Western Washington University
Institutional Master Plan
An Addendum to the Western Washington University Neighborhood Plan

Adopted by the City of Bellingham, September 24, 2001
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Approved by WWU Board of Trustees, October 5, 2001

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WASHINGTON UNIVERSITY

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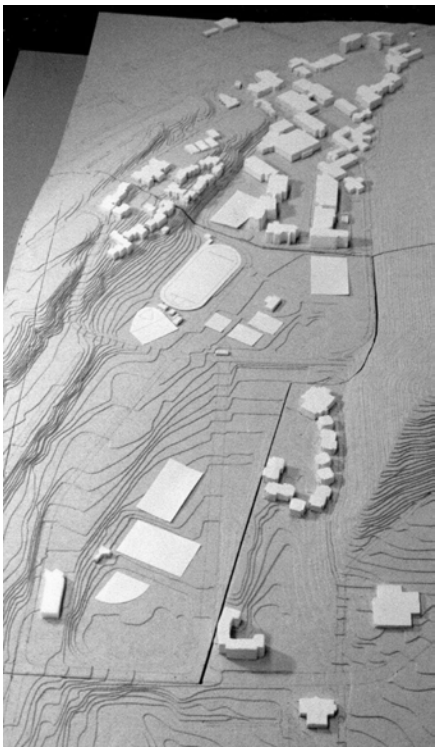
Table of Contents

Introduction

Background/History



Model of existing campus, 1999

In 1989, Western Washington University President Mortimer directed university planning staff to develop a comprehensive master plan for the physical development of campus. Out of those efforts, the *1997 Draft Comprehensive Master Plan (DCMP)* document was completed and provided a framework for future campus development. While the *DCMP* was developed as an internal, university planning document, the concepts and intent of the document were used as a basis for the cooperative development of the *Western Washington University Neighborhood Plan* which was approved and adopted by the City of Bellingham in September 1998 as part of the City's comprehensive planning activities under the State Growth Management Act. In addition, the City's Land Use Development Ordinance requires that areas such as Western's campus that are zoned "institutional," must submit an *Institutional Master Plan (IMP)* to the City for approval and adoption. The University and the City agreed to jointly develop this *IMP*.

As required by Chapter 20.40 of the Bellingham Municipal Code, this *Institutional Master Plan* was prepared by Western Washington University and the City of Bellingham and adopted by the City as an addendum to the *1998 Western Washington University Neighborhood Plan*. The *Institutional Master Plan* provides more definitive standards to ensure that the campus evolves in a "planned and coordinated manner," [1] while maintaining the campus character and academic mission (see "Appendix A: University Role and Mission Statement"). These standards include appropriate land uses, circulation and parking requirements, infrastructure improvements, building heights, setbacks, buffering and landscaping requirements, and other guidelines for the development of campus.

[1.] *Bellingham Municipal Code, Section 20.40.000 Institutional Development*

Institutional Master Plan Advisory Committee

The *Institutional Master Plan* (*IMP*) was developed with the invaluable assistance and input of a diverse advisory committee formed in November of 1998 by President Karen Morse and Mayor Mark Asmundson. Representatives from adjacent neighborhoods, the City and campus comprised the Institutional Master Plan Advisory Committee (IMPAC) that was charged to serve in a review and advisory capacity to the President of Western and to the Mayor of Bellingham in the development and adoption of the *IMP*. (See the Acknowledgements page for a list of the IMPAC members.)

Intent of the *Institutional Master Plan*

The results of the Institutional Master Plan Advisory Committee's months of work, the input of the Western planning staff and Western planning students, and the recommendations of Bellingham's Planning Commission and City Council are contained within this *IMP* document. The intent is that this document not only fulfill the land use ordinance requirements set by the City and State but also reinforce and support a healthy relationship between Western and the surrounding neighborhoods and Bellingham community. The *IMP* provides a framework for the future development of campus to accommodate the projected growth to 12,500 full time equivalent (FTE) students, without compromising the character of campus or of the adjacent neighborhoods.

Life of the *Institutional Master Plan*

This *Institutional Master Plan* establishes a range of new building square footage that can be accommodated on campus. As described in more detail in the Land Use section to follow, this *IMP* establishes a maximum of four million square feet of building space (2,721,000 existing + 1,287,000 proposed). Western may seek city approval of *IMP* amendments or a new *IMP* at any time, but Western must get city approval of a new *IMP* if it proposes new construction that would exceed four million square feet of total building space on campus. This building square foot maximum includes new space, after deductions for demolished building space and it does not include parking garages. The City may, at the discretion of the Planning Commission or City Council, initiate an amendment or an update to the *IMP* at any time during the life of the plan, consistent with BMC 20.40.040.F.

Scope of the *Institutional Master Plan*

This document divides the Western campus and adjacent areas into a number of land use "Districts" (see map on page II-15). These districts fall into one of two categories:

1. Institutionally Zoned Areas –The *IMP* regulates development for institutionally zoned areas. Development projects must comply with the use limitations, development standards and other provisions contained in this plan.
2. Non-Institutionally Zoned Areas –Some districts (such as District 1) have zoning other than Institutional. Proposed development in these districts must comply with the underlying zoning. The use limitations, development standards and other provisions of this plan are advisory only, unless the property is rezoned to Institutional through a standard rezone process.

As indicated in the Background/History section, the Bellingham Municipal Code requires that the *IMP:*

- specify appropriate land uses,
- identify required circulation and utility improvements,
- set standards for building heights, setbacks, landscape and buffering, parking and signage.

The *IMP* is not intended to be a concise site plan with specific building footprints, but rather, a framework for the development of campus.

Expansion Beyond the Main Campus

This *Institutional Master Plan* applies to the main campus area and, in an advisory capacity, to some other areas as described in the Scope of the *IMP*. As explained in the Land Use section to follow, not all of Western's future space needs for 12,500 full time equivalent (FTE) students can be accommodated on the main campus. If the densities and development patterns outlined in this plan are followed, it may become necessary to locate some uses in areas beyond the current campus boundaries. An alternatives analysis process including an advisory committee will be used to advise the City and Western where campus expansion would be most appropriate. The committee should be staffed by Western and include an equal number of Western and non-university representatives. Neighborhood representatives will be appointed by the mayor, preferably from a list of candidates submitted by the Sehome, South Hill, Happy Valley and CBD neighborhood associations. The mayor should also appoint citizens who will lend a city-wide or "big picture" perspective to the process. Western representatives should be appointed by the university president. After an initial scoping process to determine the sites to be evaluated, the committee could be expanded to include representatives from other neighborhoods where campus expansion is being considered. Each site selected for

evaluation could be analyzed to determine appropriate institutional uses, densities, characteristics, development and performance standards designed to minimize impacts and compliment neighborhood character. The committee shall include the public in its process through use of public notices, press releases, workshops, public hearings, and/or other means to seek public participation.

The *Institutional Master Plan's* Overarching Principles and Themes

• Optimize Use of Land While Maintaining Character

The *Institutional Master Plan* (*IMP*) begins at the heart of the institution and its mission with development of the academic core (see Figure 1). Established as Western's highest intensity use, this area is a conceptual 10-minute walk zone situated deep within the campus. It is strongly pedestrian focused with the feeling of a "protected sanctuary" from off-campus influences. While the *IMP* increases the overall existing built density, the academic core absorbs much of that planned growth by in-fill and modernization to accommodate all of the University's 12,500 FTE's academic needs. It does this while retaining the key desirable characteristics that define Western as it is today. Those characteristics include: the continuity of pedestrian flow, the strong connections of the built and natural environment, the sense of a "community of learners," the visual portals to the mountains, water, and adjacent neighborhoods, and the breakdown of scale. The plan promotes a circulation system that supports pedestrian uses as the highest in priority, followed by bicycles, transit, and finally, single occupancy vehicles (SOVs). It also supports the University's desired characteristics and respects the concepts of growth management, alternative transportation, and sustainable development.

The adjacent city neighborhoods are buffered from this high intensity academic core by other university uses of lower intensity that are more compatible to the neighborhood's size and character (see Figure 2). These other use buffers are predominately residential or student activity areas with a few mixed uses. The *IMP* accommodates all of the growth needed in the academic areas for the 12,500 FTE students, however, it cannot accommodate the

Figure 1

Figure 2

programmatic needs of all of the other areas while maintaining the campus' key desirable characteristics. It must grow beyond its existing contiguous boundaries. One additional regulation size field and a percentage of non-academic needs must be accommodated beyond the existing campus boundaries. The determination of where this additional need is to be accommodated isn't addressed in this document. It awaits further analysis and investigation of options.

- Maximize Alternative Transportation While Accommodating Parking

In order to maximize the available land on-campus for university uses and minimize the impacts to the adjacent neighborhoods, the *IMP* strives to present an aggressive approach regarding alternative transportation and university single occupancy vehicle (SOV) parking needs (see Figure 3). This approach is consistent with the University's Transportation Management Program. The *IMP* places priority on pedestrian circulation, followed by bicycle circulation and parking, transit and shuttle circulation and destinations, carpools and vanpools, and lastly, SOV circulation and parking. While emergency vehicles have access to all parts of the campus, SOVs are primarily relegated to the periphery of campus directly adjacent to the primary arrival path. Upon arrival to campus, SOVs are to park. Parking is accommodated through development of structures and landscaped/paved lots dispersed along the main arrival path. The structures reduce the amount of land needed for parking, thereby increasing the opportunity for other uses. Transit and shuttles are allowed to penetrate further into the campus than SOVs. The High Street corridor is maintained as a major transit hub. A second hub on the south edge of the academic core will be developed.

Figure 3

Bicycles have access to all but the most densely populated pedestrian areas in the academic core. Bicycle pathways should be improved and linked to city bicycle paths. Additional bicycle storage should be created to accommodate bicycle commuting.

Pedestrian circulation is given the highest priority to support the plan's principles of honoring the central pedestrian routes and spaces, emphasizing pedestrian activity, and maintaining the sense of a village. It also supports sustainable development concepts by reducing use of SOVs and decreasing the need for impervious surface area. Finally, pedestrian pathways with appropriate improvements will be developed on-campus with improved links to city and neighborhood walking corridors.

- Optimize Transitions, Blending, and Buffering to Sustain Adjacent Neighborhoods

The *IMP* reduces potential impacts to adjacent neighborhoods through transitions, blending, and buffering guidelines for development. Transitions, blending, and buffering are achieved through adjacent compatible university uses, structures that are consistent with the adjacent scale, density, architectural characteristics, and landscaping of the neighborhoods, and setbacks that also step-back in height recognizing adjacent densities and preserving, where possible, solar orientation.

- Optimize Communication between Western, the City and Adjacent Neighborhood Associations

The effectiveness of the *IMP* relies on a mechanism to exchange ideas and concerns between representatives of Western, the City and the adjacent neighborhood associations.

The *IMP* provides an effective mechanism whereby a citizen and/or student can be properly informed of, and able to address, all phases of proposed projects including planning, associated studies, construction, and long term effects after completion.

Toward this end, the University shall appoint a Western representative to serve as the official contact person for the Happy Valley, Sehome, and South Hill Neighborhood Associations. This representative will participate in neighborhood association meetings and activities, and serve to cut through "red tape" to communicate neighborhood concerns to the University and expedite responses from Western.

Land Use and Open Space

Land Use and Open Space Principles/Patterns to be Reinforced

Three guiding principles are carried forward from the *1997 Western Washington University Draft Comprehensive Master Plan*. These principles are preservation, enhancement, and accommodation. These principles, along with the character patterns listed below, are the primary qualitative elements used to evaluate land use and open space.

- Preservation
  - Maintain the central part of campus as the "academic core."
  - Maintain the north part of campus as residential in character.
  - Maintain close natural/people and built relationships without having structures which overpower the natural surroundings.
  - Continue to provide settings for campus art.
  - Maintain "visual portals" that link campus with natural surroundings and adjacent neighborhoods.
  - Continue tradition of incorporating significant natural open spaces.
- Enhancement
  - Promote existing intimacy and breakdown of scale that creates a sense of a "village/community."
  - Facilitate ease of wayfinding and promote a sense of edges to maintain campus as a "protected sanctuary."
  - Site buildings so that they contribute to and define adjacent spaces/plazas.
  - Orient plazas and open space to capture the sun.
  - Align buildings along key organizing lines.
  - Provide multiple "front doors" to campus.

- Accommodation
  - Provide compatible transitions with community edges and appropriate neighborhood connections.
  - Accommodate future academic growth predominantly within the 10-minute walk zone adjacent to Parks Hall.
  - Provide clear building "front doors" and presence on public space.

Land Use District Definitions

For planning purposes, the IMPAC divided the campus into a number of land use districts. Each district was then given a classification based on the existing land use and proposed future use. Next, goals and development recommendations related to the character and types of anticipated development were created for each district. The six land use district classifications are defined below.

1. **Academic** –classrooms, laboratories, computer labs, faculty offices, college and departmental offices, centers, institutes, libraries, research areas, food services, parking facilities, and related uses.
2. **Residential** –residence halls, dining halls, apartments, University Residences and Dining administrative functions, conferences, resident fitness centers, resident computer centers, outdoor recreation areas, parking facilities, and related uses.
3. **Student Activities** –programmed outdoor sport activity areas, playfields, tennis courts, running tracks, campus recreation facilities, Associated Student functions, student union functions, administrative offices such as admissions, counseling, registrar, career services and general student support, parking facilities, and related uses.
4. **Administrative/Support** –administrative offices, utility systems support functions, Physical Plant, recycling, copying services, business functions, archival functions, environmental health and safety functions, parking facilities, and related uses.
5. **Open Space** –educational or recreational functions, native growth protection areas, plazas, art (including outdoor sculpture), landscaping, walkways, kiosks, and related uses.
6. **Mixed Use** –any combination of the above uses.

Accessory Uses –Western is allowed to establish accessory uses that are customarily subordinate to the primary use of a building. Examples of accessory uses include a small coffee shop located in an office building or a computer lab located in a residence hall.

Building Across Boundary Lines –The existence of district boundary lines does not preclude the construction of a building across boundary lines so long as: 1) not more than 49% of the structure will be in a district in which the proposed use is not permitted; and 2) on property abutting or across the right-of-way from a non-institutional land use district, the non-permitted use shall not exceed 15% of the total district area.

Institutional Project Review Process

This *IMP* regulates development in the land use districts that are designated "Institutional" in the applicable neighborhood plan. (See Land Use Districts map, page II-15.) Projects proposed in these districts must be consistent with the review process, use limitations, development standards, and performance standards contained herein.

Individual projects in these areas will be reviewed by the City using either the planned development process for significant projects or the regular building/land use permit process for non-significant projects.

Significant Projects

Examples of projects the City will consider significant include new buildings, parking lots or parking structures, and new major and secondary vehicle routes. A project should be deemed significant if both of the following apply:

1. The project is located in a land use district on or near the perimeter of campus, including districts 3, 4, 6, 8, 10, 12, 13, 16, 17, 18, 19, 23, and
2. The project is not "exempt" from State Environmental Policy Act (SEPA) review under BMC 16.04.180 as amended.

Projects deemed significant shall use the planned development process contained in BMC 20.40.060 as now or hereafter amended. This process includes a neighborhood meeting and the option for a public meeting conducted by the Planning Commission. Significant projects will be reviewed for consistency with this *IMP* and with other applicable development regulations.

Non-Significant Projects

Proposed projects in Institutionally designated areas that do not meet the above criteria shall be deemed non-significant. Examples of non-significant projects include: new buildings in the core districts of the campus (districts 5, 7, 9, 11, 14, 15) interior improvement or renovation of existing buildings, exterior renovation and minor additions to existing buildings, minor roadway improvements, utility improvements or renovations, safety improvements, landscaping, signage, off-street pedestrian or bicycle paths, installation of art sculptures. Non-significant projects shall be reviewed for consistency with this *IMP* and with applicable development regulations using the standard building or land use permit process rather than the planned development process.

Project Review Process in Non-Institutional Zoning Districts

Several land use districts in this *IMP* have a non-institutional designation in their applicable neighborhood plan. Development in these districts must comply with the underlying zoning, regardless of ownership. The provisions of this plan are advisory only in these districts unless and until the zoning is changed to Institutional through a rezone process.

Projects in areas not zoned Institutional shall follow the review process established in the Land Use Development Ordinance for the underlying zone. For example, a proposed project in a Residential-Multi zone shall follow the application and review process in BMC 20.32 as amended. Projects in non-Institutional zoned areas shall be reviewed for compatibility with this *IMP*, and for compliance with neighborhood plan provisions and other applicable City of Bellingham development regulations.

Determination of Space Needs

The Institutional Master Plan Advisory Committee (IMPAC) went through an extensive process to determine current and future space needs for academic and administrative/support uses, residential units and other facilities. Existing building space by primary land use category was calculated. Projected building space needs were based on a projected student enrollment of 12,500 full-time equivalent (FTE) students. Deductions were made based upon increased classroom space utilization and e-learning. In addition, building space needs reflected the University's current compaction, and projected program needs. By deducting the existing square footage from the adjusted need projection figure, an IMPAC approved range of space needed to fulfill the future 12,500 FTE enrollment was established.

The methodology is explained in full in the Appendix. A summary of the conclusions is shown below.

FINAL IMPAC RECOMMENDED BUILDING SPACE PROJECTION RANGE (1/25/00)

	Existing Square Feet	Approved Range of Additional Need to Accommodate 12,500 FTE			Adjusted Total Need Projection Approved Range (+/-5%)		
		Low	Medium	High	Low	Medium	High
Academic	1,279,000	737,000	843,000	949,000	2,016,000	2,122,000	2,228,000
Residential	977,000	206,000	268,000	331,000	1,183,000	1,245,000	1,308,000
Student Support	198,000	170,000	189,000	209,000	368,000	387,000	407,000
University Support	159,000	137,000	153,000	168,000	295,000	311,000	326,000
Administration	108,000	91,000	102,000	112,000	199,000	210,000	220,000
TOTAL*	**2,721,000**	**1,341,000**	**1,555,000**	**1,769,000**	**4,062,000**	**4,276,000**	**4,489,000**

Exterior Programmatic Needs Include:

12 Tennis Courts	86,000
1 Hammer Throw Field	31,000
1 Fastpitch Field	152,000
3 Regulation Soccer Fields	234,000
1 All-Weather Track & Field	136,000
2 Regulation Football Fields	108,000
	747,000

Numbers are rounded to nearest 1,000

Once the demonstrated need was established, staff and the IMPAC determined what uses could be accommodated within the existing boundaries of campus and which uses could be shifted beyond the existing campus boundaries. Existing land use, density and characteristics in each district were analyzed to determine how much infill could be accommodated within campus boundaries without jeopardizing those overall desirable characteristics and character patterns that make Western unique.

A summary of the conclusions is shown on the following page.

ACCOMMODATION ON CAMPUS

Building Square Footage

Districts	Existing GSF	Proposed GSF			Difference		
		Low	Medium	High	Low	Medium	High
1	-	-	-	-	-	-	-
2	308,000	308,000	308,000	308,000	-	-	-
3	134,000	164,000	164,000	164,000	30,000	30,000	30,000
4	83,000	138,000	138,000	138,000	55,000	55,000	55,000
5	10,000	-	-	-	(10,000)	(10,000)	(10,000)
6	145,000	145,000	145,000	145,000	-	-	-
7	518,000	518,000	518,000	518,000	-	-	-
8	-	-	-	-	-	-	-
9	232,000	333,000	333,000	333,000	101,000	101,000	101,000
10	262,000	347,000	364,000	396,000	85,000	102,000	134,000
11	533,000	563,000	563,000	563,000	30,000	30,000	30,000
12	-	-	-	-	-	-	-
13	10,000	100,000	110,000	120,000	90,000	100,000	110,000
14	171,000	196,000	201,000	210,000	25,000	30,000	39,000
15	-	-	-	-	-	-	-
16	101,000	101,000	101,000	101,000	-	-	-
17	56,000	56,000	56,000	56,000	-	-	-
18	-	-	-	-	-	-	-
19	34,000	34,000	34,000	34,000	-	-	-
20	121,000	121,000	121,000	121,000	-	-	-
21	3,000	3,000	3,000	3,000	-	-	-
22		540,000	646,000	752,000	540,000	646,000	752,000
23		36,000	41,000	46,000	36,000	41,000	46,000
	2,721,000	3,703,000	3,846,000	4,008,000	982,000	1,125,000	1,287,000

Proposed Parking Structures:

North, District 1	270,000	Gross square feet
Viking Union, District 2/3	98,000	
South Campus, District 13	195,000	
Buchanan Towers, District 16	98,000	
Highland, District 9/10	98,000	
	759,000	Total gross square feet

Numbers are rounded to nearest 1,000

The calculations led to the conclusion that the following demonstrated needs will require areas beyond the existing campus boundaries. The determination of where this additional need is to be accommodated is not addressed in this document but awaits further analysis and investigation of options. See the "Expansion Beyond the Main Campus" discussion in the Introduction Section for more details on the campus expansion alternatives analysis process.

Need Accommodated within IMP Boundaries

	Low	Medium	High
Academic	2,016,000	2,122,000	2,228,000
Residential	1,087,000	1,109,000	1,150,000
Student Support	318,000	328,000	338,000
University Support	164,000	164,000	164,000
Administration	118,000	123,000	128,000
TOTAL	3,703,000	3,846,000	4,008,000

Need Accommodated within IMP Boundaries plus 333 32nd Street

	Low	Medium	High
Academic	2,016,000	2,122,000	2,228,000
Residential	1,087,000	1,109,000	1,150,000
Student Support	318,000	328,000	338,000
University Support	194,000	194,000	194,000
Administration	118,000	123,000	128,000
TOTAL	3,733,000	3,876,000	4,038,000

Additional Square Footage Needed Beyond the WWU Neighborhood

	Low	Medium	High
Academic	-	-	-
Residential	96,000	136,000	158,000
Student Support	50,000	59,000	69,000
University Support	101,000	117,000	132,000
Administration	81,000	87,000	92,000
TOTAL	328,000	399,000	451,000

Exterior Programmatic Unmet Need

1 field	110,000

Numbers are rounded to nearest 1,000

Land Area Required Under Proposed Floor Area Ratio (FAR):

Category	Building Area (sf)	FAR Range	Land Area Required (sf)
Residential	136,000	0.55 - 0.65	209,230 - 247,270
Student Support	59,000	0.5 - 1.45	40,690 - 118,000
University Support	117,000	0.1 - 0.5	234,000 - 1,117,000
Administration	87,000	0.1 - 0.5	174,000 - 870,000
TOTAL			657,920 - 2,405,270
Estimated Off-Campus Acres			**15 - 55**
Playfield Acres			3
Total Estimated Off-Campus Acres Required			**18 - 58**

Land Area Required Under Proposed Building Area Ratio (BAR):

Category	Building Area (sf)	Footprint Assume 3 Stories (sf)	BAR Range	Land Area Required (sf)
Residential	136,000	45,330	0.19 - 0.24	188,880 - 238,580
Student Support	59,000	19,670	0.4 - 0.5	39,340 - 49,180
University Support	117,000	39,000	0.05 - 0.15	260,000 - 780,000
Administration	87,000	29,000	0.05 - 0.15	193,330 - 580,000
TOTAL				681,550 - 1,647,760
Estimated Off-Campus Acres				**16 - 38**
Playfield Acres				3
Total Estimated Off-Campus Acres Required				**19 - 41**

Determination of Space Needs Summary

- This *Institutional Master Plan* estimates that an additional 1.55 million square feet of building space, 760,000 square feet of parking structure space, and 747,000 square feet of athletic field space will be needed during the life of this plan. 55% of the additional space is needed to accommodate the increased enrollment and 45% is needed to adequately accommodate the current enrollment.
- Of the total space need, 1.125 million square feet of building space and 637,000 of athletic field space, and all of the structured parking space is being accommodated on the existing campus under this plan. (See Accommodation on Campus table on page II-10.)
- The "unmet need" that cannot be accommodated on the existing campus under this plan is estimated to be 400,000 square feet of building space and 1 athletic field. (See Estimated Off-Campus Area Requirements table on page II-11.) It is estimated that the land area required to satisfy the unmet need ranges from 20 to 60 acres, depending on the density. (See Additional Square Footage table on page 12).
- This *IMP* locates 75% of the additional building space and 85% of the additional athletic field space needed to accommodate 12,500 FTE on the existing campus.
- 90% of the TOTAL building space (existing plus proposed) needed to accommodate 12,500 FTE will be located on the existing campus under this IMP.

IMP Districts

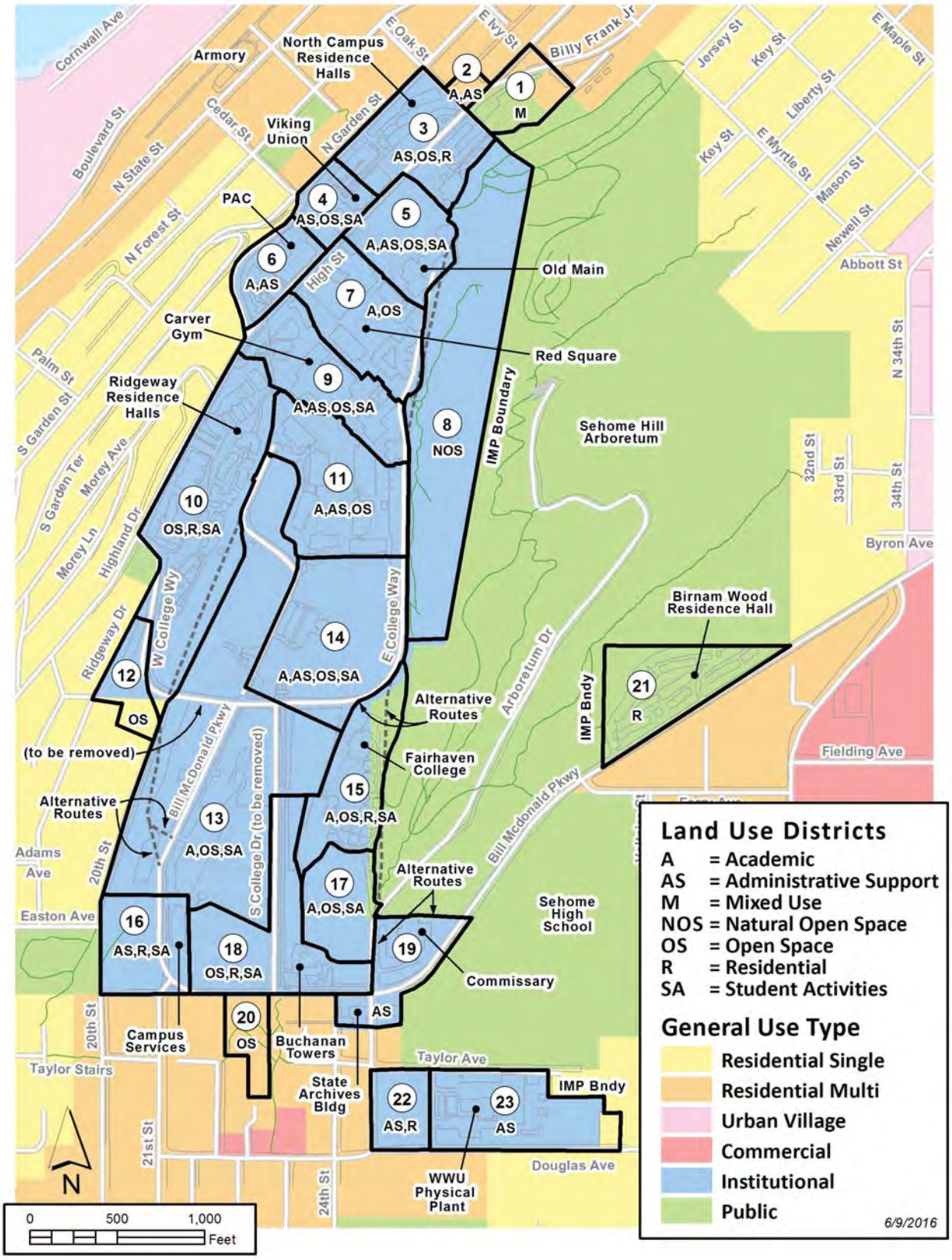
The following districts are zoned Institutional. The use limitations, development standards and other provisions, and the project review process established in this *IMP* govern development in these districts:

District 3	District 4	District 5
District 6	District 7	District 8
District 9	District 10	District 11
District 12	District 13	District 14
District 15	District 16	District 17
District 18	District 19	District 23[1]

The following districts currently have a zoning designation other than Institutional. The underlying zoning governs development of the property and the provisions of this plan are advisory until and unless the zoning is changed to Institutional through a standard rezone process:

District 1	District 2	District 20
District 21	District 22	

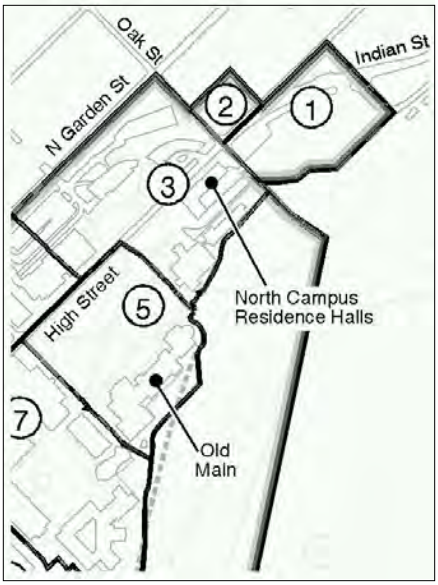
[1.] The zoning for District 23 was changed to Institutional with the adoption of this plan as recommended in the 2001 update to the Happy Valley Neighborhood Plan.



[Amended by Ord. 2010-12-073; Ord. 2016-07-020 § 1 (Exh. A)]

District 1

Location: North Campus Parking Lots



Adjacent City Zoning:
Residential-Multi (Sehome Neighborhood)

2001 Primary Land Uses

- Parking
- Open space

City Land Use Designations:

- Public and Residential Multi, Multiple - Areas 2 and 10, Sehome Neighborhood Plan

***Institutional Master Plan* Land Use Classification Recommendation:**

- Mixed Use [1]

[1.] A rezone to Institutional for District 1 should be evaluated when the Sehome Neighborhood Plan is updated. Until then, the mixed-use classification is a recommendation only and the residential-multi zoning governs use of the property. New non-residential and conditional uses would be allowed only after the district is rezoned and a site plan/planned contract is approved.

Character Goals and Development Recommendations:

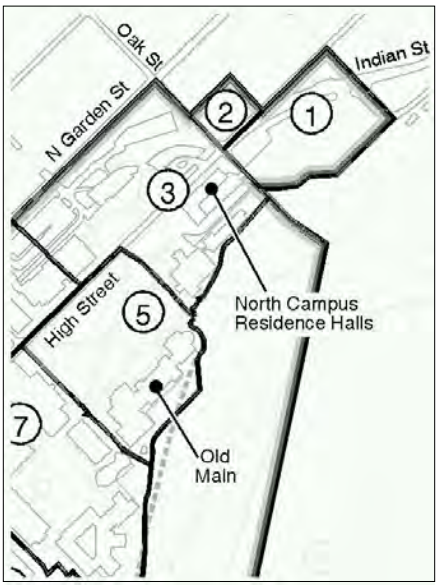
- Further develop a more welcoming and identifiable pedestrian entrance to campus.
- Develop as a transitional zone between campus and neighborhood.
- Minimize impacts on adjacent neighborhood by providing landscaping as visual buffers.

Rationale:

- Relocation of administrative functions from the core of campus potentially frees up space for academic functions in the core of campus.
- Provides parking facilities to serve north campus destinations.
- Maintains parking on periphery of campus.
- Potential use as housing compatible with adjacent "residential-multi" zoning in Sehome Neighborhood.

District 2

Location: North End (Alumni House Site)



Adjacent City Zoning:
Residential-Multi (Sehome Neigborhood)

2001 Primary Land Uses:

- Administrative/support (Alumni House)
- Open space (vacant lot just south of the Alumni House and adjacent to Oak Street)

City Land Use Designation:

- Residential Multi (Area 2, Sehome Neighborhood Plan)

***Institutional Master Plan* Land Use Classification Recommendations:**

- Academic [1]
- Administrative Support [1]

[1.] A rezone to Institutional should be evaluated when the Sehome Neighborhood Plan is updated. Until then, a conditional use permit and the residential-multi zoning govern use of the property. Additional academic or administrative support uses would be allowed in this district only after it is rezoned and a site plan/planned contract is approved.

Alumni House

Character Goals and Development Recommendations:

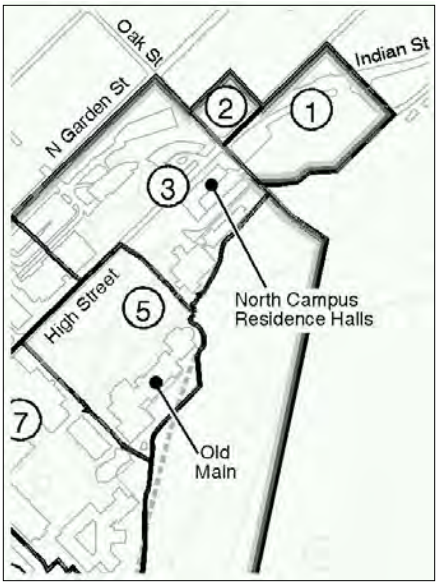
- Further develop north end to be more inviting and identifiable as entrance to campus.
- Maintain visual portals towards Bellingham Bay and Sehome Arboretum.
- Minimize impacts and provide a "compatible transition" with the adjacent Sehome neighborhood.
- Consider a rezone to Institutional when the Sehome Neighborhood Plan is updated to provide opportunities for administrative/support infill.

Rationale:

- Provides opportunities to improve district's effectiveness as a buffer between campus and the adjacent Sehome neighborhood, and provides a "compatible transition" with the adjacent neighborhood.
- Site is underdeveloped and has potential for infill with administrative and university support functions or "stand alone" academic functions, such as institutes, continuing education, etc.
- Frees space for academic uses by relocating administrative/support functions from core of campus.

District 3

Location: North Campus, including Mathes Hall, Nash Hall, Viking Commons, Higginson Hall, Edens North and Edens Hall



Adjacent City Zoning:
Residential-Multi (Sehome Neighborhood)

2001 Primary Land Uses:

- Student residences (Mathes Hall, Nash Hall, Higginson Hall, Edens North and Edens Hall)
- Dining facilities (Viking Commons)
- Multiple sculpture sites
- Parking

City Land Use Designation:

- Institutional (Area 1, WWU Neighborhood Plan)

***Institutional Master Plan* Land Use Classifications:**

- Residential
- Administrative/support
- Open space

Edens Hall

Mathes and Nash Hall

Higginson Hall

Stairway entrance between Viking Commons and Mathes Hall

Character Goals and Development Recommendations:

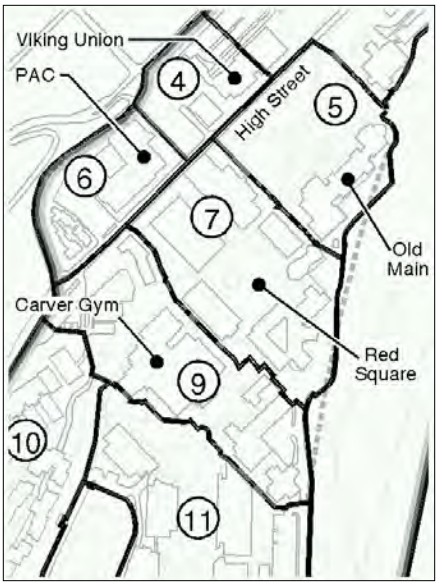
- Improve relationship of residential district with High Street by developing pedestrian/transit mall and limiting single occupancy vehicle circulation consistent with relevant City ordinances and regulations regarding the use of High Street.
- Promote feeling of residential "community" by maintaining residential use and services located in nearby District 5 (Old Main Quad Mixed Use area) and District 4 (North End Student Activities area).
- Preserve views of Bellingham Bay.
- Develop west pedestrian entry off Garden Street.

Rationale:

- Residential development allows district to continue to serve as transitional area between the academic campus core and the adjacent Sehome Hill neighborhood to the west.
- District is fully developed for residential use.

District 4:

Location: Associated Student Bookstore, Viking Union, Viking Union Addition, Virginia Wright Plaza, and portion of High Street



Adjacent City Zoning:
Residential-Multi (Sehome Neighborhood)

2001 Primary Land Uses:

- Student activities (Associated Student Bookstore, Viking Union and Viking Union Addition)
- Open space (Virginia Wright Plaza)
- Sculpture site
- Parking (pedestrian entrance to campus off Garden Street, transit access off Garden Street, service deliveries, etc.)
- High Street: From Oak to Highland Drive, High Street "closed to vehicular traffic between 7:00 am and 9:00 pm daily, during regular and summer academic quarters and for the five days preceeding such sessions. Open to vehicles Saturdays and Sundays and State holidays. City transit, emergency vehicles, University maintenance and support vehicles and bicycles not subject to vehicle prohibition. Open to vehicular traffic during severe weather conditions at discretion of Public Works director."*

*City of Bellingham Municipal Ordinance No. 8527

City Land Use Designation:

- Institutional (Area 1, WWU Neighborhood Plan)

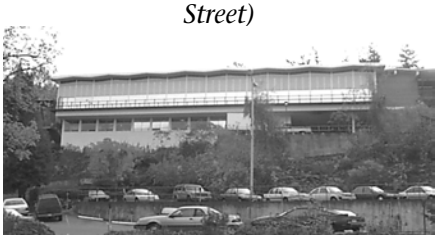
***Institutional Master Plan* Land Use Classifications:**

- Student activities
- Administrative/support (High Street transit center)
- Open space

Viking Union (High Street)

Bookstore (High Street)

Viking Union Addition (Garden Street)



Viking Union parking lot (Garden Street)

Character Goals and Development Recommendations:

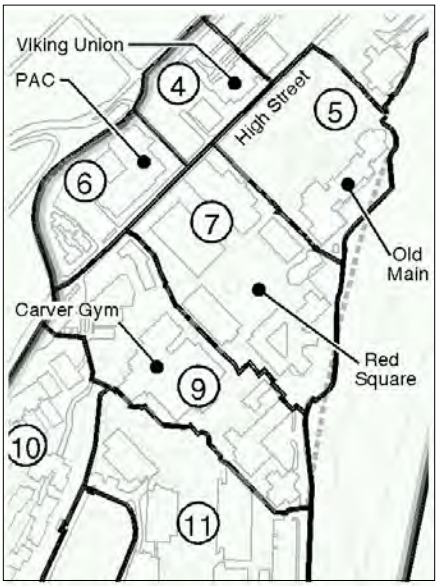
- Enlarge and enhance student center including new parking facility.
- Provide visual buffers for adjacent South Hill neighborhood.
- Consider shadow effects on adjacent residential areas and minimize further impact.
- Preserve views of Bellingham Bay from Viking Union and Virginia Wright Plaza.
- Improve service vehicle circulation below Viking Union/Commons.
- Improve pedestrian entrance to the Viking Union Addition from Garden Street.
- Develop High Street into pedestrian/transit mall and limit single occupancy vehicle circulation consistent with relevant City ordinances and regulations regarding the use of High Street.
- Support High Street as one of the campus' primary gathering places, activity centers, and commercial areas with a "main street" feel.

Rationale:

- Current use of district as a center of student activities will be strengthened with the Viking Union renovation project.
- Maintains parking on the periphery of campus.
- Renovation of Viking Union Complex should provide a more compatible visual interface with the adjacent South Hill neighborhood, as well as a more welcoming entrance to campus off Garden Street.
- The development of the High Street pedestrian/transit mall addresses issues of safety and accessibility.

District 5

Location: Old Main Quad and Old Main



Adjacent City Zoning:
None

2001 Primary Land Uses:

- Open space, pedestrian circulation, multiple sculpture sites, gathering area/special events, and informal recreation (Old Main Quad)
- Academic
- Parking
- Administrative/support
- Student activities
- Open space

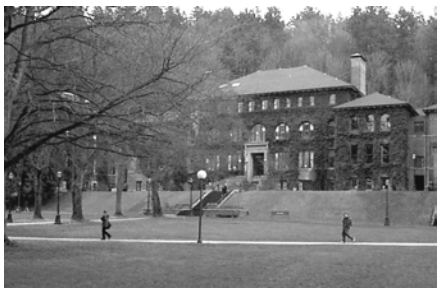
City Land Use Designation:

- Institutional (Area 1, WWU Neighborhood Plan)

***Institutional Master Plan* Land Use Classifications:**

- Academic
- Administrative/support
- Student activities
- Open space

Memory Lane



Old Main (west elevation)

Old Main (partial east elevation)

High Street in front of Old Main

Character Goals and Development Recommendations:

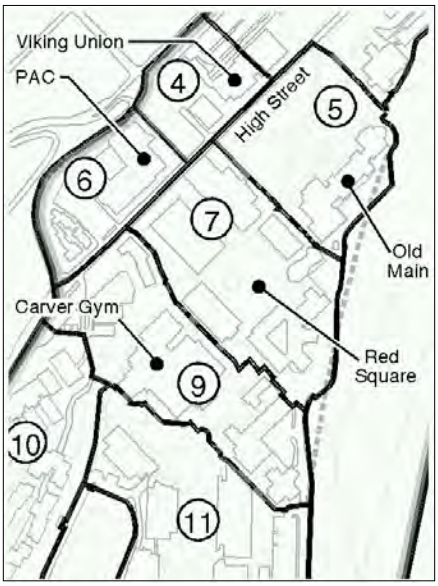
- Preserve and enhance all views of quad.
- Preserve and enhance quad and all features of historical significance: Memory Lane, Carriage Walk, Bird Sanctuary, Mt. Baker Avalanche Memorial.
- Soften edges formed by High Street by developing pedestrian/transit mall.
- Limit parking behind Old Main.
- Enhance and improve the area east of Old Main.
- Improve the backside of Old Main.
- Maintain Old Main as multi-use building.

Rationale:

- Old Main Quad and the historical character and significance of the buildings that form its edge are to be preserved per the *January 1997 Draft Comprehensive Master Plan*.
- Maintains contiguous academic core and falls within the 10-minute walk radius.
- District is fully developed for multi-use.

District 6

Location: Canada House, Performing Arts Center and High Street Hall



Adjacent City Zoning:
Residential-Single (South Hill Neighborhood)

2001 Primary Land Uses:

- Academic (Canada House, Performing Arts Center)
- Parking
- Administrative/support (High Street Hall)

City Land Use Designation:

- Institutional (Area 1, WWU Neighborhood Plan)

***Institutional Master Plan* Land Use Classifications:**

- Academic
- Administrative/support

East elevation of Canada House

Southerly view from High Street

East elevation of PAC and Canada House beyond

High Street

Character Goals and Development Recommendations:

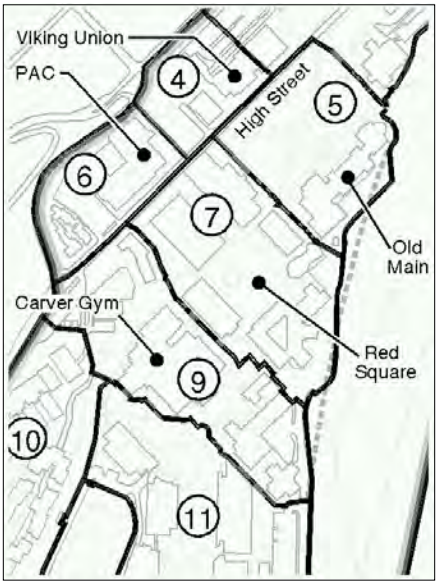
- Preserve panoramic views of Bellingham Bay from Performing Arts Center.
- Develop High Street into a pedestrian/transit mall consistent with adopted city ordninances; improve and enhance its function and relationship to all adjacent districts.
- Develop site as an academic area and vehicle turnaround as part of the High Street pedestrian/transit mall. Provide drop-off area.

Rationale:

- Makes better use of real estate already within the academic core and 10-minute walk zone.
- Redevelopment of this area provides opportunities to improve transition to the adjacent South Hill neighborhood.

District 7

Location: Red Square and Adjacent Buildings (Bond Hall, Fraser Hall, Humanities, Miller Hall, and Wilson Library/Haggard Hall)



Adjacent City Zoning:
None

2001 Primary Land Uses:

- Open space, recreation, gathering spot, assembly, and multiple sculpture sites (Red Square)
- Academic (Bond Hall, Fraser Hall, Humanities, Miller Hall, and Wilson Library/Haggard Hall)
- Parking

City Land Use Designation:

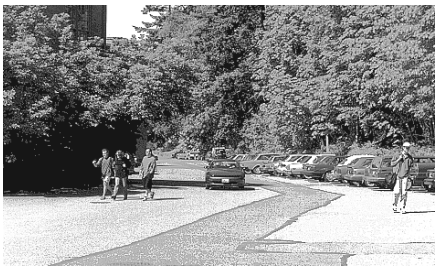
- Institutional (Area 1, WWU Neighborhood Plan)

***Institutional Master Plan* Land Use Classifications:**

- Academic
- Open space

Fisher Fountain in Red Square

Use of brick in Red Square



East College Way behind Miller Hall

East College Way behind Miller Hall

Character Goals and Development Recommendations:

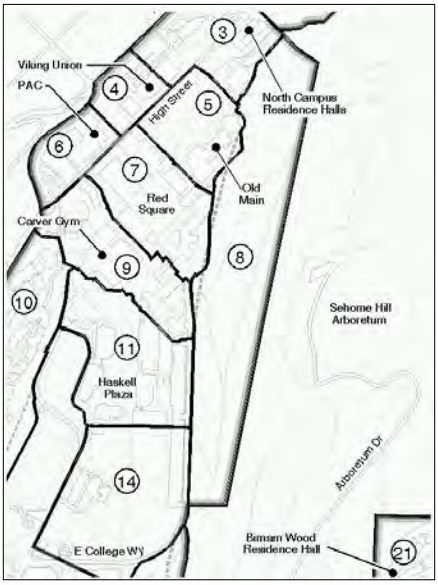
- Preserve views of Bellingham Bay from Wilson Library/Haggard Hall.
- Maintain use of Red Square as major gathering spot and open space on campus.

Rationale:

- Maintains contiguous academic core and falls within the 10-minute walk radius.
- Preservation of existing open space.
- District is fully developed for academic use.

District 8

Location: Western-Owned Portion of Sehome Arboretum



Adjacent City Zoning:
Public (City-owned portion of Sehome Arboretum)

2001 Primary Land Uses:

- Academic
- Student activities
- Preserved open space

City Land Use Designation:

- Institutional (Area 1, WWU Neighborhood Plan)

***Institutional Master Plan* Land Use Classification:**

- Natural open space [1]

[1.] The *Institutional Master Plan* designates Sehome Arboretum (District 8) as natural open space that is used for both active and passive education and recreation. The Arboretum is managed under an interlocal agreement between the City and Western. The purpose of the agreement is to preserve and maintain the Arboretum in its natural state to the greatest extent possible. The Arboretum provides educational, aesthetic, recreation, and research opportunities for both the public and the campus community.

Entrance to Sehome Arboretum

Sehome Arboretum

Character Goals and Development Recommendations:

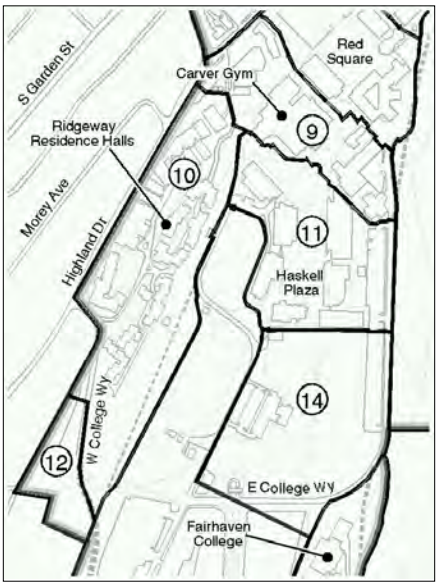
- Continue academic and student activities/ recreational functions. Development is limited to academic, informational, or recreational purposes and requires review and approval by the Arboretum Board.
- Continue to maintain and preserve under joint agreement with City.
- Enhance circulation routes.
- Maintain visual portals that link campus with Arboretum.

Rationale:

- Recognizes Sehome Arboretum as an invaluable resource for academic and recreational functions for both the campus and Bellingham communities.
- Preserves open space.

District 9

Location: Parking Area South of College Hall, Art Annex, Carver Gym, College Hall, Fine Arts, and Steam Plant



Adjacent City Zoning:
Residential-Single (South Hill Neighborhood)

2001 Primary Land Uses:

- Academic (Art Annex, Carver Gym, College Hall, Fine Arts)
- Student activities (Carver Gym)
- Administrative/support (Steam Plant)
- Parking

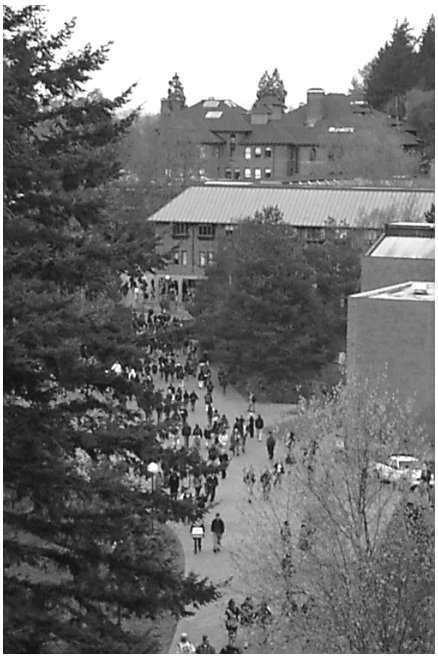
City Land Use Designation:

- Institutional (Area 1, WWU Neighborhood Plan)

***Institutional Master Plan* Land Use Classifications:**

- Academic
- Student activities
- Administrative/support
- Open space

College Hall



Major intersection between east/west and south/north pedestrian routes

Parking area behind Fine Arts

Character Goals and Development Recommendations:

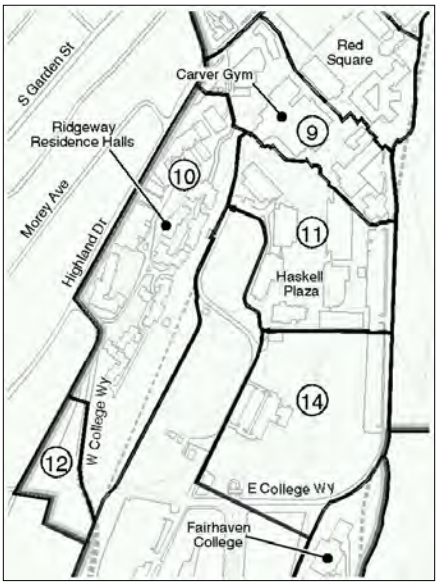
- Add academic use to the south side of Carver Gym.
- Stronger enforcement of Dismount Zone.
- Increase district area to the south of College Hall to include potential site for additional academic infill.
- Increase academic space.
- Develop parking facility south of College Hall/ north of Highland Hall.
- Limit vehicular traffic along East College Way by designating it as a "limited access" road.

Rationale:

- Increases academic capacity without adversely affecting existing character of district.
- Maintains contiguous academic zone and falls within the 10-minute walk zone.
- Stricter enforcement of Dismount Zone would help mitigate conflicts between pedestrians, bicyclists, and vehicles.
- Steam Plant serves infrastructure needs; function cannot change.
- Maintains parking on the periphery of campus and provides parking facilities to serve north and central campus destinations.

District 10

Location: Aerobic Center, Highland Hall, Ridgeway Commons, Ridgeway Residential Halls, and Track Bunker



Adjacent City Zoning: Residential-Single (South Hill Neighborhood), Public (water towers at Highland and West College Way)

2001 Primary Land Uses:

- Student residences (Ridgeway Alpha, Delta, Sigma, Omega, Beta, Gamma, Kappa, and Highland Hall)
- Student dining facilities, Fitness Center, computer lab (Ridgeway Commons)
- Academic/recreation (Aerobic Center)
- Student activities storage (Track Bunker)
- Parking

City Land Use Designation:

- Institutional (Area 1, WWU Neighborhood Plan)

***Institutional Master Plan* Land Use Classifications:**

- Residential
- Student activities
- Open space

Ridgeway Residential Complex

Ridgeway Housing

Pedestrian trails in Ridgeway

Highland Hall

Character Goals and Development Recommendations:

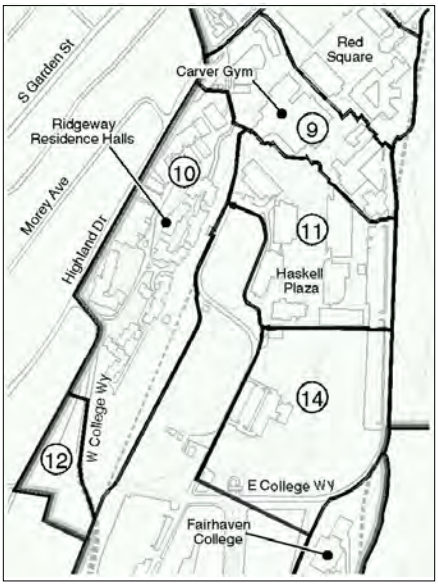
- Increase density of site with additional student housing/expansion of the Ridgeway Residence Hall complex.
- Reconfigure West College Way into "connector road" to improve safety and circulation as shown on the Proposed Vehicular Access Plan map in the Circulation Section.

Rationale:

- Expanded housing both north and south in the Ridgeway area would be close to the campus core.
- Wooded site would provide a buffer between residential housing and the adjoining athletic and academic areas of campus.
- Use of the steep site on the south end for housing would allow additional open space to be preserved for other uses.
- New housing could be developed to complement the existing Ridgeway buildings both in character and relationship to the existing structures and natural surroundings.
- Residential use provides buffer between adjacent South Hill neighborhood and campus core.

District 11

Location: Haskell Plaza (Science, Mathematics and Technology Education, Chemistry, Biology, Parks Hall, Ross Engineering Technology, Arntzen Hall, Environmental Studies)



Adjacent City Zoning: None

2001 Primary Land Uses:

- Academic (Arntzen Hall and Greenhouse; Biology; Chemistry; Environmental Studies; Parks Hall; Science, Mathematics and Technology Education; and Ross Engineering Technology)
- Open space, sculpture sites, circulation (Haskell Plaza and Science, Mathematics and Technology Education lawn area)
- Parking

City Land Use Designation:

- Institutional (Area 1, WWU Neighborhood Plan)

***Institutional Master Plan* Land Use Classifications:**

- Academic
- Administrative/support
- Open space

Haskell Plaza

Hamrol's "Log Ramps"

Parking lots behind Ross Engineering Technology

Parking lots along East College Way

Character Goals and Development Recommendations:

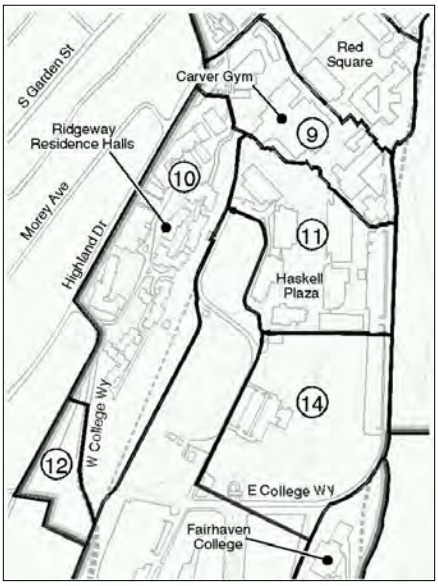
- Maintain Haskell Plaza as open space.
- Add fourth floor to Ross Engineering Technology Building as it was originally designed.
- Improve views to the west along East College Drive.
- Limit vehicular traffic along East College Drive by designating it as a "limited access road."

Rationale:

- Follows linear progression of campus core and provides appropriately scaled open space.
- Increases academic density without adversely affecting district character.
- Maintains contiguous academic core and falls within the 10-minute walk radius.

District 12

Location: Area West and South of West College Way



Adjacent City Zoning:
Residential-Single (South Hill Neighborhood)

2001 Primary Land Uses:

- Single-family residences
- Open space

City Land Use Designation:

- Institutional (Area 1, WWU Neighborhood Plan)
- Residential Single [1] (Area 4C, South Hill Neighborhood Plan)

***Institutional Master Plan* Land Use Classification Recommendation:**

- Open space

[1.] The underlying single family zoning governs use of the southern portion of this property. Institutional uses are not currently allowed. A rezone to Institutional for this property should be evaluated in the update to the South Hill Neighborhood Plan.

West College Way

West College Way

Character Goals and Development Recommendations:

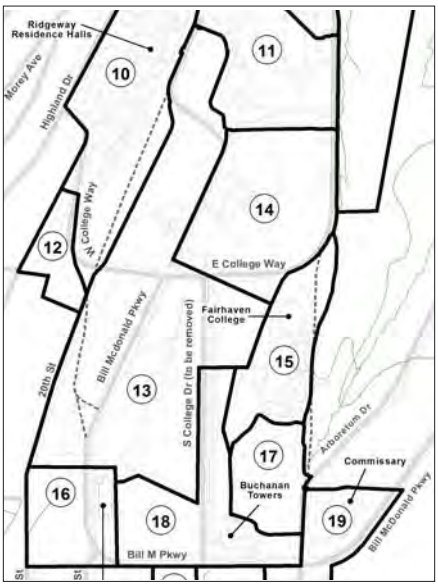
- Improve circulation flow and address safety concerns regarding steep grade of West College Way and access to and from parking lot 20R.
- Remove two single-family residences at far south end of district (20th Street properties) to accommodate reconfiguration of West College Way.

Rationale:

- Development of connector road addresses safety and circulation concerns.

District 13

Location: South Campus Fields



Adjacent City Zoning:
Residential Single (South Hill Neighborhood)

2016 Primary Land Uses:

- Soccer field
- Track
- Playfields-general recreation
- Parking

City Land Use Designation:

- Institutional (Area 1, WWU Neighborhood Plan)

***Institutional Master Plan* Land Use Classifications:**

- Academic
- Student activities
- Open space
- Administrative/support (south campus transit center)

Track

Fast-Pitch Field

21st Street and West College Way

Character Goals and Development Recommendations:

- Maximize the number of regulation size fields.
- Accommodate tennis courts, hammer throw, and academic, varsity and intramural program space needs.
- Accommodate athletic equipment, groundskeeping equipment and restroom facilities.
- Develop views of the valley.
- Increase safety for pedestrians, bicyclists, transit, vehicles.
- Reclaim the valley by removing South College Drive and reconfiguring layout of fields.
- Respect and retain existing character of sculpture pieces.
- Develop parking facility.
- Develop major south campus transit center.

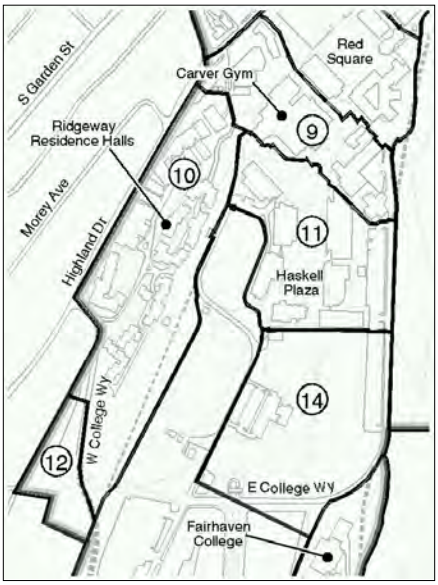
Rationale:

- Locates fields as close as possible to academic core.
- Preserves open space.
- Locates fields close to proposed Student Recreation Center.
- Provides parking facility for south campus activities.
- Provides transit service for south campus.

[Amended by Ord. 2016-07-020 § 2 (Exh. B)]

District 14

Location: Proposed Academic Quad South of Environmental Studies and Parks Hall



Adjacent City Zoning:
Public (Sehome Arboretum to the east)

2001 Primary Land Uses:

- General recreation (playfields)
- Administrative/support (Public Safety/Mailroom and Visitor Information Center)
- Multiple sculpture sites
- Circulation and parking

City Land Use Designation:

- Institutional (Area 1, WWU Neighborhood Plan)

***Institutional Master Plan* Land Use Classifications:**

- Academic
- Administrative/support
- Open space
- Student activities

Proposed academic quad area

Nauman's "Stadium Piece", tennis courts, Public Safety

Character Goals and Development Recommendations:

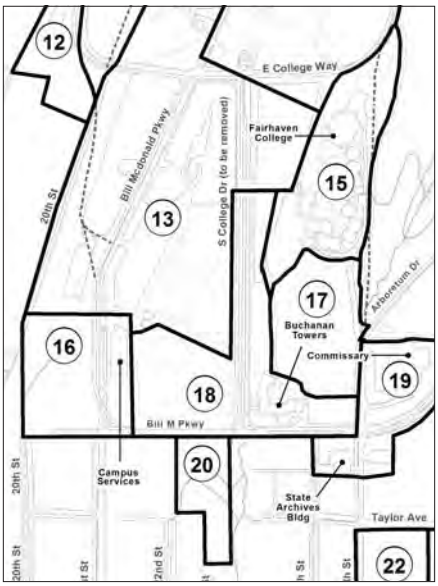
- Develop new south academic quad.
- Extend progression of academic plazas to the south with construction of new south plaza.
- Develop views of valley.
- Maintain scale similar to Haskell Plaza and Red Square.
- Maintain and accommodate sculpture collection.
- Restrict building height to minimize impact to Ridgeway residential district to the west.

Rationale:

- Expansion of current academic space is required to serve growth in student enrollment.
- Location of new south quad falls within the 10-minute walk radius and maintains contiguous academic campus core.
- Clustering of academic buildings encourages optimal functional, technical and social relationships among users.
- Location of new quad follows linear progression of campus core and geographical constraints.

District 15

Location: Fairhaven Complex



Adjacent City Zoning:
Public (Sehome Arboretum to the east)

2001 Primary Land Uses:

- Academic (Fairhaven Administration Building)
- Student and guest housing (Fairhaven Residence Halls)
- Student activities (Child Development Center)
- Open space (plaza accommodates circulation and outdoor recreation for both students and Child Development Center
- Limited associated parking north of Fairhaven Administration Building
- Parking

City Land Use Designation:

- Institutional (Area 1, WWU Neighborhood Plan)

***Institutional Master Plan* Land Use Classifications:**

- Academic
- Residential
- Student activities
- Open space

Fairhaven Administration

Fairhaven Courtyard

Daycare Center Playground

Service road behind Fairhaven

Character Goals and Development Recommendations:

- Maintain forested character as compatible interface with adjacent Sehome Arboretum.
- Maintain Fairhaven Administration Building as multi-use facility.
- Potential infill for additional residential stacks in the Fairhaven residence hall area.
- Limit vehicular traffic along East College Drive by designating it as a "limited access" road.

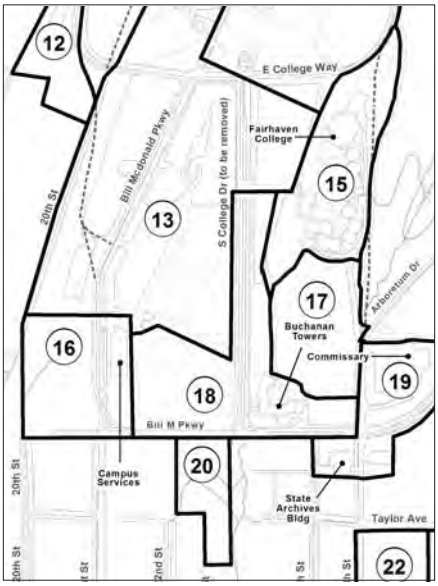
Rationale:

- Existing character interfaces well with adjacent Sehome Arboretum and provides appropriate buffer and transition zone.
- Expansion of housing would complete the housing zone already in place without adversely affecting existing character.

[Amended by Ord. 2016-07-020 § 3 (Exh. C)]

District 16

Location: Bill McDonald Parkway/21st Street Intersection Area, Campus Services Facility



Adjacent City Zoning:
Public (South Hill Neighborhood Area 10 to the west) and Residential-Multi (Happy Valley Neighborhood Area 1A to the south)

2001 Primary Land Uses:

- Open space
- Circulation and parking
- Campus Services Facility

City Land Use Designation:

- Institutional (Area 1, WWU Neighborhood Plan)

***Institutional Master Plan* Land Use Classifications:**

- Student activities
- Administrative/support
- Residential

Bill McDonald Parkway and 21st Street

21st Street

Future site of Campus Services Facility

Character Goals and Development Recommendations:

- Improve entry to campus.
- Improve circulation flow.
- Provide visual cues to campus entrance.
- Develop definition of campus edge.
- Complete construction of new Campus Services Facility at corner of Bill McDonald Parkway and 21st Street to fulfill some of the student support and university support functions.

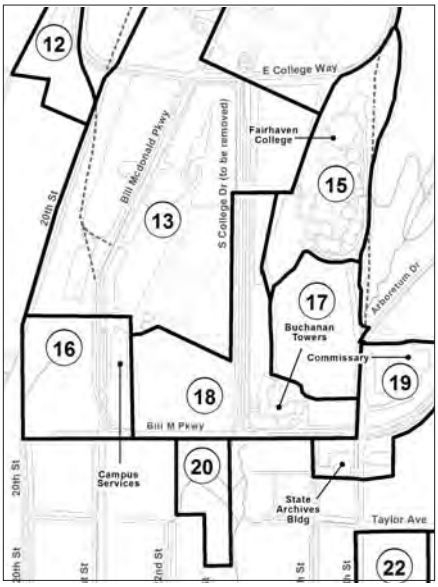
Rationale:

- Locates non-academic functions outside the core of campus to free space for additional academic uses.
- Provides easy access to Student Health Services, University Police, and Parking and Transportation (to be located in the new Campus Services Facility).
- Provides a clearly defined point of entry to campus.

[Amended by Ord. 2016-07-020 § 4 (Exh. C)]

District 17

Location: Outdoor Experiential Learning Center (OELS)



Adjacent City Zoning:
Public (Sehome Arboretum to the east)

2001 Primary Land Uses:

- Academic
- Open space
- Recreation
- Student activities
- Storage

City Land Use Designation:

- Institutional (Area 1, WWU Neighborhood Plan)

***Institutional Master Plan* Land Use Classifications:**

- Academic
- Student activities
- Open space

Outdoor Experiential Learning Site

Outdoor Experiential Learning Site

Open Space behind Buchanan Towers

Character Goals and Development Recommendations:

- Maintain wetland area as educational site.
- Maintain buffer area around wetland.
- Integrate educational and residential functions (adjoining Fairhaven Residence Halls).
- Accommodate southern exposure required by Outdoor Experiential Learning Site (OELS) by careful siting of any future structures.

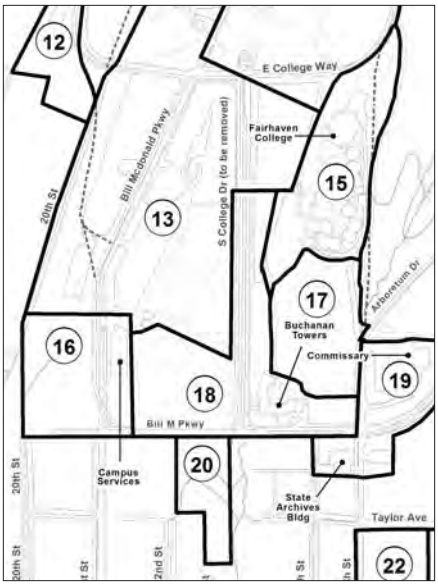
Rationale:

- Recognizes site as valuable educational and recreational resource with "rural-like" atmosphere.
- Preserves open space.

[Amended by Ord. 2016-07-020 § 5 (Exh. C)]

District 18

Location: Buchanan Towers Area North of Bill McDonald Parkway



Adjacent City Zoning:
Residential-Multi (Happy Valley Neighborhood to the south)

2016 Primary Land Uses:

- Student housing (Buchanan Towers)
- General Recreation
- Tennis
- Fastpitch softball field
- Associated circulation and parking
- Open space

City Land Use Designation:

- Institutional (Area 1, WWU Neighborhood Plan)

***Institutional Master Plan* Land Use Classifications:**

- Residential
- Student Activities
- Open space

Buchanan Towers

Intersection at Bill McDonald Parkway and South College Drive

Character Goals and Development Recommendations:

- Study potential environmental and neighborhood impacts and identify mitigation for proposed parking structure.
- Accommodate southern exposure required by Outdoor Experiential Learning Site (OELS) by careful siting of any future structures.
- Develop views of the valley
- Reclaim the valley by removing South College Drive.

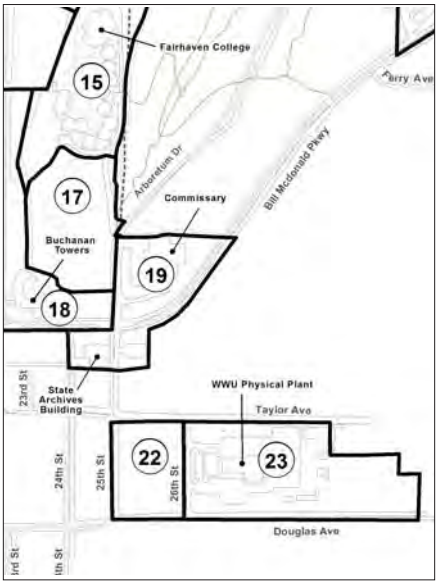
Rationale:

- Residential and student activities provide buffer between campus and multi-residential neighborhood to the south.
- Provides parking on the periphery of campus.

[Amended by Ord. 2016-07-020 § 6 (Exh.D)]

District 19

Location: Commissary and Northwest Regional Archives



Adjacent City Zoning:
Residential-Multi (Happy Valley Neighborhood to the south)

2001 Primary Land Uses:

- Administrative/support and University Residences storage (Commissary)
- Administrative/support and academic (North-west Regional Archives)
- Circulation and parking

City Land Use Designation:

- Institutional (Area 1, WWU Neighborhood Plan)

***Institutional Master Plan* Land Use Classification:**

- Administrative/support

Northwest Regional Archives

Commissary (Arboretum in background)

25th Street

Commissary

Character Goals and Development Recommendations:

- Improve views from Bill McDonald Parkway by planting landscape screens and buffers around the Commissary.
- Develop future administrative/support buildings and associated parking.

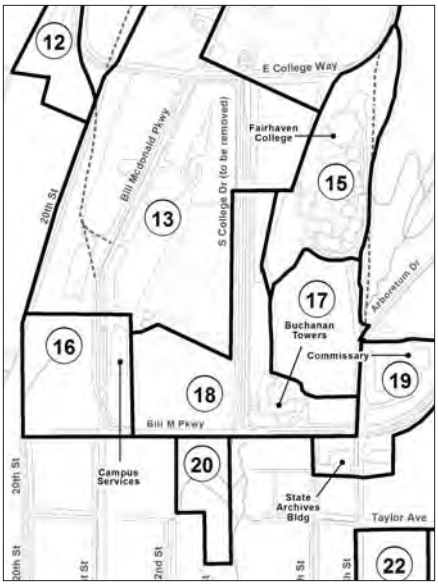
Rationale:

- Multi-use designation allows flexibility for future administrative/support needs that could be located at the periphery of campus.

[Amended by Ord. 2016-07-020 § 7 (Exh.E)]

District 20

Location: Regional Storm Water Treatment Area



Adjacent City Zoning:
Residential-Multi (Happy Valley Neighborhood)

2001 Primary Land Uses:

Open space

- Administrative/support (Regional Storm Water Treatment Area)

City Land Use Designation:

- Residential-Multi (Area 1A, Happy Valley Neighbohood)

***Institutional Master Plan* Land Use Classification Recommendation:**

- Open space/storm water treatment[1]

[1.] The regional storm water treatment facility is a permitted use under the RM zoning. The facility was developed in 2000 under Planned Institutional Contract #2000-00008.

Storm Water Treatment Area

Storm Water Treatment Area (east of apartments)

Character Goals and Development Recommendations:

- Maintain Regional Storm Water Treatment Area so that it is compatible with adjacent multi-residential land use.
- Maintain as many natural features as possible.

Rationale:

- Regional Storm Water Treatment Area addresses storm water requirements for campus and adjacent areas.
- Preserves open space.
- Provides transition zone/buffer between campus and adjacent Happy Valley neighborhood.
- Is compatible with the Happy Valley Neighborhood Plan.

[Amended by Ord. 2016-07-020 § 8 (Exh. C)]

District 21

Location: Birnam Wood Apartments

Adjacent City Zoning:
Public (Sehome Arboretum), Residential-Multi (Happy Valley Neighborhood)

2001 Primary Land Uses:

- Student housing (Birnam Wood Apartments - 132 units in seven multi-level structures, potentially housing four people per unit; two single story laundry/recreation structures)

City Land Use Designation:

- Public (Area 3, WWU Neighborhood Plan)

***Institutional Master Plan* Land Use Classification Recommendation:**

- Residential

Birnam Wood Apartments

Birnam Wood Apartments

Character Goals and Development Recommendations:

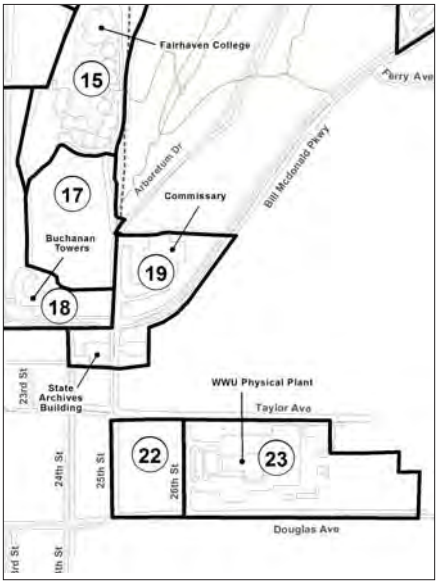
- Continue to maintain as student housing.
- This property should be evaluated for rezoning to Institutional through the annual neighborhood plan amendment process.

Rationale:

- District is fully developed for residential use.

District 22

Location: Block West of Physical Plant Bounded by 25th, 26th, Taylor, and Douglas



Adjacent City Zoning:
Residential-Multi (Area 1A, Happy Valley Neighborhood)

2001 Primary Land Uses:

- Open space

City Land Use Designation:

- Institutional (Area 1C, Happy Valley Neighbohood)

***Institutional Master Plan* Land Use Classification Recommendations:**

- Residential
- Administrative/support[1]

[1.] Western Washington University non-residential and conditional uses are allowed in this district only if it is rezoned to Institutional through the annual neighborhood plan amendment process and a site plan/planned contract is approved. Until then, the Residential Multi zoning governs use of the property. Applications for planned development and rezone to Institutional should be processed concurrently if possible.

Character Goals and Development Recommendations:

- If rezoned to Institutional, permitted uses should be limited to residential and non-industrial administrative support uses as defined herein. Warehouse and maintenance shop facilities and outdoor storage of construction or other materials shall not be located in this district.
- Appropriate development and performance stadards should be established in the rezone and planned contract process.
- As part of the planned contract process, vacating the 26th Street right-of-way should be considered in exchange for an equal dedication of land for open space on the east side of 25th Street. If this occurs, Western should be required to permanently own and maintain the open space.
- Parking in this district could serve uses located in Area 23. Parking for uses north of Bill McDonald Parkway is prohibited.

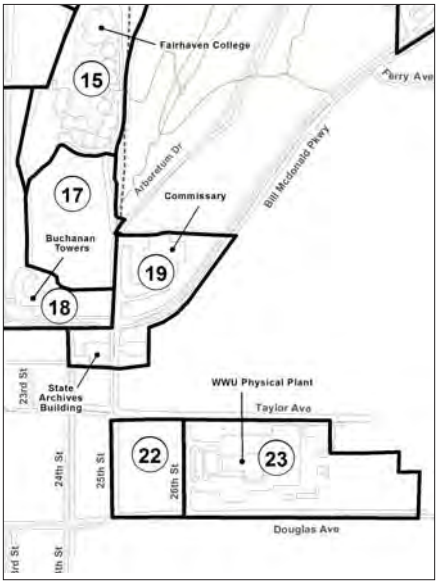
Rationale:

- This block, once completely owned by Western and rezoned to Institutional, is appropriate for expansion of office and other administrative support uses to free space on the main campus for academic use.

(Amended by Ord. 2010-12-073; 2016-07-020 § 9, Exhibit E)

District 23

Location: Physical Plant[1]



Adjacent City Zoning:
Residential-Multi (Happy Valley Neighborhood)

2001 Primary Land Uses:

- Administrative offices/support (Physical Plant)
- Physical Plant/Maintenance Shops
- Construction and other large materials storage
- Recycling and composting facilities
- Vehicle storage and fuel pumps

City Land Use Designation:

- Institutional (Area 2B, Happy Valley Neighbor-hoodPlan)[1]

***Institutional Master Plan* Land Use Classification:**

- Administrative/support

[1.] The Physical Plant property's land use designation was changed to Institutional with the adoption of this *IMP* in 2001 as approved in the 2001 update to the Happy Valley Neighborhood Plan. See Area 2B of that plan.

Physical Plant

Physical Plant

Physical Plant yard

Character Goals and Development Recommendations:

- Maintain and enhance Physical Plant, associated warehouses, and campus vehicle and equipment parking and maintenance.
- All uses in District 23 shall comply with the following standards.

  Design and Development Standards:

  1. Expansion of existing warehousing and maintenance facilities shall occur on the Taylor Street (north) side of the property whenever possible. Vacation of the Taylor Street right-of-way could be considered by the City if it would help Western locate such uses on the north side of the property.
  2. Any expansion of warehouse and maintenance shop uses adjacent to or across the street from residential areas should be designed with office space facing streets to ease potential impacts.
  3. New facilities shall be designed, constructed, and maintained to avoid unreasonable impacts on surrounding areas and to be harmonious in appearance with the existing character of the general vicinity. All new office facades should include similar scale and design features of adjacent residential structures, if possible, to reinforce and enhance the residential neighborhood character.
  4. Western truck traffic should be routed north on 25th Street to Bill McDonald Parkway and not south through the Happy Valley neighborhood.
  5. At least ten percent (10%) of the site shall remain in open space.

6. Parking lots that serve uses north of Bill McDonald Parkway are prohibited.
7. On-site parking shall be provided for all projects that require a planned contract. The number of spaces and the design of required parking shall be consistent with the regulations in BMC 20.12 for similar uses.
8. The undeveloped open space on the eastside of the property should be retained to the greatest extent possible as a green backdrop, buffer for adjacent residential areas, and wildlife corridor between Sehome Hill and Connelly Creek Nature Area.
9. Setbacks – Setbacks shall be 25 feet where the facility abuts or is across a right-of-way from residentially zoned property.
10. Landscaping – Landscaping shall be provided and maintained to buffer the surrounding neighborhood. Landscaping shall be consistent with the requirements of BMC 20.36.070. Prior to the issuance of a building permit, a scaled landscape plan shall be submitted to and approved by the Planning Department.

Performance Standards:

1. Physical Plant operations shall comply with all applicable city, state, regional and federal regulations. Each shop shall continuously employ the best pollution control technology that is practicable and reasonably available.
2. Exterior Lighting – Exterior lighting shall be designed and constructed to shield light from surrounding properties.
3. Ground Vibration – Western shall employ measures to mitigate vibration impacts on surrounding properties.

4. Odors and Airborne Pollutants – Measures to minimize odors and airborne pollution shall meet the standards of the Northwest Air Pollution Authority.
5. Noise – Noise levels shall not exceed permissible levels set in the WAC Chapter 173-60 and applicable provisions of BMC 10.24.120.
6. Generators shall be used for emergency purposes only. Maintenance testing will be conducted during normal day-time working hours.

(Amended by Ord. 2016-07-020 § 10, Exhibit E)

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Open Space

The City's Institutional Master Plan ordinance defines open space as areas which are landscaped or natural. The landscaped areas can be designated for either active or passive use.

Landscaped, active use, and open spaces on campus are programmed to serve specific educational or recreational functions such as classroom space or playfields. These programmed open spaces would not generally be potential sites for development unless alternative sites are identified to serve those same functions.

Landscaped, active use, open spaces on campus include the following:

- The Arntzen Hall Environmental Garden located east of Arntzen Hall is proposed to remain as an academic function.
- The soccer field located west of the Biology building is not regulation size, so a new regulation all-weather surface soccer field is proposed to be located north of the softball field. However, the existing soccer field would be retained as one of four required playfields.
- The track and all-weather playfield located west of 21st Street is used by PEHR (Physical Education, Health & Recreation), Campus Recreation, and Athletics. It also serves as a buffer between the proposed academic core and the Ridgeway Residence complex.
- Eight existing tennis courts will be relocated outside of the academic core, along with four additional courts (for a total of twelve courts). The courts are used by PEHR.
- The existing hammer throw/shot-put field located south of the all-weather track/playfield is proposed to be relocated outside of the home run fence of the softball field. This relocation allows for construction of the Student Recreation Center.

- There are currently four playfields that are not regulation size. These include two fields south of Environmental Studies and Parks Hall, and two fields north of the softball field. The development of four regulation sized fields in this area will require the closure of South College Drive as described in the Circulation section.
- The softball field located north of Bill McDonald Parkway is proposed to be retained.
- The Water Quality Treatment Facility located south of Bill McDonald Parkway is required to meet stormwater quality standards and also serves an academic function.

Western's landscaped, passive use open space includes the following:

- Old Main Quad, Virginia Wright Plaza, Red Square, and Haskell Plaza are vital open space areas and act as nodes for pedestrian circulation. The linkage of the quads is what forms the pedestrian circulation spine. A new quad is proposed to be developed in the new Academic District 14 to extend the pedestrian spine and create a stronger connection to Fairhaven College.
- Western's Outdoor Sculpture Collection is internationally known and includes approximately 25 pieces. New development should respect existing pieces and new settings should be developed to enhance the pedestrian experience.

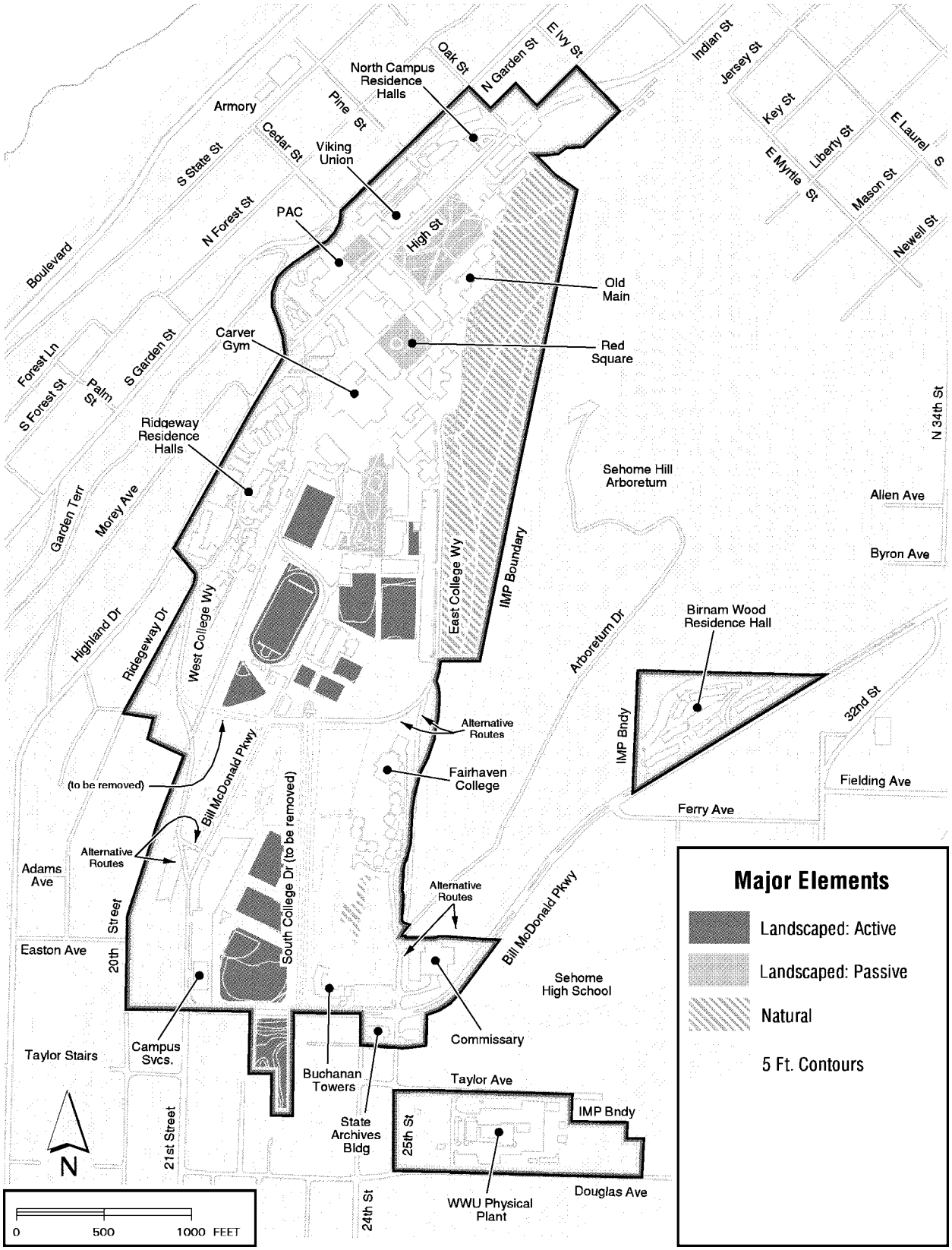
Western's natural open space that is used for both active and passive use includes the following:

- Sehome Arboretum is owned and managed under an inter-local cooperative agreement between the University and the City of Bellingham. The principle of the agreement is to preserve and maintain the Arboretum in its natural state to the greatest extent

possible. The Arboretum provides educational, aesthetic, recreational and research opportunities for both the public and campus community.

- The Outdoor Experiential Learning Site/Wetland (OELS) located south of the Fairhaven Complex is proposed to be preserved for academic and student activity use.

Natural, passive use open space on campus includes backgrounds, buffers, enframements and primitive areas. Vegetation in these areas is generally left in its natural state. These spaces are valuable in serving as binding elements that provide continuity to the overall fabric of the University's spatial composition.


North Campus Residence Halls
Oak St
N Garden St
E Ivy St
Indian St
Jersey St
Key St
Liberty St
E Laurel St
E Myrtle St
Mason St
Newell St
Armory
Pine St
Cedar St
Viking Union
S State St
N Forest St
PAC
High St
Boulevard
Old Main
Carver Gym
Red Square
Forest Ln
S Forest St
Palm St
S Garden St
N 34th St
Ridgeway Residence Halls
Sehome Hill Arboretum
Allen Ave
Byron Ave
Garden Terr
Morey Ave
East College Wy
IMP Boundary
Highland Dr
Ridgeway Dr
West College Wy
Arboretum Dr
Birnam Wood Residence Hall
32nd St
IMP Bndy
Alternative Routes
Fairhaven College
(to be removed)
Bill McDonald Pkwy
Fielding Ave
Ferry Avenue
Adams Ave
South College Dr (to be removed)
Alternative Routes
Alternative Routes
Bill McDonald Pkwy
Easton Ave
20th Street
Sehome High School
Commissary
Taylor Stairs
Campus Svcs.
Buchanan Towers
Taylor Ave
IMP Bndy
State Archives Bldg
25th St
21st Street
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WWU Physical Plant
Douglas Ave
24th St
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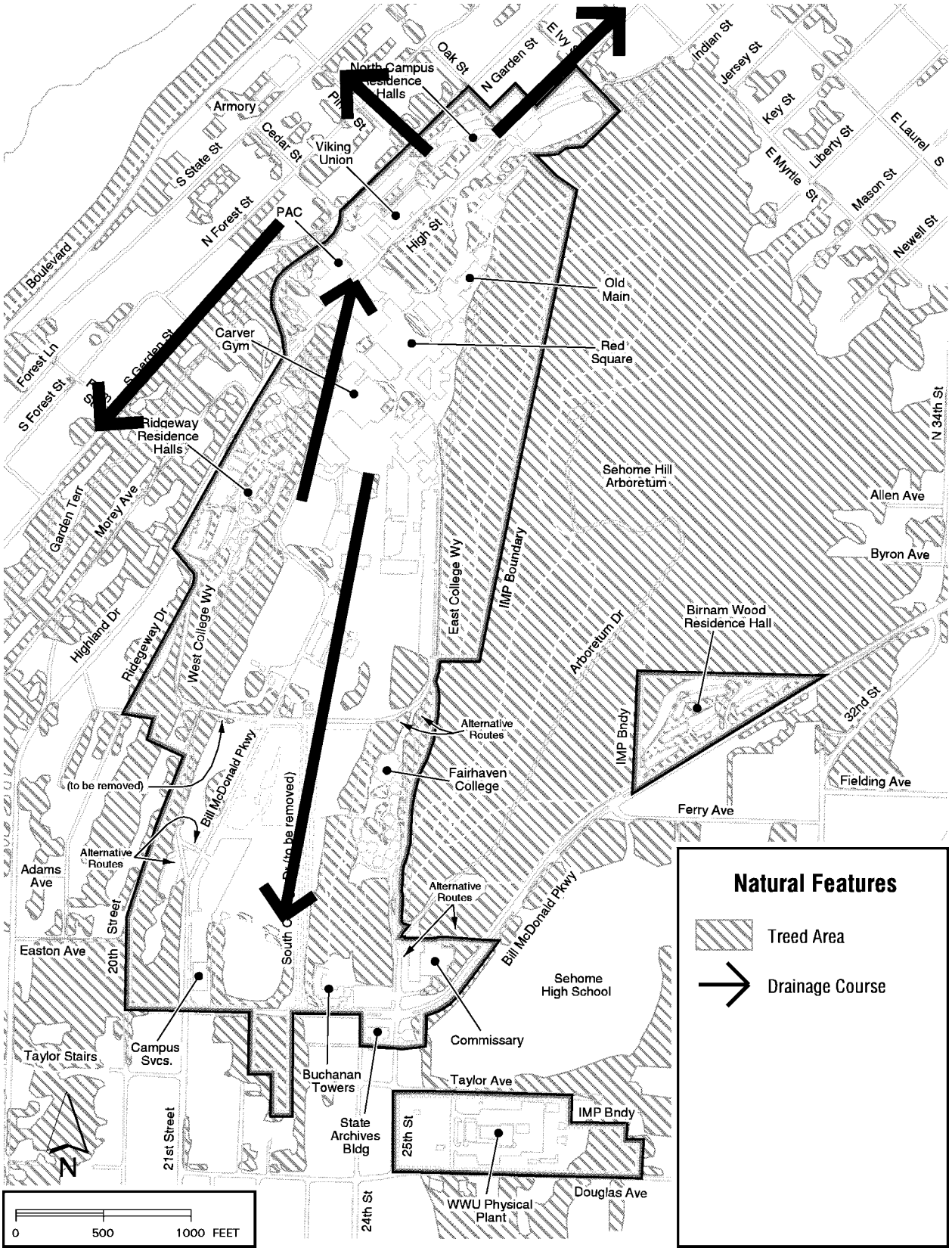
Major Elements
Landscaped: Active
Landscaped: Passive
Natural
5 Ft. Contours


North Campus Residence Halls
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Mason St
Newell St
Armory
Cedar St
S State St
Viking Union
N Forest St
PAC
High St
Boulevard
Old Main
Carver Gym
Red Square
Forest Ln
S Forest St
S Garden St
Ridgeway Residence Halls
N 34th St
Sehome Hill Arboretum
Allen Ave
Byron Ave
Garden Terr
Morey Ave
Highland Dr
Ridgeway Dr
West College Wy
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IMP Boundary
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Alternative Routes
Alternative Routes
Bill McDonald Pkwy
South College (to be removed)
Easton Ave
20th Street
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Campus Svcs.
Buchanan Towers
Taylor Ave
IMP Bndy
State Archives Bldg
25th St
21st Street
N
WWU Physical Plant
Douglas Ave
24th St
0 500 1000 FEET
Natural Features
Treed Area
Drainage Course

Circulation

Introduction

The Circulation section contains principles that guided the preparation of the circulation plan. In summary, the principles promote moving vehicular access to the perimeter of campus. The principles set up a hierarchy to facilitate pedestrian and bicycle access to campus as the highest priority, then transit and carpool access, and finally single occupant vehicle access as the lowest priority.

The Circulation section also contains a description of the identified problems with the current system and proposes a number of solutions to address the problems.

Finally, this section contains a summary of the existing and proposed major and secondary campus routes for pedestrians, bicycles, transit vehicles, and private cars. The plans identify the major access points to campus for each mode, major transit stops, and parking areas.

Circulation Principles/Patterns to be Reinforced

Many of the principles relating to circulation previously identified in the *January 1997 WWU Draft Comprehensive Master Plan* also apply to the *Institutional Master Plan*. These principles, combined with desirable character patterns identified during the IMP process, guide the proposed circulation plans. All circulation principles and patterns support the goal of prioritizing modes of transportation in the following order: 1) pedestrian, 2) bicycles, 3) transit, and 4) vehicles.

The following general principles and patterns relate to circulation:

- Provide convenient, safe, and accessible access on campus for students, staff, faculty and visitors.
- Work with the City to ensure that all on-campus and off-campus circulation plans are complementary and reinforce circulation connections between Western and adjacent neighborhoods.

- Separate pedestrian, bicycle, and transit circulation from private and service vehicles where feasible and appropriate.
- Provide multiple "front doors" to campus.
- Discourage cross campus through-traffic, promote traffic calming devices, and minimize adverse circulation effects on neighborhoods.

To promote priority of pedestrian access, the plan should:

- Locate future academic zones within a 10-minute walk from central campus to support a pedestrian oriented campus.
- Increase the number of students, staff, and faculty who walk to campus.
- Maximize convenient, well-lighted and safe pedestrian access and circulation on campus; keep pedestrians separate from bicycles and vehicles whenever possible.
- Relocate the majority of parking to the periphery of campus.
- Design pedestrian paths so they are accessible to the disabled and sufficient to carry required volumes of pedestrian traffic.
- Support the City's efforts to provide convenient and safe pedestrian access to campus.
- Convert High Street to a pedestrian/transit mall between West Campus Way and Oak Street to improve pedestrian and transit accessibility and reduce current conflicts between pedestrians and vehicles. Limit single occupancy vehicle circulation consistent with relevant City ordinances and regulations regarding the use of High Street.
- Maximize a pedestrian campus and minimize the use of limited campus land for roads.

- In accordance with "Recommendation #9" from the *WWU Neighborhood Plan*, work with city staff "to ensure that city pedestrian improvement plans complement on-campus facilities."

To promote bicycle commuting and access:

- Improve bicycle security and bicycle facilities on campus.
- Provide safe, convenient bicycle pathways on campus separate from pedestrians and vehicles whenever possible.
- Consider development of continuous north/south bicycle routes to create safer circulation conditions on both edge of campus.
- In accordance with "Recommendation #12" from the *WWU Neighborhood Plan*, continue to work with city staff "to ensure that city bicycle improvement plans complement on-campus facilities."

To promote transit use and to reduce the use of single occupancy vehicles:

- Provide for safe transit circulation to access major destination points, passenger drop zones, parking areas, and key pedestrian circulation routes.
- Enhance and promote the bus pass program for students, staff, and faculty.
- Convert High Street to a pedestrian/transit mall as previously discussed in "Pedestrian Circulation."
- Provide transit facilities that make transit service attractive, usable, and efficient for students, staff, faculty, and visitors.
- Explore demand for nighttime service.

To address vehicular access issues efforts should be made to:

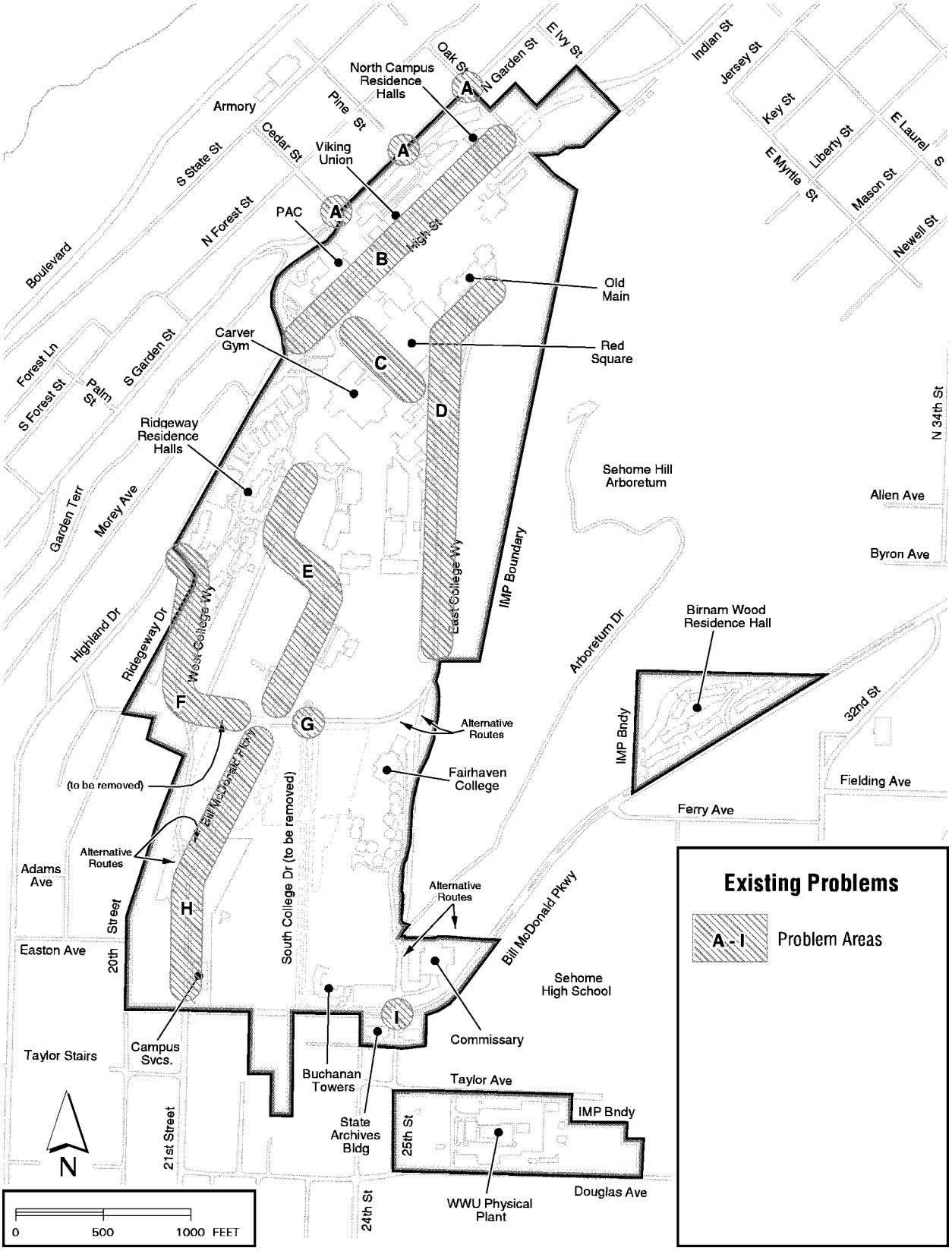
- Provide adequate infrastructure on all roadways to and from campus through the joint efforts of the City and University to encourage pedestrians, bicyclists, and transit.
- Separate private and service vehicles from pedestrian, bicycle, and transit circulation whenever possible.
- Provide road design standards (pavement, drainage, and sidewalks) and arterial upgrading that promote a rational flow of traffic.
- Provide for safe vehicular circulation to access major destination points, passenger drop zones, parking areas, and key pedestrian circulation routes through the joint efforts of the City and University.
- Locate roadways to maximize a pedestrian campus and minimize the use of limited campus and for vehicular circulation in order to accommodate as many campus facilities and functions as possible within current boundaries and maintain the campus' key characteristics.

To address parking issues efforts should be made to:

- Minimize the demand for additional parking through a transportation management program and the increased usage of alternative modes of transportation, while providing adequate parking to meet the University's need without increased reliance on neighborhood on-street parking.
- Develop on-campus parking structures to reduce land consumed for surface parking lots.
- Recognize and promote the use of off-campus parking areas (such as Civic Field) with shuttle transit service.
- Ensure that on-campus events (public lectures, performances, athletic events, etc.) are accessible to the community.

Existing Circulation Facilities

As required by the City of Bellingham *Land Use Development Ordinance for Institutional Development*, the size and condition of developed streets and sidewalks were inventoried. All developed streets within and directly adjacent to the area boundary were included in the inventory along with information such as provisions for bicycle lanes, median strips, on-street parking, and posted speed limits (see "Appendix C: Existing Circulation Facilities").


North Campus Residence Halls
Viking Union
PAC
Old Main
Red Square
Carver Gym
Ridgeway Residence Halls
Sehome Hill Arboretum
Birnam Wood Residence Hall
Alternative Routes
Fairhaven College
(to be removed)
Alternative Routes
Alternative Routes
Sehome High School
Commissary
Campus Svcs.
Taylor Stairs
Buchanan Towers
State Archives Bldg
WWU Physical Plant
Existing Problems
A - I
Problem Areas
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Existing Problems and Proposed Solutions

Transportation and parking issues were recognized as key elements in the *January 1997 WWU Draft Comprehensive Master Plan*. They remain major issues in the *Institutional Master Plan*, which reconfirms the goal to give high priority to pedestrian circulation, followed by bicyclists, transit circulation, and, lastly, vehicular circulation.

General circulation conflicts involve the interaction of pedestrians with bicyclists, transit, and vehicles along with inadequate sidewalks and lighting. Not all conflict areas can be fully resolved, but an attempt should be made to mitigate conflicts where possible. The following on-campus areas were identified as being of primary concern:

A. Garden/Cedar, Garden/Pine and Garden/Oak Intersections

Contributing factors:

- Pedestrians must cross heavy vehicular traffic
- Poor visibility
- Transit stop located close to intersection at Garden and Cedar Streets
- Heavy vehicular traffic along Garden Street

Proposed Solutions:

- *Work with Whatcom Transportation Authority (WTA) to relocate the transit stop away from the intersection at Garden and Cedar Streets.*
- *Work with WTA, the Pedestrian and Bicycle Advisory Committee, and City staff to consolidate and improve pedestrian crossings and implement traffic calming.*
- *Work with City to restrict on-street parking adjacent to intersections to increase the vision triangle areas and improve safety.*
- *Install parking structure as part of parking management plan and to support public use facilities such as Performing Arts Center, Carver Gym, and the bookstore.*

B. High Street

Contributing factors:

- High volume of pedestrian, bicycle, and transit traffic
- Primary access route for service vehicles
- Pedestrians forced to interact with service vehicles, transit, and bicyclists
- Arterial "splits" campus
- "Streetlike" character of High Street implies priority of vehicles over pedestrians

Proposed Solutions:

- *Separate pedestrians from bicyclists, service vehicles, and transit per the proposed pedestrian/transit mall.*
- *Restrict vehicular access consistent with adopted city ordinances.*
- *Improve access for disabled.*
- *Improve "streetscape" and change character of open space to encourage pedestrian use.*
- *Provide transit staging area and clearly identify transit routes.*
- *Provide bicycle lanes.*

C. East/West Corridor from High Street to Miller Hall/Fine Arts

Contributing factors:

- Major campus crossroad with the highest volume of pedestrians during class change periods
- East/west bound pedestrians, bicyclists, and service vehicles cross the major flow of north/south pedestrian and bicycle traffic
- Brick surface with no provisions to separate the various modes of travel

Proposed Solutions:

- *Reduce conflicts through signage, bike policy, and rerouting of bicycle traffic.*
- *Provide adequate bicycle storage in convenient, safe locations.*

D. East College Way north of the Steam Plant

Contributing factors:

- Poor separation between pedestrians and vehicular traffic
- Pedestrians forced to cross East College Way where visibility is poor and vehicular traffic is heavy
- Pedestrians mix with parked vehicles as well as moving traffic
- Moderate vehicular traffic

Proposed Solutions:

- *Implement pedestrian pathway improvements along East College Way.*
- *Redirect some pedestrian traffic through the "valley" with developed pedestrian pathways.*
- *Relocate Old Main administrative departments that do not need to be in the campus core to the perimeter of campus or off-campus to reduce vehicular traffic.*
- *Restrict vehicular traffic on East College Way.*

E. 21st Street/West College Way Intersection and 21st Street north of West College Way

Contributing factors:

- Transit buses, vehicles, pedestrians and bicyclists all converge at intersection
- Heavy volume of pedestrian, bicycle, transit, and vehicular traffic
- Inadequate space for buses
- Poor condition and narrow width of sidewalks
- Poor separation between vehicular, bicycle, and pedestrian traffic
- Narrow road

Proposed Solutions:

- *Close 21st Street north of West College Way to vehicular traffic except for service vehicles.*
- *Maintain 21st Street north of West College Way as a major bicycle entrance.*
- *Modify the curve where West College Way turns into 21st Street to better accommodate buses and reconstruct the intersection for easier circulation and safer pedestrian crossing.*

- *Improve traffic flow with the realignment of West College Way.*
- *Provide safe, convenient bus drop-off and loading areas.*

F. Highland Drive/West College Way Intersection & West College Way

Contributing factors:
- Inadequate room for transit stops
- Steep grade and curve in West College Way

Proposed Solutions:
- *Relocate transit stops further from the intersection and install transit pullouts wherever possible.*
- *Realign West College Way to eliminate existing curve and reduce steep grade and install sidewalks and bike lanes.*
- *Provide traffic lights as required by traffic analysis and traffic calming devices (paving treatments, roadway widths, etc.).*
- *Provide safe, convenient bus drop-off and loading areas.*

G. South College Drive/West College Way Intersection

Contributing factors:
- Limited staging area at Visitor Information Center
- Overflow vehicles interfere with cross traffic
- Poor identification of access to the Visitor Information Center
- Lack of directional signs

Proposed Solutions:
- *Eliminate intersection by vacating South College Drive and directing incoming traffic to 21st Street as the main entry to campus, where the new Campus Services Facility will be located. South College Drive should not be vacated until an alternative route to the east-side of campus is in place.*
- *Direct non-campus traffic around campus via the realignment of West College Way.*

H. 21st Street between Bill McDonald Parkway and West College Way

Contributing factors:
- Road and sidewalks in poor condition
- Narrow road and sidewalk
- Lack of designated bike lanes
- High volume of pedestrians, bicyclists, and vehicles
- Lack of separation between vehicles and pedestrians

Proposed Solutions:
- *Improve 21st Street with wider vehicular lanes, designated bicycle lanes, and wider sidewalks that separate pedestrians from vehicular traffic with a planted buffer.*
- *Provide transit pullouts wherever possible.*
- *Add parking structure to meet future growth needs and to reduce land area taken up by surface parking lots.*
- *Add pedestrian crossings from parking lots located on the uphill side of 21st Street.*

I. Bill McDonald Parkway/25th Street Intersection

Contributing factors:
- High volume of traffic on Bill McDonald Parkway, the main entrance to campus
- Pedestrians, bicyclists, transit, and vehicles accessing Bill McDonald Parkway from 25th Street
- Pedestrians and bicyclists accessing Bill McDonald Parkway from 24th Street
- Western students who live south of campus
- Sehome High School students
- Physical Plant traffic
- Visitors to Northwest Regional Archives Building
- General city traffic
- Poor visibility and limited identification of crosswalk

Proposed Solutions:

- *Relocate pedestrian crossing closer to South College Drive to allow easier pedestrian access to designated sidewalks and a more direct passage to campus.*

- *Work with City to develop treatments that reduce traffic speed along Bill McDonald Parkway.*
- *Re-examine intersection at 25th Street and Bill McDonald Parkway and road configurations to address safety issues and vehicular circulation (see "Proposed Vehicular Access & Parking", page III-23).*
- *Install parking structure to serve Buchanan Towers and Fairhaven College to replace parking loss due to relocated fields.*

Additional Circulation Issues

This plan contains an appropriate level of detail about most of the proposed circulation system improvements on the Western campus. Future feasibility and impact analysis, and mitigation identification will be needed prior to issuance of a planned contract for the following projects:

- The proposed 25th Street extension north of Bill McDonald Parkway shown as a study area on the map on page III-23.
- The proposed parking garages.

Further traffic analysis by Western will also be required to analyze the impacts of projected student, faculty, and staff population growth on off-campus facilities. Elements that Western should evaluate in a review of off-site impacts include but are not limited to:

- An O&D study to determine what percentage of Western related vehicle traffic impacts the City's arterial street system.
- Identified mitigating measures to preserve arterial street capacity, pedestrian safety, and bicycle mobility.
- A definition of the threshold that triggers the implementation of the mitigating measures.

Transportation Impact Fees

The University shall be required to pay Transportation Impact Fees in accordance with adopted city ordinances at the time of building permit issuance for any new facilities.

Summary of Circulation Plans

Key circulation elements of the *IMP* are the elimination of South College Drive and East College Way between 21st Street and the Arboretum to allow reconfiguration of the fields and the creation of the new south academic district. To accomplish this, the University is dependent on City cooperation to vacate these roads. This cooperation minimizes the impacts of development on adjacent neighborhoods by maximizing buildable area on campus. Circulation routes then fall into place with new pedestrian pathways established along field layouts and vehicular traffic guided around campus instead of running through the "valley."

The following circulation plans show existing and proposed major and secondary routes for pedestrians, bicycles, transit and vehicles. The plans identify the major access points to campus for each mode of transportation, major transit stops, and parking for bicycles and vehicles.

Pedestrian Circulation

- High, Garden and Cedar Streets will remain the major pedestrian access points to campus on the north end. Pedestrian routes within the north end of campus follow the existing configurations with some routes gaining heavier foot traffic (route between Haggard Hall and Wilson Library and the corridor between Haggard Hall/Bond Hall and College Hall/Carver Gym).
- In order to increase pedestrian and transit accessibility, High Street will be converted to a pedestrian/transit mall consistent with adopted city ordinances. The concept of the pedestrian/transit mall supports the circulation principles by placing high priority on pedestrian and transit circulation and separating vehicular and pedestrian traffic. The mall will provide safe and convenient bicycle

access via separate bicycle lanes and bicycle amenities (covered bike storage across from the bookstore). Safe and convenient passenger drop zones will be located at the north and south ends of the mall to reinforce the concept of providing multiple "front doors" to campus for both the campus community and visitors. The development of the mall will also provide opportunities for enhancing the campus interface with adjacent neighborhoods and for improving the streetscape aesthetics with improved signs, lighting, paving, and other landscape elements. The Campus Infrastructure Development (CID) project is looking at eliminating the need for access to High Street for neighbors during inclement weather by creating an appropriate alternate route to the downtown area from Highland Drive.

- Major pedestrian access points to campus on the south end of campus also remain the same as the existing pedestrian access points (21st Street, the former South College Drive at 23rd Street, 25th Street, and Bill McDonald Parkway), but internal pedestrian routes will differ. Sidewalks along 21st Street will be improved and separated from vehicular traffic by a planting strip, but pedestrians will be encouraged to use the pedestrian path further east (along the fields) for their primary route for increased safety and further separation from bicyclists and vehicular traffic. The major access point at the south end of the former South College Drive (23rd Street) will connect to a north/south pedestrian route through campus that separates pedestrians from vehicles for most of its length.
- Pedestrians entering campus from 25th Street and Bill McDonald Parkway will merge at the south end of the Fairhaven Complex, continue through Fairhaven Plaza and join the major north/south pedestrian route.

Bicycle Circulation

- Major access points remain the same as the existing bicycle access points: Indian Street, Garden Street, Oak Street, Cedar Street, Highland Drive, 21st Street, the former South College Drive (23rd Street), and Bill McDonald Parkway.
- Major access points link up with major bicycle routes through campus (primarily north/south routes).
- Bicycle lanes will be provided along the realigned 21st Street.
- Secondary bicycle routes provide east/west routes through campus. Some secondary bicycle routes within the core of campus are restricted in use. (The bicycle dismount zone is enforced through the Public Safety office.)
- The proposed secondary bicycle route shown east of Old Main and Edens Hall would provide a continuous north/south route on campus, but will require further study and analysis in conjunction with the Sehome Arboretum Board.
- In general, major bicycle parking with amenities such as covered storage are located at the ends of the east/west routes so that bicyclists can park bicycles and store equipment at the edge of campus and access the campus core by foot.
- Bicycle parking facilities will be provided at a rate of at least one bicycle space for each ten FTE students.

Transit Circulation

- Two major transit centers are proposed: one in the north campus area on High Street as part of the pedestrian/transit mall and one in the south campus area, close to the proposed student recreation center and adjacent to the proposed academic district.
- The campus shuttle service shall continue to operate.

Vehicular Circulation

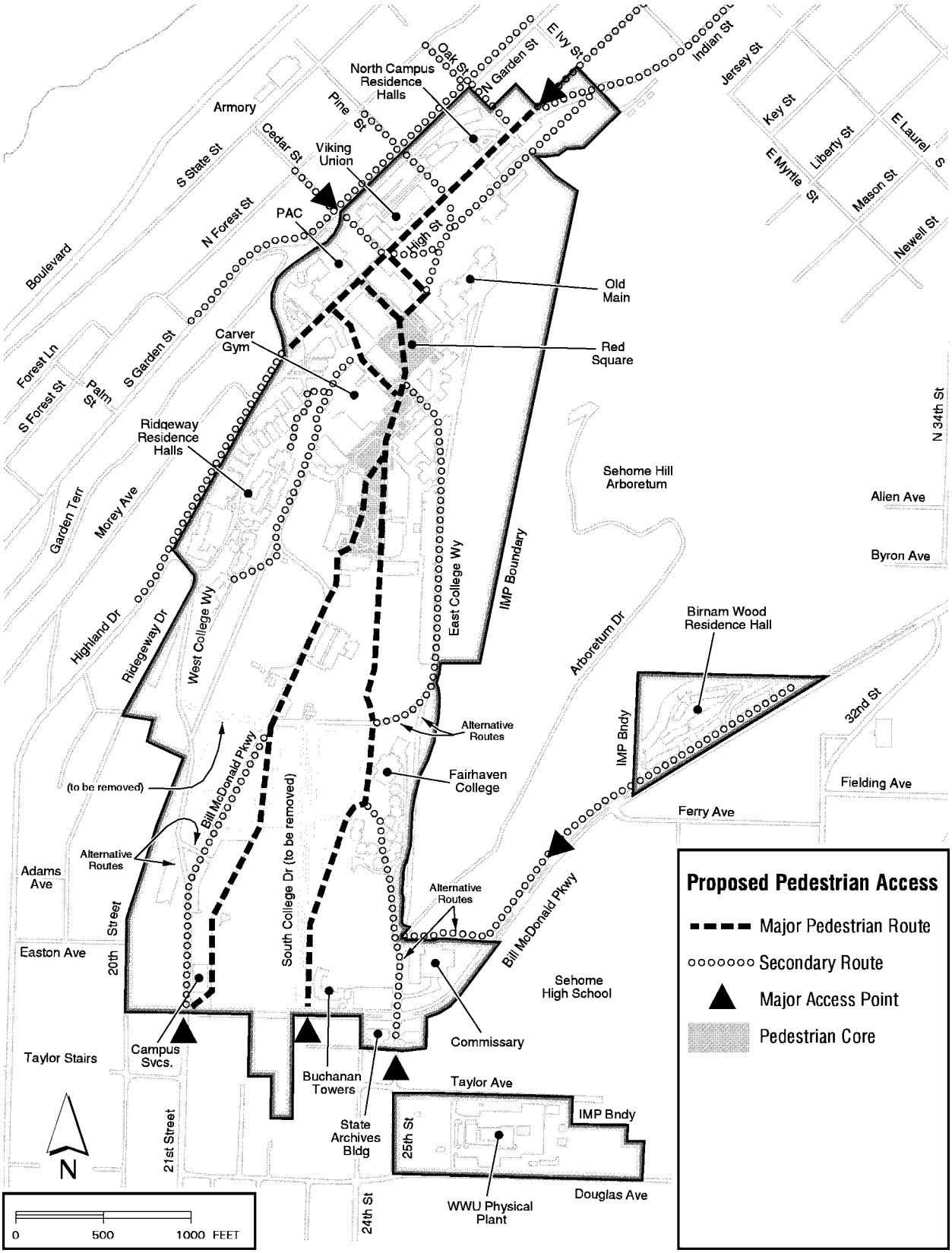
- The key element in the *IMP* is the elimination of South College Drive to free up the "valley" for the development of new fields and the new south academic district. With the City's cooperation, vacation of South College Drive and other street rights-of-way will allow the consolidation of University property to reconfigure circulation flow and optimize land use.
- Major vehicular access points are Garden Street, 21st Street, 25th Street, and Bill McDonald Parkway.
- Conversion of High Street to a pedestrian/transit mall will address aesthetic and safety issues while still recognizing the need for visitor access in accordance with adopted city ordinances.
- Elimination of the south "leg" of East College Way frees up land for development of the new academic district.
- The Fairhaven access road intersection at Bill McDonald Parkway needs to be re-examined to address safety issues and vehicular circulation (see "Proposed Vehicular Circulation Access," page III-23).
- 21st Street will be realigned to address safety issues on the existing West College Way and will allow non-campus traffic to bypass campus.
- 21st Street will be improved for safety, circulatory efficiency, and aesthetics.
- A limited access road off West College Drive provides access to the campus core (behind the science complex).
- The existing road behind the Fairhaven Complex will be reserved for pedestrians and limited vehicular access.
- The feasibility of the proposed east access road should be explored with the City and Arboretum Board.

Parking

- Alternative modes of transportation, such as transit and carpooling, bicycling and walking, will be encouraged to reduce the demand for parking facilities. Structured parking facilities may be utilized to meet parking requirements on campus. (See "Parking Standards" section.)
- The University should expand incentives for the use of alternative modes of transportation to faculty, students, and staff in order to reduce use of single occupancy vehicles (SOVs) on campus.
- A minimum of 3,400 parking spaces is required to be provided on campus to meet current parking demand. Provisions to increase or decrease the number of required parking spaces, as student enrollment or demand for parking changes, is in the "Parking Standards" section of this document.
- A portion of university parking will need to be accommodated in structured facilities. Potential sites for parking structures locates major parking at the periphery of campus. Potential sites (see Proposed Vehicular Access and Parking map, page III-23) include the existing parking lot at Oak and Indian Streets, the Viking Union, the area north of Highland Hall, south of the proposed student recreation center, and east of Buchanan Towers.[1]
- Off-campus parking facilities may be utilized to meet a portion of the minimum parking requirements subject to city zoning and city approval. (See "Parking Standards," page VI-6.)
- The University and the City of Bellingham are negotiating the continuance of an interlocal agreement for Residential Parking Zones (RPZs) around campus. Western will partner with the City to continue to fund a residential parking zone program around the campus. A well designed and aggressively enforced RPZ program is a key component of efforts to mitigate campus impacts on the

surrounding neighborhoods. Future expansion of the RPZ may be required to mitigate the impacts of enrollment increases projected in this plan. Western's continued participation in the funding of an RPZ program will be a prerequisite for considering any requests from Western for reductions of on-campus parking spaces. The City recognizes that Western's continued funding of the RPZ Program is a component of Western's mitigation of impacts resulting from past and future construction and other activities.

[1.] The feasibility and cost of providing structured parking on these sites is being evaluated by the University, with the assistance of Rich and Associates, Inc., a nationally known parking consultant. The preliminary results of this study indicate that the proposed parking structures are feasible without state funding or university subsidies, but would require fairly substantial increases in university parking fees. For example, it may be necessary to increase existing parking fees campus-wide by approximately 20 percent to construct a 300 space parking garage adjacent to the Viking Union, or 40 percent to construct a 550 space garage south of the proposed student recreation center. The University will continue to explore financing alternatives that could reduce the cost of constructing parking structures, including the use of tax exempt bond financing. The University will also continue to study the costs of transportation management program improvements that could substantially reduce the need for structured parking. It is expected that the analyses of the costs of constructing structured parking and improving the transportation management program will be an on-going effort during the implementation of the *Institutional Master Plan*.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Alternative Routes
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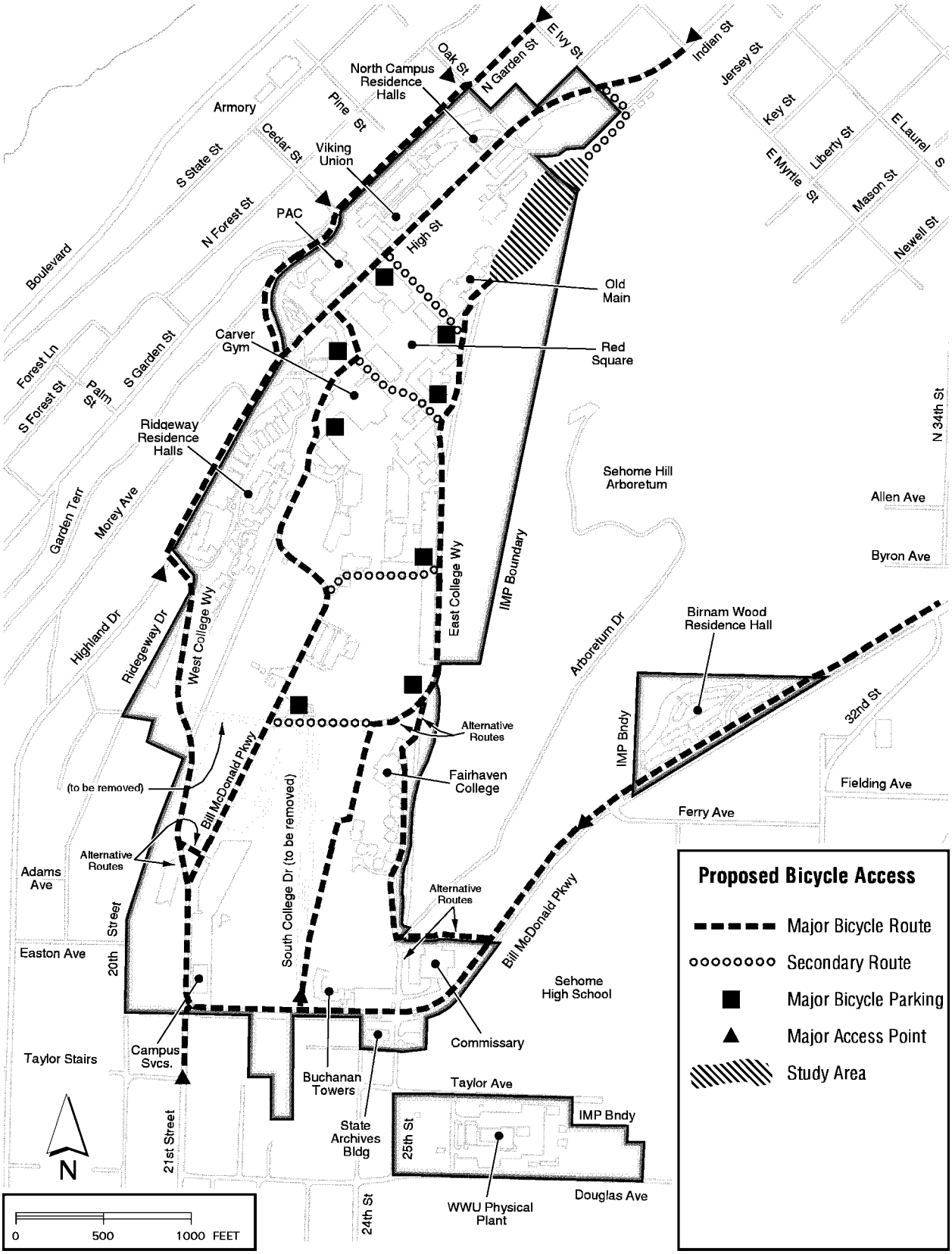
Proposed Pedestrian Access
Major Pedestrian Route
Secondary Route
Major Access Point
Pedestrian Core


Proposed Bicycle Access
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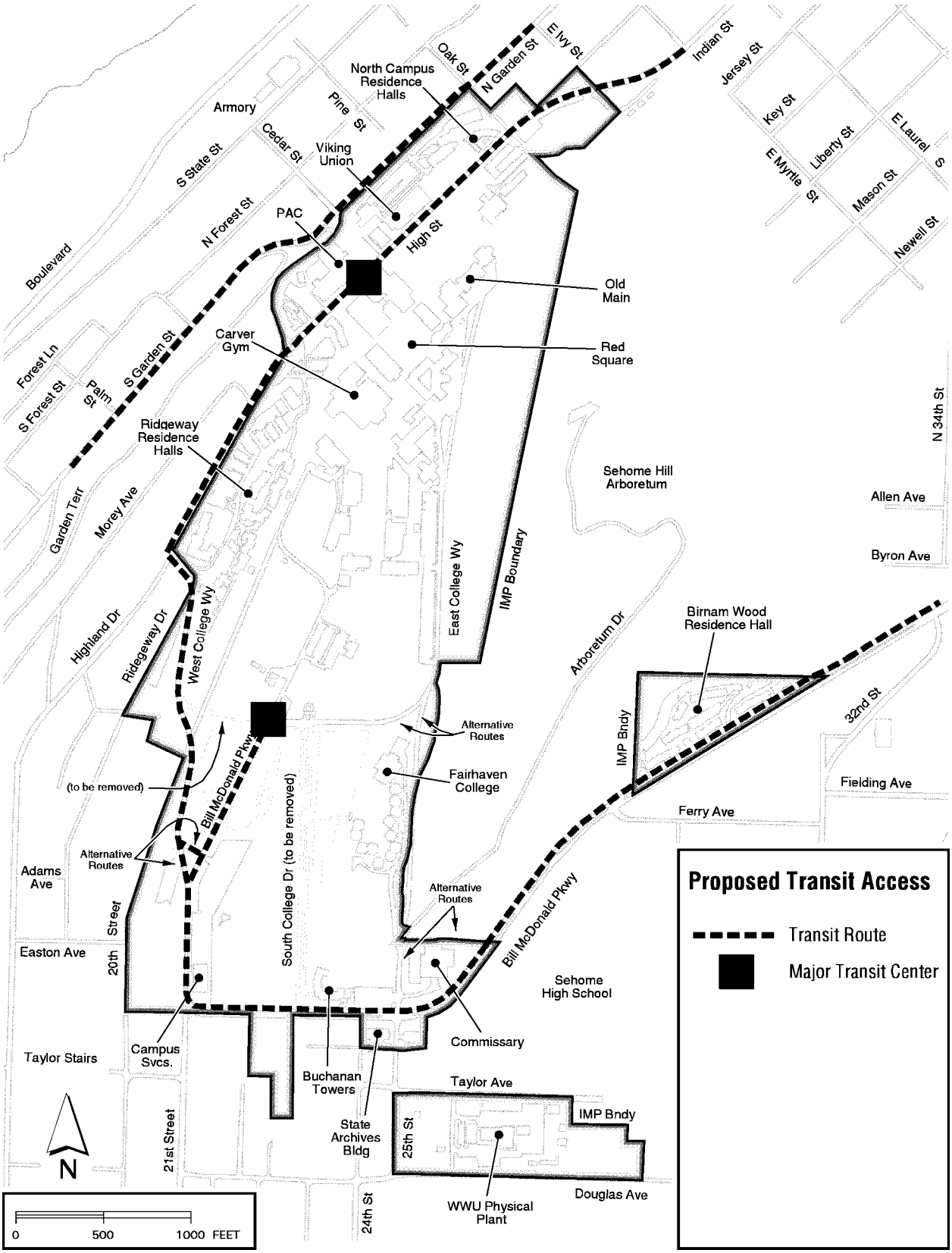
Proposed Transit Access
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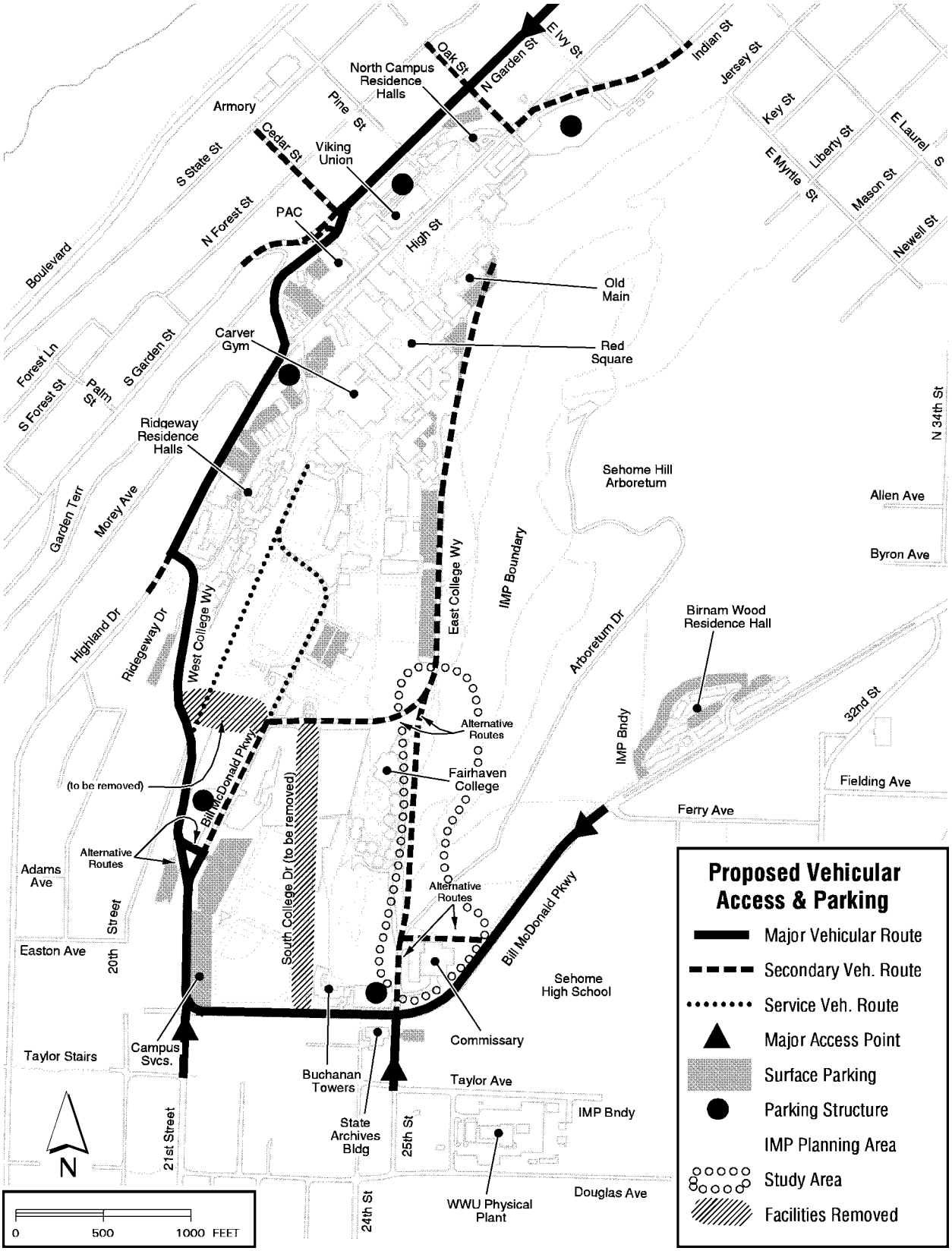
Proposed Vehicular Access & Parking
Major Vehicular Route
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Service Veh. Route
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Surface Parking
Parking Structure
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Study Area
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Utilities

City Utilities

Both City and University utility systems were analyzed for the condition and capacities of existing lines as well as the various system capacities to provide required services for the proposed development. As the campus grows, provisions will be made for the extension and/or improvements of all utility systems so that the campus and adjacent areas are not adversely affected.

Water

- Water is supplied to the campus by the City of Bellingham from the tank on Highland Drive and a reservoir on Sehome Hill above Oak Street.
- Water pressure is limited in some areas of campus, and fire flow water pressure is a concern.
- Fire pumps have been provided in several buildings to meet code requirements.
- Backup power is being provided to the pump station that services the reservoirs near the campus. After 2001, the pump station will not have an issue with power outages. Consequently, water supply to the University and the outlying areas will be constant.
- It is proposed that the waterlines serving south campus and down 21st Street from the Highland tank be increased in size. Additionally, a portion of the university waterline is to be modified and individual meters installed in the buildings. These revisions would meet existing and future requirements and improve fire flow to the campus.

Sanitary Sewer

- The campus sanitary sewer system is served by the City of Bellingham sewage collection system and directed to the Post Point treatment facility.
- There are three main sanitary sewer lines. One system serves the north campus and flows to the north. Two lines on the south campus flow south.
- Existing Western owned on-campus lines are of adequate size though some of the piping needs maintenance. The existing line from Carver Gym to 21st Street is in poor condition and is in need of replacement.
- The Campus Infrastructure Development (CID) predesign project calls for a revision of the sanitary sewer lines leaving south campus. The lines would be upgraded and rerouted to run along roadways. The analysis at that time showed that the planned growth would bring the City system near its capacity. Actual flow analysis from the campus system is planned to confirm that the City system will not be overloaded.

Storm Water Systems

- The campus storm water is served by the City of Bellingham storm water collection system. The north campus, Ridgeway area, and track flows north and then west to Bellingham Bay. The south campus system flows south through the City system to Padden Creek.
- The City of Bellingham main line serving the north campus that runs west from the campus is at capacity. Any new load to this system will require upgrading the size of this line or providing on-site detention facilities on campus.
- The storm water system serving the south campus has been improved. A treatment facility has been developed south of Bill McDonald Parkway to treat storm water leaving campus before it flows into the

City system. A series of detention vaults were placed just north of Bill McDonald Parkway to meet new storm water management guidelines. This system was designed and built with the capacity to serve the planned growth in the south campus area.

- The CID pre-design project developed a preliminary plan of the storm water system leaving the south campus. The lines would be upgraded and rerouted to run along roadways. Analysis showed that the planned growth would not exceed the city system.
- Existing on-campus lines are adequately sized although some need maintenance.

Non-City Utilities

Tunnel System

- The existing tunnel crosses campus from north to south and carries steam/condensate piping, chilled water piping, compressed air, high voltage cables, telecommunications, fire and life safety systems, and building automation and control systems.
- The tunnel system supports sustainable development by precluding the need to disturb the landscape in order to access infrastructure systems.
- For the most part the tunnel is dry, secure, and well lit.
- Communications and electrical trays are congested in several sections.
- A new section of tunnel is required to loop the proposed south campus academic district to establish steam and electrical system loops.
- New tunnels should be sized to include space for future chilled water lines.

Chilled Water

- An existing moth-balled system of chilled water pipes was installed in the tunnel system. It is recommended that reactivation of the chilled water system be undertaken with chillers that serve portions of campus.

Electricity

- The campus is served with two main electrical systems. The north campus is fed with a 4,160 volt system. The south campus is fed with a 12,470 volt system.
- The 12,470 volt loop electrical system is at capacity. (A loop allows electrical service from two directions. In case there is a short of loss of a service, the system can still function from the second source.) A new feeder and service is required to maintain the looped service. If the loop service is broken, there is additional electrical capacity, but the campus would then be served by radial feeds. (A radial feed is a single electrical line. There is no secondary service in the event of emergency failure.)
- The campus needs to complete the 12,470 volt loop to the Steam Plant from Haggard Hall.
- It is proposed that in the future all of campus would be converted to 12,470 volt redundant loops.
- Some of the high voltage cables are at their expected life.
- The campus also needs to complete the loop connection on north campus.

Fire and Life Safety Systems/Building Controls and Automation Systems

- All campus buildings are served with fire and life safety systems and building control and automation systems through the tunnel and ductbanks (concrete encased conduit) systems.

- The building controls and automation system was recently upgraded and utilizes the Integrated Signal Distribution System (ISDS) fiber optic cable system. This system is centrally monitored and controlled at the Physical Plant.
- The fire and life safety systems are planned to be upgraded to be served through the ISDS fiber optic cable system. They currently run on copper cable and are monitored by University Police.

Natural Gas

- The University is a natural gas utility provider with gas serving the Steam Plant and various buildings for heat or lab purposes. Stand-alone gas service is provided to the Physical Plant, the Archives building, the three main kitchen facilities and other facilities located long distances from the steam system.
- Gas supplied to campus is capable of handling future demand but is considered an interruptible source. For this reason the Steam Plant has the capacity to convert to oil when needed.
- No future need is expected in the academic core. Minor lab needs could easily be served from the campus system.
- In the academic core, gas is typically needed for experiments and the firing of ceramic kilns and metal foundry.
- Gas for buildings developed south of the proposed Academic District 14 may be necessary. New facilities should go through a life-cycle study to determine whether natural gas is the best fuel source.

Steam

- The campus uses a central steam plant to supply building heat and hot water to all campus buildings except the Physical Plant, Armory, Public Safety,

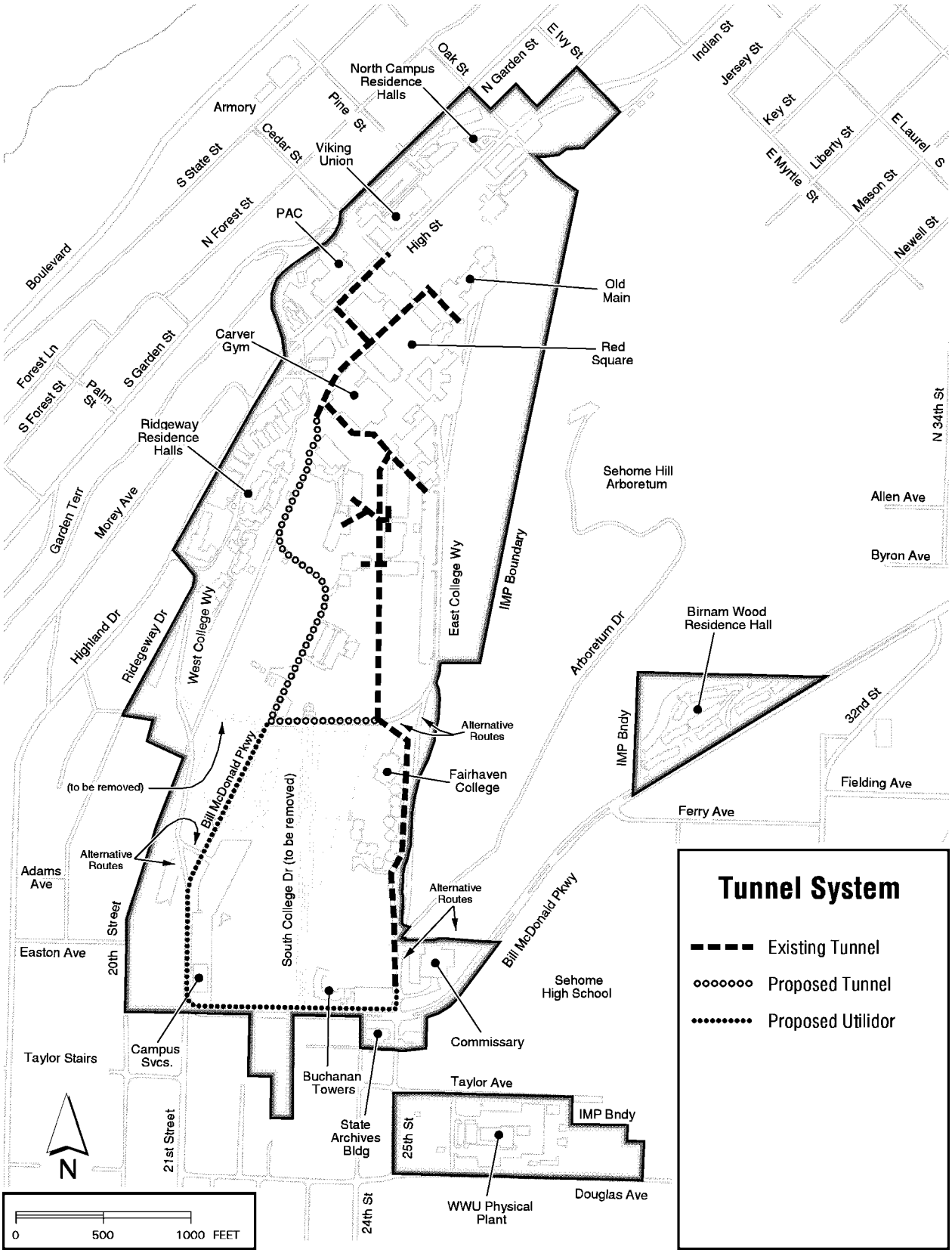
Parking and Transportation, Visitors Information Center, Alumni House, and High Street Hall.

- Steam is distributed primarily in the tunnel system with some radial feeds in utilidors.
- The Steam Plant has capacity for expected growth.
- The condensate system in many areas is at the end of its expected life and should be replaced within 20 years. (Condensate is the hot water return system for the steam.)
- The anticipated growth may require increasing steam pressure in the existing lines to meet future needs.
- Increasing pressure would increase maintenance requirements and may require changing condensate piping, insulation, and pressure reducing valve settings.
- It is recommended that buildings south of the Academic Zone District not be served with steam due to the decrease in efficiency levels.

Telecommunications

- The University is in the process of completing its Integrated Signal Distribution System (ISDS). This system is a fiber optic backbone for transporting information.
- The ISDS lines are fiber optic cables and carry data communications, fire and life safety communications, building controls and automation communication, and television.
- The telecommunication systems are run through campus in the tunnel system or ductbanks to all buildings.
- The telephone system (voice communications) runs on copper cable to a main switch in Bond Hall. Private companies currently provide public switched network access and long-distance carrier services.

- A satellite communication system is also located at the Physical Plant and connects to the ISDS system.
- The campus has an emergency telephone system throughout campus. The emergency phones use cell technology and connect to University Police.
- There is a need for cellular telephone and communication technology to serve the campus and neighbors.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Tunnel System
Existing Tunnel
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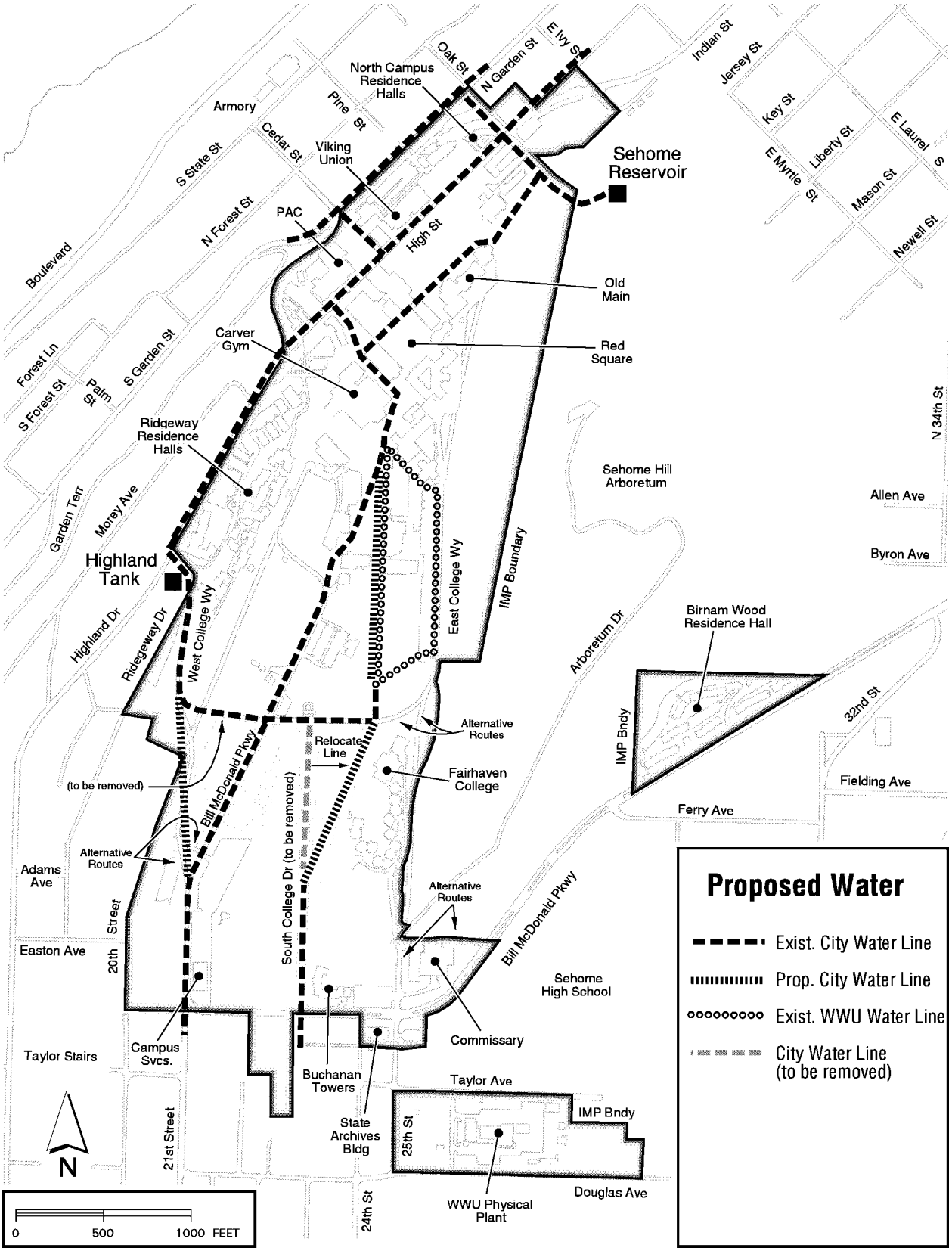
Proposed Utilidor


Proposed Water
Exist. City Water Line
Prop. City Water Line
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City Water Line (to be removed)
Sehome Reservoir
Highland Tank
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Viking Union
PAC
Armory
Old Main
Red Square
Carver Gym
Ridgeway Residence Halls
Sehome Hill Arboretum
Birnam Wood Residence Hall
Fairhaven College
Sehome High School
Commissary
Buchanan Towers
State Archives Bldg
WWU Physical Plant
Campus Svcs.
Taylor Stairs
Alternative Routes
Relocate Line
(to be removed)
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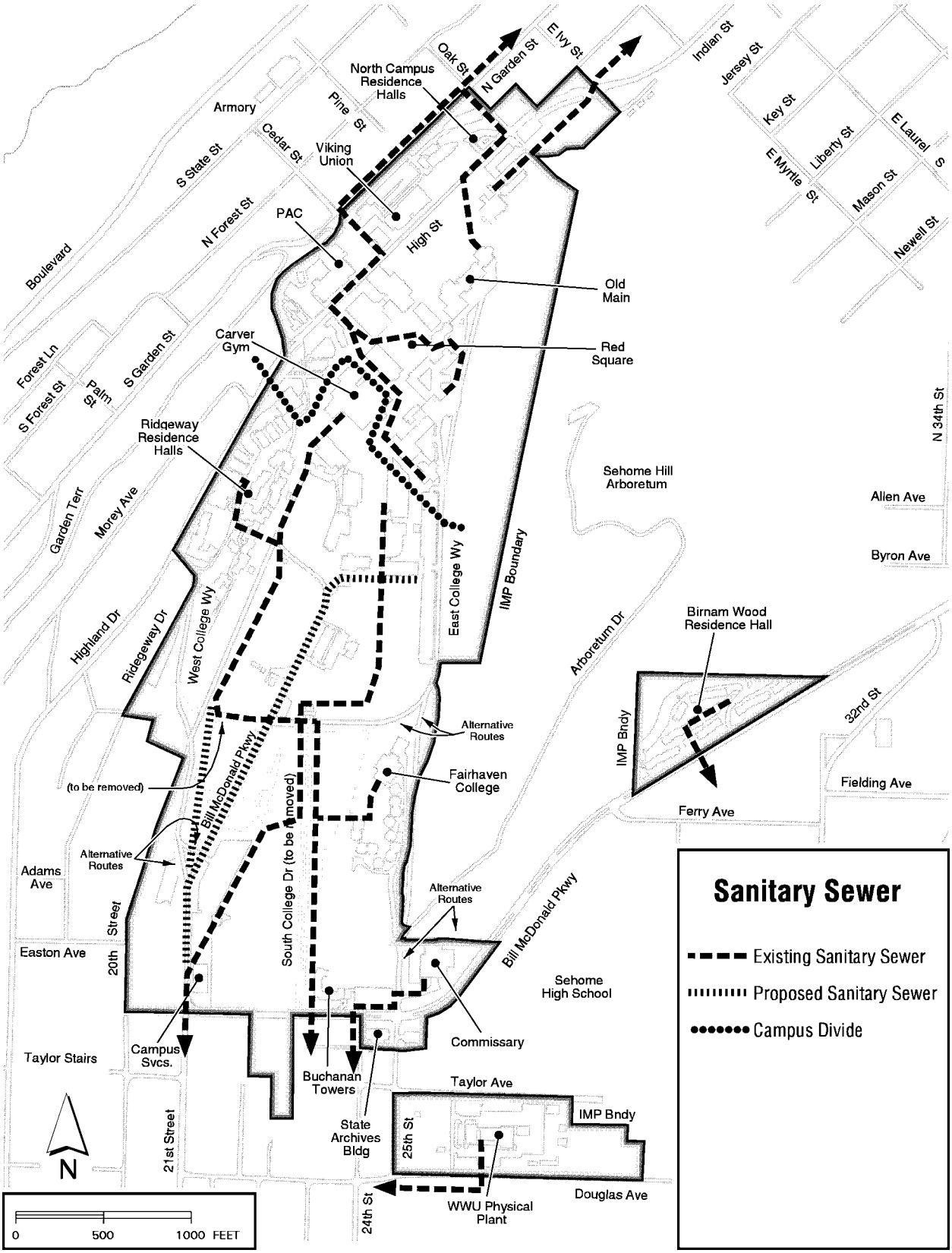
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Red Square
Forest Ln
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Ridgeway Residence Halls
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Sehome Hill Arboretum
Allen Ave
Byron Ave
Garden Terr
Morey Ave
Highland Dr
Ridgeway Dr
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East College Wy
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Arboretum Dr
Birnam Wood Residence Hall
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IMP Bndy
Alternative Routes
Fairhaven College
Fielding Ave
Ferry Ave
(to be removed)
Bill McDonald Pkwy
South College Dr (to be removed)
Adams Ave
Alternative Routes
Alternative Routes
Bill McDonald Pkwy
Easton Ave
20th Street
Sehome High School
Commissary
Taylor Stairs
Campus Svcs.
Buchanan Towers
Taylor Ave
IMP Bndy
State Archives Bldg
25th St
21st Street
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24th St
WWU Physical Plant
Douglas Ave
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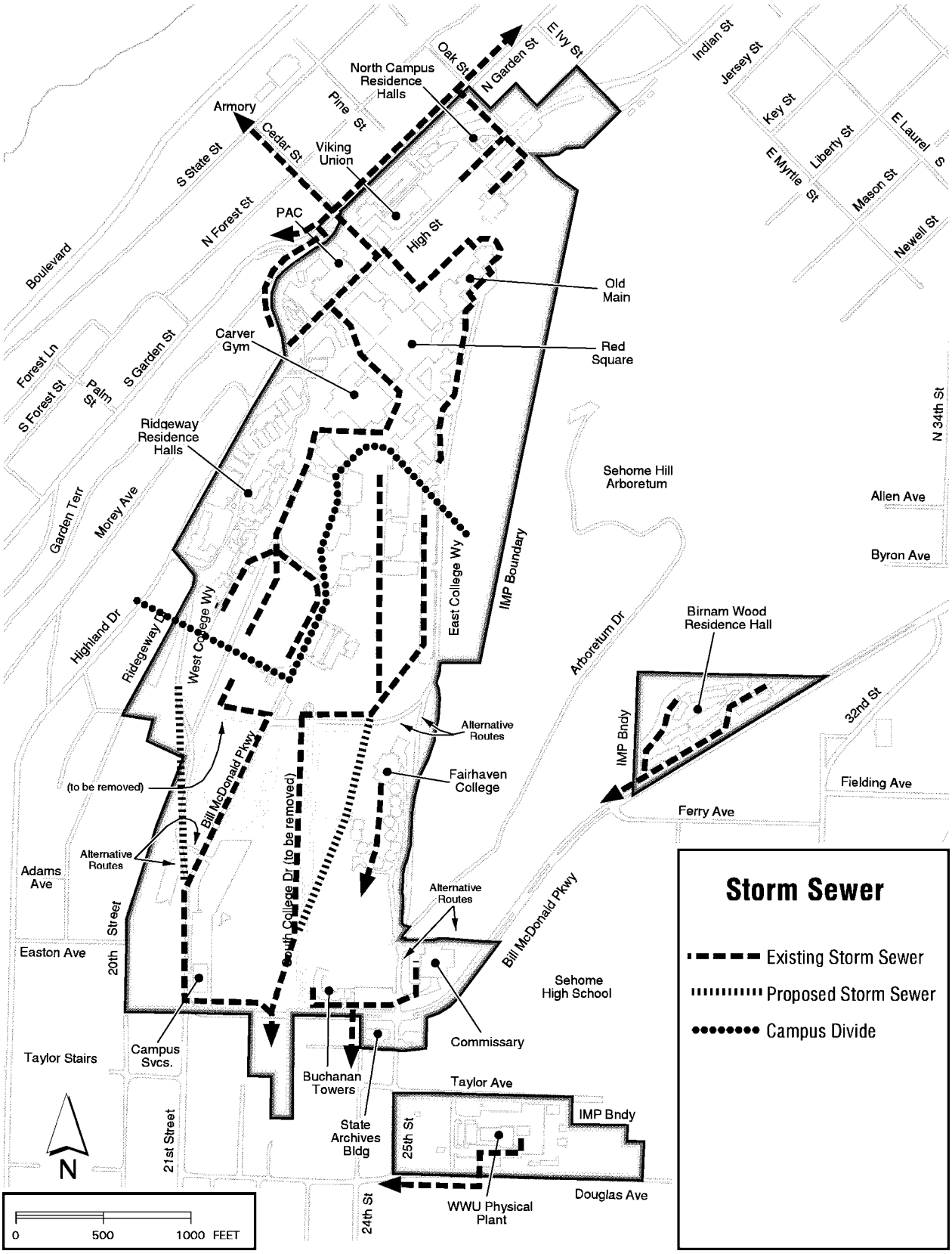
Sanitary Sewer
Existing Sanitary Sewer
Proposed Sanitary Sewer
Campus Divide


Storm Sewer
Existing Storm Sewer
Proposed Storm Sewer
Campus Divide
North Campus Residence Halls
Armory
Viking Union
PAC
Old Main
Red Square
Carver Gym
Ridgeway Residence Halls
Sehome Hill Arboretum
Birnam Wood Residence Hall
Fairhaven College
Alternative Routes
(to be removed)
Sehome High School
Commissary
Campus Svcs.
Buchanan Towers
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Phased Development Schedule

Introduction

The complete build-out of the *Institutional Master Plan* occurs in phases of development, as funding becomes available and as completed renovation or new projects provide the domino steps needed for the next stage of development to occur. Historically, funding for academic, administration, university support, and components of student support have come from legislative funds. Residential and the remaining components of student support have been covered through the issuance of revenue bonds. The University will need to look for funding from those traditional sources, as well as seek funding from systems not previously explored in order to implement the *Institutional Master Plan*.

The table on the next page represents phased development planned to meet the entire need for facilities, both within and outside of the campus boundaries.

The first step to most of the development is the installation of the needed utilities and roadway infrastructure, predominately in the south campus area. Most City of Bellingham roadway and utility systems are already in place to accommodate these university improvements. The table shows development in the 2000-2005 column during and after the infrastructure improvements in all categories except for administration. In addition, the table shows a relocation of the hammer throw/shot-put area to accommodate location of the Student Recreation Center (included in student activities) and the first parking facility. The parking facility would not be completed until the later part of the 2000-2005 time frame and may not be needed until the 2005-2010 phase, depending on the *IMP* parking requirement methodology.

Phased Development Schedule (Total Gross Square Feet)

Functions	2000-2005	2005-2010	2010-2015	Beyond 2015
Infrastructure	South Campus Area	-	-	Additional Areas
Academic	130,000 GSF - 150,000 GSF	150,000 GSF - 200,000 GSF	150,000 GSF - 200,000 GSF	310,000 GSF - 400,000 GSF
Residential	50,000 GSF - 60,000 GSF	50,000 GSF - 60,000 GSF	-	100,000 GSF - 210,000 GSF
Student Support	120,000 GSF - 140,000 GSF	-	-	50,000 GSF - 70,000 GSF
University Support	15,000 GSF - 20,000 GSF	-	50,000 GSF - 60,000 GSF	70,000 GSF - 90,000 GSF
Administration	-		30,000 GSF - 40,000 GSF	60,000 GSF - 70,000 GSF
Programmed Open Space	Hammer-throw/shot-put	2 regulation-size fields	2 regulation size fields & 12 tennis courts	-
Parking Facilities	250 - 350 spaces	350 - 500 spaces	-	500 - 700 spaces

Phased Development Schedule Summary

- 2000-2005 time frame, build infrastructure in the south campus (roads and utilities) and add 315,000 to 370,000 square feet of academic, residential, and support building space, and 250 to 350 structured parking spaces.
- 2005-2010 time frame, add 200,000 to 260,000 square feet of academic and residential building space, two playfields, and 350 to 500 structured parking spaces.
- 2010-2015 time frame, add 230,000 to 300,000 square feet of academic, support, and administration building space, two playfields, and 12 tennis courts.

- Following the 2000-2005 time frame, development phasing focuses on academic programs, residential facilities, playfields, and parking.
- The parking facilities shown in the 2005-2010 time frame are primarily dependent on the third regulation field development in the south campus area shown in the 2010-2015 column.
- In addition to the development shown in the table above, the University will be renovating its existing facilities to accommodate both programmatic changes and internal systems upgrades. Continuing and associated improvements for bicycle paths, pedestrian circulation, transit routes and shelters will also occur.

Plan Completion

Western will be required to produce a new or updated institutional master plan once 1.28 million square feet of new building space (4 million square feet total building space) needed to accommodate 12,500 FTE is completed.

Standards

Introduction

In order to preserve the vision of this *Institutional Master Plan*, the University shall design projects and develop the campus in accordance with the following standards.

Compatibility with Adjacent Neighborhoods

An important consideration when adding new development to campus is locating the more intensive uses internal to the campus and creating a transition area with less intensive institutional and residential uses at the perimeter. The edges of campus are particularly important and new development should be designed to accomplish this transition and to be compatible with adjacent residential neighborhoods. The *IMP* has been written with these considerations in mind. More specifically, the following principles have guided the preparation of the *IMP* including the Standards section:

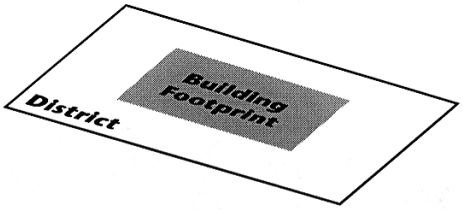
- In establishing the permitted uses in each land use district, an effort was made to buffer adjacent city neighborhoods from the high intensity academic core by other uses of lower intensity that are more compatible to the neighborhood's size and character. Permitted uses at the edge of campus are predominately residential or student activity areas with the potential for a few appropriate mixed uses.

- In establishing the development standards in this section, an effort was made to reduce the *IMP's* potential impacts on adjacent neighborhoods through the use of transitions, blending, landscape, and acoustical buffering. Transitions, blending, and buffering are achieved by designing structures that are consistent with the adjacent scale, density, architectural characteristics, and landscaping of the

neighborhoods, and use of setbacks that step-back in height recognizing adjacent densities and preserving, where possible, solar orientation.

- Western shall appoint a representative to serve as the official contact person for the Happy Valley, Sehome, and South Hill Neighborhoods. This person shall participate in neighborhood association meetings and serve to communicate neighborhood concerns and to expedite responses from Western. If neighborhood concerns cannot be resolved at this level, representatives from the neighborhood, Western, and the City shall meet to resolve the issue.
- Plans for all significant Western projects shall be provided to the adjacent neighborhood associations in a timely manner to allow adequate time to respond. This shall include a clear mechanism for feedback to include all phases of the project (planning, studies, construction, post-construction).

BAR (Building Area Ratio) =

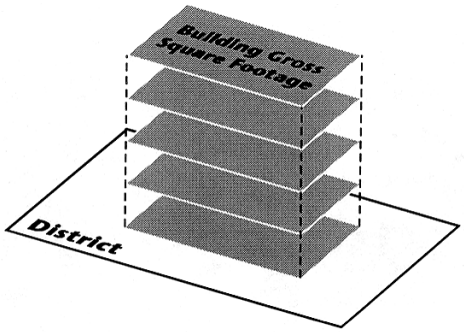


$$\frac{\text{Building Footprint}}{\text{District Square Footage}}$$

Building Heights, Setbacks and Site Coverage

In general, the *Institutional Master Plan* deals with the issues of building heights, setbacks, and site coverage through the use of density ratios. The two ratios used are the Building Footprint Area to District Area ratio (Building Area Ratio, or BAR) and Building Total Area to District Area ratio (Floor Area Ratio, or FAR). All ratios are calculated using gross square footage.

FAR (Floor Area Ratio) =



$$\frac{\text{Building Gross Square Footage}}{\text{District Square Footage}}$$

Site Coverage

For Academic areas the existing FARs range from 0.45 – 1.31, with an average of 0.92. The *IMP* uses a FAR range of 0.90 –1.10 for development in Academic areas. The existing Academic BARs range from 0.29 –0.39, with an average of 0.33. The *IMP* uses a BAR range of 0.32 –0.35 for development in Academic areas.

For Residential areas the existing FARs range from 0.34 –0.76, with an average of 0.48. The *IMP* uses a FAR range of 0.55 –0.65 for development in Residential areas. The existing Residential BARs range from 0.11 – 0.19, with an average of 0.17. The *IMP* uses a BAR range of 0.19 –0.24 for development in Residential areas.

For Administration/Support and Mixed-Use areas that currently have functions within them, the existing FARs range from 0.06 –0.52, with an average of 0.22. The *IMP* uses a FAR range of 0.10 –0.50 for development in Administration/Support and Mixed-Use areas. The existing Administration/Support and Mixed-Use BARs range from 0.04 –0.18, with an average of 0.12. The *IMP* uses a BAR range of 0.05 –0.15 for development in Administration/Support and Mixed-Use areas.

For Student Activity areas the calculation of FARs and BARs is modified slightly to include exterior programmed spaces, such as playfields, as single floored facilities. The existing FARs range from 0.36 –0.92, with an average of 0.40. The *IMP* uses a FAR range of 0.50 –1.45 for development in Student Activity areas. The existing Student Activity BARs range from 0.35 – 0.42, with an average of 0.36. The *IMP* uses a BAR range of 0.40 –0.50 for development in Student Activity areas.

For each building project, Western shall demonstrate to the City's satisfaction that the proposed projects meets the applicable district FARs and BARs, including reporting the total of the existing plus proposed BARs and FARs.

Building Height

In addition to these density ratios, the *IMP* limits building height to 60 feet, as defined under the Bellingham Municipal Code 20.08.020, for any development within 100 feet of a property line abutting a residential zoned property or within 70 feet of a property line that is across a right-of-way from residential zoned property.

Further consideration of transition from institutional areas to adjacent residential neighborhoods should include consideration of view corridors and sun/shadow effects as specified in the Character Goals and Development Recommendations of each district.

Setbacks

When development in the Institutional zone is abutting or across a right-of-way from non-institutional zoned areas, the development should comply with setback requirements of the non-institutional district, provided that no portion of a structure's facade shall be less than ten feet from the edge of a public right-of-way requiring a setback. The setback requirements shall not apply to non-structural elements such as fences, free-standing walls, bulkheads, ramps, signs, and entrance canopies.

Nonconforming Structures

Structures existing prior to the adoption of the *IMP* that do not meet the development standards of the *IMP* shall be considered nonconforming. Nonconforming structures may remain without alterations or may be altered in a manner that does not increase the degree of nonconformity. If a nonconforming structure is destroyed by fire, act of nature, or other causes beyond the control of the University, it may be rebuilt to the same or smaller configuration existing immediately prior to the time the structure was destroyed.

Landscaping and Buffering

Where appropriate, landscaping on the periphery of campus shall take into consideration the following principles:

- Use plantings to minimize noise and visual impacts on adjacent districts and neighborhoods.
- Provide street trees as recommended in the Bellingham Street Tree Plan along campus periphery roadways to buffer adjacent neighborhoods.
- Use sustainable development to select and position landscape materials to aid in achieving energy efficiency.
- Use native or well-adapted plant material where appropriate.
- Where possible, take advantage of trees to reduce cooling loads and use hedge rows or shrubbery to block cold winter winds or help channel cool summer breezes into buildings.
- Use plant material and site design features to slow and absorb water runoff, filter sediments and facilitate water infiltration.
- Maximize pervious surfaces that are conducive to water filtration and use natural drainage ways where possible.
- Minimize use of herbicides, pesticides, and fertilizer through plant selection and design.
- Minimize need for irrigation by plant selection and by grouping plant material with similar watering needs.

When development occurs at the edges of campus, other methods of buffering one land use from a higher intensity land use shall be considered to accomplish the buffering and transition discussed above.

- Scale of buildings: design to reduce the impacts of tall and large buildings along the periphery of campus.

- Open space: use open space to buffer development and maintain desirable BARs.
- Architectural design: use architectural design elements to blend with surroundings and to obscure unsightly building mechanical systems.
- Building System Noise: when development occurs at the edge of campus, use acoustical engineering techniques where appropriate to properly abate noise resulting from campus building systems so that noise levels do not exceed adopted city and state standards.
- Site design: use sustainable design methods appropriate to the project.
- Circulation patterns: use buildings to define and enhance circulation and open space.
- Climate control: consider shadowing and climate impacts on adjacent neighborhoods resulting from campus structures.
- Lighting: minimize lighting impacts on adjacent districts and neighborhoods while still providing adequate lighting for safety.

Crime Prevention Through Environmental Design

Western should incorporate appropriate Crime Prevention Through Environmental Design (CPTED) principles in all projects.

Parking

1. The minimum parking requirement for Western Washington University shall be 3,400 spaces, unless reductions are approved by the City of Bellingham Planning Director, in accordance with section City of Bellingham Land Use Development Ordinance, 20.12.010 B. Additional spaces shall be required if the occupancy of the University's on-campus park-

ing lots and garages during peak periods exceeds 90 percent for two consecutive years, as determined by a comprehensive parking survey of on-campus parking facilities, which shall be conducted by the University during the peak occupancy periods of each academic year. The amount of additional parking required shall be 0.3 spaces for each FTE (full-time equivalent) student in excess of the average of the FTE enrollment during the first year in which parking utilization exceeds 90 percent and the previous year. No additional on-campus parking shall be required for university employees and visitors. For purposes of determining current parking requirements, the enrollment shall be based on the fall quarter FTE enrollment of students on the Bellingham campus. For purposes of determining future parking requirements, State of Washington FTE enrollment targets for Western Washington University shall be utilized, with adjustments made, if necessary, to identify the projected fall quarter enrollment (vs. average annual enrollment targets or projections).

2. A reduction in the minimum vehicle parking requirements, not to exceed 30 percent, may be approved by the City of Bellingham Planning Director, if the University can demonstrate through a comprehensive transportation and parking study that: 1) the increased use of alternative modes of transportation, including transit, carpools, bicycles and walking, has reduced the actual demand for parking to an amount less than the minimum requirements, and 2) that no significant adverse impact on the surrounding neighborhoods will occur. Percentage reductions in the requirements that are equivalent to any percentage reductions in the number of the University's single occupant vehicle (SOV) commuters, as determined through a mode split survey that compares the mode split with that determined in the 1998 transportation survey conducted by the University, shall be granted automatically, provided that the

peak utilization of all on-campus parking spaces remains below 90 percent. The 1998 transportation survey showed that 27 percent of the university commuters traveled to campus by single occupant vehicles, which shall be used as the basis for the calculation of any reductions in the amount of required parking.

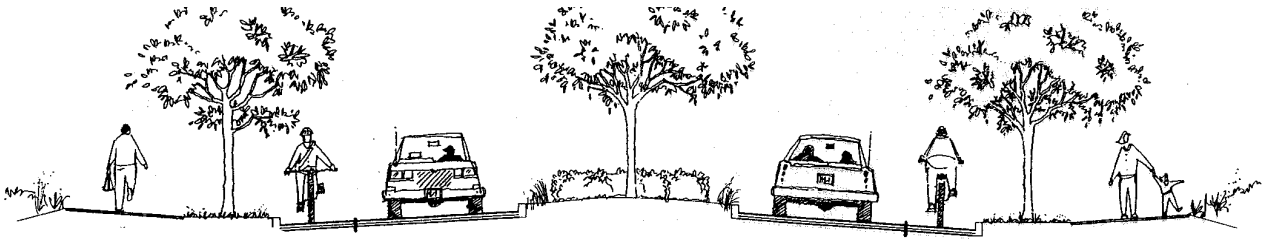
Western shall provide at least two weeks notice to the City of Bellingham Planning Department of the time period during which the peak period parking utilization surveys are to be scheduled and, if requested, shall allow a representative of the Department to observe or participate in the survey. In addition, the results of all transportation and parking studies shall be made available to the public, including neighborhood representatives, and Western shall work with the City and neighborhood representatives to identify and respond to any concerns with the studies.

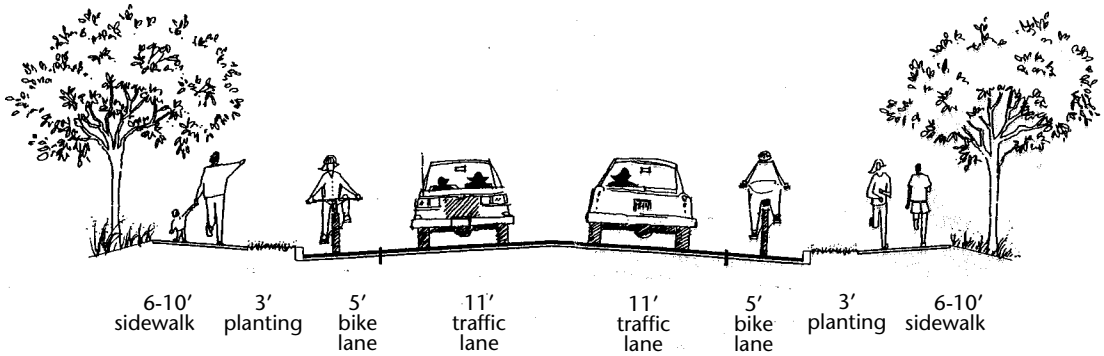
3. A minimum of six percent of the vehicle parking spaces shall be available for short-term parking (defined as parking designated for visitors, metered parking, or other parking having with time limits of four hours or less).

4. Off-campus parking may be utilized to meet up to a maximum of twenty percent of the minimum university parking requirements if it is available during peak periods of parking utilization and is located within 500 feet of the campus boundaries, or beyond 500 feet when it serves university off-campus uses located on the same or adjacent site(s) or is connected to the campus by free or low cost transit service operating during peak periods. If off-campus parking areas serve other, non-university uses, a joint parking agreement specifying rights and/or operating times must be signed by all participants and the City of Bellingham's Planning Director and filed in the County Auditor's Office. Any off-campus parking must be consistent with City land use and zoning requirements and approved by the City of Bellingham's Planning Director.

5. BMC 20.12.010 C (4) and (9) not withstanding, the University may continue to make revisions to its existing parking facilities without City approval, in ways that do not require a City permit, so long as the University does not decrease the total amount of off-street parking spaces below the minimum requirements.
6. BMC 20.12.010 E (1) notwithstanding, the City and the University may agree that new parking facilities may utilize surfacing other than hard surfacing.
7. Off street parking dimensions shall meet the requirements of BMC 20.12.010 C (6), (7), and (8), unless waivers of the requirements are approved by the City of Bellingham Director of Planning and Community Development, with concurrence by the Director of Public Works.
8. Parking facilities shall meet the design requirements of BMC 20.12.010 D, unless waivers are approved by the City of Bellingham Planning Director, with concurrence by the Public Works Director.
9. The University shall provide bicycle parking facilities containing a minimum of one bicycle parking spaces for each 10 FTE students, provided that additional spaces shall not be required if it can be demonstrated that the peak occupancy of existing bicycle parking facilities does not exceed 90 percent.
10. Western's continued partnership with the City in funding a comprehensive residential parking zone program shall be required before the City will consider any future reductions to the approximately 3,400 existing on-campus parking spaces.
11. New parking lots and structures shall be located so as to minimize, as much as possible, the impact of vehicle traffic going through surrounding neighborhoods.

Street Standards





Signs

- Exterior signs shall follow the established campus sign program. The signage program provides a framework for promoting a visually cohesive environment and providing identification and directional communication in a safe, effective and aesthetically pleasing manner. In general, vehicular directional signs, entry signs to campus and building identification signs all follow a low, horizontal format that minimizes visual impact on the surroundings and still provides communication in a clear, visible manner.
- All new signs on the perimeter of campus shall follow the established campus sign program and be designed and installed with consideration to the impacts on the adjacent neighborhood.
- Signs may be internally illuminated (similar to the existing entrance sign at Oak and Garden Streets), or have indirect lighting that does not adversely impact adjacent residential property.
- The use of neon signs shall be discouraged.
- All signs shall be located outside the vision clearance triangle established by the City.
- The sign program shall be revised to accommodate any new signage needs, but the intent, general configuration and graphic layout of signs shall remain consistent with the existing program.
- Until a safer alternative and more unified approach is developed, the use of sandwich signs for temporary events may continue to be used on campus.

Access for the Physically Challenged

- All new development shall conform to standards set for access for the physically challenged as outlined in local building codes and standards.
- Nonconforming existing facilities shall be upgraded based on priority of need, feasibility and as funding is available.

Appendices

Appendix A
Western Washington University's Role and Mission Statement

Western Washington University's Role and Mission Statement

University Role:

Western Washington University's objective is to provide high quality undergraduate education with a core focus on the liberal arts; programs of a practical and applied nature directed to the educational and professional needs of state residents; and selected graduate programs through the master's degree.

University Mission Statement:

As a public comprehensive university focusing primarily on serving undergraduate students throughout the region, the University is dedicated to the pursuit of truth, learning and the dissemination and development of knowledge, and service to the community.

Its programs contribute to the educational, economic and cultural needs of its community which centers on Washington state and extends to the world beyond. This mission is addressed principally through teaching which embraces the liberal arts and professional preparation.

The University nurtures the intellectual, ethical, social, physical and emotional development of each student. It aims to teach learning skills useful in a rapidly changing and highly technical world and to develop a consciousness of the challenges and responsibilities of living in a diverse and pluralistic society.

It strives for graduates who are skilled communicators, able to critically analyze and use information, able to recognize and address the complex issues of the modern world, and who are willing to serve as responsible stewards of natural resources.

In its research, the University strives to develop new knowledge and to apply that knowledge, where appropriate, to the solution of problems. The goal of its cultural programs is to enrich the lives of all people touched by them.

Through all of its programs, on and off campus, the University seeks to improve the life of the community by teaching people to solve problems and meet the challenges of a complex world.

Appendix B
Methodology for Projecting Building Space Needs

Application of Methodology for Projecting Building Space Needs

APPROVED BY IMPAC: January 25, 2000 (amended 12/6/00)

Building Area Category Definitions

Residential *
Residence Halls
Dining Halls
Apartments
Residential & Dining Administration

Academic & Instruction
Classrooms
Laboratories
Faculty Offices
Academic Colleges & Departmental Offices
Library

Administration
President's Office
Provost's Office
Vice Presidents:
Student Affairs
External Affairs
Business & Financial Affairs

University Support
ATUS
EHS
Human Resources
Mail Services
Publishing
PFO
Telecommunications
University Police
Parking

Student Support
Admissions
Counseling
Registrar
Campus Recreation
Associated Students
Viking Union
Career Services
General Student Support

How much building space is currently on campus?

Existing Building Space by Area

All existing gross building square footage** on the main campus is accounted for within these five areas:

EXISTING BUILDING AREAS

	Gross Sq. Ft.	%
Residential	977,000	36%
Academic	1,279,000	47%
Administration	108,000	4%
University Support	159,000	6%
Student Support	198,000	7%
	2,721,000	**100%**

* Housing" was replaced with "Residential", 5/26/00
** *Gross square footage includes all interior building space, such as halls, stairs, walls, custodial and mechanical areas, etc.*

Does the current space adequately meet the needs of the existing campus population?

On the Western campus today, there are many examples of building spaces that are inadequate both physically and functionally for their intended purpose. Examples of results of inadequate building space include:

- Extended period of time to complete degrees
- Faculty and staff working in spaces too cramped to conduct their work in an effective or efficient manner
- Spaces without adequate lighting, heating or ventilation
- Spaces that are too noisy
- Insufficient space for undergraduate research

These deficiencies, or *compaction* effects, impact the quality of education, the overall college and work experience, the accessibility of building space, the capacity to respond to changing needs, the ability to meet state and federal standards, and the productivity of staff.

How much building space do we need to address the existing deficiencies (compaction) in each area?

To estimate the level of current compaction, we considered several factors:

- ✓ Western Washington University mission statement of accommodating 30% of head count in campus residential compared to actual student residential capacity
- ✓ Compaction rates of departments that have moved over the last 10 years
- ✓ Washington State *Facilities Evaluation and Planning Guide* (FEPG) building space guidelines compared to actual space on campus
- ✓ Amount of space in departments that are currently compacted

With this information, we estimated a *Compaction Factor* that was applied to the deficient areas on campus today. The result is a square footage estimate in each building area that would meet the needs of the existing campus.

Existing Compacted Square Feet	**x**	Compaction Factor	+	Existing Uncompacted Square Feet	=	**Total Square Feet to Meet Existing Need**

Residential compaction is handled separately because it is based on Western's mission of accommodating 30% of head count, while historical data and state guidelines were considered for other building areas.

In estimating the total square feet needed for Residential, we started with 30% of headcount as the goal, or "mission," for the number of students to be housed on campus. We then accounted for the average annual occupancy rate of 90% so we could estimate the number of operating beds needed to meet the university goal. The apartment beds at Birnam Wood were excluded at this point, because only residence hall beds will be added in the future. The current compaction factor for residence halls was estimated at 4.8%.

The total square feet needed to meet today's need in the residential area was estimated at approximately 1.0 million square feet, or 4.2% more than the existing square feet.

WORKSHEET: <u>CURRENT COMPACTION - RESIDENTIAL</u>

Student Headcount - Fall 1999		11,708
"Mission" -30% of Opening Week Headcount	x	0.30
Number of Students to be Housed on Campus -per "Mission"	=	3,512
Average Annual Occupancy Rate - 90%	÷	0.90
Total Beds Needed for Mission	=	3,903
Apartment Beds - Birnam Wood	-	517
Residence Hall Beds -Needed for Mission	=	3,386

Residence Hall Compaction Factor = Residence Hall Beds - Needed for Mission / Current Number Residence Hall Beds = 3,386 / 3,232 = 1.048

Existing sq. ft. - associated with residence halls		Residence Hall Compaction Factor		Sq. ft. Needed Today - associated with residence halls		Existing sq. ft. - associated with apartments		Total Sq. Ft. Needed Today
853,696	x	1.048	=	894,285	+	123,304	=	1,017,589

We applied the Washington State *Facilities Evaluation and Planning Guide* building space guidelines and determined that the current compaction factor for classrooms at Western is 31%. We used 30% as a compaction factor for scheduled academic space. For unscheduled space, we used 54% as the compaction factor – based on historical expansion data.

WORKSHEET: CURRENT COMPACTION OF ACADEMIC, ADMINISTRATION, UNIVERSITY SUPPORT, STUDENT SUPPORT

DEPARTMENTAL EXPANSION OVER THE PAST TEN YEARS (unscheduled space only)

	Sq. Ft. (net) Previous	Sq. Ft. (net) New	% Increase
Student Support Services	1,580	3,138	99%
Campus Services Facility	7,440	13,172	77%
Communications	37,985	60,529	59%
Residential & Dining Administration	6,033	13,195	119%
Biology	30,238	40,281	33%
Chemistry	22,974	33,530	46%
TOTAL	**106,250**	**163,845**	**54%**

Please Note: We assumed that the newer facilities (those built within the last 10 years) do not have significant compaction issues. We did not verify this assumption. Therefore, there may actually be crowding or other compaction effects within the newer facilities at this time.

To address the current compaction in the other building areas, it is estimated that an additional 678,000 square feet, or 38.9% more than exists today.

WORKSHEET: <u>CURRENT COMPACTION OF ACADEMIC, ADMINISTRATION, UNIVERSITY SUPPORT, STUDENT SUPPORT</u>

Existing Gross Square Feet		1,744,000	
Subtract Newer Facilities	-	367,000	(Haggard Hall, Science Facilities, Ross Engineering Technology)
Remaining Existing Sq. Ft.	=	**1,377,000**	

Existing Scheduled Compacted square feet		Scheduled Space Compaction Factor		Scheduled square feet to Meet Existing Need
271,778	x	1.30	=	353,331

Existing <u>Un</u>scheduled Compacted square feet		<u>Un</u>scheduled Space Compaction Factor		Scheduled square feet to Meet Existing Need		Existing Newer Facilities square feet		Total Square Feet to Meet Existing Need
1,105,222	x	1.54	+	353,331	+	367,000	=	**2,422,353**

When all the compaction affects are accounted for, the additional building space needed to address the existing deficiencies is estimated at 719,000 square feet, or 26.4% more than the existing square footage.

WORKSHEET: CURRENT COMPACTION - TOTAL

(Gross Square Feet)

	Existing Square Feet		Compaction Factor		Total Square Feet to Meet Existing Need	Compaction Difference
Residential - residence halls	853,696	x	1.048	=	894,285	40,589
Residential - apartments	123,304	x	none	=	123,304	-
Academic - unscheduled compacted	640,222	x	1.54	=	985,942	345,720
Academic - scheduled compacted	271,778	x	1.30	=	353,311	81,533
Academic – newer facilities	367,000	x	none	=	367,000	-
Administration	108,000	x	1.54	=	166,320	58,320
University Support	159,000	x	1.54	=	244,860	85,860
Student Support	198,000	x	1.54	=	304,920	106,920
TOTAL	**2,721,000**				**3,439,943**	**718,943**

How much building space would be needed to accommodate 12,500 student FTE – and related departments, programs and services?

The Comprehensive Master Plan needs to accommodate a student population of at least 12,500 FTE. First we considered how much of an increase 12,500 FTE (future FTE) represents relative to the current student FTE.

Historical FTE Trends and Assumptions

The FTE growth rates used in this step of the methodology are based on several factors:

- The 1974 Facilities Development Plan (current adopted plan) indicates that building square footage rose proportionately to student population
- Over the last 20 years, faculty and staff have grown at about the same rate as student growth

Percent Increase in Student FTE

To address the increase in student FTE, we assumed that building space projections would increase at the same rate as student FTE. The *Growth Projection Factor* is the ratio of Future FTE to Current FTE. It represents the percent increase in FTE relative to today.

$$\frac{\text{Future FTE}}{\text{Current FTE}} = \boxed{\textbf{Growth Projection Factor}}$$

$$\frac{12{,}500}{10{,}648} = \boxed{1.1739}$$

The *Growth Projection Factor* was applied to the *Total Square Feet to Meet Existing Need* to get the *Raw Need Projection*. There are other factors that may increase or decrease the *Raw Need Projection*. The final projection of building space need is referred to as the *Adjusted Need Projection* and can be found in later sections.

Total Square Feet to Meet Existing Need	x	Growth Projection Factor	=	**Raw Need Projection**
3,439,943	x	1.1739	=	4,038,250

The additional building space needed to accommodate 12,500 student FTE is estimated at approximately 600,000 square feet, or 48% more than the existing building square footage.

WORKSHEET: CAMPUS FTE GROWTH

Gross Square Feet

	Existing Square Feet	Total Square Feet to Meet Existing Need		Growth Projection Factor		12,500 Raw Need Projection	Campus FTE Growth Difference
Residential	977,000	1,017,589	x	1.1739	=	1,194,578	176,989
Academic	1,279,000	1,706,253	x	1.1739	=	2,003,021	296,763
Administration	108,000	166,320	x	1.1739	=	195,248	28,928
University Support	159,000	244,860	x	1.1739	=	287,448	42,588
Student Support	198,000	304,920	x	1.1739	=	357,955	53,035
TOTAL	**2,721,000**	**3,439,943**				**4,038,250**	**598,307**

Are there other factors to consider that might impact space needs in the future, in addition to the growth of the student population?

Other Factors Included in the Analysis

We considered state and university goals that directly impact future building space projections:

- ✓ State Higher Education Coordinating Board (HECB) goal of increasing the rate of classroom space utilization
- ✓ State HECB goal of increasing e-learning participation
- ✓ New programs

The increase in student FTE increases the need for building space. Other factors – increased rate of space utilization and e-learning – would offset some of the need for increased building space. While new programs would increase the need for building space. The combined impact of these factors is added to the *Raw Need Projection* to estimate the *Adjusted Need Projection*.

Increased Rate of Space Utilization

If the hours of room utilization were increased, it would offset some of the projected need for increased building space. The HECB goal translates into an increase in the rate of space utilization in classrooms by approximately 10% during the time frame of the Comprehensive Master Plan. We included all scheduled rooms in our analysis (classrooms, labs, meeting rooms). The *Projected Utilization Savings* will be included in the *Adjusted Need Projection* of future building space.

Raw Need Projection	**x**	% Existing Scheduled Space	**x**	10%	=	**Projected Utilization Savings**

The projected savings from increased space utilization is approximately 39,000 square feet, or just under 1% of the *Raw Need Projection* for 12,500 FTE.

WORKSHEET: UTILIZATION

(Gross Square Feet)

	Raw Need Projection		% Existing Scheduled Space					Projected Utilization Savings
Residential	1,194,578	x	0.13%	x	10%	=		(150)
Academic	2,003,021	x	17.81%	x	10%	=		(35,680)
Administration	195,248	x	9.13%	x	10%	=		(1,783)
University Support	287,448	x	1.53%	x	10%	=		(440)
Student Support	357,955	x	2.79%	x	10%	=		(999)
TOTAL	**4,038,250**							**(39,052)**

E-Learning

If students participate in e-learning, there may be some decreased demand for classroom and lab space (NOTE: some argue that there will be increased demand for space to support the program). The HECB goal translates into an increase in e-learning by approximately 5% during the time frame of the Comprehensive Master Plan. However, unless students participate in these programs full time, the impact will be minimal. Also, unless there is a known amount of participation in these programs, it would be difficult to plan space effectively. The *Projected E-learning Savings* will be included in the *Adjusted Need Projection* of future building space.

Raw Need Projection	**x**	% Existing Classroom & Lab Space	**x**	5%	=	**Projected E-Learning Savings**

The projected savings from increased e-learning is approximately 17,000 square feet, or 0.4% of the *Raw Need Projection*.

WORKSHEET: E-LEARNING
(Gross Square Feet)

	Raw Need Projection	x	% Existing Classroom & Lab Space				Projected E-Learning Savings
Residential	1,194,578	x	0.0%	x	5%	=	-
Academic	2,003,021	x	15.6%	x	5%	=	(15,584)
Administration	195,248	x	3.6%	x	5%	=	(354)
University Support	287,448	x	5.5%	x	5%	=	(798)
Student Support	357,955	x	0.0%	x	5%	=	(7)
TOTAL	**4,038,250**						**(16,743)**

New Programs

New programs – educational, student support, regulatory – increase the need for building space at a faster rate than FTE growth. The 1974 Facilities Development Plan assumed that programmatic increase accounted for 25% of the projected growth. Based on historical expansion data, and discussions with Space Administration and the Office of University Planning & Analysis, we used 10% as our program growth factor. The factor is applied to the *Existing Square Feet* to estimate the *Projected Need for New Programs*.

Total Square Feet to Meet Existing Need was used as the base, instead of the *Raw Need Projection*, because the projected growth related to new programs is based on today's square footages, not the projected need for 12,500 FTE. The *Projected Need for New Programs* will be included in the *Adjusted Need Projection* of future building space.

We used 5% for residential because the administrative areas (offices and programs) are small compared to the residential and dining portion. This will also take care of the historical trend of increasing room size for students.

Total Square Feet to Meet Existing Need	x	10 %	=	**Projected Need for New Programs**

The projected building space needed to accommodate new programs is approximately 293,000 square feet, or 8.5% of the *Total Square Feet to Meet Existing Need.*

WORKSHEET: PROGRAMS
(Gross Square Feet)

	Total Square Feet to Meet Existing Need		Projected Need for New Programs
Residential	1,017,589	x 5% =	50,879
Academic	1,706,253	x 10% =	170,625
Administration	166,320	x 10% =	16,632
University Support	244,860	x 10% =	24,486
Student Support	304,920	x 10% =	30,492
TOTAL	**3,439,943**		**293,115**

Adjusted Building Space Need Projection for 12,500 FTE

The *Raw Need Projection* – or projected building space need based only on an increase in FTE – is adjusted by subtracting *the Projected Space Savings from Utilization and E-learning* and adding the *Projected Need for New Programs*. The result is an estimate of the *Adjusted Need Projection* to accommodate 12,500 student FTE.

Raw Need Projection	--	Projected Savings from Utilization & E-Learning	+	Projected Need for New Programs	=	**Adjusted Need Projection**

When all factors are taken into account, the Adjusted Need Projection is estimated to be 4,276,000 square feet, or 57.1% more than the square footage that exists on campus today.

WORKSHEET: TOTAL NEED

	Raw Need Projection					Projected Savings from Utilization & E-Learning							
	Existing		Compaction		Campus FTE Growth		Utilization		E-Learning		New Programs		Adjusted Need Projection
Housing	977,000	+	40,589	+	176,989	+	(150)	+	-	+	50,879	=	1,245,308
Academic	1,279,000	+	427,253	+	296,768	+	(35,680)	+	(15,584)	+	170,625	=	2,122,382
Administration	108,000	+	58,320	+	28,928	+	(1,783)	+	(354)	+	16,632	=	209,743
University Support	159,000	+	85,860	+	42,588	+	(440)	+	(798)	+	24,486	=	310,696
Student Support	198,000	+	106,920	+	53,035	+	(999)	+	(7)	+	30,492	=	387,441
TOTAL	**2,721,000**		**718,943**		**598,307**		**(39,052)**		**(16,743)**		**293,115**		**4,276,000**

Final Approved Building Space Need Projection Range

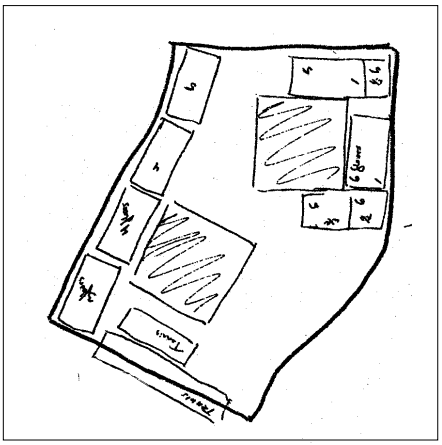
The Institutional Master Plan Advisory Committee (IMPAC) approved the Adjusted Needs Projection as a range of plus or minus 5%. Therefore, the ***Final Approved*** *Building Space Need Projection (amended)* is 4,062,000-4,489,000 gross square feet. This represents 49.3% to 65.0% more than the existing square feet of building space,

WORKSHEET: FINAL APPROVED BUILDING SPACE PROJECTION RANGE

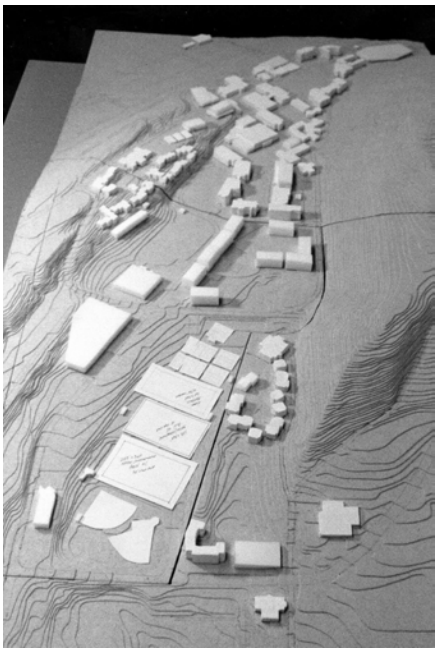
	Existing Square Feet	Adjusted Need Projection	Approved Range (+/- 5%)	
			low	high
Residential	977,000	1,245,308	1,183,042	1,307,573
Academic	1,279,000	2,122,353	2,016,263	2,228,502
Administration	108,000	209,743	199,256	220,230
University Support	159,000	310,696	295,161	326,230
Student Support	198,000	387,441	368,069	406,813
TOTAL	**2,721,000**	**4,276,000**	**4,062,000**	**4,489,000**

Appendix C
Plan Alternatives

Plan Alternatives



Group One/Scheme One - Sketch



Group One/Scheme One - Model

- On March 28, 2000 the Land Use and Open Space Sub-Committees met jointly. Planning staff presented the FAR and BAR calculations (as summarized in the Land Use section of this document and explained in detail in the Appendix), and reviewed the existing and proposed land use maps.
- During a planning exercise ("gaming session") the members were divided into two "teams." Their charge was to help determine if the proposed south academic district would accommodate the medium projected academic space needs. There was some concern over the appropriateness of addressing academic needs without considering other functions (housing, parking, etc.), but it was generally agreed that academic functions were a good starting point.

  Team members arranged paper templates of academic building footprints, fields, tennis courts and quad areas on 100' scale maps of the south campus.
- Group one included: Sarah Clark-Langager, Dunham Gooding, Lynda Goodrich, April Markiewicz, Ron Riggins, and Dan Warner.

  Group one's scheme maintained open space and views. One and one-half academic building foot prints were eliminated from the required eight and one-half by increasing building heights. Building heights tapered from six floors to the far north to two floors at the far south. The reduction in building footprints required allowed space for tennis courts and one additional field. It was assumed that the access road behind Old Main (East College Drive) would remain and that South College Drive would be eliminated.

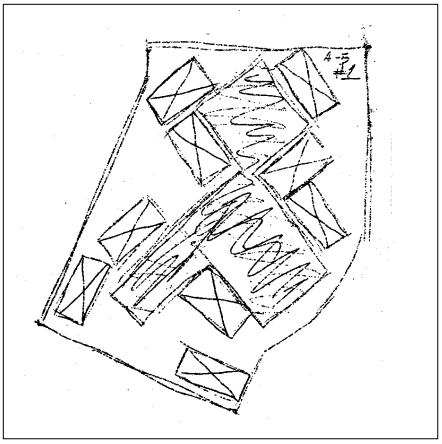
- Group two included Barbara DeFreytas, Chris Koch, Greg Kuhn, Robert Stoops, Dave Toyer, and Susan Trimingham).

  Group two developed three schemes. This group tried to keep the same ambiance of the existing campus i.e. small building scattered among small open spaces. They also tried to maintain all sculptures.

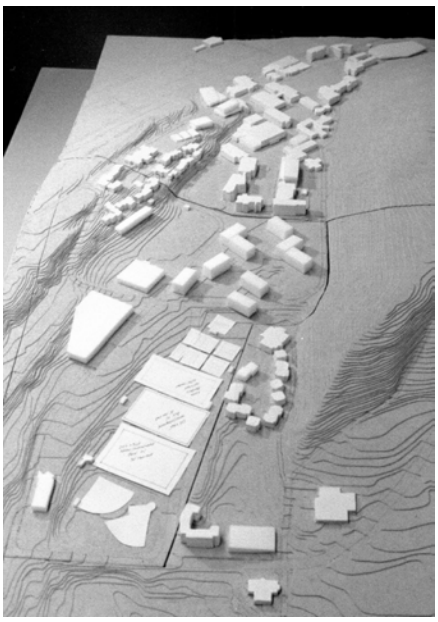
  Scheme One: keeps the linear flow of campus, maintains lines of sight down the valley and out towards Sehome Hill, maintains brick material in quads, and locates service roads on the perimeter.

  Scheme Two: also maintains linearity, but directs views in a different direction.

  Scheme Three: limits views, is more inwardly directed, has enclosed interior spaces, and promotes a "neighborhood" concept.



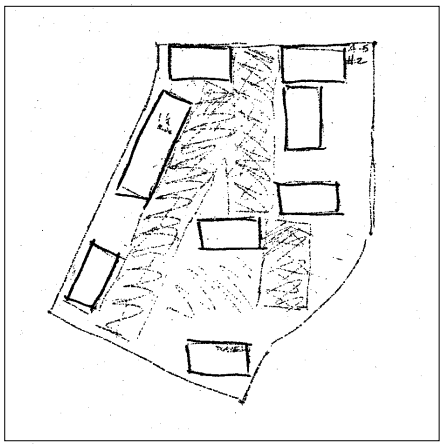
Group Two/Scheme One - Sketch



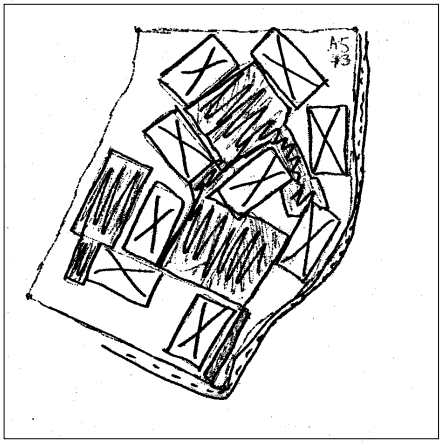
Group Two/Scheme One - Model

While the members concluded that the proposed academic district area outlined is adequate for meeting the medium academic space needs, they were aware that other function needs such as housing, parking and circulation were yet to be considered and could have considerable impacts. In addition, the "gaming session" was limited to two-dimensions; it was only intended to be a simple exercise to help members understand spatial and visual relationships. The schemes that resulted from the "gaming session" represent a few of the many ways the proposed academic quad could be developed.

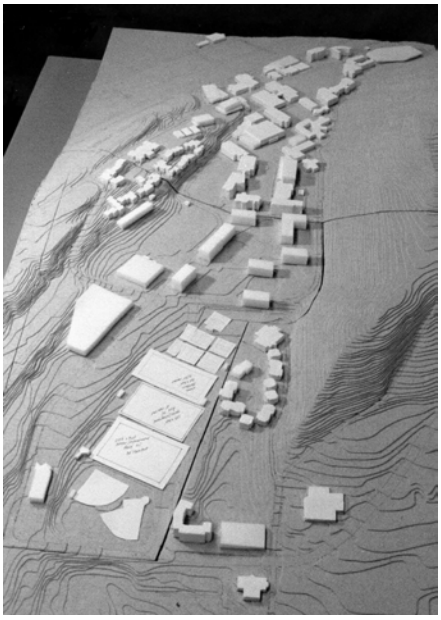
Subsequent to the "gaming session," the members' sketches were translated into a three dimensional format (see sketches and photographs).



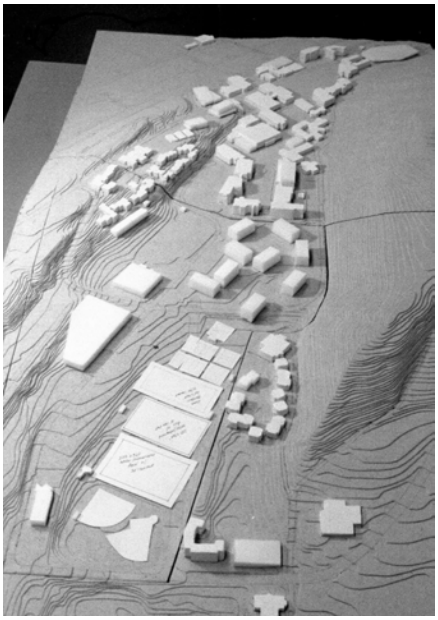
Group Two/Scheme Two - Sketch



Group Two/Scheme Three - Sketch

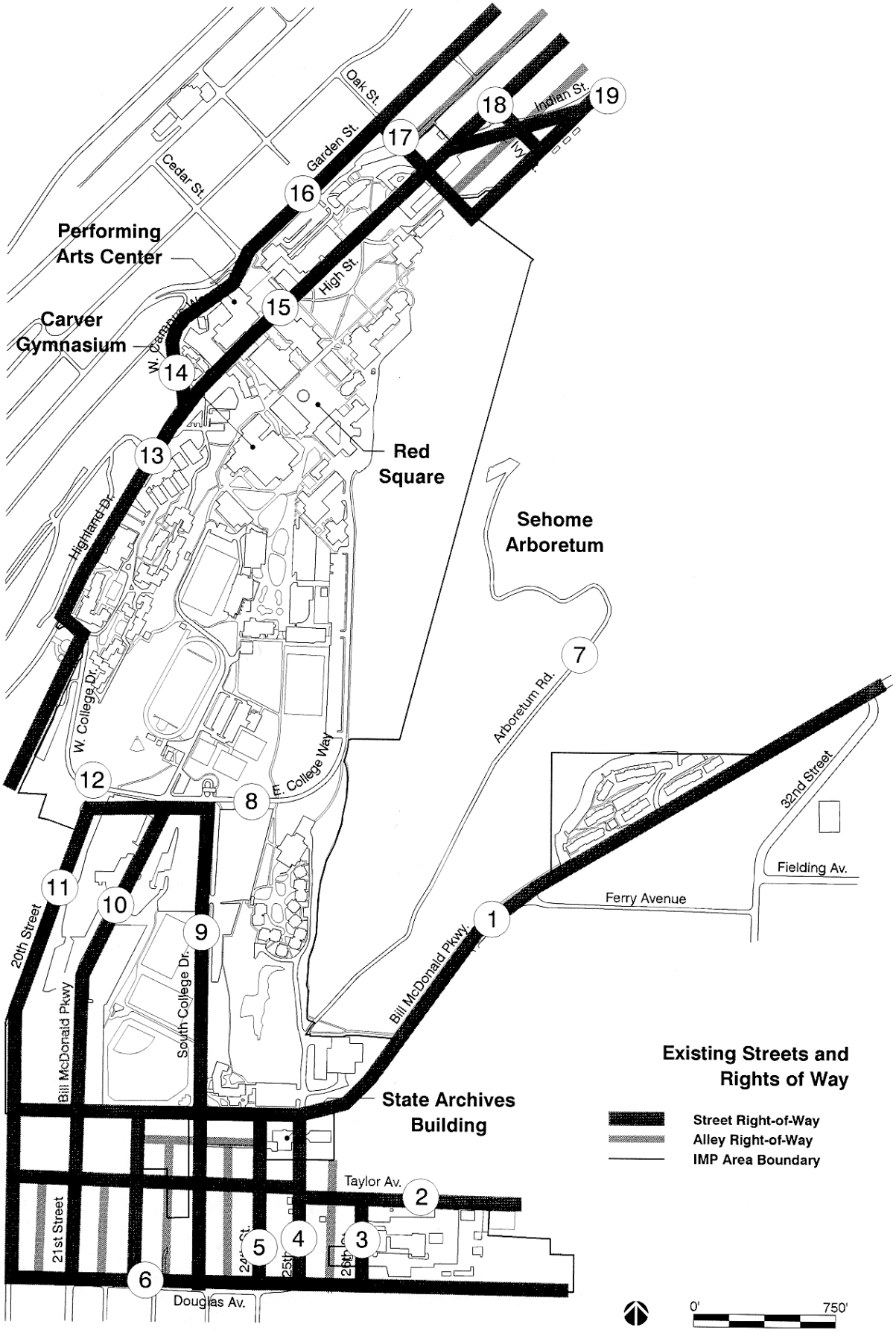


Group Two/Scheme Two - Model



Group Two/Scheme Three - Model

Appendix D
Existing Circulation Facilities


Oak St.
Garden St.
Cedar St.
Indian St.
High St.
W. Campus Dr.
Highland Dr.
W. College Dr.
E. College Way
Arboretum Rd.
32nd Street
Fielding Av.
Ferry Avenue
Bill McDonald Pkwy.
South College Dr.
20th Street
21st Street
Taylor Av.
Douglas Av.
Performing Arts Center
Carver Gymnasium
Red Square
Sehome Arboretum
State Archives Building
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
Existing Streets and Rights of Way
Street Right-of-Way
Alley Right-of-Way
IMP Area Boundary
0'
750'

Existing Circulation Facilities

As required by the City of Bellingham *Land Use Development Ordinance for Institutional Development*, the size and condition of developed streets and sidewalks were inventoried. All developed streets within and directly adjacent to the area boundary were included in the inventory along with information such as provisions for bicycle lanes, median strips, on-street parking and posted speed limits.

1 Bill McDonald Parkway

- Two-lane, secondary arterial.
- Street width: 37′-8″
- Planted median strips: 10 feet wide median from I-5 to the intersection at South College Drive.
- Bicycle lanes: 5′-0″on both sides of street.
- Sidewalks: 5′ wide on the south side of Bill McDonald Parkway between I-5 and South College Drive in good condition. Seven foot wide sidewalk on part of the north side separated from vehicles by 7′ wide planting strip. Sidewalk veers away from street shortly before the Commissary building.
- On-street parking: none permitted.
- Posted speed limit: 25 mph in front of Sehome High School to 21st Street and 35 mph elsewhere.

2 Taylor Avenue

- Street width: 34′-8″
- Bicycle lanes: none.
- Sidewalks: none.
- On-street parking: both sides.
- Posted speed limit: none posted.

3 26th Street

- Street width: 21 feet
- Bicycle lanes: none.
- Sidewalks: none.
- On-street parking: on west side of block in front of Physical Plant; on both sides just south of the Physical Plant.

(4) 25th Street

- Collector arterial (per Happy Valley Neighborhood Plan).
- Street width: 21 feet
- Bicycle lanes: none.
- Sidewalks: 5′-8″ on both west and east sides in excellent condition.
- On-street parking: on west side of street.
- Posted speed limit: None posted.

(5) 24th Street

- Street width: 21 feet
- Bicycle lanes: none.
- Sidewalks: 5′-2″ in poor condition on east side; 13′-9″ wide planting strip on east side has culvert and on-street parking.
- On-street parking: yes.
- Posted speed limit: 20 mph (school zone).

(6) Douglas Avenue

- Street width: 22 feet
- Bicycle lanes: none.
- Sidewalks: none.
- On-street parking: south side in front of apartment complexes.

(7) Arboretum Road

- Street width: 18′-9″
- Bicycle lanes: none.
- Sidewalks: None.
- On-street parking: none.
- Posted speed limit: none posted.

(8) East College Way

- Street width: 23′ 8″
- Bicycle lanes: none.
- Sidewalks: 6′-2″ on east side in good condition, 2′-2″ paved path on west side in good condition.
- On-street parking: none.
- Posted speed limit: 25 mph (10mph from Steam Plant north)

(9) South College Drive

- Street width: 50′-8″ two-lane secondary arterial (confirm) with a 15′-7″ wide planted median strip. Connects East College Way/West College Way to Bill McDonald Parkway. Ends at Visitor Info Center.
- Bicycle lanes: none.
- Sidewalks: 5′-8″ wide sidewalks on east side of South College in good condition. Sidewalk separated from vehicles by 5′-8″ wide planting strip.
- On-street parking: None.
- Bus shelters/pull-outs: three bus stops and one bus shelter located along this arterial.
- Posted speed limit: 25 mph.

(10) 21st Street

- Street width: 30′-7
- Two-lane road terminates behind Science, Mathematics, and Technology Education building (SMATE).
- Bicycle lanes: none.
- Sidewalks: vary from 5′-0″ to 8′-6″.
- On-street parking: both sides.
- Posted speed limit: 25 mph (20 mph by the tennis courts).

(11) 20th Street

- Street width: 18′-2″
- Bicycle lanes: none.
- Sidewalks: none.
- On-street parking: east side.
- Posted speed limit: 25 mph.

(12) West College Way

- Steep two-lane, secondary arterial (confirm).
- Street width: 28 feet.
- Bicycle lanes: none.
- Sidewalks: 4′-3″ sidewalk recently added to north side, raised curb separates sidewalk from road.

- Bus shelters/pull-outs: bus stop at the junction of West College Way and Highland Drive has no pull-off area.
- On-street parking: none permitted.
- Posted speed limit: 25 mph.

13 Highland Drive

- Street width: 24′-10″
- Bicycle lanes: none.
- Sidewalks: 5′-10″ on east side in good condition.
- On-street parking: angled, parallel parking on west side of street.
- Posted speed limit: 25 mph.

14 West Campus Way

- Street width: 26′-8″, two-lane secondary arterial that connects High Street/Highland Drive with Garden Street.
- Bicycle lane: bicycle lanes on both sides were delineated in summer of 1999. Bicycle lanes end where West Campus Way turns into Garden Street.
- Sidewalks: sidewalks on both sides of the street (3′ 5″ east in excellent condition & 5′-8″ west in poor condition).
- On-street parking: none permitted.

15 High Street

- Street width: varies from 25′-0″ to 40′-0″.
- Bicycle lanes: none.
- Sidewalks: width varies. 5′-6″ on east side in excellent condition; 4′-6″ on west side in good condition.
- Sidewalk on west side separated from road by 4′-6″w x 58′-3″ planting strip
- On-street parking: west side.

16 Garden Street

- Street width: 31′-8″ wide, two-lane secondary arterial from West Campus Way to its northerly

terminus at East Champion Street (confirm). From West Campus Way south, Garden Street is classified as a collector arterial (confirm).

- Bicycle lanes: none.
- Sidewalks: sidewalks adjacent to campus are in good condition and are provided on both sides of the street. The sidewalks on the east side are 6′-2″; the west side sidewalks are 6′-9″. In some areas, separated by planting strips on the east side (14′-7″) and on the west side (14′-11″).
- On street parking: permitted on the east side of the portion of Garden Street that abuts campus (between Oak and Cedar Streets); Residential Parking Zones located further south on Garden Street.
- Posted speed limit: 25 mph.

17 Oak Street

- Street width: 17′-6″
- Bicycle lanes: none.
- Sidewalks: 5 feet on the south side in good condition with a 10′-6″ planting strip; 5′-2″ on the north side in good condition with a 4′-7″ planting strip.
- On-street parking: on north side.
- Posted speed limit: none.

18 Ivy Street

- Street width: 23′-3″
- Bicycle lanes: None.
- Sidewalks: None.
- On-street parking: Both sides.

19 Indian Street

- Street width: 41 feet
- Bicycle lanes: none.
- Sidewalks: east side = 5′-8″ in good condition; west side = 5′-6″ in good condition.
- On-street parking: both sides of street.
- Posted speed limit: none.