

Gross Square footage is calculated according to the FICM (Facilities Inventory and Classification Manual) calculations provided below. FICM is an industry standard for higher education space metrics.

FICM Gross Square Feet (GSF) Calculation:

1. A building is defined as a roofed structure for permanent or temporary shelter of persons, animals, plants, materials, or equipment, and exhibits the following characteristics: it is attached to a foundation and has a roof, is served by a utility, exclusive of lighting, and is the source of significant maintenance and repair activities. Temporary tent structures are not considered buildings.

2. FICM-GSF is the sum of all areas on all floors of a building included within the outside faces of its exterior walls, including floor penetration areas, however insignificant, for circulation and shaft areas that connect one floor to another. It includes additional space generally not included in calculating square footage using other methods, such as mechanical penthouses and mezzanines, attics, enclosures, and corridors.

3. Net new gross square feet is calculated from the Campus Master Plan gross square feet. Only the net new gross square feet will be deducted from the Campus Master Plan development allocation.

4. All parking areas and structures, loading areas, and interstitial space required for mechanical and electrical systems to support the building are excluded from the Campus Master Plan gross square feet. Interstitial space is the space between floors for mechanical, electrical, and HVAC systems.

Landscape Buffers and Vegetation

Required Landscape: A 30-foot Type II landscaped buffer will be maintained at the campus boundary adjacent to single-family residential zoning.

North Creek: Indigenous plant material with emphasis on trees and shade cover shall be included in landscaping along North Creek. Planting of shade trees native to the area is required along public access routes to the North Creek shoreline.

Light and Clarity

Exterior lighting will be shielded or directed away from structures in adjacent or abutting residential zoned areas and arterials. Mirror glass is not permitted.

Solar panels are permitted consistently with BMC 12.14.250.D.

Parking and loading areas shall include lighting capable of providing adequate illumination for security and safety. Lighting standards shall be in scale with the height and use of the associated structure. Pedestrian walkways and sidewalks may be lighted with three- to four-foot-high lighting bollards. Any illumination, including security lighting, shall be directed away from adjoining properties and public rights-of-way.

The sports field complex field lights may be operated between the hours of 8:00 AM to 11:00 PM.

North Creek Restoration Area

The North Creek relocation and wetland restoration area was incorporated as a Native Growth Protection Area. No clearing, grading, construction or tree removal except for dead, diseased or hazardous trees, will occur, except for what is specifically authorized as part of stream relocation and restoration plans, the regional trail and overlooks and drainage and utility extensions.

To highlight the successful restoration of the wetlands and enhance educational opportunities for students of the campus, the previously disturbed area associated with the Savington Green Conservatory is excluded from the buffer requirements. Maintenance and building improvements are allowed. Creation and maintenance of a trail for educational access of the wetland is allowed.

Odors: Ventilation devices and other sources of odors will be directed away from residential zoned property.

Parking: Motor vehicle parking will be limited to a maximum of 4,200 spaces within the campus boundary, including spaces associated with campus housing but not including service and load zones, bicycle spaces, and accessory off-campus leased spaces. Parking spaces may be located in any Development Area to accommodate need. The Campus shall develop additional parking spaces consistently with a Transportation Management Plan prepared by the Campus, filed with the City, and updated on a yearly basis. When the Campus applies for a consistency determination for new development, the application will include an explanation of how parking for the new development will be consistent with the TMP.

Parking lots and garages may contain standard and small vehicle spaces. No minimum parking stall size is established. The standard size to use in design planning for standard vehicle space may be approximately 8.5 feet in width and 19 feet in length. The standard size to use in design planning for a small vehicle space may be approximately 8 feet in width by 16 feet in length.
The campus parking, regardless of location, is intended to serve the entire campus. The campus and associated parking facilities may be considered a unified site (area) for ADA accessible parking spaces, and the Campus shall distribute and assign ADA compliant parking around campus to accommodate need.

Temporary construction-related parking provided for construction workers is exempt from the parking maximum.

Screening of parking areas at the campus boundary adjacent to single-family zoning will be provided by the required 30-foot landscaped buffer (described herein). Parking areas located across a City-owned street from property not owned by the Campus will be screened according to BMC 12.16.090.

Setbacks

Setbacks are required as set forth in Table 1. Setbacks will only be required for new structures located on the campus boundary and along City-owned streets when the property located across from the structure is not owned by the Campus. Campus structures across a City street from commercial or campus zones have no required setbacks.

Retaining walls, raised plazas, sculpture and other site elements shall have no setback requirements in any Development Area. Wireless communication facilities will be located outside of any buffer, and facilities that exceed the maximum height of the campus district will be located a minimum of 100 feet within the campus boundary.

Underground structures may be located within setback areas. Covered and uncovered pedestrian walkways and similar facilities are permitted within setbacks.

In areas where both setbacks and landscape buffers are required, these features are overlaid upon each other and are not considered additive. For example, a structure may be located 30 feet from a property line in a location requiring both a 30-foot landscaped buffer and a 30-foot setback as long as the requirements for both buffers and setbacks are satisfied.

Structure Height

In Development Areas A, B, C, D and F, 65 feet is the allowed height and in Development Area E, 100 feet is the allowed height as set forth in Figure 6-2. The exceptions to building height limits in BMC 12.14.120 shall apply. All vents, air conditioning units, mechanical, electrical and other equipment located on the roof of any structure shall be screened as needed to avoid an unsightly appearance as viewed from surrounding property, including hillside locations. The building roof design and covering/screening materials shall be described in detail in an application for a consistency determination, and it shall be demonstrated how these items will mitigate the visual impact of the equipment.

Structure Height Setbacks

When buildings exceed 35 feet, in accordance with Figure 6-2 of this section, the mandatory setbacks from any abutting single-family zone (not including combination zones) shall be increased as follows: (A) The mandatory setbacks shall be increased three feet horizontally for each foot of building height exceeding 35 feet. These increased setbacks shall apply to the entire building, rather than to only those portions of the building which may be higher than 35 feet. Where a property is along a City-owned street, the increased setbacks from any abutting single-family zone shall be measured from the street property line of the single-family property. See Figure 6-3.

General Height Measurement Method

Building height shall be measured in accordance with the BJC.

Wireless Communication Facilities

Antennae and other wireless communication facilities that serve only the campus are permitted without compliance with BMC 12.11 and do not require a determination of consistency. Any such facility that exceeds the maximum height of the development area shall be located a minimum of 100 feet within the campus boundary.

The following text sets forth the process that will be codified in BMC 11.04.

PROJECT REVIEW PROCESS

11.10.004 DETERMINATION OF CONSISTENCY FOR DEVELOPMENT PROPOSED ON THE BOTHELL CAMPUS OF THE UNIVERSITY OF WASHINGTON BOTHELL AND CASCADIA COLLEGE

a. Notwithstanding any other provision of this Chapter, a determination of consistency for a project proposed within the Campus District by the University of Washington Bothell or Cascadia College shall be made under this section instead of under BMC 11.10.001.

b. The University or College shall submit an application that:

1. Explains how the proposed development expresses or implements the planning and design principles in Section 4 of the Campus Master Plan.

2. Identifies the intended academic uses of the proposed development;

3. Includes a site plan and plan views;

4. Includes renderings that demonstrate the architectural features of the proposed development;

5. Describes the University’s or College’s review as SEPA lead agency, and provides any additional SEPA documents prepared pursuant to WAC 197-11-600;

6. Identifies any mitigation set forth in Section 7 of the Campus Master Plan that will be included with the proposed development;

7. Explains how the proposed development complies with the District Regulations in BMC 12.64.108:

a. Calculates the gross square feet of proposed development and, if the project includes demolition, calculates net new gross square feet;

b. Calculates how much of the total capacity allowed by the Campus Master Plan will remain undeveloped after approval of the proposed development;

c. Demonstrates compliance with height limits, setbacks and any applicable size limitation;

d. Identifies and describes any required landscape buffer;

e. Describes additional landscaping;

f. Identifies the number of additional student full time equivalents (student FTEs) who will come to the campus as a result of the proposed development;

g. Identifies the number of additional beds to be created by any development that includes student housing, and calculates the effect of this student housing on transportation and parking;

h. Explains compliance with other applicable provisions of the Campus District regulations, including lighting, signage, and control of odors from cooking areas.

i. Explains how the proposed development is consistent with the Transportation Management Plan, or how this Plan will be amended to address the proposed development; and

j. Identifies other City approvals that will be applied for, including any building permit or other construction permit; concurrency encumbrance letter; public area use permit; storm drainage side sewer permit; or shoreline substantial development permit.

C. The Department shall determine whether a proposed development is consistent with the Campus Master Plan by determining:

1. whether the application includes the information required in section B;

2. whether the application is consistent with the District Regulations in BMC 12.64.108; and
3. whether additional mitigation is appropriate under the City’s substantive SEPA authority, BMC 14.02.230, or is required to ensure consistency with other applicable city regulations. The Department may require such additional mitigation as a condition of the consistency determination.

D. The Department may not approve development that is inconsistent with the Campus Master Plan. The Department may approve a minor amendment to the Campus Master Plan in response to a specific development proposal. A minor amendment is one that:

1. accommodates reasonable academic use of the Campus;
2. creates environmental impacts that are within the range of impacts analyzed in the Final Environmental Impact Statement for the Campus Master Plan;
3. does not entail amendment of height limits or setback or buffer requirements in development areas A and C; and
4. does not move more than ten percent of net new gross square feet from one development area to another, and does not increase the total gross feet allowed by this Campus Master Plan.

Any other amendment is a major amendment of the Campus Master Plan that requires approval by the City Council, University Board of Regents, and College Board of Trustees.

E. The Department’s consistency determination under subsection C, and any decision regarding a minor amendment under subsection D, are Type II land use actions that may be appealed pursuant to BMC 11.14.005.

F. Demolition within the Campus District is not subject to a consistency determination and a demolition permit may be applied for and issued in advance of a consistency determination for new campus development. Demolition of a building within the Campus District that is on the City’s historic register shall not be subject to the provisions of BMC 22.28.060 so long as the application for a demolition permit includes an Historic Resources Addendum or similar document that identifies the historic qualities of the building and demonstrates that alternatives to demolition have been considered. The site of any demolition shall be maintained in a safe condition and free of debris.

Mitigation Commitments

At the time of this draft printing, UW Bothell, Cascadia College and the City of Bothell are engaged in the process of negotiating Mitigation Commitments, which will be included in the final CMP.
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SECTION 3: GROWTH PROFILE

SECTION 4: CAMPUS MASTER PLAN AND DESIGN PRINCIPLES
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