



Facilities Master Plan



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Facilities Master Plan



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SKAGIT VALLEY COLLEGE

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1.0 EXECUTIVE SUMMARY

1.1 INTRODUCTION

Skagit Valley College was founded in 1926 and is the second oldest community college in the state. Its Mount Vernon Campus opened in 1956 to serve the needs of students of their region, providing the fundamentals to move on to four-year institutions or to receive training and education in specialized skills programs. SVC primarily serves counties in its district; Skagit, Island and San Juan, through its two campuses and three centers. The main campus, is located in the City of Mount Vernon. Whidbey Island Campus is significantly smaller and located in Oak Harbor. The three centers; San Juan Center, South Whidbey Center and Marine Technology Center, are located in Friday Harbor, Clinton and Anacortes, respectively.

Skagit Valley College's two campuses and three centers focus on providing education to the community at large, especially those that might be underserved in rural areas. There are a variety of options to suit individuals' needs including two-year degrees for students wishing to transfer to four-year institutions and professional and technical training programs for students who wish to move straight into professional or technical jobs. SVC also offers programs in continuing education and community involvement that address the lifelong learning needs of its community.

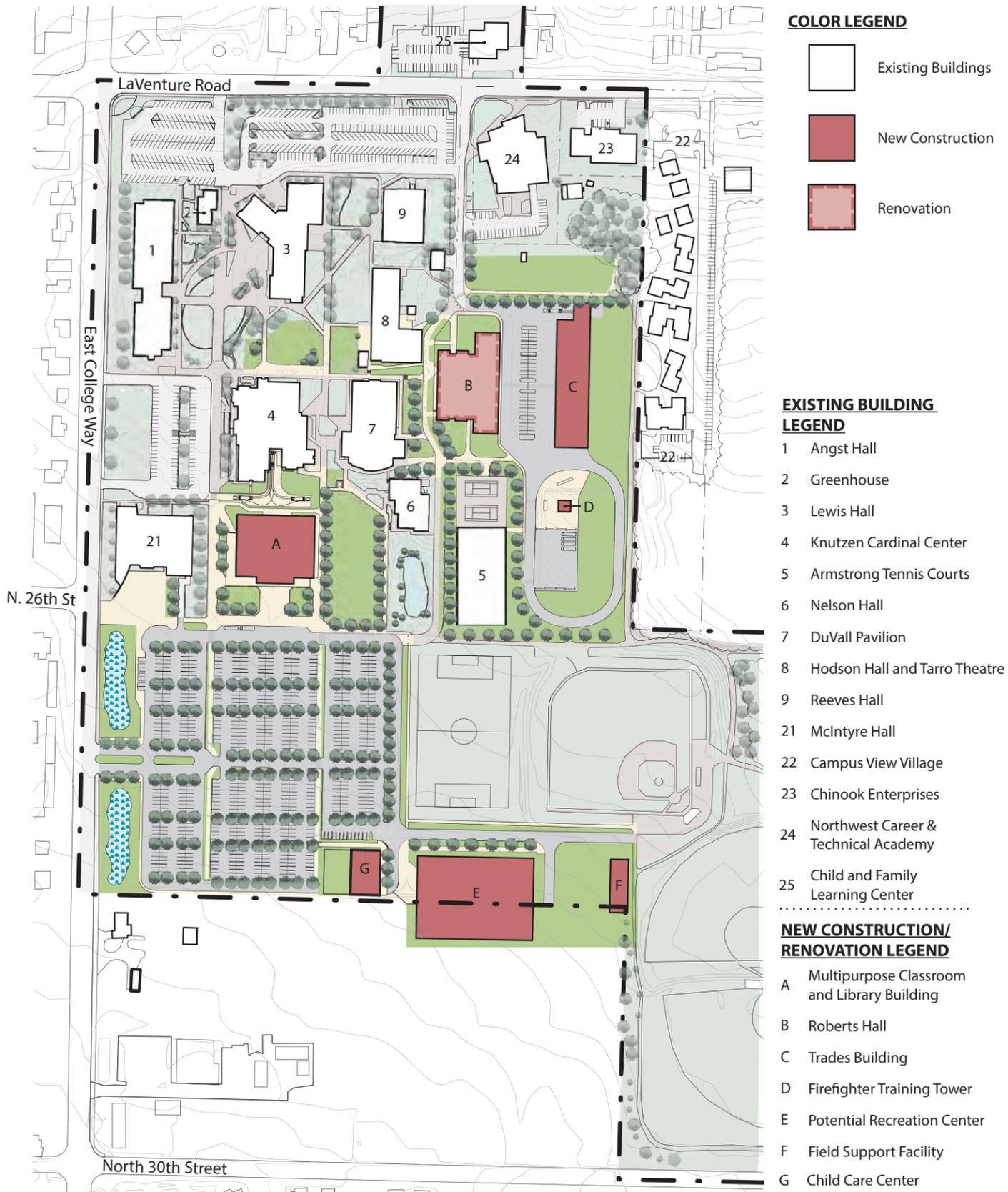
SVC initiated a facilities master planning process in order to create a framework that will guide future development on its campus in a way that reflects the mission and vision of the institution. Campus planning provides a key role in creating the appropriate environment for education. The facilities master plan looks to transform the College by developing state-of-the-art facilities that support contemporary instructional methodologies as well as services to support the campus. The plan provides a vision for the college with emphasis on development that relates to the College's five Strategic Priorities; Latino Community Engagement, Global Citizenship, Environmental Stewardship, Utilizing 21st Century Technologies, and Aligning Educational Programs with Regional and State Economic Development Strategies. Each of these elements has implications for the master plan.

1.2 MOUNT VERNON CAMPUS – LOCATION AND CHARACTER

The Mount Vernon Campus is not far from downtown and is easily accessible from within the region. To the east of campus are sweeping views of the Cascade Mountains and Mount Baker. The strength of SVC's programs and its attractive setting are both assets, making the College appealing for prospective students.

The campus is organized in three distinct zones; the academic and campus center core, the professional technical programs area, and the athletic fields. The campus core represents the heart of the campus and is where the first buildings were built in 1956. The architectural style and building material palette vary across campus. Buildings at the campus core are more collegiate in appearance with the use of brick, metal panel and stucco. Buildings on the north side of campus tend to have a utilitarian style and siting. Simple, industrial materials are used on buildings surrounded by a large, paved service zone.

The age and condition of facilities vary widely across campus due to steady construction throughout the College's history. Over the past few years SVC has undertaken construction of replacement buildings as well as renovation of existing buildings. The replacement projects have improved campus buildings by providing state-of-the-art facilities in keeping with contemporary educational methods. Continued maintenance, renovation and new construction are needed to accommodate growth and to address facilities that are under performing or not functional. The master plan has been developed to address these facilities issues as well as to address how the landscape will interact with and anchor the campus architecture.



1.3 MOUNT VERNON CAMPUS – DEVELOPMENT PLAN

The master plan presents a plan for the development of the campus over two major phases; the 15-year Development Plan and the Long-range Development Plan (LRDP). The LRDP is a 30-year, long-range vision for the transformation of the SVC Mount Vernon Campus. The master planning consultant team worked with SVC faculty and staff to guide the creation of the master plan. A set of themes or methods of improving the campus became evident through those meetings. These themes included:

Consolidation

- Campus and facilities resources can be better utilized through consolidation of smaller buildings into larger buildings. Utilization of existing infrastructure, increased density near existing campus services, and the sharing of spaces between programs can provide future flexibility and future building sites in the heart of campus.

Improve Campus Experience for Students

- Campus experience can be improved by reorganizing buildings, open space and circulation to create an universally accessible campus that is easy to navigate and distinctly Mount Vernon.

Planning Relative to Funding Resources

- Sources for funding implementation of the master plan guide the development for the 15-year Development Plan and the LRDP. Both plans assume that the primary funding for academic and professional technical facilities will be through state allocations. Therefore, the 15-year plan focuses on addressing buildings that have 5-15 years of remaining life. Other projects included in this master plan, such as the child care center and recreational facilities, can be funded through local and regional partnerships and/or industry grants.

15-YEAR DEVELOPMENT PLAN - FACILITIES

The 15-year Development Plan, Figure 1, reflects capital requests that respond to the anticipated needs of SVC and to the funding criteria of the State Board of Community & Technical Colleges (SBCTC). All campus buildings are reviewed by the State through the Facility Condition Survey (FCS). Buildings are rated on a scale of less than 5 years to greater than 35 years of projected lifespan. Many of the older buildings on the Mount Vernon Campus have been renovated and are regarded in satisfactory condition, but some are noted as having 5-15 years of remaining life. The Facilities Master Plan addresses the replacement or renovation of these buildings.

Renovation of Roberts Hall (B) and replacement of the Diesel Building are prescribed as a way to address both the aging buildings and the trades programs' growth. The Diesel Building would be replaced with a new 55,000 GSF Trades Building (C). This building would also allow for consolidation of the functions currently housed in the Fire Station and Maintenance Building. The demand for these trades programs is growing rapidly, and there is a demonstrated need for additional classroom spaces, student collaboration spaces and technical program areas.

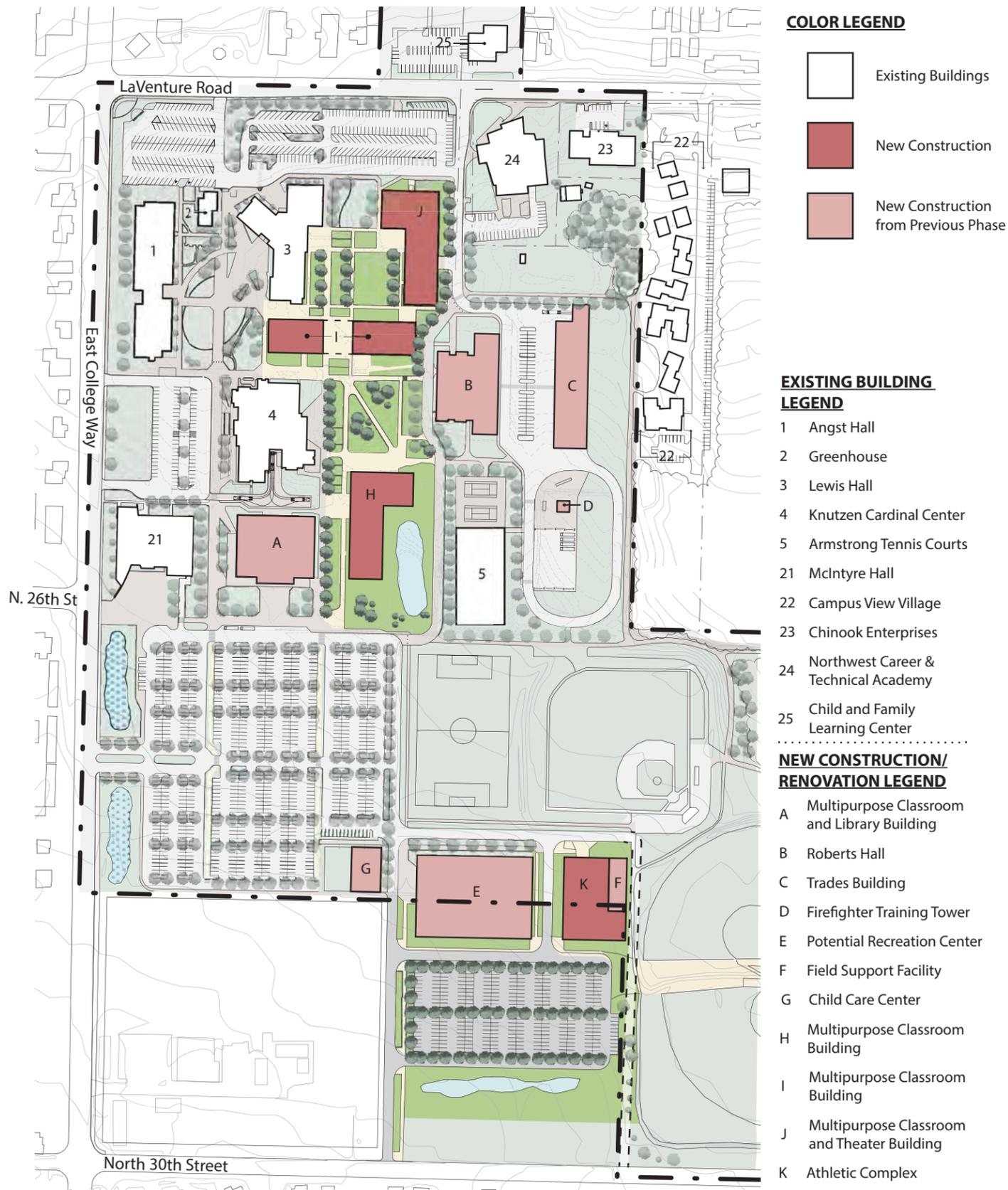
Another consolidation and replacement project is proposed for Ford Hall, Cole Library and the Administration Annex. These buildings would be replaced with a 56,300 GSF Multipurpose Classroom and Library Building (A) which also contains administrative offices. By constructing a new facility the College would be able to address existing buildings which are rated as having 5-15 years of remaining useful life while adding increased functionality and student amenity space. This building would also serve as a significant building, marking the main entrance to campus from the east parking lot.

The last grouping of projects proposed in the 15-year Development Plan is on the east side of campus near the athletic fields. A Field Support Facility (F) is proposed to support the ball fields with restrooms, locker rooms, offices and concessions. In addition, practice and training facilities currently in the existing field house would be replaced in this new facility. Locating the new field house adjacent to the ball fields would allow for direct coaches' supervision and ideal alignment with future growth of athletic amenities in this area.

Relocation of the downtown Mount Vernon YMCA to the campus has been discussed as an opportunity for a partnership between the College and the YMCA. A Potential Recreation Center (E) near the ball fields and tennis

Figure 1. Mount Vernon Campus - 15-year Development Plan





courts would further reinforce the identity of this area as an athletic zone. This type of development would have a net benefit for both the community and the campus.

Finally a 4,500 - 6,000 GSF Child Care Center (G) is shown along SVC's eastern property line. The location proposed for the child care center would accommodate constructing it on the existing campus, as the first project of the 15-year Development Plan. It would be located to ensure the small building fits in with the scale of the larger recreational buildings that may follow. The siting of the building would optimize access, security and solar orientation. Classrooms would open directly to the outdoor play area which would be oriented either to the south or east. Angle-in parking adjacent to the front door would provide safe loading and unloading for parents and children.

15 YEAR DEVELOPMENT PLAN - SITE

The organization of the Mount Vernon Campus can be confusing to first-time visitors or new students. Pathways are often not direct and visibility to destinations is sometimes obstructed. Creating a campus that is easy to navigate and accessible to all individuals is an important objective of the master plan. Providing well-defined open spaces that relate to building entries and link to pathways will improve the campus aesthetically and functionally. A defined main entry experience will also provide a sense of arrival at campus.

The 15-year Development Plan proposes a revised main entry at the east parking lot. The vehicular entry features a one-way in and out loop, and a boulevard configuration that heightens the sense of collegiate entry. Covered walkways and tree lined planting strips provide pedestrian circulation through the parking lot towards the new Multipurpose Classroom and Library Building. From there east-west pedestrian promenades would provide broad pathways and clear visual corridors to the center of campus. In addition to improved pedestrian circulation, campus signage standards previously developed by G. Scott Design would be implemented throughout campus. These strategies would ease wayfinding and provide better clarity of the organization of campus.

LONG-RANGE DEVELOPMENT PLAN

Over the next 20-25 years, programs will evolve and buildings will reach the end of their useful life and need to be replaced. Additional new facilities for SVC will gradually transform the campus. The Long-range Development Plan (LRDP), Figure 2, provides a framework for continued growth of the campus to address the Master Planning Strategies and Themes noted in the Master Plan document.

The following projects outline a vision for the campus that would provide greater impact on the creation of a cohesive campus with purposely-shaped outdoor space and a clear pedestrian circulation system. The replacement buildings would consolidate existing facilities into larger, state-of-the-art buildings designed to accommodate future flexibility as well as reinforce the sense of community on the main campus.

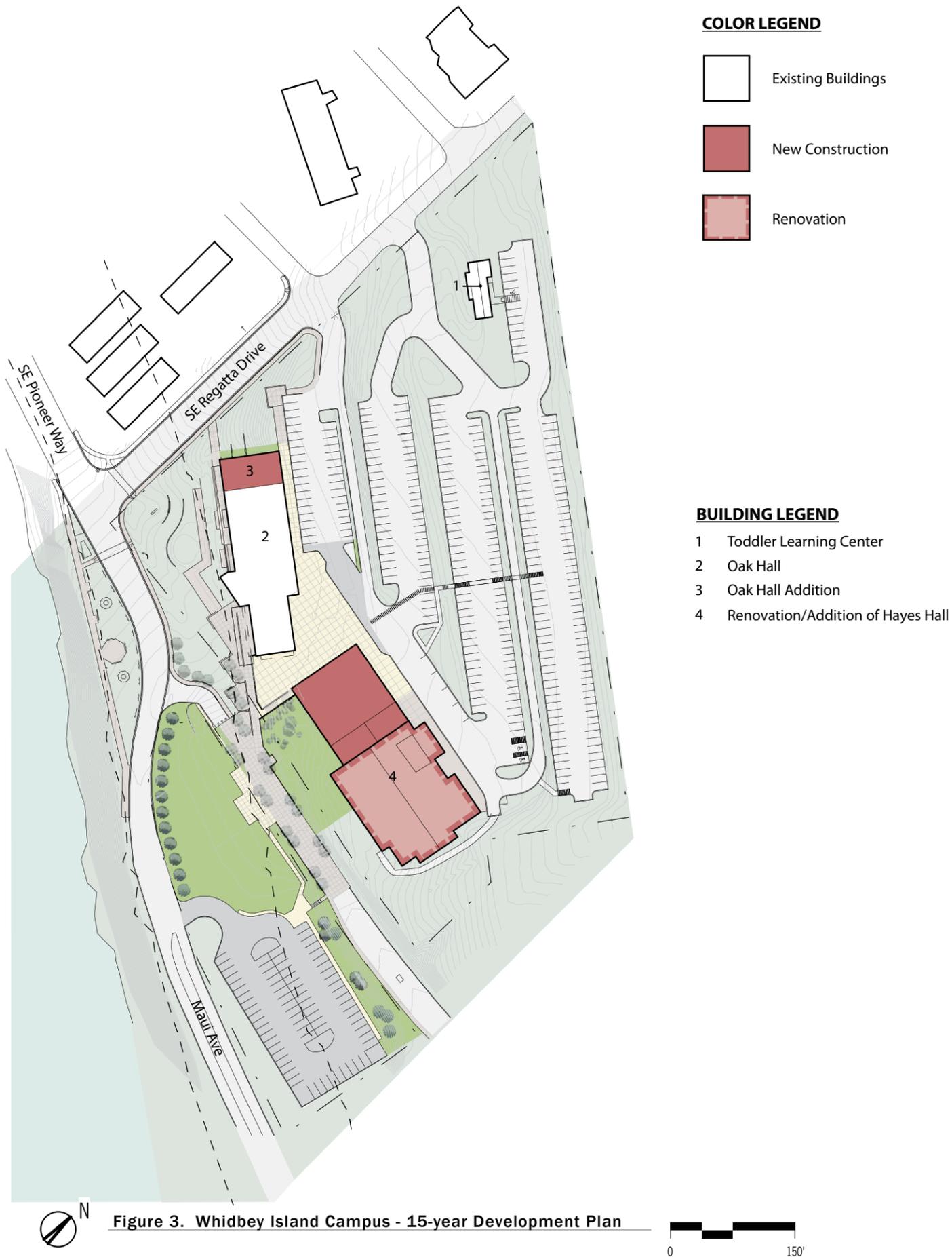
Long-Range Development Projects:

- Future Multipurpose Classroom Building at the former Ford Hall site (I)
- Future Multipurpose Classroom and Theater Building at the Hodson Hall and Reeves Hall site (could include a replacement to Tarro Theater) (J)
- Future Multipurpose Classroom Building at the former DuVall Pavilion and Nelson Hall site (H)
- Future Athletic Complex constructed as an addition to the Field Support Facility in the 15-year plan (K)

These projects represent replacement or growth projects depending on the needs of the College in the next 20-25 years. Careful planning for these projects would need to be considered well before construction. Some of the proposed projects have associated impacts on existing infrastructure. In particular, replacement or relocation of the Boiler Building and switchgear #3, located adjacent to Tarro Theater, need to be taken into consideration.

Figure 2. Mount Vernon Campus - Long-range Development Plan





1.4 WHIDBEY ISLAND CAMPUS – LOCATION AND CHARACTER

The Whidbey Island Campus is located east of downtown Oak Harbor and west of the Naval Air Base facilities. To the north of the campus is a low-density residential neighborhood. The southern edge of campus fronts along the Oak Harbor Bay of Puget Sound. Much of the campus enjoys expansive water views and southern exposure. From south to north across the site is a steep rise in grade. At certain times of the year, harsh southwesterly winds sweep up the campus slope. Otherwise, the views across the bay and the mild Northwest climate make the campus a very pleasant place.

The campus is organized in two distinct zones, the upper and lower campus. The division between the upper and lower campus is due to a steep grade change between the two and a vacated street that is now a pedestrian plaza. The campus originally began on the lower site where Old Main and Sprague Hall still stand today. These buildings are deteriorating and are not being fully utilized. Located on the upper campus is Oak Hall, Hayes Hall and the Toddler Learning Center. Most of the campus functions occur on the upper campus. This part of campus is also where the community comes to use the College Library and the Sno-Isle Library. Both libraries are located in Hayes Hall and are open to the public.

The challenge of the Whidbey Island Campus is to create a universally accessible campus where all of the buildings are efficiently utilized.

1.5 WHIDBEY ISLAND CAMPUS – DEVELOPMENT PLAN

Similar to the Mount Vernon Campus, the master plan presents a plan for the development of the campus over two major phases; the 15-year Development Plan and the Long-range Development Plan. And, as mentioned in the Mount Vernon Campus development plans description, master plan themes became apparent when studying the campus needs and investigating solutions. The three themes were consolidation, improving the campus experience for students, and planning with respect to funding resources.

15-YEAR DEVELOPMENT PLAN

The 15-year Development Plan, Figure 3, proposes the demolition of Old Main and Sprague Hall and the consolidation of their functions in an Oak Hall addition (3) and a partial replacement and renovation of Hayes Hall (4). The key component to these projects is the relocation of the Sno-Isle Oak Harbor Library to a facility off campus. Remodeling of Hayes Hall for use by the College would allow for the development of a more efficient floor plan and greater support service space for student programs.

Consolidation of facilities on the upper campus is key to providing accessibility to all campus facilities. Localizing the campus to Oak Hall and Hayes Hall would allow barrier free access in the first phase of the development plan.

There would also be associated landscape improvements with these projects. An enlarged entry courtyard and drop-off would be developed between Oak and Hayes Hall. This would simplify access to campus and provide one destination for students, faculty and the community. This courtyard would extend toward the south between the two buildings. Preservation of views and gardens of native plants would enhance the connection of the campus to its surroundings.



Figure 3. Whidbey Island Campus - 15-year Development Plan





COLOR LEGEND

- Existing Buildings
- New Construction
- Renovation from Previous Phase
- New Construction from Previous Phase

BUILDING LEGEND

- 1 Toddler Learning Center
- 2 Oak Hall
- 3 Oak Hall Addition
- 4 Renovation/Addition of Hayes Hall
- 5 Multipurpose Classroom Building

LONG-RANGE DEVELOPMENT PLAN

The Long-range Development Plan proposes a growth project on the lower campus. The lower campus falls within the Shoreline Master Plan which governs the use of land within the first 200 feet from the shoreline. Construction in this zone would require a conditional use permit.

The future Multipurpose Classroom Building (5) could be connected to the upper campus with construction of a bridge across the Pioneer Way Plaza. The bridge would connect to the second floor of the growth project and would be tall enough to allow emergency vehicle access below it.

1.6 PROCESS

This document is the first phase of the master planning process for Skagit Valley College. This master plan will serve as a decision-making tool for SVC as it plans for the future. SEPA documentation and traffic and parking studies should be undertaken well in advance of any expected development or future funding requests, as these actions will require review and approval by authorities who have jurisdiction over the building permitting process.



Figure 4. Whidbey Island Campus - Long-range Development Plan



2.0 MISSION, VISION & STRATEGIC INITIATIVES

2.1 MISSION AND VISION

Skagit Valley College's mission and vision represent the values and goals of the institution:

MISSION

Skagit Valley College provides opportunities for students in pursuit of their educational and employment goals, while contributing to the economic and cultural enrichment of our communities.

VISION

Skagit Valley College is dedicated to the success of our students. Our work is guided by a set of shared principles and our decisions are based on strategy and evidence. We are committed to quality, innovation, equity, and lifelong learning of students and employees.

2.2 CORE THEMES & STRATEGIC PRIORITIES

Access

- *The College will meet or exceed Strategic Enrollment Management targets*
- *The College will meet or exceed the statewide participation rate*
- *College enrollment will reflect district demographics*

Achievement

- *Students will successfully progress and accomplish their educational goals*
- *Students will demonstrate significant learning related to general education requirements*
- *Students will successfully transition to the workforce*

Community

- *Students and employees will engage in a culture of mutual respect and acceptance that embraces diversity and promotes a civil society*
- *The College will collaborate with its communities through the exchange of knowledge and resources*

Skagit Valley College's Five Strategic Priorities emphasize areas for development of programs, facilities and recruitment. By understanding SVC's vision, strategic themes and directions, the planning team in concert with the college administration, faculty and staff is able to define a direction for the master plan. Each element of the strategic plan has an underlying implication for the campus master plan.

Campus planning plays a key role in creating the appropriate environment for education. Transforming the College to meet its potential involves the development of state-of-the-art facilities for contemporary instructional methodologies and support services on campus. Planning these facilities in a manner that improves access, circulation and orientation on campus will contribute to a more successful campus experience. Improving the physical environment aids in marketing the College as students and community members make choices about where to go for educational and

cultural activities in relation to their comfort with the physical environment. A strong identity of the College portrays an image of a place where people can succeed.

In order to achieve these objectives in a manner that supports its institutional goals of Access, Achievement and Community, SVC must provide educational facilities in keeping with contemporary instructional technologies and methodologies.

Strategic Priority	Implications for Master Plan
1. Latino Community Engagement	<p>Create a campus where language is not a barrier. Provide an environment of safety where sightlines are clear across campus and visual cues aid in wayfinding. Provide universal accessibility.</p> <p>Create a safe campus through lighting, visibility of pathways and emergency vehicle access.</p> <p>Provide gathering spaces for people to come together and celebrate shared ethnic backgrounds or cultural differences.</p>
2. Global Citizenship	<p>Create an attractive, state-of-the-art campus that will draw international students and visitation.</p> <p>Create public spaces that will encourage interaction and dialogue among all students and faculty groups.</p> <p>Improve the campus experience for international students living at the Campus View Village by providing a well-defined pedestrian path between the student housing and the main campus.</p>
3. Environmental Stewardship	<p>With a focus on LEED and sustainable use of resources, create a campus with durable, energy efficient buildings. Plan for building replacements and renovations that will use resources in a sustainable manner and take advantage of opportunities for natural ventilation and daylight.</p> <p>Encourage sustainable campus maintenance practices.</p>
4. Utilizing 21 st Century Technologies	<p>Construct state-of-the-art campus facilities with appropriately-sized spaces and convenient services. Replace or renovate aging and outdated campus structures to support existing program strengths.</p> <p>Plan flexible spaces and buildings that will accommodate the needs of new and changing programs. Provide learning environments that facilitate new pedagogies which are evolving in response to 21st century technologies.</p> <p>Provide technology infrastructure throughout the campus including classrooms equipped for online or distance learning technologies.</p> <p>Construct a library that provides students with access to a variety of informal learning environments including independent and group study spaces with access to digital media and information technologies.</p>
5. Aligning Educational Programs with Regional and State Economic Development Strategies	<p>Continue to develop programs that support growing regional and state industry by providing appropriate facilities and state-of-the-art equipment.</p> <p>Consolidate smaller buildings into larger replacement projects where the proximity of similar programs benefits from shared resources and promotes interdisciplinary learning.</p>

Figure 5. Strategic Enrollment Management Plan Strategies

3.0 COLLEGE PROFILE

3.1 BACKGROUND

GENERAL INFORMATION

Skagit Valley College is governed by a five-member Board of Trustees appointed by the Governor. The Skagit Valley College district encompasses three counties: Skagit, Island and San Juan. Figure 6 shows the distribution of Skagit Valley College's campuses and centers. SVC's main campus is in Mount Vernon. A smaller campus is located on Whidbey Island in Oak Harbor. The South Whidbey Center, San Juan Center and the Marine Technology Center are the College's three centers.

Skagit Valley College offers a variety of academic and technical degrees, certificates and continuing education programs to meet the lifelong learning needs of the community. It is a vital community resource, serving a large suburban population. The College has tailored their academic and technical programs towards professions strongly rooted in the regional economy, ensuring that students have success in the local job market after graduation. As one of the oldest community colleges in the state, SVC has a significant regional presence bolstered by a strong alumni base.

LOCATIONS

Mount Vernon Campus
2405 East College Way
Mount Vernon, WA 98273
(360) 416-7600

South Whidbey Center
11042 SR 525 #138
Clinton, WA 98236
(360) 341-2324

Whidbey Island Campus
1900 SE Pioneer Way
Oak Harbor, WA 98277
(360) 675-6656

Marine Technology Center
Northwest Career & Technical Academy
1606 R Avenue
Anacortes, WA 98221
(360) 766-6282

San Juan Center
221 Weber Way
Friday Harbor, WA 98250
(360) 378-3220

HISTORY

Founded in 1926, Skagit Valley College is the second oldest community college in the state. Originally named Mount Vernon Junior College, the College served as an accessory to Mount Vernon High School. It operated out of various locations for the next 20 years until 1955 when a 35-acre site was purchased in Mount Vernon. Shortly after, in 1956, Skagit Valley College began a satellite program on Whidbey Island. Like the Mount Vernon Campus, the Whidbey Island Campus did not find a permanent home until 15 years later when the campus was established in 1971.

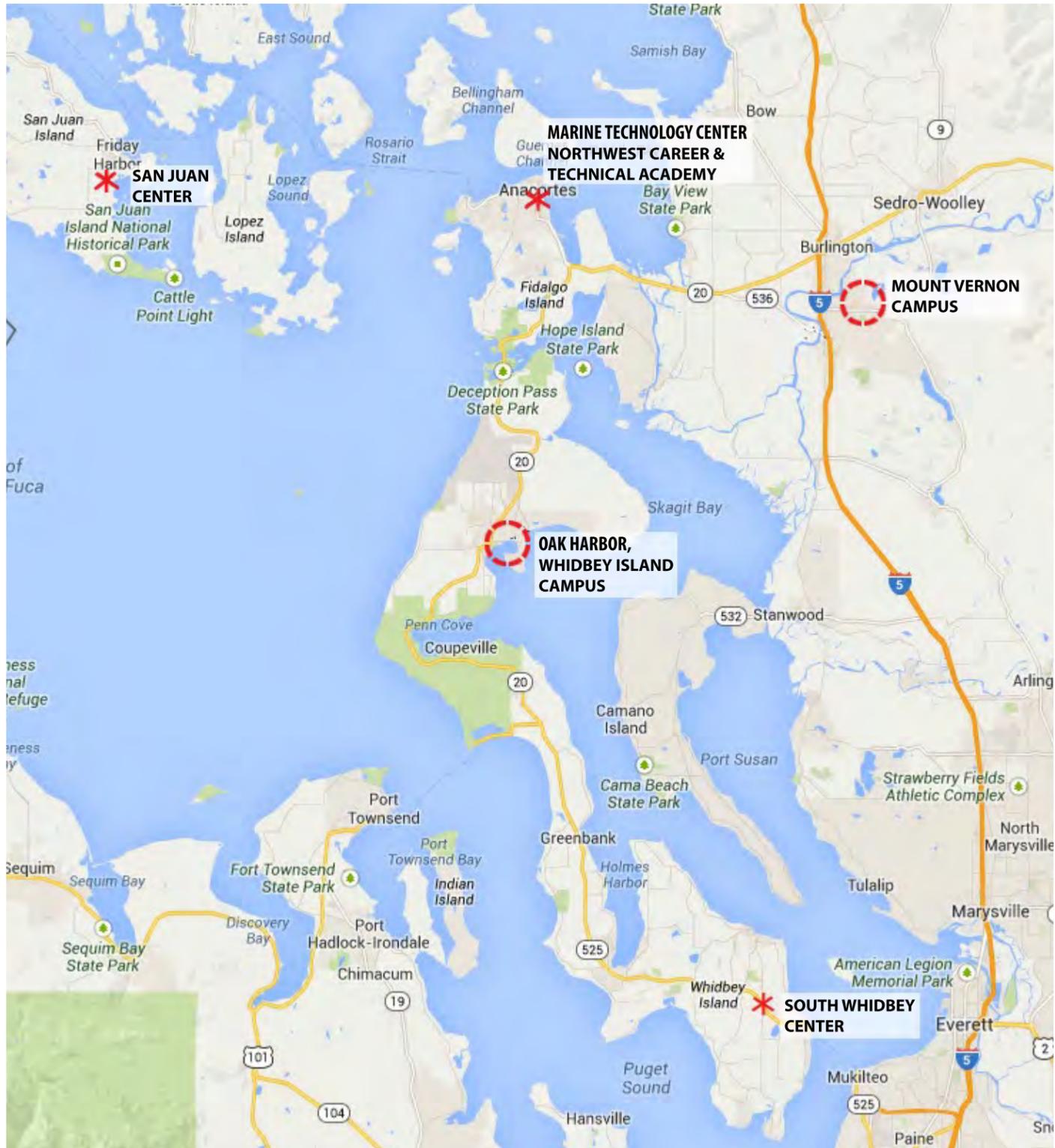


Figure 6. Regional Map of Skagit Valley College Campus and Center Locations

MOUNT VERNON CAMPUS

The original Mount Vernon Campus began with six core buildings organized around a large central quad. Constructed between 1956-1959, they included general classroom halls, a gymnasium, student center and a central boiler building. Pedestrian pathways across the quad connected to the buildings' exterior breezeways. Several of the original buildings are still in use today.

Over the next 55 years the Mount Vernon Campus grew to encompass 96 acres and 30 buildings (Figure 7 shows an aerial photo of the existing campus). Mature trees define the north edge of campus, while buildings are set within manicured lawns. Views towards surrounding mountains such as Mt. Baker can be seen across campus. Parking lots and athletic fields define the east and west edges of campus. At the core of campus are the major academic and student service buildings. The northwest section is composed of professional technical buildings and a large vehicle test track. Buildings on the outer edges of campus include those built by outside entities such as the McIntyre Performing Arts Center and the Northwest Career and Technical Academy Center.



Figure 7. Existing Mount Vernon Campus

WHIDBEY ISLAND CAMPUS

Skagit Valley College began offering classes at Whidbey Island in 1956. SVC held evening classes at Oak Harbor High School and the Naval Air Station until 1971 when the Whidbey Island Campus was established. The first buildings on the campus were gifted to the College by the adjacent Naval Air Station with the provision that they would be used for education. The buildings included a former navy hospital and a modular building from Boeing. With these two buildings SVC was able to offer day classes in Oak Harbor and increased educational programs to include university transfer classes, nursing, office occupations, electronics, graphic arts and marine technology.

The navy hospital building, now known as Old Main, was built in 1943. The modular building, Sprague Hall, is composed of several portables which have been covered with a single roof and an enclosed exterior breezeway. These were the only campus buildings until 1993 when Hayes Hall was constructed in partnership with the Sno-Isle Library District. Hayes Hall functions as the Skagit Valley College library, the Oak Harbor public library and a multipurpose classroom building. The building is maintained and operated by the College with Sno-Isle Library. Also located on the campus is the Toddler Learning Center built in 1991 which provides children an early start in education. Oak Hall was the last building constructed on campus, in 2002.



 **Figure 8. Existing Whidbey Island Campus**

REGIONAL INSTITUTION

Skagit Valley College's two campuses and three centers focus on providing education to the community at large, especially those that might be underserved in rural areas. There are a variety of options to suit individuals' needs including two-year degrees for students wishing to transfer to 4-year institutions and professional and technical training programs for students who wish to move straight into the job market. Programs are tailored by skilled industry instructors and local business leaders to help students succeed. SVC provides GED, English as a Second Language (ESL) and Adult Basic Education (ABE) programs for students wishing to prepare for college or build an educational foundation for a better job. Available to the community are continuing education classes and Running Start for high school students. Also, Skagit Valley College's centers provide unique programs such as Marine Maintenance Technology at its Marine Technology Center and the popular Road Scholar program at the San Juan Center. Refer to Chapter 11.0 - Centers for more information on the College's Centers.

By offering a diverse menu of programs, degrees and certificates, Skagit Valley College looks to continue its role in providing quality higher education, economic development and cultural enrichment for the greater Skagit Valley community.

3.2 PREVIOUS MASTER PLANS

MOUNT VERNON CAMPUS

The 1968 Comprehensive Development Plan was the first master plan for the campus. It emphasized a strong NE-SW axis which extended the campus out from the original quad towards Mount Baker. Only portions of the 1968 plan were ever realized. The plan became outdated as curriculum evolved and enrollment changed. Much of the construction during the late 1970s through the 1980s was completed without reference to a master plan.

In 1993, a new master plan officially replaced the antiquated 1968 development plan. This plan established the College's Public District zoning designation, and it refocused development on defining academic quads linked by a pedestrian network. Future growth was encouraged through proposed land acquisitions to the east.

In 2001, a new master plan was written and approved by the City of Mount Vernon. This master plan advised the College to build larger, multi-story buildings rather than acquire property and expand outward. At the time many of the College's land holdings were part of land use partnerships. This plan reinforced and maintained the existing landscaped quads.

The most recent master plan by Henry Klein Partnership, Architects (HKP) was completed in 2005 as an update to the 2001 plan, see Figure 9. HKP worked with the faculty and students to draft a guide for the college to make decisions on future growth and change across the campus. They outlined six basic themes which included: expansion through multi-story buildings and land acquisition; the introduction of "Smart Buildings" with enhanced distance learning capabilities; improved facilities for day and night use; clarified organization of entry, parking, pathways and gathering points; and stormwater retention and treatment across the campus.

The 10-year build-out plan would increase the campus facilities from 334,456 GSF to 481,930 GSF, resulting in 44% growth. Additionally, the plan identified locations for three buildings, totaling 180,000 GSF, to be built in partnership with other public or private entities.

The primary strategy of the master plan was to remove 11 existing buildings and residences including three of the original 1950s buildings. Nine major construction projects were identified including five new buildings, three renovations and one addition. To address parking and site access, the plan recommended a new parking structure located adjacent to a redefined campus entry and drop-off from LaVenture Road at the west edge of campus.

Since its publication in 2005, significant building components of the master plan have been implemented. In 2009 Angst Hall opened as a replacement of the 1956 building. Construction of Lewis Hall will be completed in 2014, replacing the 1957 building. Extensive remodels of Hodson Hall, the Administration Annex, and Knutzen Cardinal

Center were completed in 2004, 2007 and 2008 respectively. The Northwest Career and Technology Academy was built by local high school districts and opened in 2010. Finally, a number of outdated, underutilized buildings have been removed.

The landscape and vehicular/pedestrian circulation plans have not been realized as extensively as the building development. For instance, when the Northwest Career and Technology Academy opened on the northwest corner of campus, the site identified as a main drop-off plaza and bus turnaround in the 2005 plan was eliminated. The vehicular circulation and parking improvements, including the parking structure, were not implemented either.

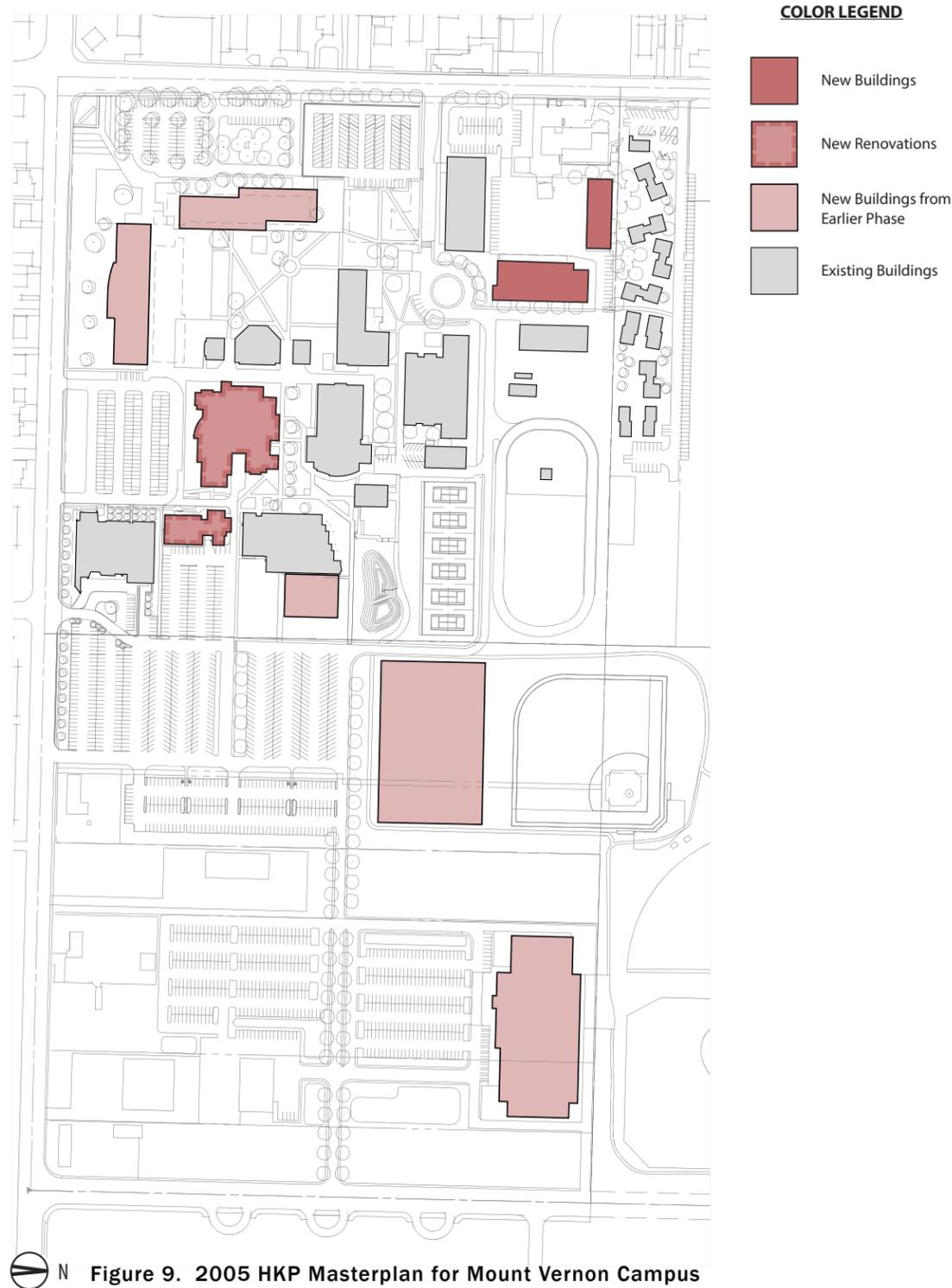


Figure 9. 2005 HKP Masterplan for Mount Vernon Campus

WHIDBEY ISLAND CAMPUS

The last master plan for the Whidbey Island Campus was completed in 2007 by Henry Klein Partnership, Architects, see Figure 10. It detailed a 10-year plan for campus growth and development which would replace outdated or obsolete facilities, improve facilities for day and night use, introduce “Smart Buildings” for enhanced distance learning capabilities, and improve the campus grounds and entry.

The plan proposed the removal and replacement of Old Main and Sprague Hall with a single building at 43,400 GSF. This represented an addition of 11,110 GSF to campus facilities. Development of landscape gardens across campus and a plaza-like setting along Pioneer Way were suggested as enhancements to the natural setting with a focus on views towards the harbor.

Since its publication in 2007, none of the master plan has been realized.

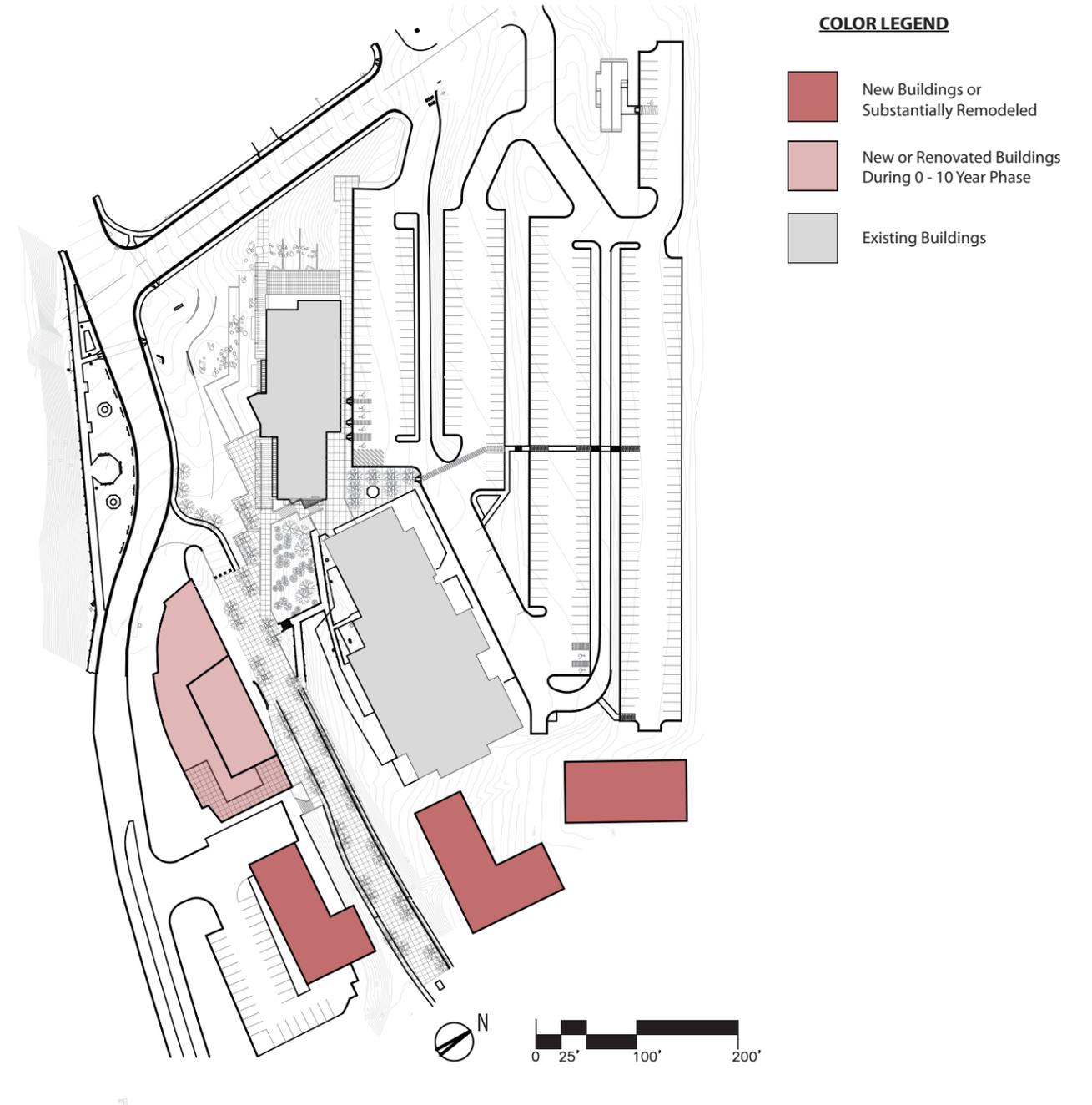


Figure 10. 2007 HKP Masterplan for Whidbey Island Campus

3.3 STUDENTS AND PROGRAMS

BACKGROUND – CURRENT ENROLLMENT

During the 2012-2013 academic year enrollment at Skagit Valley College, as reported by the Washington State Board for Community & Technical Colleges (SBCTC) was 4,422 full-time equivalent students (FTEs). Total enrollment at SVC was 9,541. Of these students, 37% were enrolled in academic/transfer programs and 50% were enrolled in workforce education. The remaining students were pre-college or Running Start (8%) and basic skills (7%). 45% of students are full-time.

The largest ethnic group represented is Caucasian at 70%, followed by Hispanic at 17%. All other ethnicities are in the single-digit ranges. This generally represents the diversity of the local counties with most students living in Skagit, Island and San Juan counties. Students come from as far away as Bellingham, Everett, Anacortes and Concrete. The gender split is 59% female and 41% male.

EXISTING PROGRAMS

Skagit Valley College offers 38 Associated Degrees and 65 Professional Certificates in 32 programs of study:

Associate Academic Transfer Degrees

- Associate in Arts – Direct Transfer Agreement (AA-DTA)
- Associate in Science – Transfer
- Associate in Biology
- Associate in Applied Science – Environment Conservation
- Associate in Applied Science – Early Childhood Education
- Associate in Business
- Associate in Pre-Nursing
- Associate in Music (transfers to WWU)
- Associate in Visual Arts (transfers to WSU)

University transfer courses are offered in the following disciplines:

- | | |
|------------------------------|-------------------------|
| • Anthropology | • Ethnic Studies |
| • Art | • Geology |
| • Astronomy | • History |
| • Biology | • Humanities |
| • Biotechnology | • International Studies |
| • Business | • Mathematics |
| • Chemistry | • Music |
| • Cinema | • Nutrition |
| • Communication Studies | • Oceanography |
| • Computer Science | • Philosophy |
| • Criminal Justice | • Physical Education |
| • Drama | • Physics |
| • Economics | • Political Science |
| • English | • Psychology |
| • Environmental Conservation | • Sociology |
| • Environmental Science | • World Languages |

Professional/Technical Training Degrees and Certificates available in:

- Associate in Technical Arts Degree (ATA)
- Technical Certificate
- Micro-Certificate of Completion

More than 30 Professional/Technical training programs offered in the following areas of study:

- | | |
|--|---|
| • Allied Health | • Health Care Professions |
| • Automotive Technology | • Human Services |
| • Banking & Financial Services | • Manufacturing Technology |
| • Business Management | • Marine Maintenance Technology |
| • Composite Technology | • Medical Assistant |
| • Computer Information Systems | • Multimedia & Interactive Technology |
| • Criminal Justice | • Nursing |
| • Culinary Arts & Hospitality Management | • Office Administration & Accounting Technology |
| • Dental | • Parks Law Enforcement Academy |
| • Diesel Power Technology | • Pharmacy Technology |
| • Early Childhood Education | • Student Success Programs |
| • Education Paraprofessional | • Technical Arts ATA |
| • Environmental Conservation | • Technical Design |
| • Environmental Sustainable Agriculture | • Tourism & Hospitality Management |
| • Family Life | • Veterinary Assistant |
| • Fire Protection Technology | • Welding |
| • Health & Fitness Technology | • Workforce Training |

EXISTING STRENGTHS AND FUTURE DIRECTIONS – MOUNT VERNON CAMPUS

According to the Skagit Valley College graduation report from 2004-2005 to 2012-2013, the College has seen an increase in the number of degrees and certificates awarded in the past six years with an average growth of 7% per year. Last academic year, 2012-2013, graduation rates were up by 1% in spite of a large graduation spike in 2011-2012, a 19% increase over the previous year (see Figure 11). While spikes in enrollment and graduations occasionally occur this is not thought to be a trend. A steady increase of 2-5% is expected in the coming years.

The graph below describes graduation trends at Skagit Valley College, the Mount Vernon Campus, the Whidbey Island Campus and Centers.

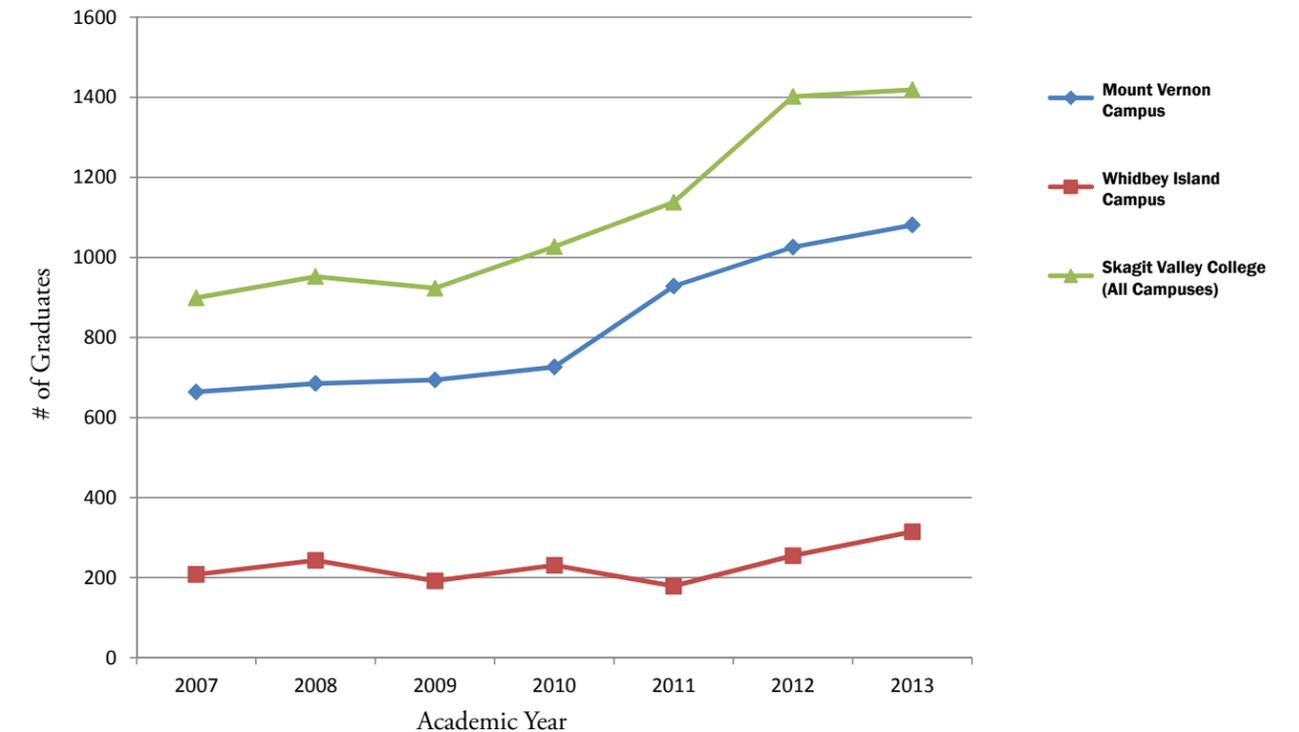


Figure 11. Graduates per Academic Year

The Mount Vernon Campus has experienced an average growth in degrees and certificates awarded of 8% per year, with a 5% increase in 2012-2013 academic year. 23% of the graduates received degrees in the Academic Transfer programs, 32% were Nursing and Allied Health, 40% were other Professional and Technical programs and the remaining 5% of graduates were in GED or basic skills.

Historically, a large percentage of students attending community colleges are in the academic transfer program and continue on to the state universities. Students from Washington State's community and technical colleges make up 40% of all graduates from bachelor degree programs at the State's public four-year colleges and universities according to statistics providing by the Washington State Board for Community and Technical Colleges. The continued support and improvement of facilities for these academic transfer programs will be necessary.

Skagit Valley College has been improving and augmenting their professional and technical training programs as one of their strategic priorities. They have stated that their priority is to align "educational programs with regional and state economic development strategies." As evidence of this, six full manufacturing certificates have been added in the last two years; previously there was only one.¹ Students can now pursue certificates in advanced composites, computer-aided technical design, manufacturing technology and manufacturing foundations. Some of these programs are only available at the Marine Technology Center in Anacortes, but there is the possibility of relocating certain programs to the Mount Vernon Campus. The Composites and Manufacturing program, in particular, is a candidate for future relocation.

Local industry demand is increasing for the production of lightweight, high-strength materials. In response to this industry trend, job opportunities have become more prevalent. This has been seen across a broad number of fields including automotive, aerospace, wind energy and marine equipment. These industries have shown strong growth since January 2011 within Skagit County.² In response, Skagit Valley College will look for ways to continue to strengthen the related technical education programs and to set itself apart from other community colleges. They are simultaneously specializing and diversifying their offerings to meet a range of needs for students who are not looking for a traditional four-year degree. As evidence of the success of these programs, the number of degrees, certificates and diplomas awarded is continuing to grow.

The College has also expressed the desire to continue and improve its outreach to minority and ESL communities. An emphasis has been placed on recognition of culture instead of assimilation. To achieve this, SVC will look to local community partnerships and development of support programs. In addition, improved wayfinding and a strengthened image of the institution and entry will ease the experience of new students to campus.

As the College continues to strengthen its programs, a top priority is to provide the necessary facilities and support for these programs and their students. This document will address campus and facilities improvements to meet the College's long-term vision and program needs.

EXISTING STRENGTHS AND FUTURE DIRECTIONS – WHIDBEY ISLAND CAMPUS

Figure 11 shows that the Whidbey Island Campus has been relatively stable in terms of the number of degrees and certificates awarded each year, although there was a 19% increase in the number of graduates from the 2011-2012 academic year to 2012-2013. There has been a general upward trend over the past two years. 24% of the graduates received degrees in academic transfer, 49% receive degrees or certificates in Nursing programs, 22% are in other professional and technical programs, and the remaining 5% are in GED or basic skills.

Since its early days, the Whidbey Island Campus has offered nursing programs. This continues to be the campus's strongest technical program and has the highest enrollment. While the College wishes to maintain its strong nursing programs, it lacks proper support facilities with state-of-the-art technology and relevant training equipment. To continue this legacy and sustain high enrollment, SVC will need to address its facilities.

The Whidbey Island Campus has the advantage of being part of a larger institution and can offer some classes held at the Mount Vernon Campus online or as a hybrid format. This is particularly appealing for academic transfer students wanting to stay close to home. As SVC looks to increase the online offerings more infrastructure for technology will be required.

The College is currently engaged in investigating new, promising programs that would be suited for the Whidbey Island Campus. This would include programs in allied health and associated fields, as well as strengthening its arts and university transfer programs. In the near term, capital development will focus on better spaces to support existing programs.

1 Stayton, Mark. "Building Tomorrow's Workforce: Skagit Valley College Expands Manufacturing Program to Meet Local Demands." *Goskagit.com*. Skagit Valley Herald, 11 June 2013. Web. 8 July 2013.

2 Stayton, Mark. "Aerospace Composite Class Set to Begin." *Goskagit.com*. Skagit Valley Herald, 22 June 2013. Web. 8 July 2013.

4.0 SITE – MOUNT VERNON CAMPUS

4.1 LAND USE & ZONING

The City of Mount Vernon has an adopted Comprehensive Plan and development regulations that will guide the future development of the Skagit Valley College, Mount Vernon Campus. The City's first Comprehensive Plan that included the College was adopted in 1960. It has been updated a number of times since then. Most recently, the City adopted a Growth Management Act (GMA) compliant Comprehensive Plan in 2005.

The City's Comprehensive Plan designation of the Mount Vernon campus is Community College (CC), and the site is zone Public (P) (refer to zoning map on page 32). The P zone permits institutional uses such as schools, colleges, government centers, churches and community or neighborhood parks. Any future development within this zone must meet the specific requirements outlined in the City of Mount Vernon Municipal Code chapter 17.30 "Public".

The College has an existing master plan that was approved by the City. The code requirements in MVMC 17.30.090 were written for new developments within the City and do not take into consideration entities like the College that will, over time, update and expand their existing master plan. The City does not require a new master plan from the College for the existing site; however, if the College were to acquire new property, SVC would need to go through a planning process for the new property.

Chapter 17.30 and Chapter 14.05 in the municipal code outline the submittal requirements and review procedures for updating a master plan for newly acquired property. Individual building projects are evaluated and approved for their respective master use and building permits in the context of the approved master plan submitted to the City. The City's review of the master plan is considered a Type IV decision, which requires review and a recommendation from the Hearing Examiner, as well as City Council review and approval. As such, a public hearing is required, as well as a formal council approval action.

If it is desirable, the College may have an updated master plan reviewed by the Hearing Examiner and City Council for its current campus. An advantage of pursuing this would be to have a project-level SEPA analysis completed so this process is not necessary with each future project.

For the P zone, setbacks are a minimum of 25 feet from LaVenture Road and East College Way, and a minimum of 10 feet from North 30th Street. There are no side or rear yard setbacks unless the building is adjacent to a residential zone with no intervening street or alley. This requirement does not affect any of the proposed construction of the LRDP. The maximum height limit is 50 feet and four stories. Unoccupied spaces can exceed the height limit.

PARKING REQUIREMENTS

In the P zone, the minimum number of off-street parking spaces is determined by the Hearing Examiner per Chapter 17.84 of the municipal code. There are not specified ratios of building area or FTEs to required parking spaces. Typically, the required number is computed by completing a demand study or by showing alignment of the proposed project with a parking count established by a traffic or demand study completed for the master plan on file.

In July 2001 a parking utilization study was completed for the College by Transportation Engineering Northwest which demonstrated available capacity and underutilization of the parking lots on campus at that time. In July 2002 another traffic study was completed to support the construction of the McIntyre Hall Performing Arts Center. The Transportation Impact Study included a review of the entire campus traffic impacts and has been referenced by subsequent projects to establish a basis for parking expansion ratios.

For future projects, an updated traffic and parking demand study should be completed. These studies will establish the future parking demands anticipated by the 15-year Development Plan and could be used by future projects during their entitlement process.

4.2 ENVIRONMENT

The City of Mount Vernon is one of the larger cities in the Mount Vernon-Anacortes region and is the county seat of Skagit County. The city is approximately 11.5 square miles with a population of roughly 32,070. With a quaint downtown and the beauty of the surrounding farms, the Mount Vernon economy is largely supported by agriculture and tourism.

Many of the buildings in downtown are representative of the town's long history dating back to 1870. The city grew considerably in those early days in response to the railroads opening in 1891 and 1910, connecting Seattle to Vancouver via Mount Vernon and another branch connection to Bellingham. Mount Vernon continues to be a major transportation link between Seattle and Vancouver. Interstate Highway 5 bisects Mount Vernon and provides a midpoint destination between the two cities.

Nestled in the foothills of the Cascade Mountains, Mount Vernon's climate is typical of the Pacific Northwest region. Moderate temperatures are typical throughout the year with overcast days caused by marine air lifted and cooled as it moves inland. Winters are characterized by cool wet days, and summers tend to be drier and warmer. Average annual precipitation is just over 30 inches.

The Mount Vernon Campus is not far from downtown and about 1.5 miles west of Interstate 5. The campus is located in a transition zone between urban and suburban developments to the south and west and residential areas to the north and east. Dense trees along the north campus boundary provide a buffer to residential neighborhood, while city streets define the west and south edges. The eastern section of campus is adjacent to mostly undeveloped land.

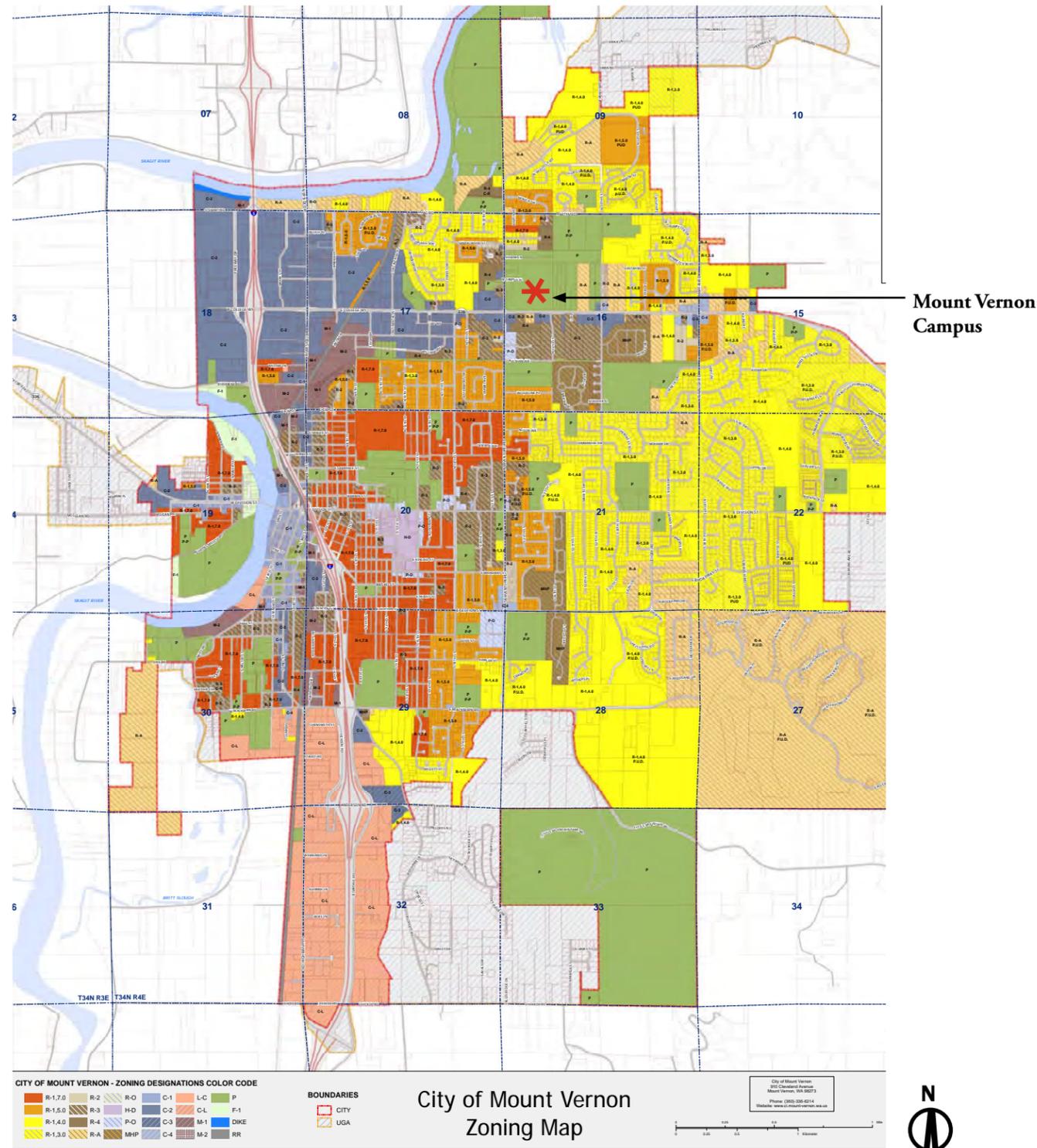
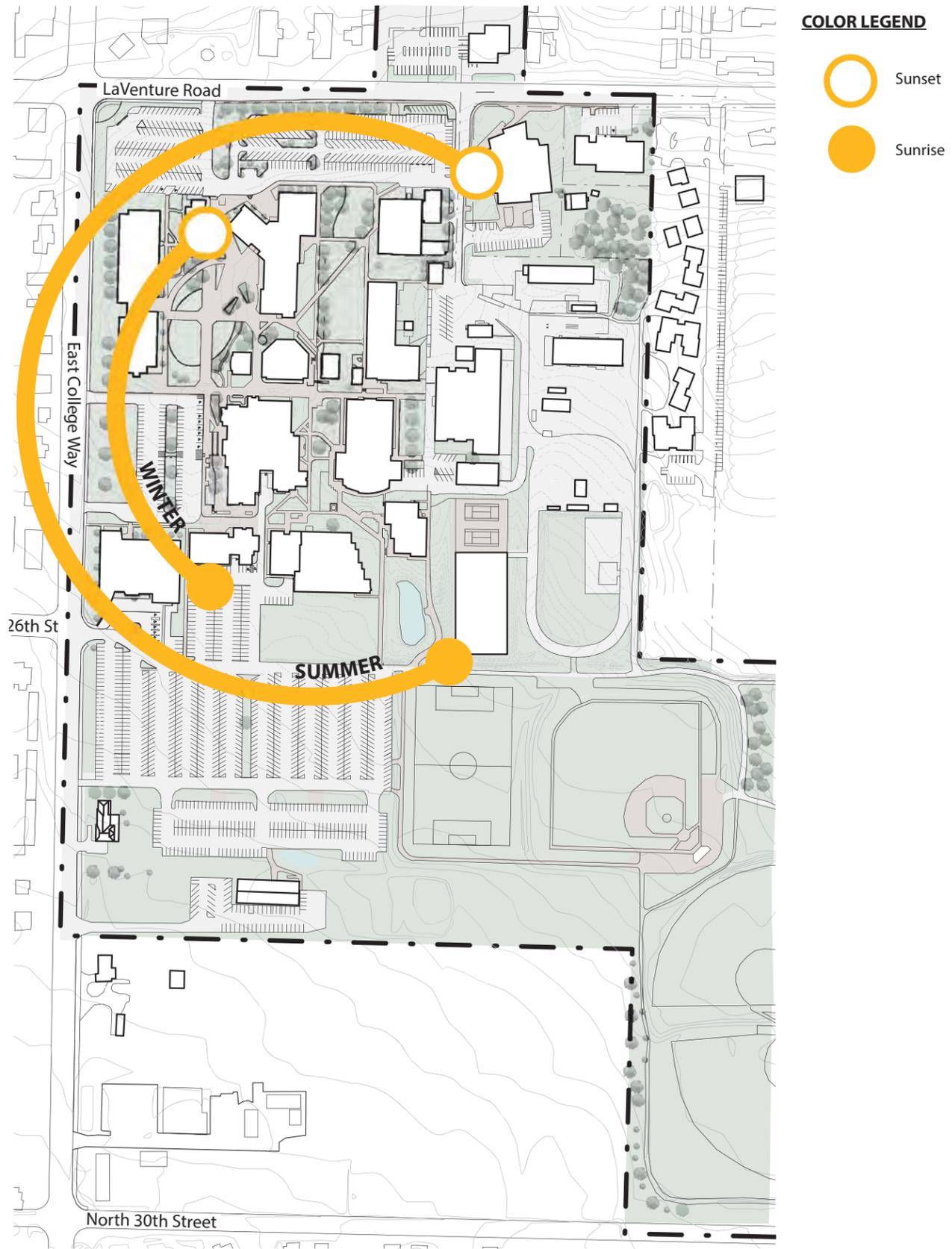


Figure 12. Land Use Zoning (City of Mount Vernon)



COLOR LEGEND

- Sunset
- Sunrise

CAMPUS ORGANIZATION

The campus is generally divided in three zones: the academic and student center core, the professional/technical programs and the athletic fields. In addition to these zones, Campus View Village provides housing for international students and student athletes at north edge of campus.

The academic and student center core is where the campus began. The six initial buildings and quad have remained the heart of campus in spite of growth outward and replacement of some of the original buildings. Buildings for general classrooms, science labs, computer labs, visual arts, student services and the library are connected by paved pedestrian paths. Lately this area has undergone significant redevelopment. Lewis Hall is currently under construction and Angst Hall was completed in 2009. Both buildings were replacement projects for original campus buildings.

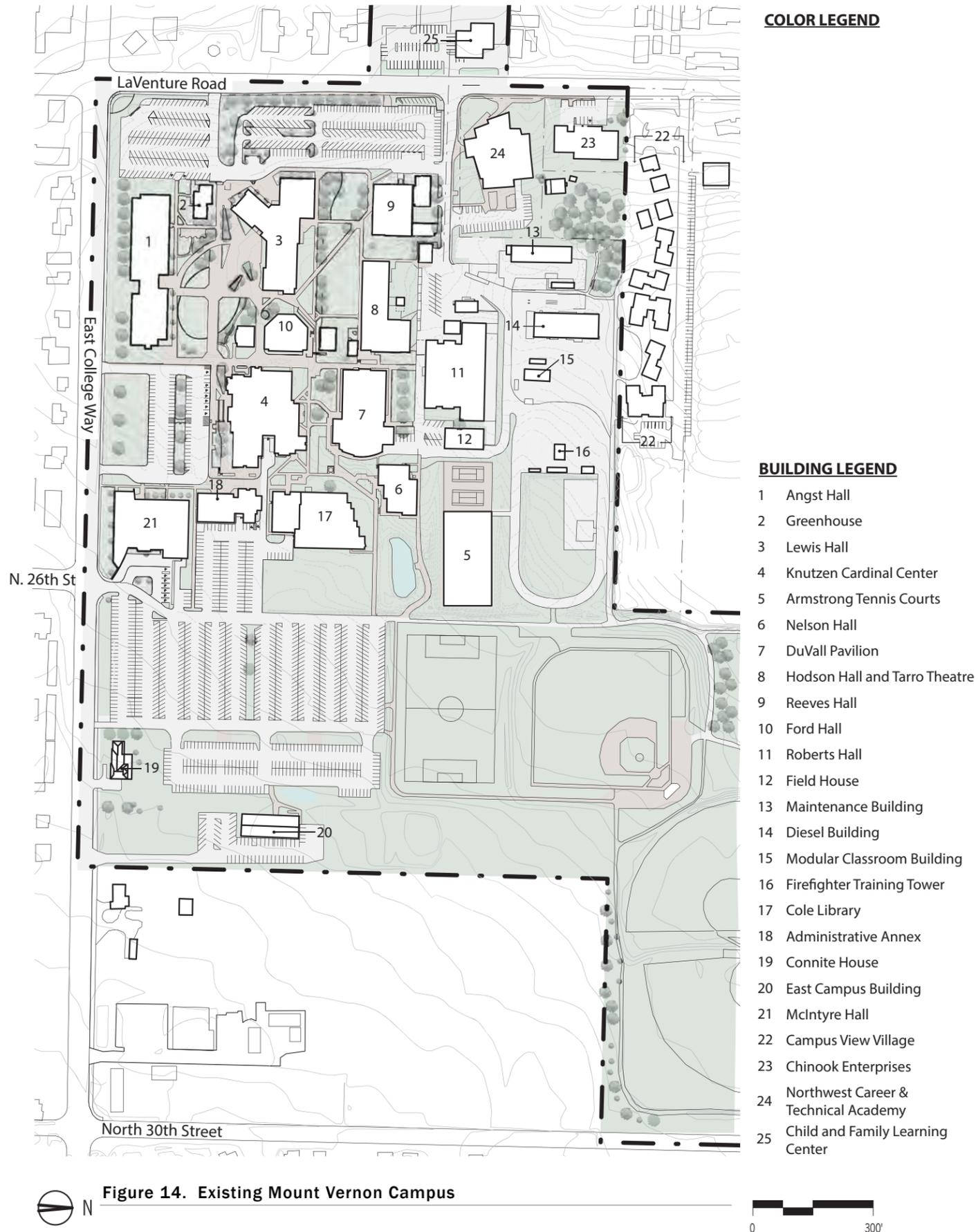
The professional/technical programs are generally located just north of the campus core and are bounded by student housing to the north and athletic fields to the east. Buildings are primarily for automotive technology, vocational and diesel trades, and fire training programs. Also in this area are maintenance and storage structures. A large vehicle test track is associated with the automotive technology and diesel trades programs. This area is characterized by buildings encompassed by asphalt.

Athletic fields are located in the northeast corner of campus. These facilities include shared county and college baseball fields, tennis courts and a soccer field. Just to the west of the tennis courts is a field house used for baseball practice and other sports.

Community facilities, which include McIntyre Hall Performing Arts Center, The Northwest Career Technical Academy (NCTA), The Child and Family Learning Center and Campus View Village are located on the west and north edges of the campus. These facilities are typically non-profit institutions located on land leased out by the College. McIntyre Hall Performing Arts Center is located off East College Way, near the main entry. McIntyre Hall holds a diverse menu of arts and entertainment and is home to many local community organizations including the Skagit Symphony, Northwest Ballet Theater, Theater Arts Guild, Youth Symphony, among many others. These types of facilities bring people from the community to the campus and establish it as a community amenity.

Figure 13. Seasonal Sun Paths





4.3 ACCESS AND CIRCULATION

Skagit Valley College, Mount Vernon Campus is located 1.5 miles east of Interstate 5. Two major arterials, SR-528/East College Way and LaVenture Road define the south and west boundaries of campus. East College Way extends east from I-5, continues along the southern edge of campus and to residential neighborhoods beyond. The main drop-off and visitor parking is located off East College Way, midway between LaVenture Road and North 30th Street. To the west, LaVenture Road separates small commercial buildings from the campus. North 30th Street is a minor arterial east of the campus, adjacent to privately owned and largely undeveloped land.

PUBLIC TRANSPORTATION

The campus is served by Skagit County Community Transit and Tri-County Connector. An on-campus Skagit Transit stop is located with the main campus entry and drop-off, just south of Knutzen Cardinal Center.

Local Bus Routes

- Routes 204, 205, 207 serve campus Monday through Friday, with limited service on weekends
- Route 204, 205, 207 reach various parts of the City of Mount Vernon connecting it to the campus
- Campus bus stop is located off East College Way at the main entry drop-off loop

Greater Public Transit Network

- Route 305 serves from Mount Vernon to Skagit Highlands, Clear Lake and Sedro-Wooley, 8 am – 5:30 pm
- Route 80X, express bus from Bellingham to Mount Vernon
- Route 90X, express bus from Everett to Mount Vernon
- Tri-County Connector provides service between Skagit, Island and Whatcom Counties. It includes a bus from Mount Vernon to Whidbey Island, allowing students to commute between campuses

This past year, Skagit Valley College in conjunction with Skagit Transit implemented a few initiatives to promote the use of public transit. Bus trips to SVC have increased from 32 to 72 times per day. A new route linking the Mount Vernon Campus to Sedro-Woolley has reduced commute time from 1 hour 40 minutes to only 25 minutes. A discount for students on Skagit Transit passes are offered at \$15 per quarter. This discount was made possible by the combined efforts of Skagit Transit, the College, and the Associated Students of Skagit Valley College (ASSVC). There has been a steady increase in ridership over the past years.

The availability and access to public transit allows students to commute from across the region. Students come from as far away as Bellingham, Everett, Anacortes and Concrete. This is an appealing feature for prospective students considering attending SVC.

VEHICLE ACCESS AND PARKING

Existing Conditions

Vehicular access to campus is located off East College Way with the main entry drop-off loop located 750 feet east of LaVenture Road. The main parking lot is located further to the east. A secondary campus drop-off and large parking area is located on LaVenture Road, 200 feet north of East College Way. A service entrance off LaVenture Road also allows access to the technical professional programs buildings and test track.

Left turns from East College Way to the main entry and the largest parking lot are uncontrolled. As the campus grows and traffic increases, these turns will become more difficult and congestion along East College Way will increase.

SVC's parking supply consists of 1593 stalls which includes parking for students, staff, handicap parking, car pool, electric charging stations and other emergency, security or facilities dedicated spaces. The most expansive parking lot is located east of the core campus buildings and provides the bulk of the student parking. It is shared with community

Figure 14. Existing Mount Vernon Campus



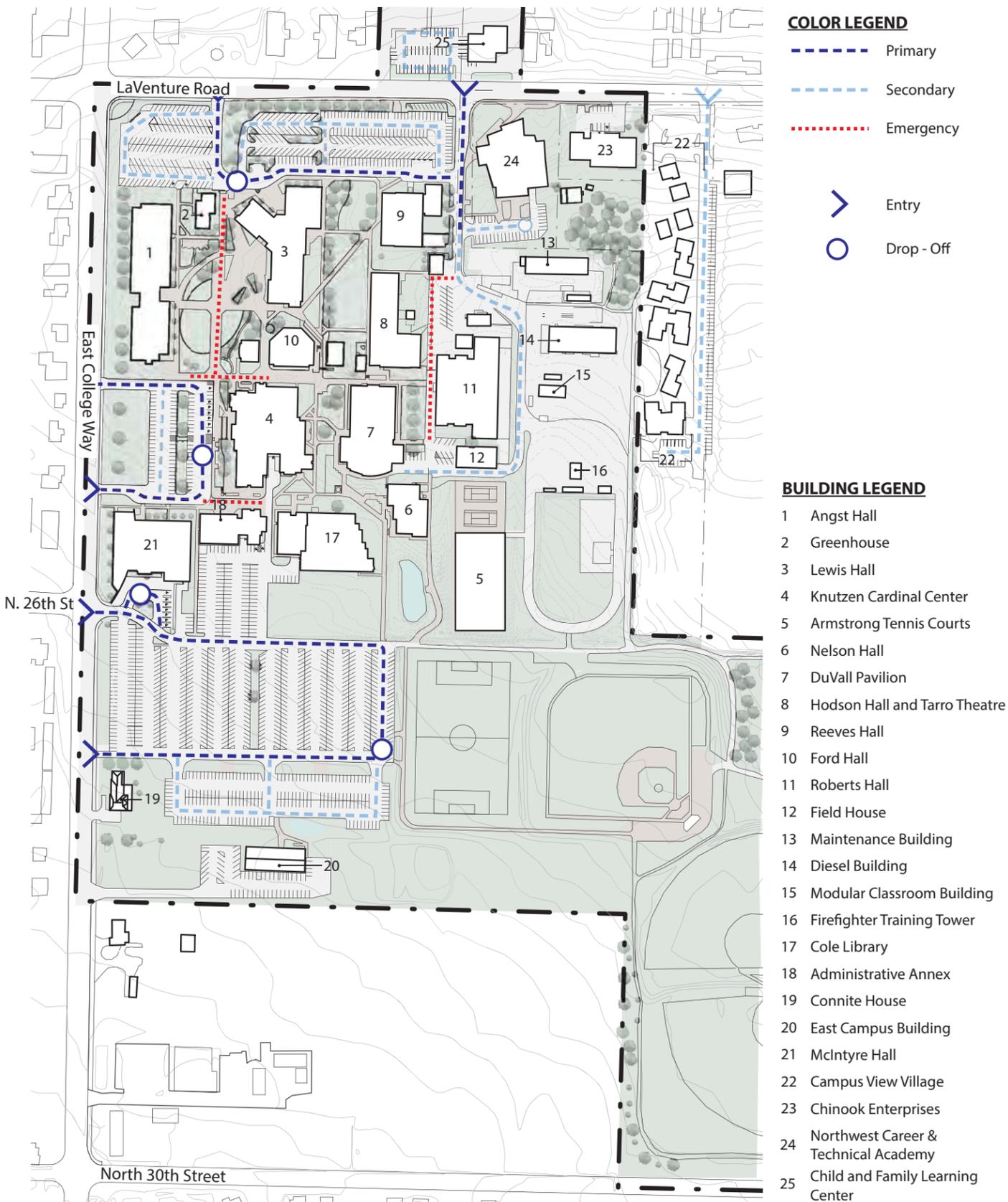


Figure 15. Vehicular Circulation Diagram

parking for the performing arts center and the athletic fields. Additional parking is provided on the west edge of campus. There is no internal campus link between these two major parking areas. The current supply is adequate to serve demand but at peak times drivers sometimes have to search between the two disconnected lots for a parking space. Some students feel that parking is far from classes, which is frustrating for students.

There are no cross-campus vehicular connections. Figure 15 shows a diagram of the campus vehicular circulation. Emergency vehicle access is also limited. However, with the completion of Lewis Hall this will be improved. As part of that project, fire and emergency access is added to the south, from the west parking lot and continuing east to Knutzen Cardinal Center. Emergency access does not extend east of the Knutzen Cardinal Center, so the continuity of the east-west link is missing. Limited fire and emergency vehicle access is also available at the north section of campus. Emergency vehicle access is provided from the service entrance to the south side of Roberts Hall. The emergency access does not continue further to the east.

Needs Analysis

Additional parking will be required with campus growth and could provide the opportunity for clarification of vehicle access. Refined circulation and ease of access to a main entry drop-off is necessary for the campus as well as events along the east side of campus.

Further improvement to emergency vehicle access is needed across the northern section of campus, connecting the west edge of campus to the east parking lot. An added benefit of creating emergency access is that it would provide a needed service route.

Proposed Master Planning Strategies

- Continue fire and emergency access from to the east side of campus
- Improve the vehicular entry to east main campus parking lot and introduce elements to indicate it as the main entry to campus
- Organize new buildings with a mind towards establishing campus front door, service and emergency vehicle access and continuity of circulation
- Include sustainable design elements such as pervious paving, landscaping and trees to minimize heat island effect and introduce sustainable stormwater management elements
- Consider additional shared use parking with community facilities on the east side of campus

PEDESTRIAN CIRCULATION

Existing Conditions

The Mount Vernon Campus is an easily walkable campus with a dense core of buildings at the center and parking pushed to edges. Figure 18 shows a diagram of pedestrian circulation on campus. The campus, while not completely flat, has a soft topographic rise from the southeast to northwest and is negotiated with ramps and stairs. While it is typical for students to walk across campus and from building to building between classes, wayfinding can be confusing for visitors or new students.

The age of campus and varying development patterns over the years has contributed to a lack of hierarchy between open spaces and buildings. Open spaces are not linked in a cohesive manner and are often hidden from view. The east half of campus has very little visual connection to the open spaces on the west half. There are no long vistas or viewpoints for which pedestrians can understand how the different areas of campus are connected. For instance, the pedestrian paths leading from the east main parking lot to the center of campus thread between either side of the Administration Annex and McIntyre Hall to the south and the Library to the north. Then, pedestrians are redirected around the Knutzen Cardinal Center and the main entry drop-off loop. Alleviating dead ends or jogs of the pathway would add clarity to the campus organization.



Figure 16. Existing East-West Pedestrian Corridor



Figure 17. Existing North-South Pedestrian Corridor

A principal north-south circulation route through campus connects the main entry drop-off loop, continues past Ford Hall and the Knutzen Cardinal Center, and ends at Roberts Hall. Hodson Hall, Duvall Pavilion, Ford Hall and Knutzen Cardinal Center are closely clustered along either side of this path making it feel narrow and constricted. Adding to that feeling are the accessible ramps near Ford and Hodson that branch off the main walkway and are defined by concrete retaining walls and a network of handrails (refer to photograph, Figure 17). At the end of this major campus spine is an asphalt drive leading past Roberts Hall.

A secondary north-south route runs along the east side of Knutzen Cardinal Center and the west side of McIntyre Hall and the Administration Annex. The pedestrian path is disrupted by the service entry and loading dock for Knutzen. Past the service zone the circulation path begins again and continues north to Nelson Hall. A diagonal path between Nelson and the Library provides views out to the athletic fields and the foothills of the Cascade Mountains beyond.

At the professional technical programs buildings at the north section of campus, the pedestrian network breaks down. This area is characterized by large areas of asphalt and dedicated vehicular circulation zones. While the paved areas are utilitarian and serve the function of the technical programs, it presents a problem for students living at the Campus View Village to the north. There are no sidewalks connecting the housing to the main campus core forcing pedestrians and vehicles to share the same zone.

Pedestrian circulation east-west across the campus will be improved with the completion of Lewis Hall. The plaza at the south side of Lewis will be the largest open space on campus and will connect to the Knutzen Cardinal Center to the east (refer to photograph of eastern extension of this route, Figure 16). This will provide a strong east-west link between two buildings which serve major student service functions. There is a collegiate feel to this plaza with circulation that makes it an obvious destination and a good starting point for first-time students and registration.

Needs Analysis

Pedestrian access, circulation and wayfinding can be improved throughout campus. The ability to navigate by clear visual connections is needed and would lend to greater continuity through campus. It is also important to introduce consistent signage and wayfinding so users can gain easier access to the site and efficiently locate their destination.

Universal design is a school of thought that advocates accommodation of as many people as possible, rather than just the most common type of person. Routes that are technically ADA compliant may meet the law but fail to welcome students and staff who are physically handicapped. A truly inclusive campus experience accommodates everyone together. Access to ADA ramps is sometimes obscured, making the best way to one's destination unclear. Consideration should be given to the physical and visual incorporation of ramps with other pathways.

In addition to these general campus improvements to circulation and wayfinding, a couple of specific issues also need improvement. First, pedestrian circulation needs to be separated from vehicular circulation at the professional technical programs area at the north end of campus. Providing a sidewalk for students walking from the Campus View Village to the center of campus would improve pedestrian safety. Second, pedestrian access from the east parking lot should be better defined as a major campus entry. The large quantity of parking stalls naturally lends to emphasizing this approach to campus.

Proposed Master Planning Strategies

- Develop pedestrian circulation to improve wayfinding and serve as organizational elements for the campus
- Improve clarity of east-west and north-south pedestrian circulation with emphasis on a few major routes defined as promenades
- Emphasize a main entry collegiate experience that connects to the greater pedestrian network
- Separate pedestrian circulation from vehicular circulation
- Provide ADA pathways throughout campus and integrate ramps with the landscape and pedestrian pathways

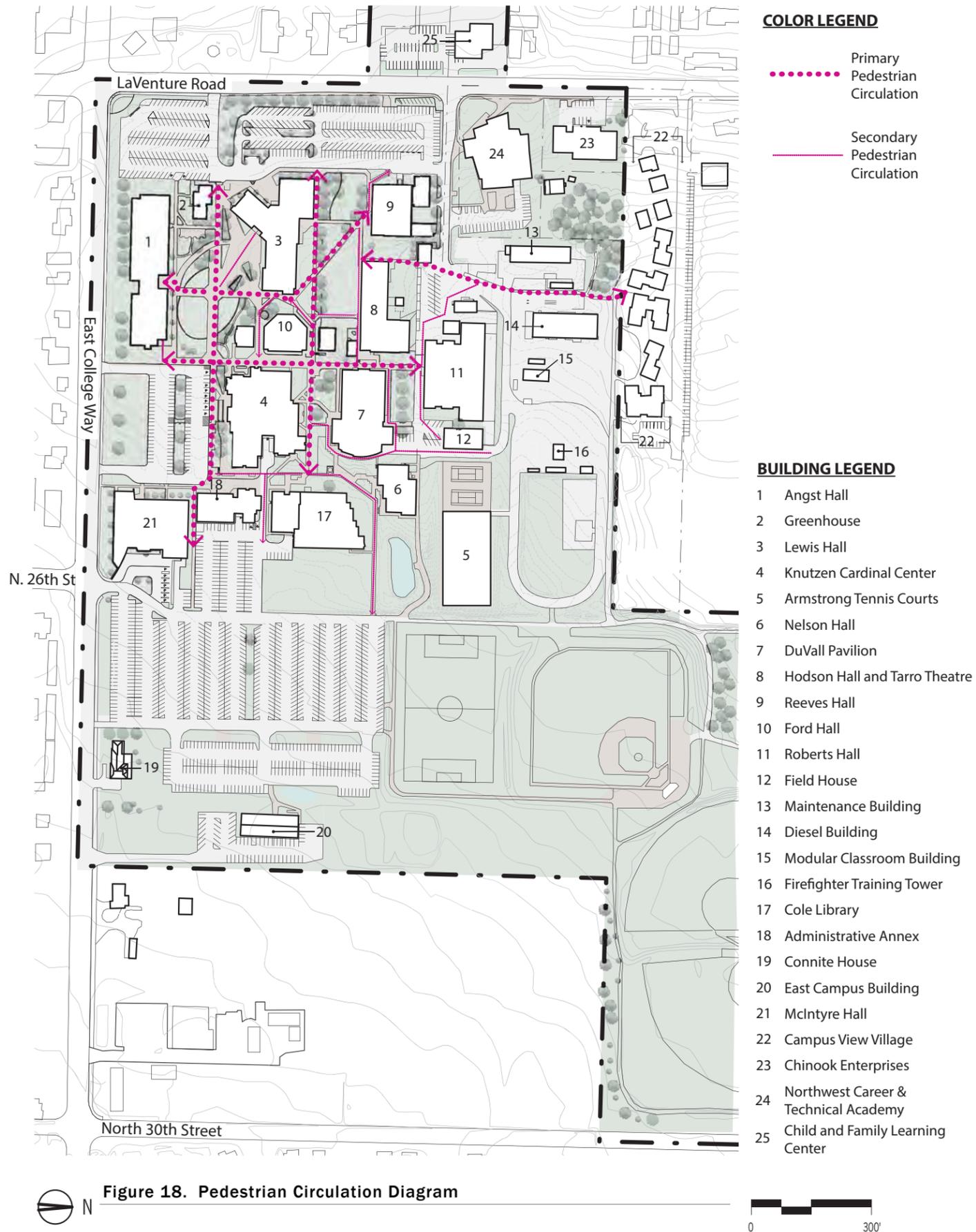


Figure 18. Pedestrian Circulation Diagram

4.4 OPEN SPACE AND LANDSCAPE

GATHERING AND RECREATION SPACES

Existing Conditions

The Mount Vernon Campus has a variety of open space typologies ranging from a large formal gathering plaza that is currently under construction south of Lewis Hall to an informal landscaped area surrounding a storm water retention pond east of Nelson Hall (see Figure 19). In general, the campus open spaces are the result of buildings built over time either without a master plan or with distinctly divergent master planning strategies. Campus open spaces have the feeling of being created by the leftover space between building edges instead of clearly-defined and purposely-arranged outdoor rooms. The exception would be Tollefson Plaza, south of Lewis Hall which is designed to combine hardscape, landscape and water features. This area will give students places to study and socialize. It also could be programmed by the college when needed, extending a welcome area for new students registering for classes or for promoting extra-curricular activities.

Another gathering space on campus is the area south of Hodson and Reeves Halls. This is more of an informal area with tree-lined paths and a soft rise in grade from south to north. The manicured lawns provide places for students to quietly study or read a book. Lastly, the area between DuVall Pavilion and Knutzen Cardinal Center has crisscrossing paved paths and becomes activated with students moving about the campus.

At the north section of campus, the landscape is characterized by large areas of paving and does not provide places for informal student interaction, recreation or gathering. The athletic fields to the east provide the primary recreation spaces.

Needs Analysis

Additional formal and informal spaces are needed to support a variety of uses. Spaces should provide for outdoor study, social gathering and informal recreation. A hierarchy and variety of spaces would aid in wayfinding around the campus. A common thread of hardscape materials and planting would aid in the feeling of a unified campus.

The amount of paving characterized by the professional technical programs area should be reduced. Links to the campus core gathering spaces should be provided.

Proposed Master Planning Strategies

- Establish additional campus quads and gathering or informal recreation spaces on campus
- Provide a hierarchy of outdoor spaces which link to each other through continuity of pathways, planting and paving materials, furniture and lighting

LANDSCAPE

Existing Conditions

Currently, the campus does not take full advantage of its location and is disconnected from its context. Connections to the surrounding community are lost due to the fact that much of the site's perimeter is taken up by parking. This also affects perceptions of the College where the first impression is of parking.

The site's climate, tucked in the foothills of the Cascade Mountains, can make landscape maintenance challenging and resource-intensive, but is also a great opportunity. The mountains and valley provide spectacular views and unique cultural context.

In general, the current landscape maintenance keeps plantings low enough to allow for clear site lines and eliminates potential hiding places. Planting beds are kept near building entrances and shrubs up against building walls. Much of the campus landscape is characterized by open, manicured lawns with some mature trees. A row of old growth Giant Sequoias (*Sequoia Dendron giganteum*) are located north of the DuVall Pavilion. These provide a lush canopy and should be preserved and maintained.

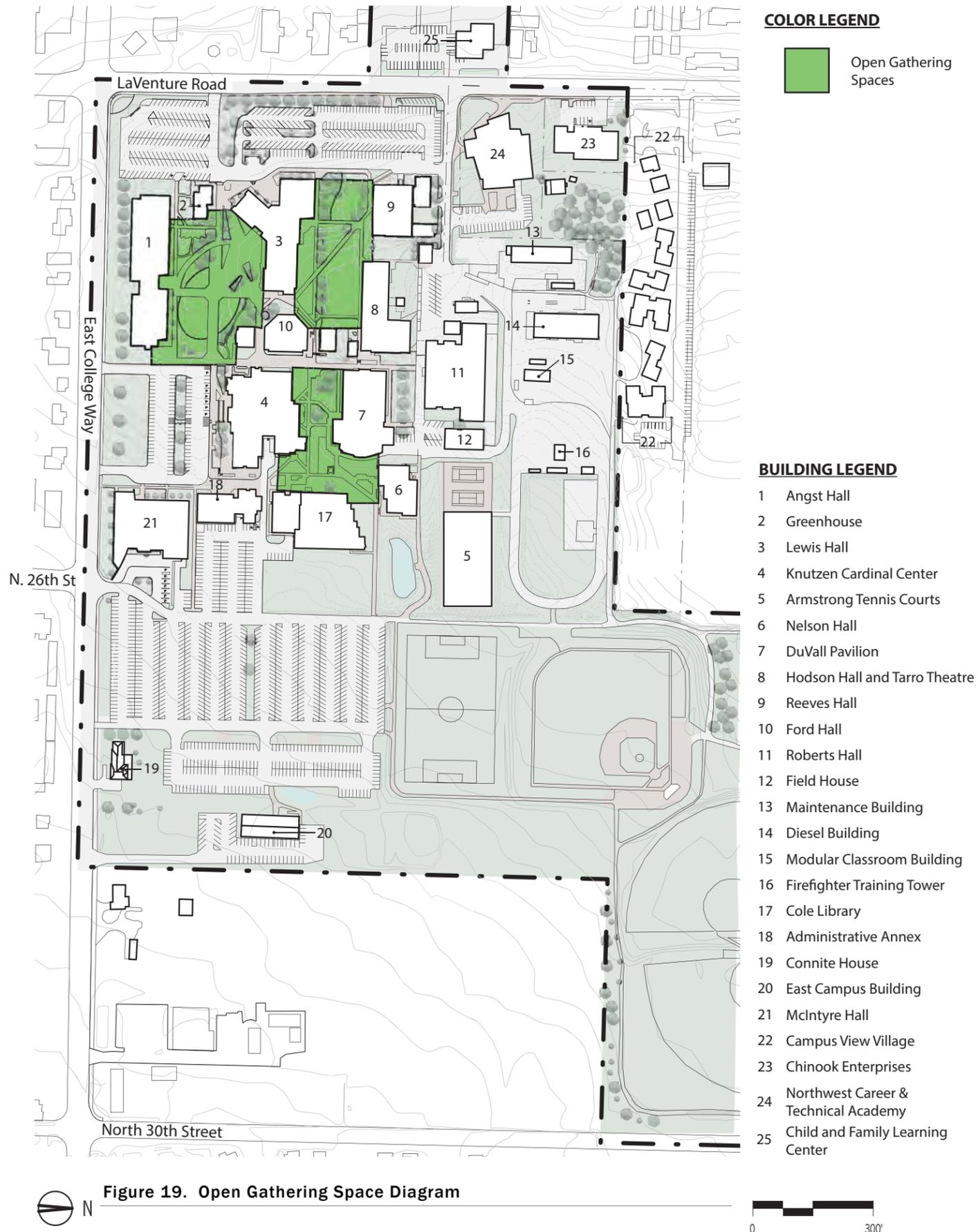


Figure 19. Open Gathering Space Diagram

Needs Analysis

An emphasis should be placed on native plants and local materials to tie the campus to its surroundings. The opening of campus view corridors to the mountains should be maintained as a way to create a place that is distinctively Mount Vernon.

Continuity of plantings and materials is needed to tie together the campus setting, creating a signature campus-wide identity. Buildings currently differ in style and era. A consistent landscape with cohesive furnishings, paving and planting would unite disparate elements into a cohesive whole.

Screening of the parking areas along East College Way and definition of the campus entry is needed. Providing a tree-lined vehicular drive through the parking lot would add to the collegiate feel.

Proposed Master Planning Strategies

- Screen parking with the use of low shrubs around the perimeter of campus
- Use feature plantings to mark vehicular access points with taller plantings set back to maintain safe sightlines for drivers and pedestrians
- As new buildings are added, consider how building entry plazas can be designed to create a transitional space between inside and out
- Connect the site to its cultural context through the use of native plants and local material

4.5 INFRASTRUCTURE

CIVIL

Existing

Utility Tunnel: The campus has a utility tunnel that connects many buildings throughout campus (see Figure 20). Constructed with the original campus buildings, the 6-foot high by 8-foot wide tunnel network has been expanded over time with subsequent projects. The Campus is generally heated by steam that is distributed across the campus via the tunnels from the Boiler Building. The only buildings not served by the tunnel system steam are the Maintenance Building, Diesel Building, Fire Fighter Training Tower, Field House, Administrative Annex, McIntyre Hall, East Campus Building, Child and Family Learning Center and the Greenhouse. The utility tunnel also provides pathways for power and IT infrastructure.

Water: While campus water services are provided by the City of Mount Vernon, all on-site water mains are privately owned by the College. Separate water system loops are provided on campus for fire protection services, domestic water, and irrigation. The fire loop generally consists of 10-inch diameter pipe and provides adequate fire flow.

Storm Drainage: The campus storm drainage system consists of an underground piped conveyance system, catch basins and direct piped collection of roof runoff. A topographic ridge splits the campus into two drainage sub basins west and east. Connections of this onsite private system to the public system occur east and west of the topographic ridge at the northwest, southwest and southeast areas of the campus to LaVenture Road and College Way.

Stormwater detention flow control and water quality treatment is required by City stormwater codes for new construction projects. Recent projects on campus have implemented underground chamber systems and stormwater detention ponds. For example, the detention pond south of the tennis courts was constructed with the Nelson Hall project and a underground detention chamber was constructed with the Lewis Hall project. However, instead of addressing stormwater with each new project, a comprehensive approach to campus stormwater management can be considered for the master plan to provide greater flexibility with each incremental project. Large surface ponds, raingardens, or similar facilities for water quality and flow control strategically placed on campus would allow projects to be constructed without providing localized and independent drainage systems.

Sanitary Sewer: The campus sanitary sewer service is provided by the City of Mount Vernon. The main connection to the City sewer system is at the southwest corner of campus to a manhole in the intersection of LaVenture and College Way. The sewer discharge for McIntyre Hall is to the south to a connection in College Way.

Needs Analysis

The utility tunnel should be extended where feasible to new buildings. Extensions would allow the campus steam, power, and telecommunications systems to serve new construction. While water capacity should remain sufficient during the 15-year Development Plan, future fire flow studies may be needed to ensure adequate pressure and flow is available to serve as demands increase when buildings without fire protection systems are replaced.

A comprehensive approach to stormwater management for the campus would reduce the need for localized and independent underground chamber systems. Development on the east side of campus near the ball fields should be served by a stormwater facility closer to those developments. A sewer main extension from College Way to serve that portion of campus would be required. It should be sized to accommodate future growth.

Proposed Master Planning Strategies

- Extend utility tunnel
- Verify that adequate fire flow for future growth on the main campus can be provided
- Provide large surface detention ponds for water quality and flow control that could be used for future projects. The City has stated that they support low-impact development strategies and emerging technologies, which means it may be possible to develop rainwater gardens instead of surface detention ponds

ELECTRICAL

Existing

The electrical service for the Mount Vernon Campus enters from the PSE utility feed on LaVenture Road north of the Northwest Career and Technical Academy. There are two primary distribution points to the campus. Switchgear #2 is located in an outdoor enclosure south of the Maintenance building. Switchgear #3 is located in a free standing structure just south of Hodson Hall that also contains toilet rooms. These two switchgear locations distribute power to most of the campus buildings via the utility tunnel or in underground feeders in ducts. The existing electrical power has the capacity to accommodate the 15-year Development Plan. Figure 20 depicts locations of fixed infrastructure such as the switchgear and central boiler (east of Reeves Hall).

Needs Analysis

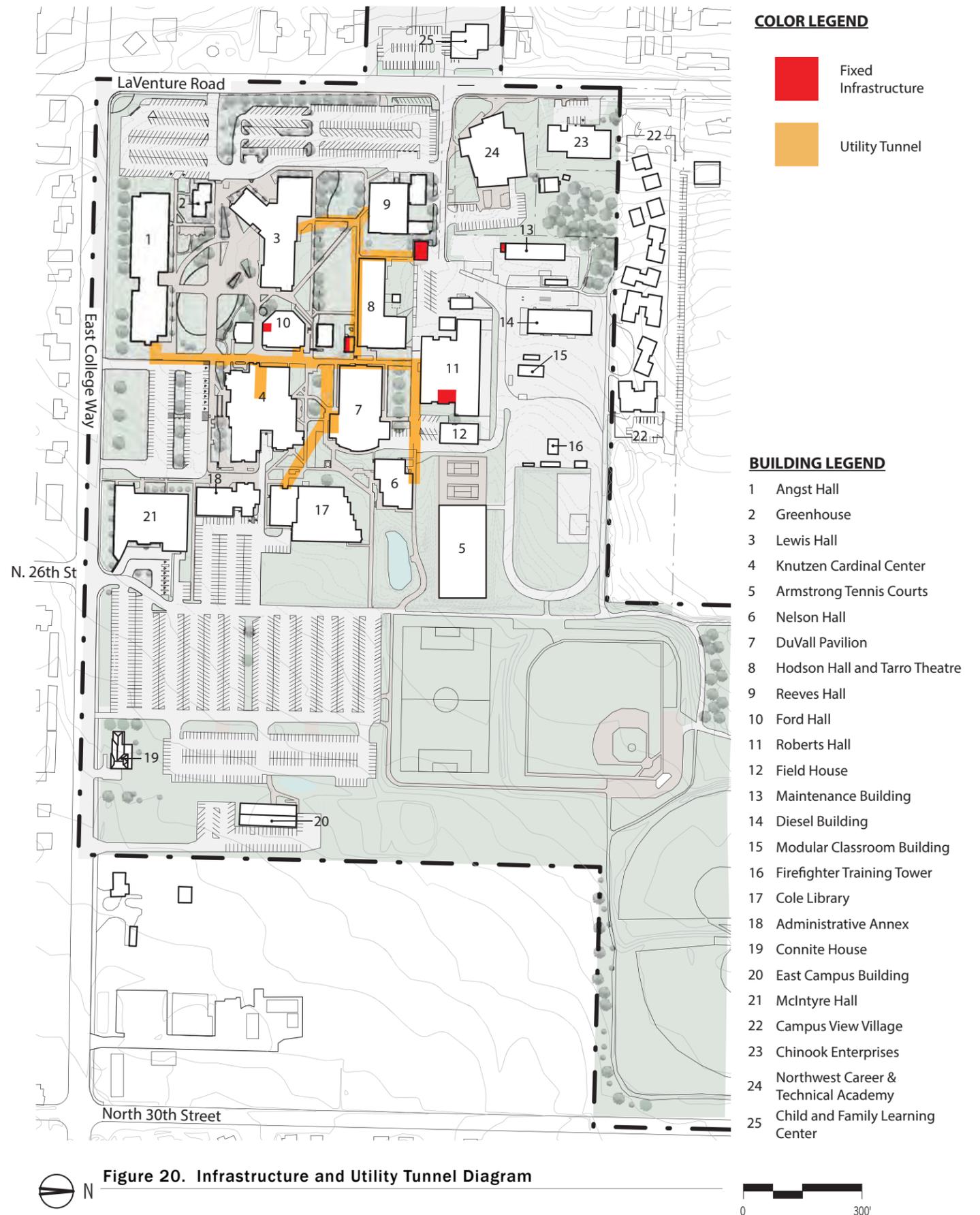
While the power for the 15-year Development Plan is adequate, providing a second point of electrical service entry into the campus would provide redundancy in power service. As the campus grows a campus fire alarm network should be considered. Such a network would provide more reliability, operational flexibility, and maintenance consistency. The campus currently has an under-utilized clock system which needs to be better utilized in the future.

Other electrical infrastructure needs:

- Standardized site lighting for safety and maintenance. Currently, site lighting is provided by a variety of lamp types and controlled at individual buildings
- A networked fire alarm system and a mass notification system for campus

Proposed Master Planning Solutions

- Preserve the locations of Switchgear #2 and #3 in the 15-year Development Plan as these provide distribution of power to the campus
- Consider adding a second utility primary power service from the east or south side of campus, as well as a new primary power switchgear to provide a level of redundancy to the campus utility system. The redundant power



supply would allow offloading some of the building services from the heavily utilized Primary Switchgear #2 in the middle of campus

- Provide campus wide-system for fire alarm
- Incorporate electrical systems that are low-maintenance and consider standardizing systems for fire alarm, lighting controls, etc, to reduce impact on maintenance and operations

TELECOMMUNICATIONS

Existing

The telecommunications systems on the Mount Vernon Campus include a campus data center and a separate telephone room located in Roberts Hall. These spaces house the campus telephone system, servers, network equipment, cabling infrastructure, emergency notification and radio system head end equipment. Backup power, an uninterruptible power supply (UPS), redundant air conditioning systems, and a fire suppression system provide support for these spaces and infrastructure. The telecommunications cabling pathways consist primarily of cable trays located in the extensive tunnel system.

The campus wireless network includes wireless access points (WAP) located in buildings throughout the campus. The wireless network is administered with a central controller located in the data center. In addition, there is a separate student wireless service. Connite House is connected to the campus network with a point-to-point wireless connection.

Needs Analysis

The data center has capacity to accommodate additional equipment and more capacity is being created as older equipment and technology is replaced with newer more compact systems. The data center and telephone rooms meet the IT needs of the College and are acceptable facilities for the foreseeable future.

There are portions of the campus telecommunications pathways which are restricted in size, congested with cabling and do not provide the capacity for additional cabling. The pathways to the data center consist of underground conduits to the tunnel system which are at capacity and do not have room for additional cabling to be installed. The tunnel system to the Library is restricted in size and requires crawling to reach the Library. The Administrative Annex and McIntyre Hall are served by underground conduits which have limited capacity to accommodate additional cabling.

The existing cabling and network equipment infrastructure does not provide adequate capacity and bandwidth. At times, there are network bottlenecks and delays in response times. Bandwidth demands on the network are increasing, driven in part by new instructional models and applications.

Wide area network services also include data circuits to the San Juan and South Whidbey campuses for distance learning and video conferencing. The demand for interactive video services at these remote campuses is increasing.

Proposed Master Planning Strategies

- Maintain the existing data center in Roberts Hall to avoid costs of relocation and minimization of impacts to on-going operations of the College
- Expand conduit system from the Data Center to the tunnel or if possible, extend the tunnel system up to the Data Center
- Address the restricted underground conduit pathway serving the Library, Administrative Annex and McIntyre Hall and increase the pathway capacity to accommodate additional cabling
- Extend the campus tunnel pathways to new and renovated buildings to provide telecommunications pathways, as well as electrical and steam
- Include additional site pathways for a second wide area network service feed to provide a backup to the current single service

- Future projects should include the current industry-standard twisted-pair copper and optical fiber cabling to provide the bandwidth required to support the growing demand for wireless access, virtual desktop and cloud computing, interactive audio and video and other high-speed applications
- Replace existing optical fiber backbone and fiber hub infrastructure currently located in Ford Hall in preparation for replacement of the building. A new fiber hub facility should be considered in an alternate location, preferably in the next capital campaign project. The new fiber hub would provide redundant pathways and could include backup facilities for the data center in Roberts Hall
- Expand the campus-wide student and administrative wireless networks to increase coverage and the capacity to support the growing number of wireless devices, users, and applications
- Where funding is available replace the older horizontal cabling installed in buildings with new category 6A cabling
- Develop a comprehensive and integrated campus-wide security system including surveillance video, intrusion detection, emergency notification, emergency telephones, duress buttons and access control to implement and automate the College's security and safety objectives

5.0 BUILDINGS - MOUNT VERNON CAMPUS

5.1 BUILDING SYSTEMS

EXISTING CONDITIONS

The Mount Vernon Campus has grown over the years with steady building construction and renovation throughout its history. Consequently, there is a wide range of building ages and conditions. To achieve its strategic objectives, Skagit Valley College must continue to provide state-of-the-art facilities in keeping with contemporary educational standards. Facilities not performing to that standard which have maintenance, operational or functional issues will be addressed in this master plan document.

The architectural style and building material palette vary across campus. Buildings on the north side of campus tend to have a more utilitarian style with cladding similar to industrial buildings including metal panel, corrugated metal, concrete and CMU. There are also a few modular buildings which the College plans to remove. The use of these types of materials and the large amount of paving contribute to the feeling that the north side of campus is a backdoor, service zone.

Buildings at the campus core are characterized by brick, metal panel, stucco, glass and some limited use of corrugated metal. Detached, exposed steel and concrete structural elements are expressed on some older buildings, either defining entries or as sun screening elements. Brick color tends to vary across the campus. The recent trend has been to unify the campus with a darker red brown brick color used at Angst and Lewis Halls and the Knutzen Cardinal Center renovation. In general, campus buildings' exterior envelopes are in good condition with some noted exceptions of minor deterioration and moisture damage.

All campus buildings are reviewed by the State through the Facility Condition Survey (FCS). Buildings are rated on a scale of less than 5 years to greater than 35 years of projected lifespan (see the table below and Figure 22). Buildings with a lower FCS score have fewer deficiencies and are in better condition. Many of the older buildings on the Mount Vernon Campus have been renovated and are regarded in satisfactory condition, but some are noted as having 5-15 years of remaining life. The master plan addresses the replacement or renovation of these buildings.

Building	Year Built	Remodel	Existing SF	FCS Score	Remaining Life	Notes
Boiler	1959		1,443	196	> 15 yrs	Equipment is in good condition and easily controlled Average building construction
Maintenance Building	1976		4,800	414	5-15 yrs	Roof leaks and significant deterioration is evident HVAC equipment is deteriorated
Knutzen Cardinal Center	1959	2008	27,558	190	> 15 yrs	Building systems in good condition Some roof repair on the two small wings of the building are necessary
Administration Annex	1986	2008	16,519	210	> 15 yrs	No sprinklers, illuminated exit signs or emergency lights
Hodson Hall	1959	2004	16,087	174	> 15 yrs	
DuVall Pavilion	1956	2001	27,252	274	5-15 yrs	West wall has indications of water intrusion and moisture damage
Field House	1995		4,900	268	> 15 yrs	No fire alarm or sprinklers, no heat
Ford Hall	1988		23,600	282	5-15 yrs	Moderate building deterioration No sprinklers, illuminated exit signs or emergency lights

Building	Year Built	Remodel	Existing SF	FCS Score	Remaining Life	Notes
Angst Hall	2009		67,942	146	> 15 yrs	LEED platinum building
Lewis Hall	2014					Still under construction
Cole Library	1963		26,730	286	5-15 yrs	Roof membrane has minor to moderate deterioration Leaks at north window Poor insulation
Fire Training Tower	1998		5,100	140	> 15 yrs	
Roberts Hall	1971		33,281	284	5-15 yrs	Poor insulation HVAC and electrical service only partially support space
Fire Station	1973		2,400	294	5-15 yrs	Moderate building system deterioration
Nelson Hall	1996		13,055	190	> 15 yrs	No sprinklers, illuminated exit signs or emergency lights Wood frame and concrete structure
Reeves Hall	1959		21,970	520	5-15 yrs	Most systems in need of major renovation No sprinklers, illuminated exit signs or emergency lights
Modular Classroom Building	1982		10,900	296	> 15 yrs	No sprinklers, illuminated exit signs or emergency lights Exterior and interior wall surfaces show random deterioration and wear
Modular Classroom Building	1995		1,792	674	< 5 yrs	Temporary construction General deterioration is evident
East Campus Building	1984		10,250	354	5-15 yrs	

Figure 21. Facility Conditions Table

Of note in the FCS above, Cole Library, Ford, Roberts and Reeves Halls have 5-15 years of remaining life. Buildings in poor condition such as these will need to be addressed either through renovation or replacement. The determination between renovation and replacement is based on a number of factors including cost of renovation and efficacy or efficiency of the building after renovation. In other words, if the building is too small or too constrained by its geometry to provide adequately sized, functional classrooms, it may not be a candidate for renovation.

Some buildings rated as good condition in the FCS have deficiencies in fire protection, construction or assembly type. These deficiencies also factor into the campus strategy for replacement and renovation projects. Buildings which lack fire sprinklers include DuVall Pavilion, Ford Hall, Nelson Hall, Reeves Hall and the Modular Classroom Building.

The majority of campus buildings are served by a central plant and utility tunnel system. The boiler provides steam heat piped through the utility tunnel to these buildings. Electrical and telecommunications infrastructure are also routed through the tunnel. Not connected by this subterranean system are the Administration Annex, Modular Classroom Building, and the Maintenance Building. Each building has an independent mechanical system. For example, the Administration Annex has heating and cooling provided by variable-flow refrigerant system with rooftop units.

The central boiler is an efficient system for the campus. The only drawback is that the initial cost of upgrades to this centralized equipment is higher than the cost of upgrading one building's mechanical equipment at a time. The last equipment upgrade for the central boiler was in 2003. The current system's capacity is sufficient for the existing campus and future expansion.

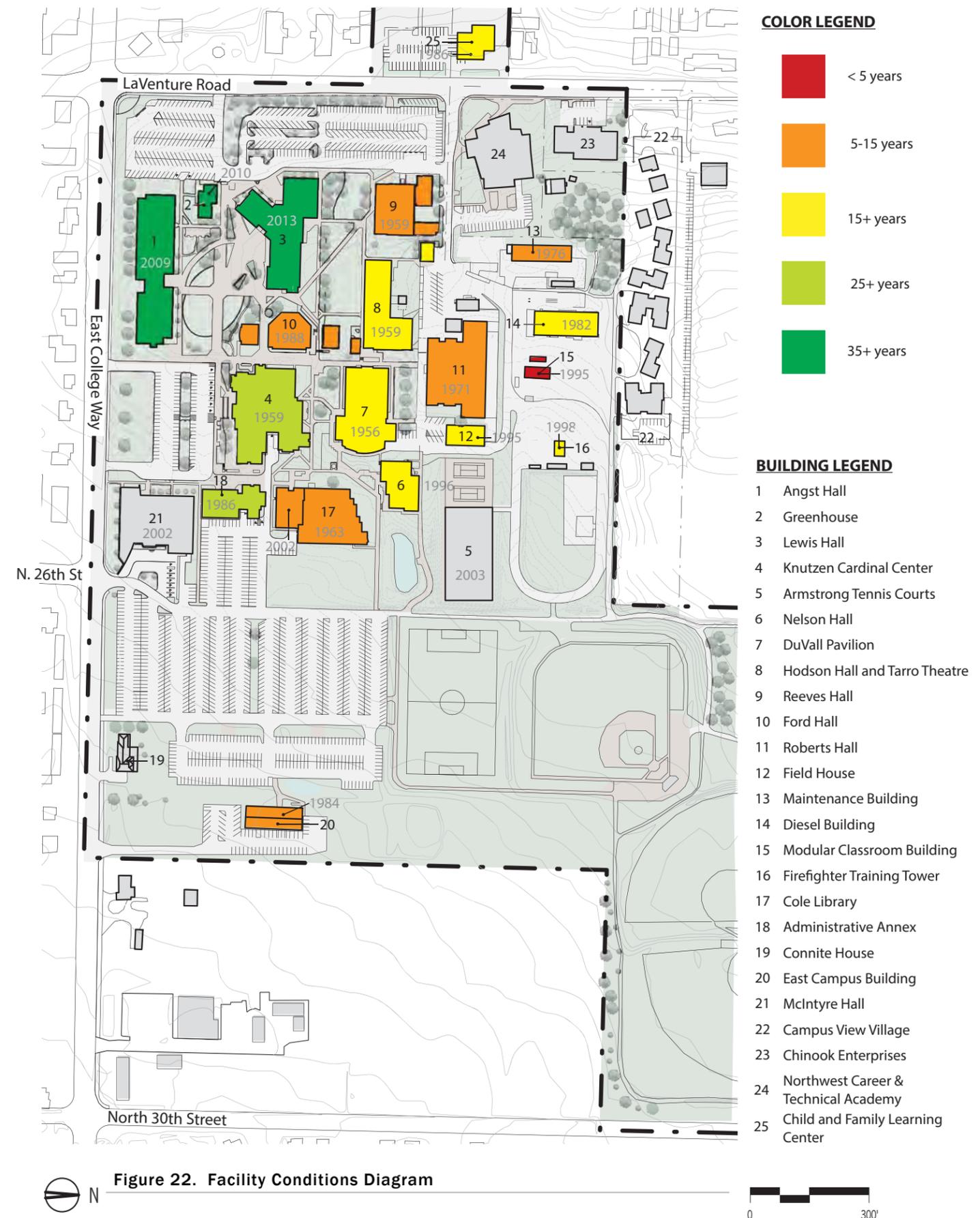


Figure 22. Facility Conditions Diagram

CAMPUS AND STUDENT SUPPORT SPACES

The Mount Vernon Campus and facilities were not originally designed to be occupied all day by students. Few comfortable spaces are available on campus where students can spend down time between classes. There is a lack of communal areas that encourage interaction between students and staff. In addition, there are no food service options for students taking classes in the evening.

Currently one of the most popular spaces on campus is the cafeteria in the Knutzen Cardinal Center. It provides a meeting place where students can access WiFi and work between classes. Providing student amenities like those in the Knutzen Cardinal Center such as meeting spaces, formal and informal study areas and food service can strengthen a sense of internal campus community.

As noted in Chapter 4 – Site - Mount Vernon Campus, a few of the older campus buildings such as Ford Hall, Hodson Hall and the Administration Annex are so closely sited to others that they do not allow room for future additions. These buildings also tend to be smaller and less flexible for renovation. In addition, they are oriented in a way that does not take advantage of natural light or wind patterns on the site for daylighting or passive cooling.

NEEDS ANALYSIS

Recently, manufacturing has begun to return to the United States. Washington is one of 15 manufacturing-oriented states, and has experienced an 11.5% rise in manufacturing employment from January 2010 to April 2013. The availability of jobs in these fields will continue to encourage students to pursue professional and technical degrees and certificates. SVC has already observed increased demand and projects FTE numbers will continue to grow. As demand increases, additional pressure will be placed on the facility resources for these programs. The Modular Classroom Building, which is used for the technical programs, is rated at 15 years of remaining life. A strategy is needed to address both the growth of these programs and the facilities' operational and maintenance needs.

For students in the academic transfer program, areas for informal study and group work is very important. A variety of spaces available to students to independently or collectively study and socialize between classes improves the sense of campus community and aids in informal learning. Libraries are typically the campus facility that would provide these types of spaces, but Cole Library does not adequately provide this. The quality of space could be improved by establishing zones for quiet study separated from the more active and noisy group study. Also, technology infrastructure including ample computer labs and tables with easy access to outlets for laptops are needed.

Currently, Skagit Valley College does not have a child care facility on campus. Child care would be an appealing feature for parents attending SVC and could help future students choose the College. This amenity is common on other similar sized community college campuses.

Ford Hall is among the buildings identified in the FCS with a limited lifespan. The building has some functional and life safety issues inherent in its construction. Stairs and an exterior ramp provide a vertical link between the first and second floor because it lacks an elevator. It is wood frame construction, but does not have fire sprinklers. Ford's exterior envelope is poor resulting in poor energy conservation performance. A major renovation would not be effective from a cost benefit standpoint and due to inflexibility of Ford Hall geometry and site constraints.

PROPOSED MASTER PLANNING STRATEGIES

- Co-locate compatible programs to share student study and support spaces; program adjacencies organized to foster exchange of ideas and learning across related fields of study; integrate student gathering spaces in new and existing buildings
- Accommodate growing professional technical programs with an emphasis on co-location of programs with shared resources
- Provide a child care facility on campus
- Replace outdated buildings with larger, more efficient structures
- Unify buildings through material palette

6.0 DEVELOPMENT PLANS - MOUNT VERNON CAMPUS

The Master Plan for the Mount Vernon Campus of Skagit Valley College presents a broad vision for the strengthening and transformation of the existing campus. The master plan describes the development of the campus in two time frames, the 15-year Development Plan and the Long-range Development Plan. The 15-year Development Plan addresses buildings and their adjacent sites that are shown in the States' Facility Condition Survey to have 5-15 years of remaining life. The Long-range Development Plan (LRDP) looks beyond this first phase of development to when other buildings will be reaching the end of their useful life. The proposed development of the campus is based on analysis of current and projected program trends, facility needs and the campus environment. The following themes characterize the Master Plan.

6.1 MASTER PLAN THEMES

CONSOLIDATION OF FACILITIES

A theme of this master plan is to consolidate buildings that are reaching the end of their useful life into larger replacement buildings instead of replacing them at their current size and location. Learning now happens in an assembly of adjacent spaces including active learning classrooms, breakout rooms for project-based learning and informal learning spaces that allow learning to continue outside the classroom. Adjacencies of these different learning spaces facilitate the flow of learning from formal to informal or from collaborative to individual study. This is evident across the spectrum of educational programs, from academic transfer to professional technical programs.

Consolidating smaller buildings into one larger building creates an opportunity for sharing this assembly of spaces between programs. With more academic space to house different programs, a larger building creates the potential for interdisciplinary learning.

Consolidating also frees up future sites on campus for long term development. This allows the College to utilize existing campus infrastructure rather than acquiring property and extending infrastructure to that property. It reinforces the sense of campus community by keeping the campus concentrated on its current site instead of expanding east across the existing parking lot.

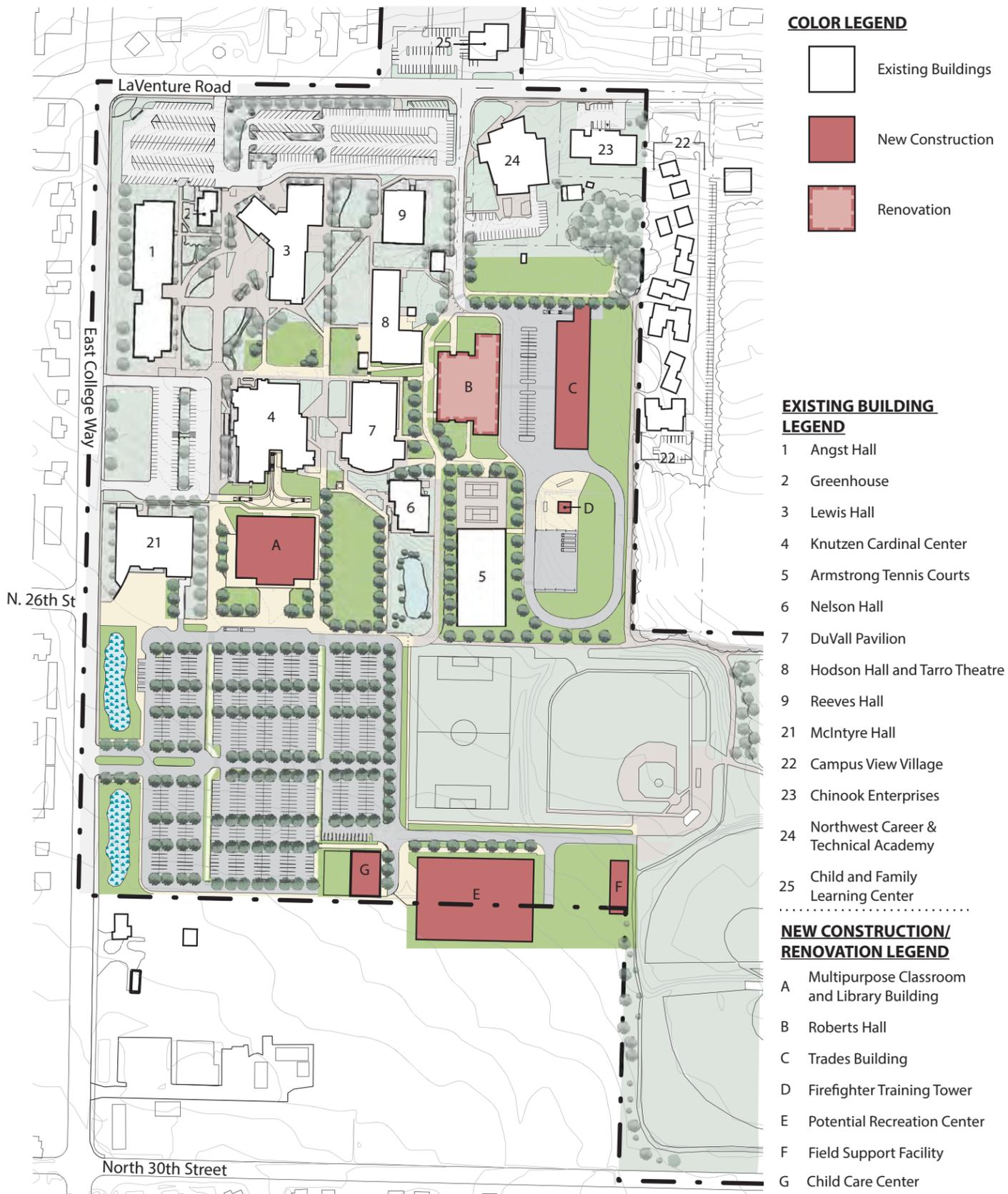
IMPROVING CAMPUS EXPERIENCE FOR STUDENTS

As facilities are replaced, the reorganization of buildings, open space and circulation has been addressed to improve the student experience. Improving cross-campus pedestrian circulation helps wayfinding. Separation of vehicular and pedestrian circulation in key areas of the campus will enhance students' safety.

PLANNING RELATIVE TO FUNDING RESOURCES

Planning and project sequencing are guided by funding sources available to implement the Master Plan. The projects proposed in the 15-year Development Plan are based on criteria for state funding. The College will be eligible to request capital funding from the State in spring of 2016. Scoring criteria for state funding along with need will determine sequencing of projects for the 15-year Development Plan.

Additionally, alternative funding sources could also determine the sequencing of projects in both the 15-year Development Plan and the LRDP. The Master Plan recognizes that while state funding for future projects guides the Development Plan, a combination of funding sources, including state allocations, local and regional partnerships, and industry grants, will be needed to fund the plan as presented. The College could engage in partnerships and land lease



associations with local non-profit institutions and government agencies to provide assistance for upgrading program facilities, such as those for professional technical programs and athletics.

Some partnerships benefit both the campus and the community, such as the shared ball fields between the College and Skagit County. These mutually beneficial partnerships should continue to be explored as a way to strengthen the campus as a community amenity. For example, SVC and the Mount Vernon YMCA are considering a new YMCA facility that could be located partially on the campus property adjacent to the ball fields.

6.2 15-YEAR DEVELOPMENT PLAN FOR FACILITIES

The 15-year Development Plan, Figure 23, reflects capital requests that respond to the anticipated needs of SVC and to the funding criteria of the State Board of Community & Technical Colleges. This phase consists of a combination of renovation projects, replacement projects, and accompanying site development to improve the campus and facilities. The master plan also considers projects developed without state allocations that instead could be developed through local partnerships. Completion of this collection of projects is the first step toward implementing the vision of the master plan.

RENOVATION & REPLACEMENT: ROBERTS HALL (B) & TRADES BUILDING (C)

The renovation of Roberts Hall and the replacement of the Diesel Building are prescribed as a way to address the aging buildings and the trades programs' growth. The demand for these programs is growing rapidly, and there is a demonstrated need for additional classroom space, student collaboration spaces and technical program areas. These programs demand state-of-the-art facilities to maintain competitiveness in the education marketplace, however existing equipment is outdated. Funding for this project could be a combination of public and private funds should industry partnerships develop.

The Diesel Building would be replaced with a new 55,000 GSF Trades Building. This new building would also accommodate the uses of the Fire Station, Truck Driving Classrooms and Maintenance Building which are currently located in temporary and small buildings on the north side of campus. Reconfiguration of the hardscape areas associated with these buildings is part of this project. A shared service yard would be used by the automotive and diesel programs to support both curricula.

REPLACEMENT: LIBRARY, CLASSROOM, ADMINISTRATION BUILDING (A)

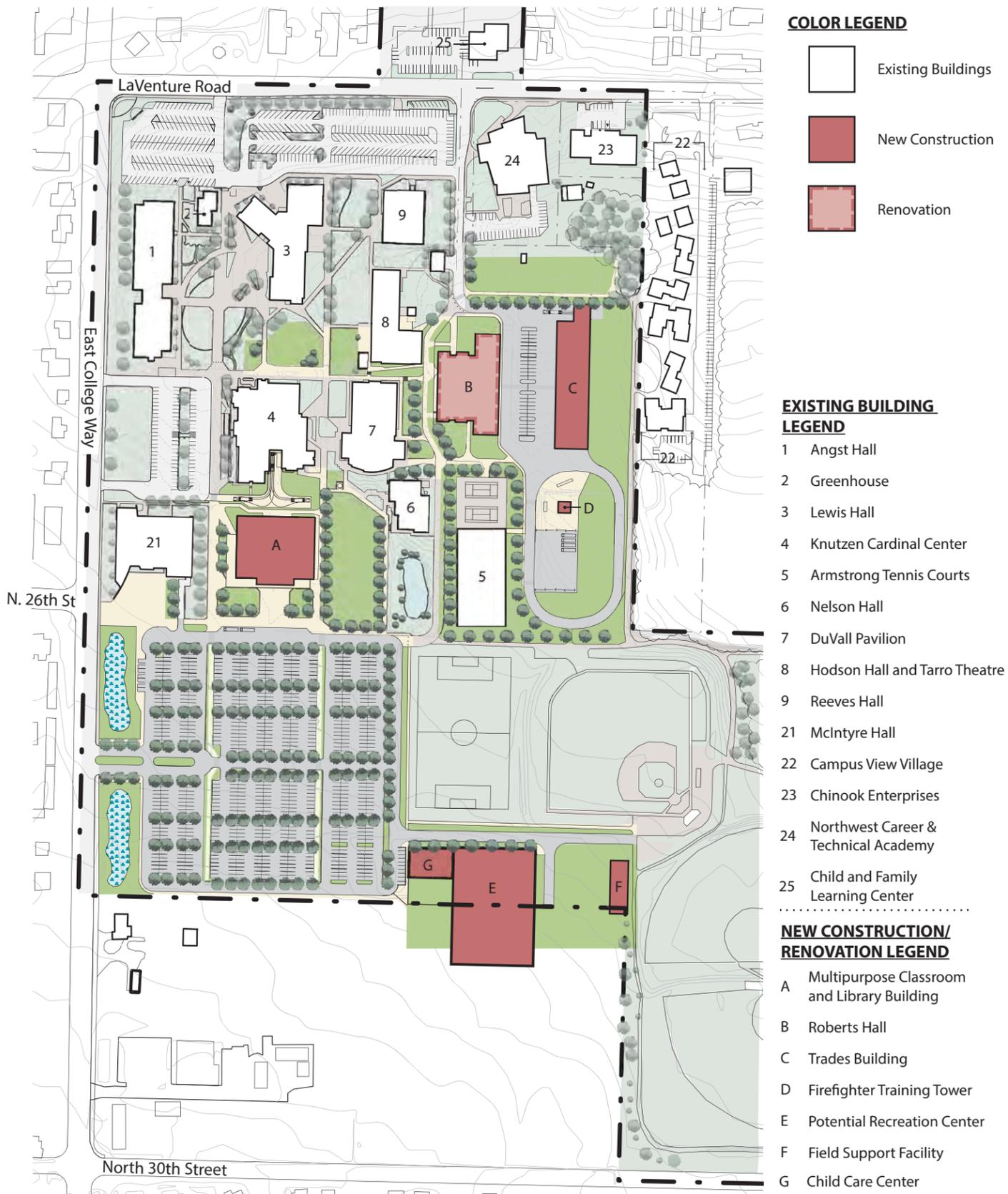
Ford Hall and the Library are projected to have 5-15 years of remaining useful life per the FCS. Replacement of the Library, Ford Hall, and Administration Annex would provide the opportunity to address these buildings and increase availability of multipurpose classrooms, informal learning spaces, and gathering spaces. 23,600 SF of Ford Hall, 26,730 SF of Cole Library and 10,244 SF of the Administration Annex would need to be replaced in a new building. A 56,300 GSF multipurpose classroom and library building which also contains administrative offices is proposed to be located with a strong presence on the east parking lot. It would be sited to consolidate service areas between the Library and culinary functions in the Knutzen Cardinal Center, thus separating service from pedestrian circulation. The building and corresponding site improvements will serve as a new entrance to campus from the east.

FIELD SUPPORT FACILITY (F)

SVC needs a field support facility containing bathrooms, locker rooms, offices and concessions located adjacent to the ball fields to serve the SVC athletic programs. This field support facility would also contain the practice and training facilities currently in the existing field house east of Roberts Hall. This location will allow for direct coaches' supervision and ideal alignment with future growth of athletic amenities in this area of campus.

Figure 23. 15-year Development Plan





POTENTIAL RECREATION CENTER DEVELOPMENT (E)

The master plan shows a recreation center on the eastern portion of campus, adjacent to the athletic fields and tennis courts. A community recreation facility in this location would reinforce an athletics zone on campus and could provide auxiliary support service. This facility would not be funded through state allocations, rather it could be developed as a local partnership. For instance, the Downtown Mount Vernon YMCA is exploring relocating its facility to SVC. This presents a tremendous opportunity for partnership between the college and the YMCA organization. It also further strengthens the campus as a community resource.

CHILD CARE CENTER (G)

A 4,500 - 6,000 GSF child care center is proposed along SVC's eastern property line. Two potential locations are being held as options in the master plan for this facility. Both locations would accommodate constructing the child care center on the existing campus as the first project of the 15-year Development Plan. Also, it would be located to ensure the small building fits in with the scale of the larger recreational buildings that may follow. The siting of the building would optimize access, security and solar orientation. Classrooms would open directly to the outdoor play area which would be oriented either to the south or east. Angle-in parking adjacent to the front door would provide safe loading and unloading for parents and children.

The primary option, Figure 23, allows the building to be a standalone facility that is tucked into the northern corner of the east parking lot. This location could allow for future expansion, but reduces the parking capacity of the east lot. Also, this location orients the classrooms and the outdoor play area to the south, maximizing solar exposure. The second option, Figure 24, locates the child care facility adjacent to the recreation center, maximizing the parking capacity of the east lot.

6.3 CAMPUS SITE IMPROVEMENTS - 15-YEAR PLAN

The facilities projects proposed for the 15-year Development Plan also include accompanying site improvements to address Site Master Planning Strategies noted in Chapter 4 and below:

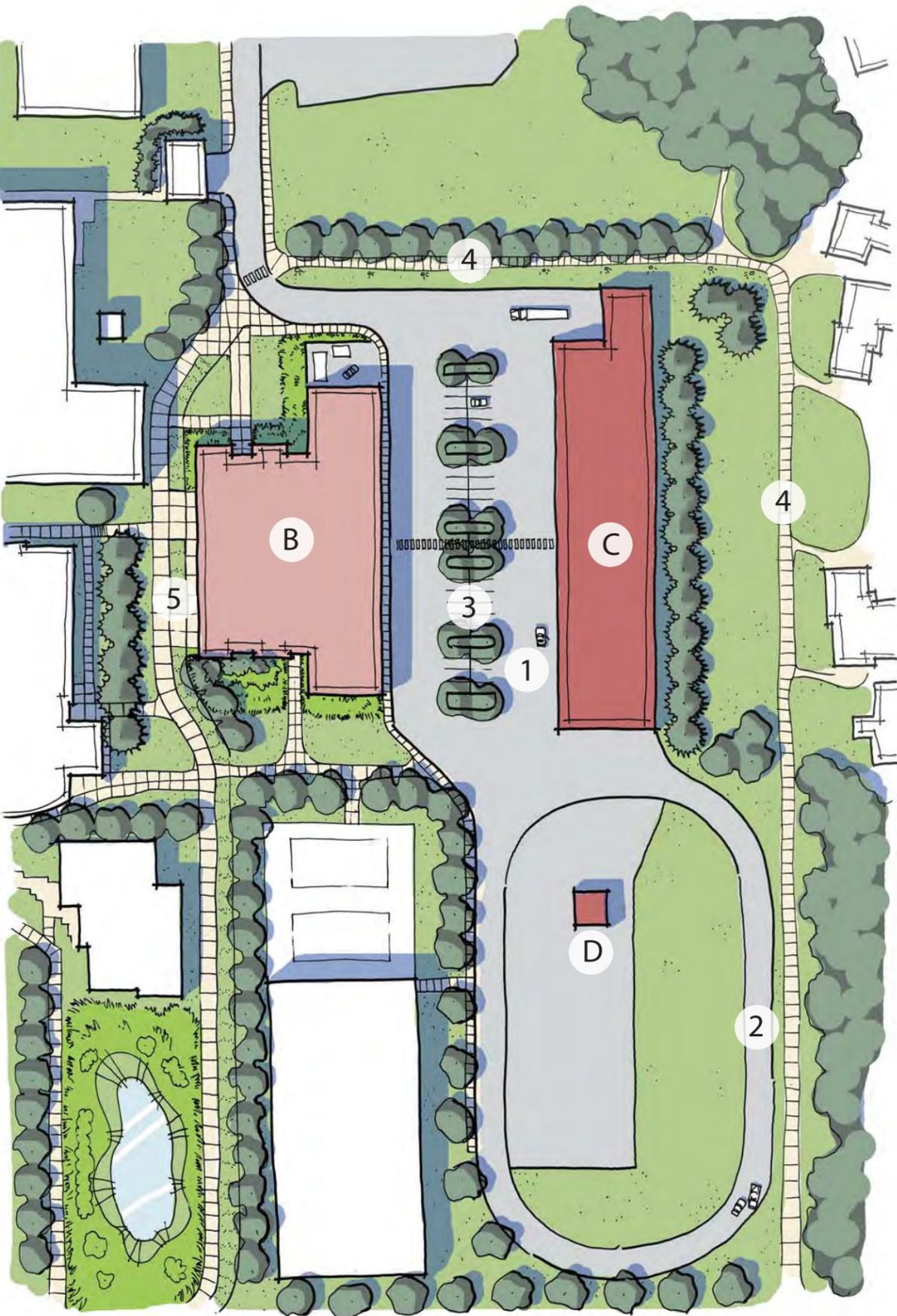
- Provide emergency and service access between east and west sides of campus
- Separate pedestrian from vehicular circulation in the north section of campus around the Trades buildings
- Extend pedestrian circulation pathway from the Tollefson Plaza in front of Lewis Hall towards the east, connecting to the east parking lot
- Separate Knutzen Cardinal Center service area from pedestrian circulation
- Establish main entry at east parking lot

Refer to the diagrams on pages 64 - 66 for full campus vehicular circulation, pedestrian circulation and open space improvements of the 15-year Development Plan.



Figure 24. 15-year Development Plan - alternate child care location





NORTH CAMPUS SITE IMPROVEMENTS

The following site improvements, as depicted in Figure 25, are proposed as part of the Trade buildings renovation and replacement project. These improvements may have to be phased depending on funding.

The North Pedestrian/Emergency Access Pathway (5)

Envisioned for the 15-year phase of the master plan, this pathway in the north campus provides direct pedestrian and fire access between the east and west portions of campus. It is similar in concept to the emergency access that is part of the plaza between Lewis and Angst Halls. It can be used for service and fire access link between the eastern and western portions of campus and also serves as pedestrian circulation.

The pathway is proposed as a 20 foot wide roadway, with 12 feet of width dedicated to pedestrian hardscape and the remaining 8 feet would be a grass-pave system capable of supporting a fire truck. Grass-pave is a subsurface reinforcement system that allows for vehicles to drive or park on grass without causing rutting, mud or root zone compaction. This pathway would provide a formal front door to the renovated Roberts Hall, and becomes part of the link to future athletic facilities to the east and expanded housing to the North

Pedestrian Link To Student Housing (4)

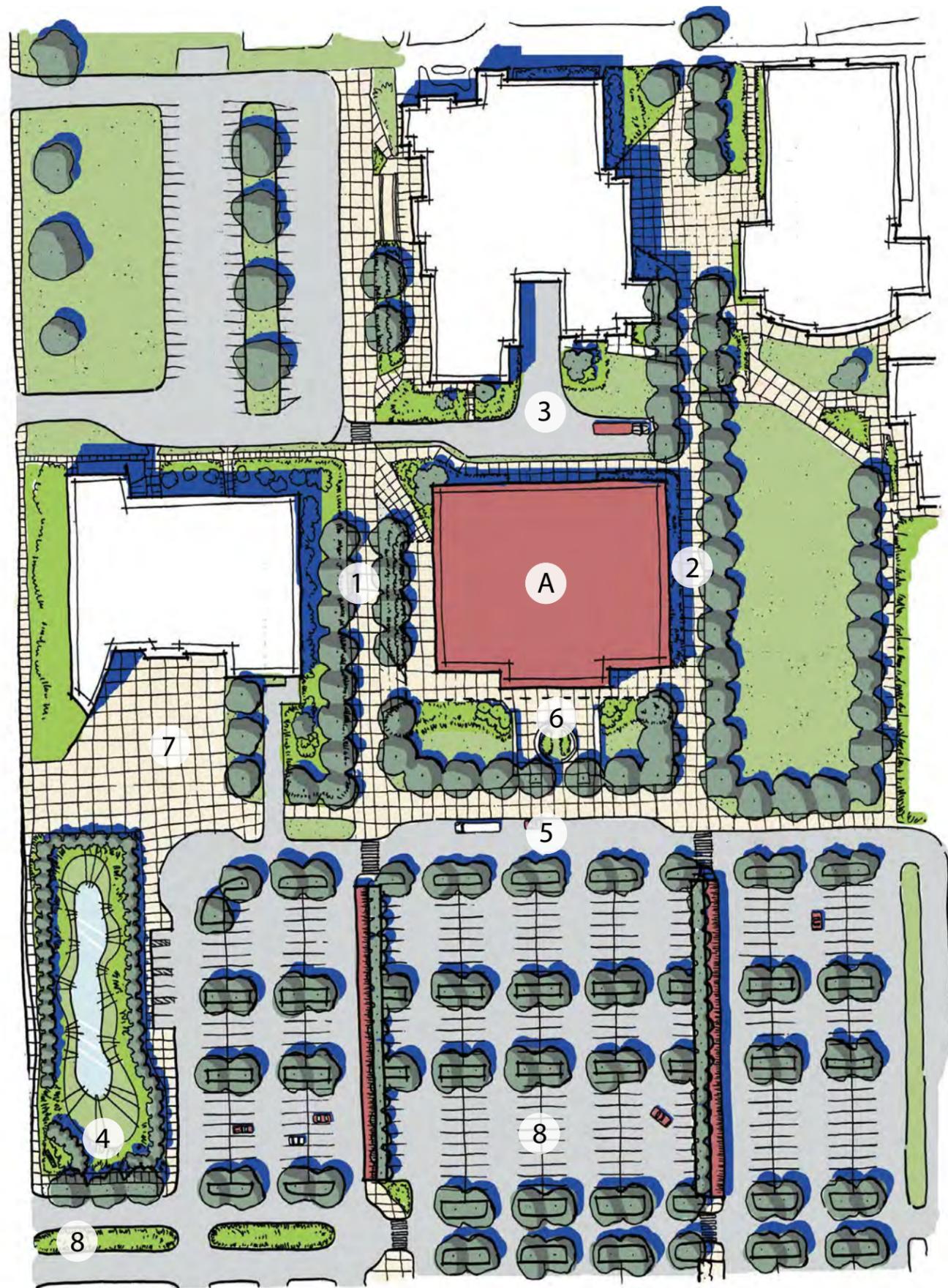
Vehicular circulation needs to be separated from pedestrian circulation around Roberts Hall and to the north to Campus View Housing. The expanse of asphalt in this area of campus creates a conflict between pedestrian and vehicular circulation. The demolition of the Diesel and Maintenance buildings and consolidation into a new building that will share a service yard with Roberts Hall. This demolition will allow for a large reduction in the amount of asphalt that characterizes the north part of the campus. A dedicated pedestrian path that will serve the Campus View Village housing to the north of campus is part of the site improvements associated with the trades buildings.

Trades Building Plan

Figure 25 shows the following site and facility features of north campus of the 15-year Development Plan:

- B. Renovate Roberts Hall (33,000 SF)
- C. New 55,000 GSF Trades Building, two-story building with upper floor for classrooms and faculty offices, ground floor for Diesel, Maintenance, and the Fire Station
- D. Relocated Fire Fighter Training Tower
- 1. Shared service yard wide enough for use by Roberts Hall and Trades Building programs
- 2. Reconfigured auto test track
- 3. Relocated motor pool and vehicle storage
- 4. Dedicated pedestrian path to Campus View Village and landscape buffer to housing at the North
- 5. North pedestrian and emergency access pathway connecting the east and west portions of campus

Figure 25. North Campus Facilities and Site Improvements



EAST CAMPUS SITE IMPROVEMENTS

Site improvements, as shown in Figure 26, are proposed as part of the Library Classroom Building replacement project. These improvements may have to be phased depending on funding. They may also be developed as part of a partnership with the YMCA.

East Campus Entry (8)

The campus entry is a critical part of the student and visitor experience because most of the parking that serves the campus is located east of the campus. A formal entry is proposed here. The parking is buffered from East College Way by a green edge that contains landscape features for stormwater control.

The vehicular entry to campus is relocated to the east and bisects the proposed green edge to campus. This vehicular entry features a one-way in and out loop and a boulevard configuration designed to heighten the sense of collegiate entry. The new entry configuration will provide a prominent location for new campus signage.

The east campus entry provides an opportunity to enlarge the current McIntyre Hall entry plaza for outdoor events that are visible from College Way. Parking currently located in this area has been relocated to the expanded eastern parking lot.

The existing parking at the eastern lots totals 946 stalls. This includes 56 stalls at the East Campus Building lot. Currently, parking at the East Campus Building is isolated from campus connections and has no formal pedestrian link to the west. A redesign of this parking area to incorporate it into a larger, more efficient campus lot is needed.

With the reconfiguration of the east parking lot and the addition of the new Library Classroom Building, parking is reduced by roughly 100 stalls in this area. Greater efficiency and increased parking may be possible when it is fully designed. However, contemporary codes for planting strips and stormwater management have higher impacts on parking lots today, requiring more area allocated for sustainable elements. Even at a reduced capacity this parking lot will have a benefit to campus by creating a lot that allows for easy navigation and greater visibility of available parking spaces. Covered pathways through the parking lot will link to the campus pedestrian network.

Southern Pedestrian Promenade (1)

The southern pedestrian promenade continues the broad pathway in the Tollefson Plaza, extending it to the east to connect the eastern parking lot to the campus. The promenade has a hardscape walkway for pedestrian use, and a wider grass-pave portion to provide service and fire department access. The existing parking spaces south of the Knutzen Campus Center sidewalk would be removed to create an enlarged sidewalk.

Library/Classroom Building Plan

Figure 26 shows the following site and facility features of the east campus and main entry:

- A. Library/Classroom building
- 1. Extension of southern pedestrian promenade
- 2. Extension of central pedestrian promenade
- 3. Consolidated service and loading access to culinary and library loading docks
- 4. Green edge to eastern parking and entry plaza
- 5. Bus and vehicular drop off zone
- 6. Main entry and porch element
- 7. Enlarged McIntyre Plaza
- 8. Reconfigured eastern parking lot with revised main vehicular entry (only portion of parking shown, see following page for full vehicular circulation diagram)

 Figure 26. East Campus Facilities and Site Improvements

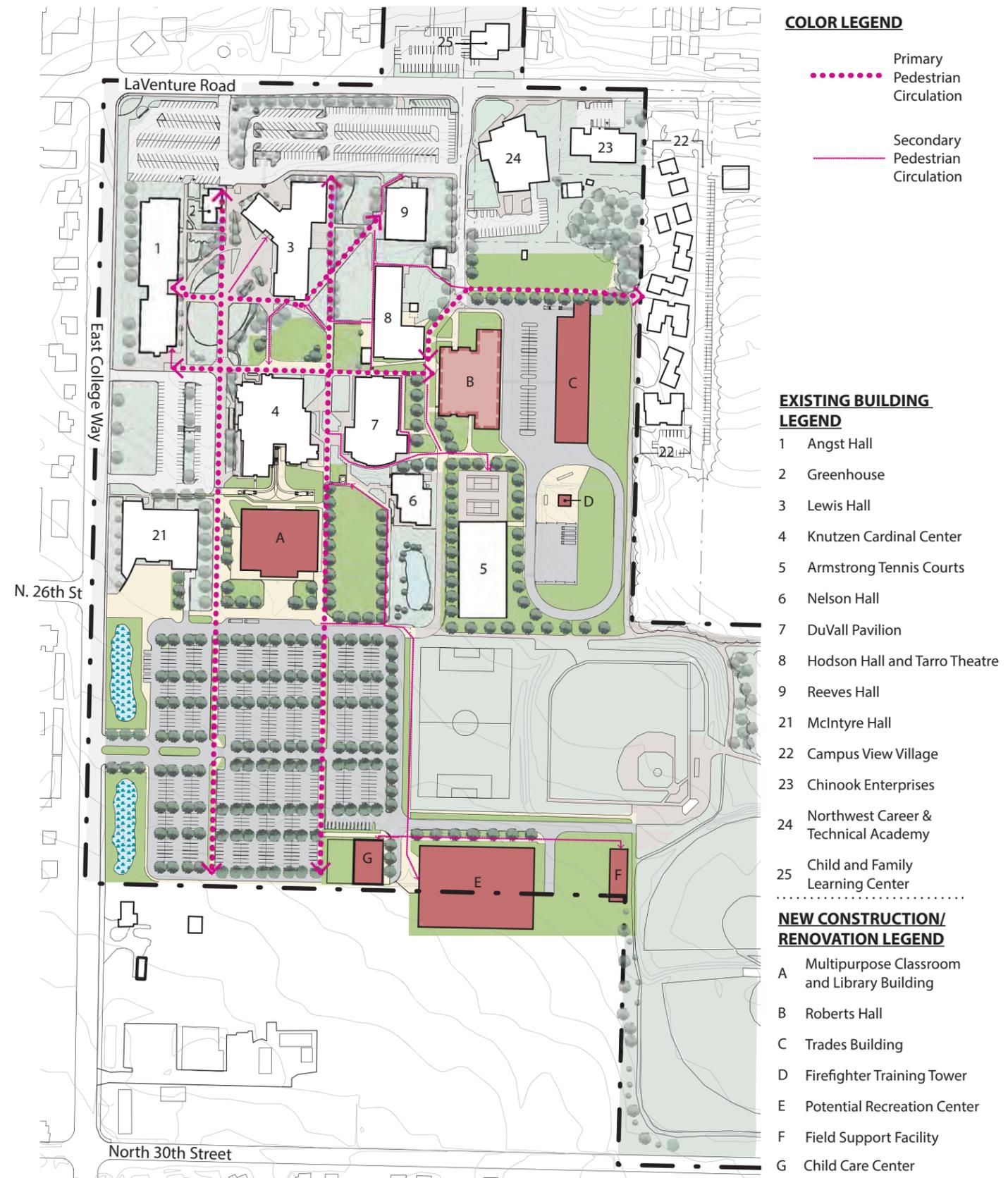


Figure 27. 15-year Development Plan - Vehicular Circulation



Figure 28. 15-year Development Plan - Pedestrian Circulation





6.4 LONG-RANGE DEVELOPMENT PLAN (LRDP)

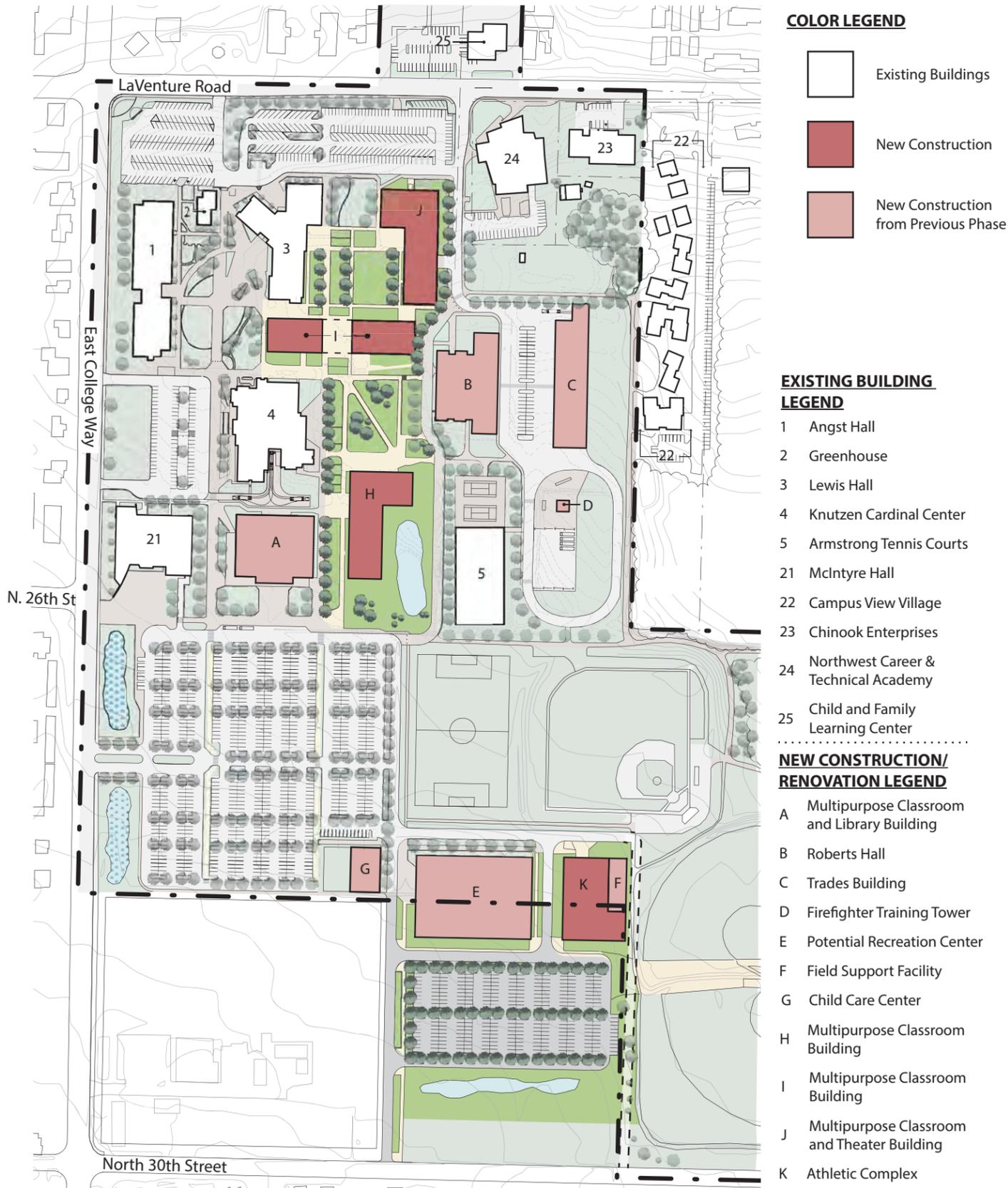
Over the long term (20-25 years) programs will evolve and buildings will reach the end of their useful life and need to be replaced. Additional new facilities for SVC will gradually transform the campus. The Long-range Development Plan provides a framework for continued growth of the campus to address the master planning strategies and themes noted throughout the Master Plan document. The plan on the following page depicts projects for which the College may commence development within the next 25 years. They would be undertaken in an order best aligned with potential funding sources and programmatic needs.

The Long-range Development Plan is shown in Figure 30. Careful siting of these projects can shape outdoor space and clarify pedestrian circulation. They follow the consolidation theme by replacing two smaller buildings with one larger building. The site created by moving replacement square footage for Ford Hall to the Library site in the 15-year Development Plan provides a site for a growth project or a replacement/growth project in the LRDP. Square footage for growth could be added by constructing three-story buildings. Thus, the LRDP provides for growth while keeping the critical mass of campus on the existing site.

While infrastructure elements are not impacted in the 15-year Development Plan, future projects in the LRDP would involve the consideration of infrastructure relocation such as the existing boiler plant and switchgear #3 adjacent to Tarro Theater.

Figure 29. 15-year Development Plan - Open Gathering Spaces





FACILITIES

Future Academic Building (Former Ford Hall Site) (I)

The former Ford Hall site, adjacent to Lewis Hall, could be used to expand programs in Lewis or to house new academic programs. The building should be located to define the edges of both the Tollefson Plaza to the south and the proposed campus quad to the north. In this position the building could also create a through building gateway between the campus quad to the north and a future campus quad to the east.

Future Building Site (Hodson And Reeves Replacement) (J)

Reeves Hall will undergo an exterior renovation in 2013 and will likely have a limited programmatic renovation during the 15-year Development Plan. Reeves, Hodson Hall and the Tarro Theater were all built in 1959 and recently renovated, but they will eventually reach the end of their useful life and need to be replaced. The replacement project represents an opportunity to define a campus quad north of Lewis Hall, improving the space between the proposed building and Roberts Hall. The building also occupies a highly visible site along the northern entry drive and would be prominently visible.

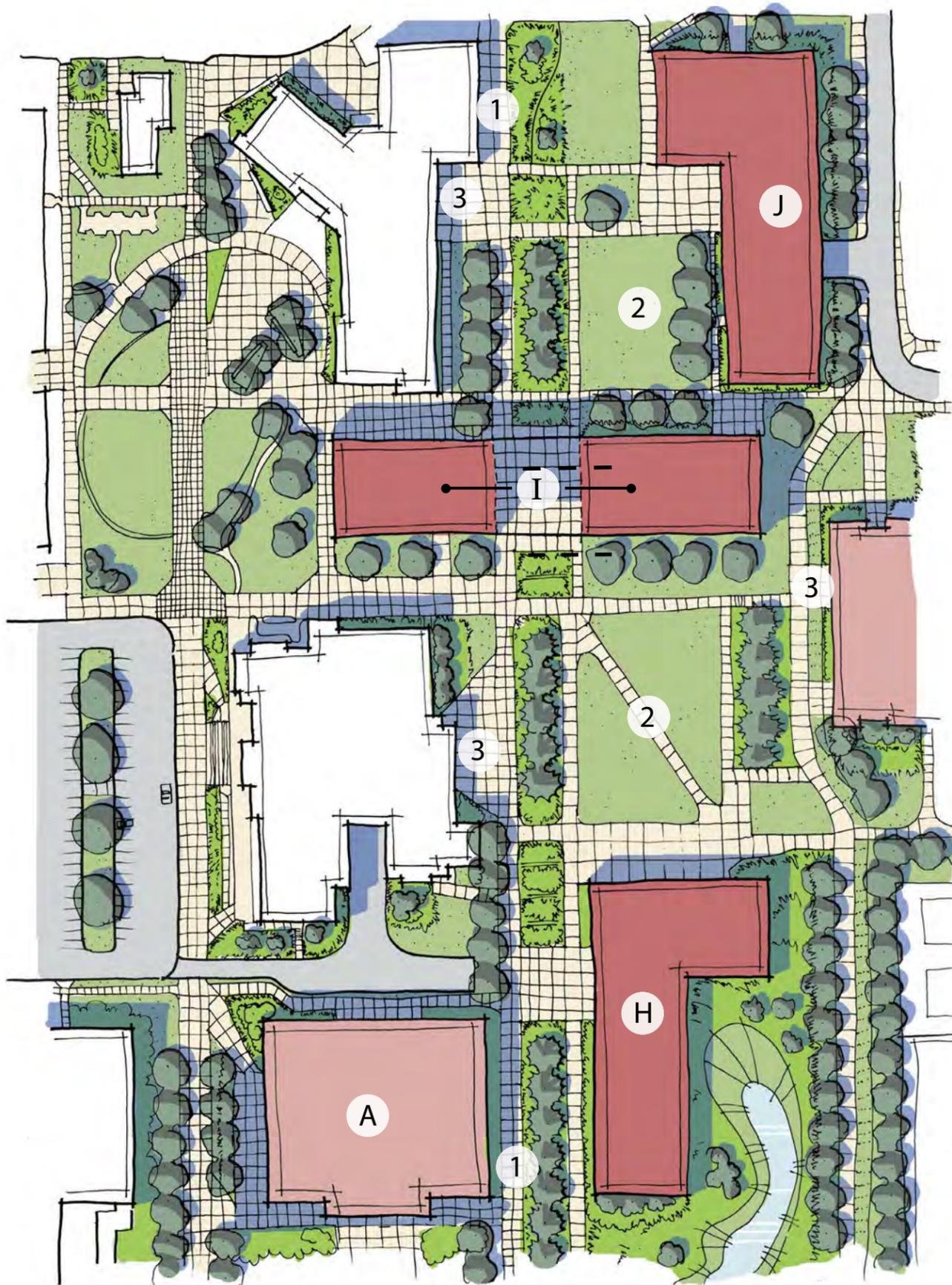
DuVall Pavilion & Nelson Hall

The DuVall Pavilion was built in 1956. Should it need to be replaced there is the potential to construct a similar facility adjacent to the east athletic fields (K). This replacement project would include a gym, workout rooms, faculty offices, classrooms, and field support facilities. Consolidating the athletic facilities on the east side of campus frees up space at the campus core for future development.

Nelson Hall, at 13,055 GSF, is a small academic building dedicated to workforce training. Its smaller size limits its ability to adapt to future programs or be expanded. In the LRDP it is proposed to be eventually replaced. This future academic building site represents an opportunity to complete the transformation of the eastern green edge along the parking lot and creates a formal edge to a new campus quad on the former site of DuVall Pavilion. A growth project that could be a multipurpose classroom building (H) is shown on the LRDP

Figure 30. Long-range Development Plan





N Figure 31. Campus Core in Long-range Development Plan

LONG-TERM SITE IMPROVEMENTS – LRDP

As the campus develops and adds new buildings the following site improvements should be phased in each building project. The campus in the LRDP features a network of quads and connecting corridors that provide clarity of movement and enhanced wayfinding on campus. These quads also provide gathering spaces for students.

Refer to the diagrams on pages 72 - 74 for full campus vehicular circulation, pedestrian circulation and open space improvements of the LRDP. Figure 31 is a detail plan of the improvements to the central campus.

The Central Promenade (1)

In the LRDP, a secondary east-west promenade provides another pathway into campus from the eastern parking lot and links both new campus quad spaces to the north of the campus center and Lewis Hall, respectively. New buildings are sited along this promenade to enhance the overall campus environment and to frame views of the mountains to the east. The Multipurpose Classroom Building (I) would be a multi-story building that bridges over the Central Promenade allowing for continuous visual connection across campus while re-using the Ford Hall site.

New Campus Quads (2)

The removal of Ford Hall and DuVall Pavilion will create opportunities to shape central campus green space. Conceived as a series of landscape rooms, the design of these quads as open spaces linked by the pedestrian promenade will help to create a cohesive campus environment. Redevelopment of these areas will provide additional space for much needed barrier free access across campus. These open spaces will have a multitude of benefits for the overall campus experience including space for informal student gathering.

Secondary Building Entry Plazas (3)

The LRDP includes a proposed reconfiguration of many of the existing campus pathways and hardscape areas to create new building entry plazas. These plazas, which will be small in scale, will share common landscape and hardscape elements, serve as wayfinding guides, and help to define building entries for new and existing buildings.

Shared Public Use Zone (not shown)

The area to the east of the current campus is envisioned as a future collaboration with the County to create a shared public use area. This amenity could take the form of a park or additional sports fields. While undefined at this time, there is potential for the College to work closely with local government and non-profit institutions to develop this portion of the site to strengthen the overall public, institutional presence of the College.

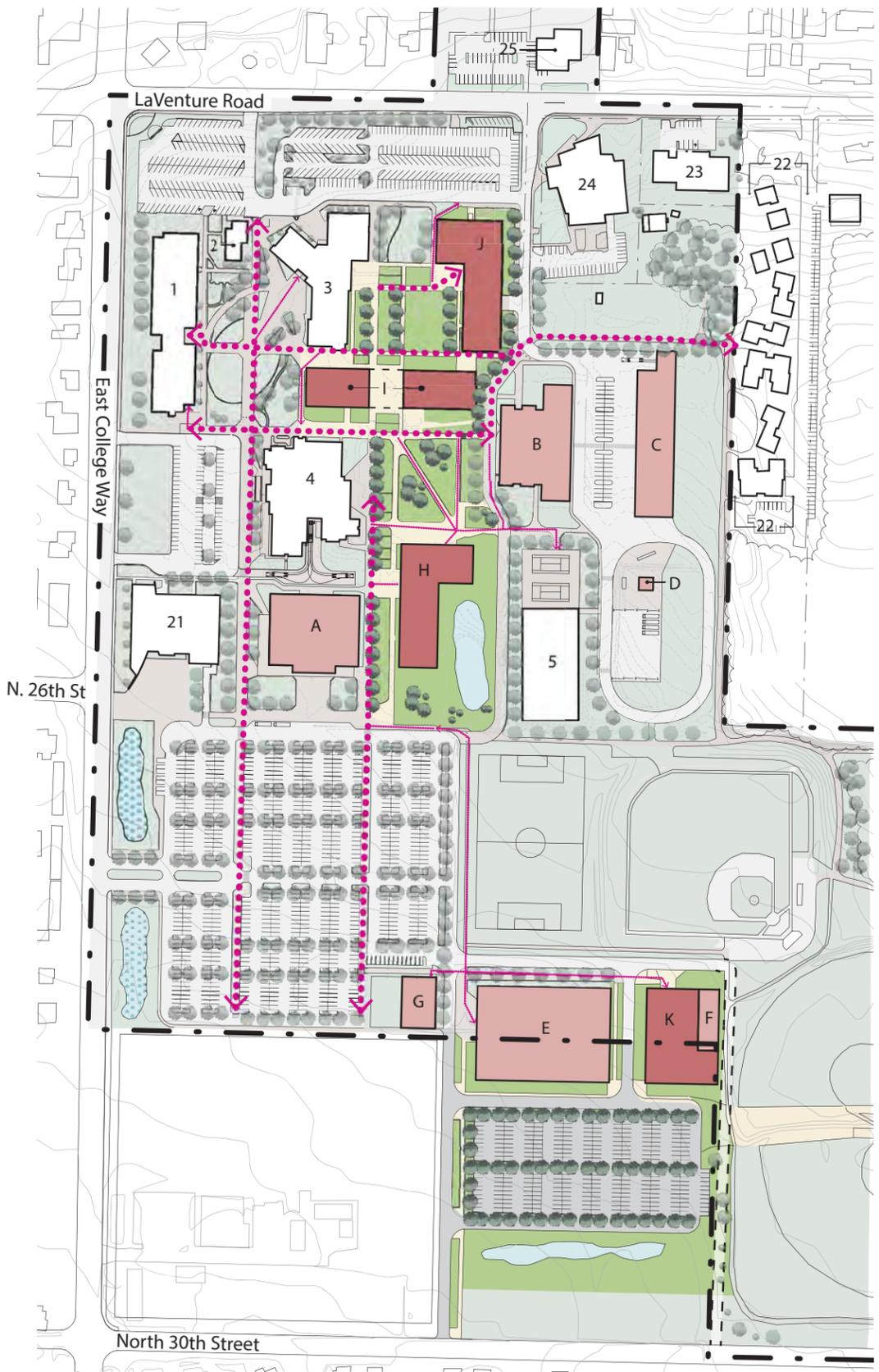
A road connecting N 30th Street to the main parking lot and the potential recreation center is shown in the LRDP. This roadway, as drawn, is located on property which is not currently owned by the College. If the College is not able to acquire this property or develop this road through partnership with the parcel owners, an alternate road location is available to the north which is within the campus property lines (just south of the ball fields).



- COLOR LEGEND**
- - - - Primary
 - - - - Secondary
 - Emergency & Service Vehicles
 - - - - Alternate Road
 - > Entry
 - Drop - Off

- EXISTING BUILDING LEGEND**
- 1 Angst Hall
 - 2 Greenhouse
 - 3 Lewis Hall
 - 4 Knutzen Cardinal Center
 - 5 Armstrong Tennis Courts
 - 21 McIntyre Hall
 - 22 Campus View Village
 - 23 Chinook Enterprises
 - 24 Northwest Career & Technical Academy
 - 25 Child and Family Learning Center

- NEW CONSTRUCTION/RENOVATION LEGEND**
- A Multipurpose Classroom and Library Building
 - B Roberts Hall
 - C Trades Building
 - D Firefighter Training Tower
 - E Potential Recreation Center
 - F Field Support Facility
 - G Child Care Center
 - H Multipurpose Classroom Building
 - I Multipurpose Classroom Building
 - J Multipurpose Classroom and Theater Building
 - K Athletic Complex



- COLOR LEGEND**
- Primary Pedestrian Circulation
 - Secondary Pedestrian Circulation

- EXISTING BUILDING LEGEND**
- 1 Angst Hall
 - 2 Greenhouse
 - 3 Lewis Hall
 - 4 Knutzen Cardinal Center
 - 5 Armstrong Tennis Courts
 - 21 McIntyre Hall
 - 22 Campus View Village
 - 23 Chinook Enterprises
 - 24 Northwest Career & Technical Academy
 - 25 Child and Family Learning Center

- NEW CONSTRUCTION/RENOVATION LEGEND**
- A Multipurpose Classroom and Library Building
 - B Roberts Hall
 - C Trades Building
 - D Firefighter Training Tower
 - E Potential Recreation Center
 - F Field Support Facility
 - G Child Care Center
 - H Multipurpose Classroom Building
 - I Multipurpose Classroom Building
 - J Multipurpose Classroom and Theater Building
 - K Athletic Complex



Figure 32. Long-range Development Plan - Vehicular Circulation



Figure 33. Long-range Development Plan - Pedestrian Circulation





Figure 34. Long-range Development Plan - Open Gathering Spaces

7.0 SITE – WHIDBEY ISLAND CAMPUS

7.1 LAND USE & ZONING

LAND USE & ZONING

The City of Oak Harbor zoning designates the Skagit Valley College property as Public Facilities (PF) (see Figure 35). The PF zone permits institutional uses such as public parks, schools, colleges, governmental offices, churches, hospitals, public works yard and utility structures. The City does not require a master plan for the campus; however, requirements can change. When planning the next project, the City requirements for the Land Use permitting process will need to be reviewed.

For the PF zone, setbacks are a minimum of 35 feet from front and side yards along SE Pioneer Way and SE Regatta Drive. Otherwise there are no side or rear yard setbacks. The maximum building height is limited to 35 feet, but unoccupied spaces can exceed the height limit.

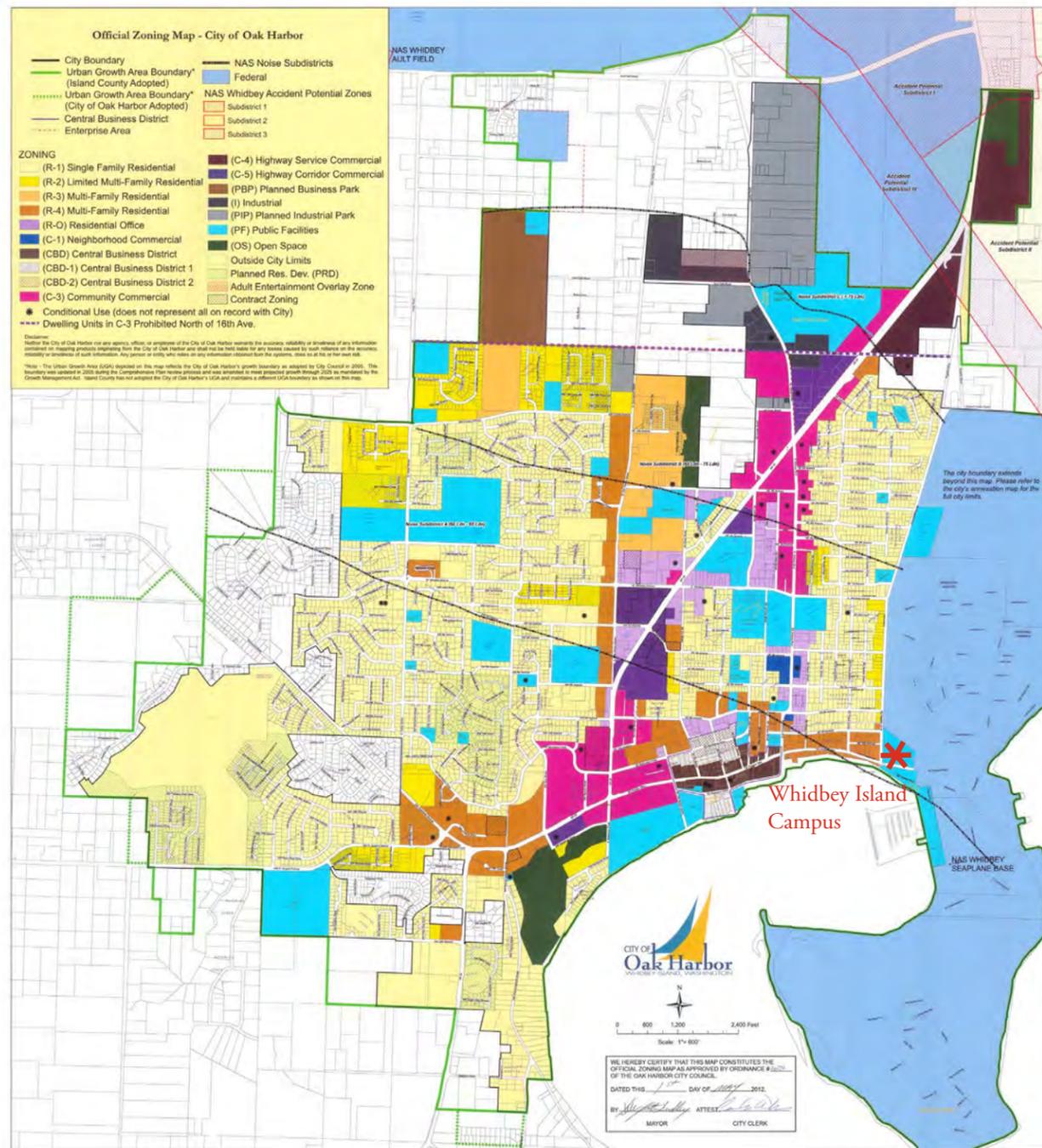


Figure 35. Zoning for City of Oak Harbor

SHORELINE MASTER PLAN

In addition to the City zoning codes, the campus is also subject to the Shoreline Master Plan which regulates the area within 200 feet from the ordinary high water mark (OHWM) of the shoreline (see Figure 36). Figure 37 shows where the 200 foot shoreline offset intersects with the Whidbey Island Campus. The Shoreline Master Plan designates this 200 foot zone of the campus as Urban Mixed Use. A variety of water-oriented commercial, residential and private recreational uses are allowable in this area where the shoreline has previously been developed. The following are the applicable tenets of the Shoreline Master Plan Urban Mixed Use Zone:

- *Development should be designed and maintained to protect and enhance the shoreline environment and be compatible with adjacent public and private uses of the shoreline.*
- *Priority should be given to water-dependent uses that are consistent with the designation criteria.*
- *Non-water-oriented commercial uses are allowed on sites without direct access to the shoreline such as the area north of SE Pioneer Way.*
- *Development must include significant public benefit such as providing public access and ecological restoration.*
- *Public access should be provided for priorities such as the Waterfront Trail or visual access to the Waterfront Trail.*
- *Native shoreline vegetation and environmentally friendly landscaping practices are encouraged.*

The building setback for this zone is 50 feet from the OHWM with two subzones. Setback Zone 1, the Vegetation Management Zone (VMZ), is the first 30 feet from the OHWM and mandates the protection and enhancement of the shoreline ecology and slope stabilization through native vegetation. No impervious surface is allowed in this zone. Setback Zone 2 is defined as the area between 30 and 50 feet from the OHWM. 60% of Zone 2 is to be native vegetation while the maximum impervious surface is limited to 20%. Minor development is allowable as long as it is limited to gazebos, boathouse or other structures less than 12 feet in height and associated with water-oriented activities.

Outside the 50 foot setback the height limit is restricted to a maximum of 35 feet which is consistent with the City zoning height limit for campus. The total impervious lot coverage can be a maximum of 80%. Low impact development practices are required, and “Green Building” practices are encouraged for shoreline development. Since Urban Mixed Use does not specify Institutional uses, a Conditional Use Permit would be required for future campus buildings built within the 200 foot shoreline zone.

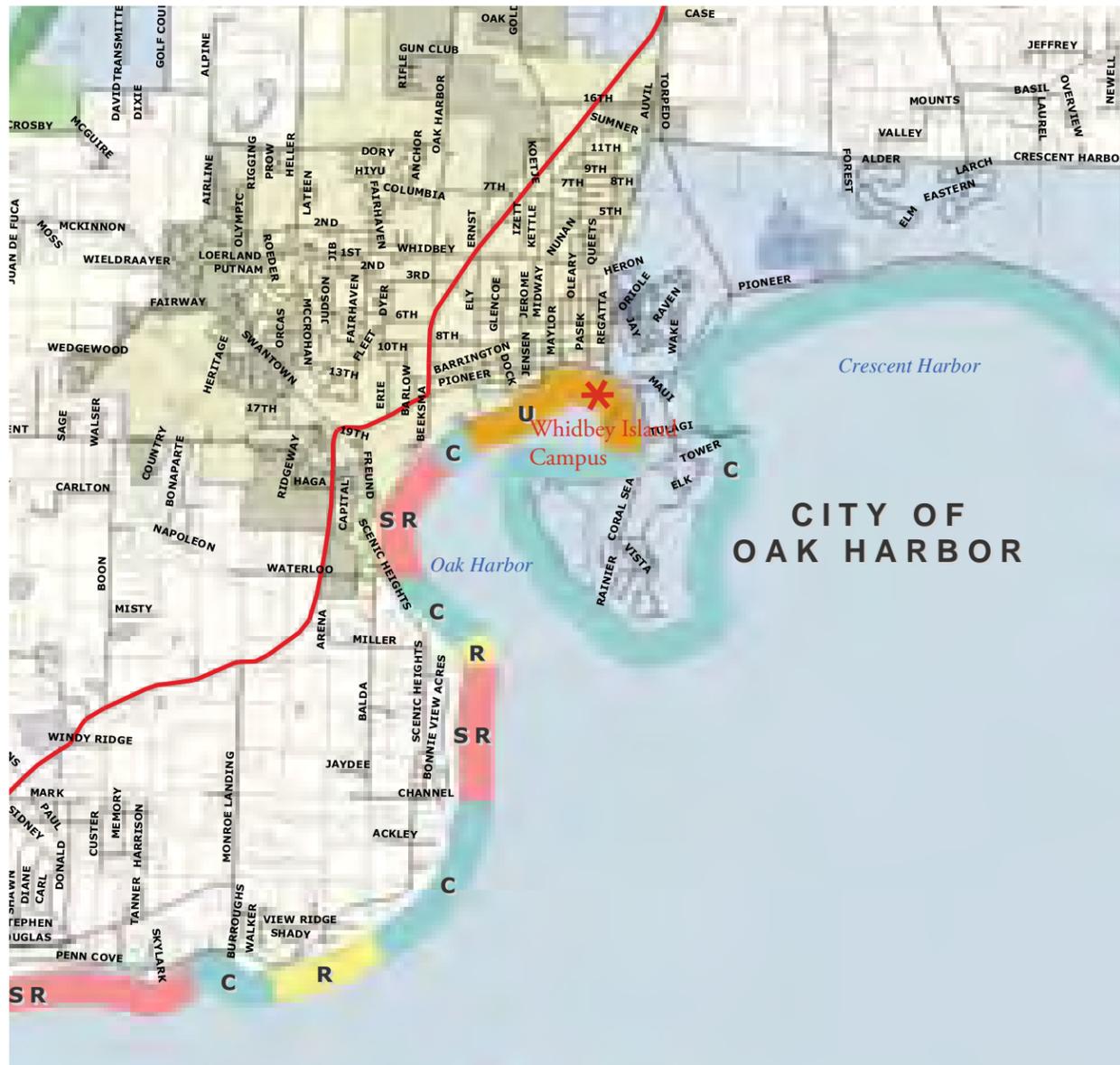
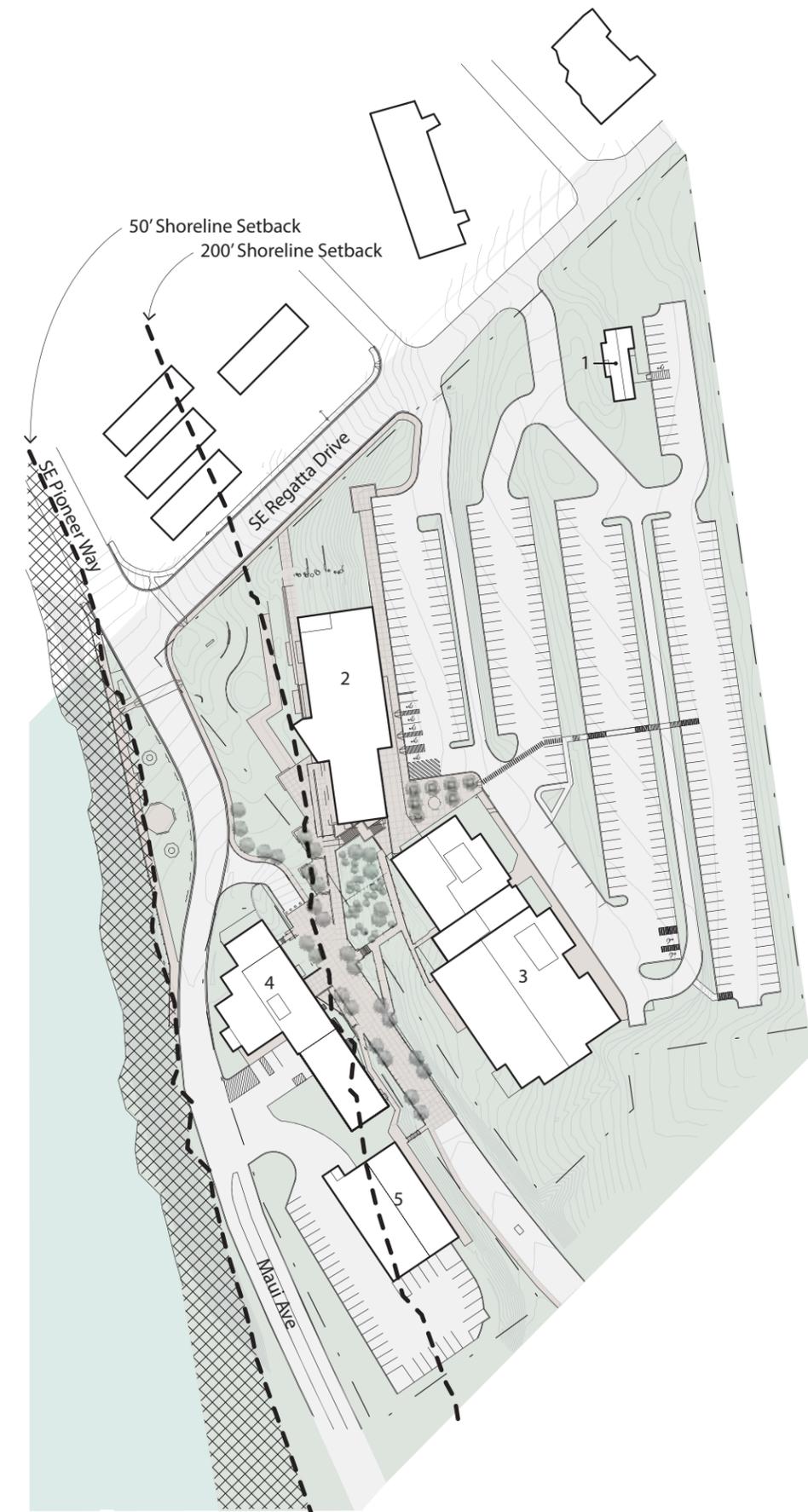


Figure 36. City of Oak Harbor Shoreline Designation

COLOR LEGEND

 No / Limited Building Zone



BUILDING LEGEND

- 1 Toddler Learning Center
- 2 Oak Hall
- 3 Hayes Hall and Sno-Isle Oak Harbor Library
- 4 Old Main
- 5 Sprague Hall

 Figure 37. Shoreline Setbacks Diagram



7.2 ENVIRONMENT

SITE CHARACTER

The City of Oak Harbor is Whidbey Island's largest city with a population of roughly 22,075. Oak Harbor was first settled in the early 1850s but did not experience significant growth until the mid-1900s. Two events contributed to the growth of Oak Harbor. First, in 1935, Deception Pass Bridge was completed, linking Whidbey Island to Fidalgo Island and the rest of the Washington region. Almost 10 years later, the Naval Air Station was established on Whidbey Island in 1942 prompting a population upswing.

The campus is located east of downtown Oak Harbor and west of the Naval Air Base facilities. To the north of the campus is a low density residential neighborhood. The southern edge of campus fronts along the Oak Harbor Bay of the Puget Sound. Much of the campus enjoys expansive water views and southern exposure. From south to north across the site is a steep rise in grade. At certain times of the year, harsh southwesterly winds sweep up the campus slope. Otherwise, the views across the bay and the mild Northwest climate make the campus a very pleasant place.



CAMPUS ORGANIZATION

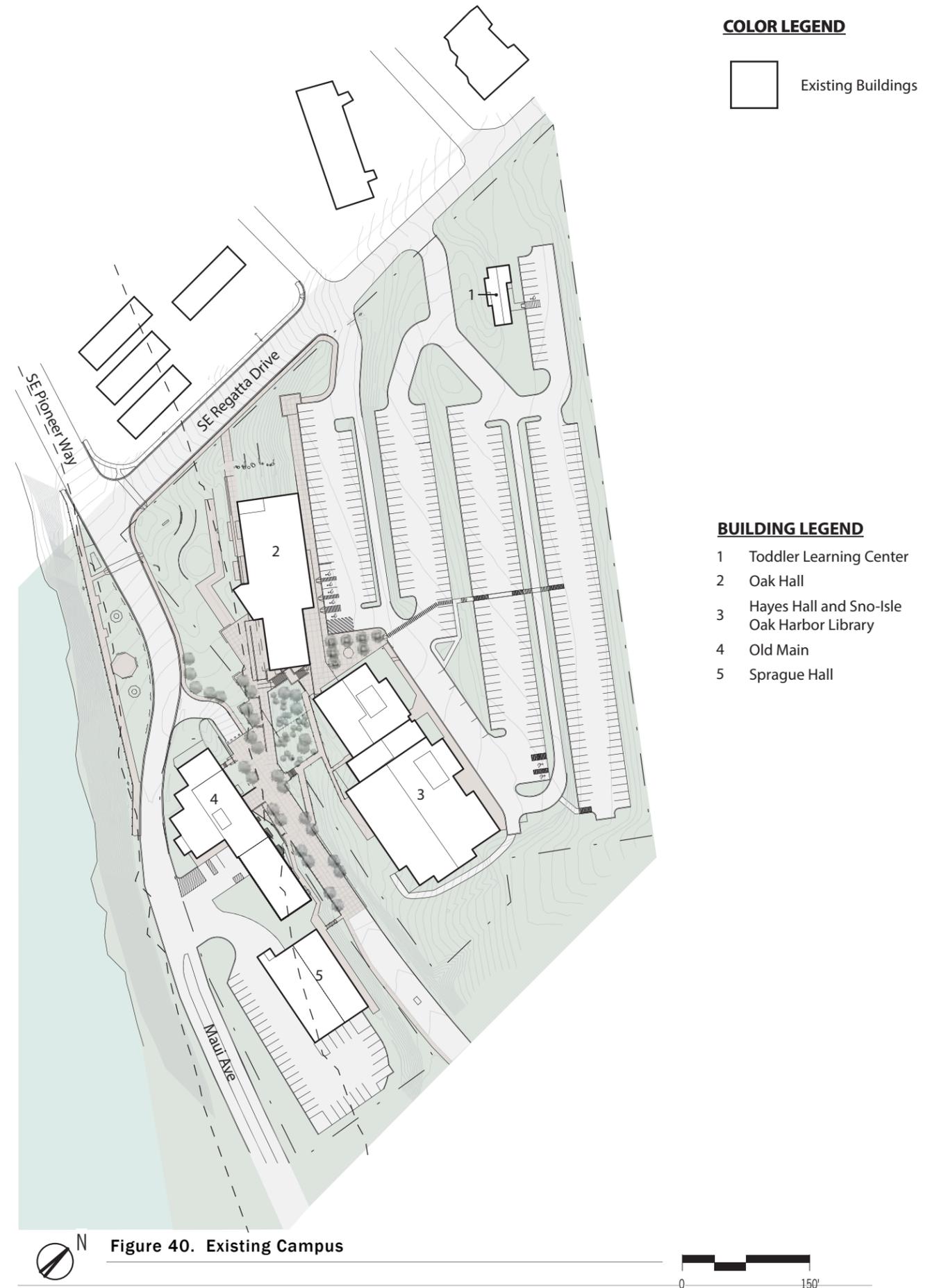
The campus is bisected along an east-west axis by a vacated section of Pioneer Way which is now a pedestrian plaza and emergency vehicle access to the Naval base. Grade change is significant on either side of the plaza posing challenges for accessibility. There is the perception of a barrier between the upper and lower campus because of the steeply sloping terrain. The original campus buildings, Old Main and Sprague Hall are south of this campus division while Hayes and Oak Halls are located on the north side (Figure 40 shows the existing campus plan) . The majority of campus functions are served by these two northern buildings. Hayes Hall was built and is maintained in partnership with the Sno-Isle Library and contains Oak Harbor's public library, as well as the College's library (also open to the public). The remainder of Hayes Hall is a multi-purpose classroom building. At the far north side of campus is the Toddler Learning Center.

The perception of higher-quality facilities on the upper campus, as well as the topographic issues present challenges for a unified campus. There is less activity on the lower campus, although some of the most important student service spaces are located in Old Main. This building houses student services, the bookstore, administration and instructional offices, adult basic education classes and other instructional space. These types of services are more typically located at the heart of a campus with a visual presence on the main entry for easy location by new students.

To students, Sprague Hall feels the most remote of all the buildings. It is primarily used as art studios and classrooms. There is a study room within Sprague that is isolated and, thus, infrequently used. Having study rooms and student amenities more connected to the upper campus would give students places to linger on campus during the day. Currently, most students come for class and then leave. Planning for these centrally-located student amenities in the master plan can, when implemented, reinforce the sense of campus community, one of SVC's Core Themes.



Figure 39. Whidbey Island Campus looking towards Oak Harbor



7.3 ACCESS AND CIRCULATION

LOCATION AND ACCESS

The City of Oak Harbor, located on Whidbey Island, is accessible from areas north and south via SR-20. Otherwise much of the island remains disconnected from other parts of Washington. However, SR-20 does eventually turn east and connect to Interstate-5. Because of its slightly isolated location, the Whidbey Island Campus serves a more localized community. Smaller arterials provide east-west connections across the island.

The campus is located one mile east of SR-20. SE Pioneer Way handles much of the traffic from SR-20 and directly connects to the campus. Secondary access to the campus is via SE Regatta Drive which runs north-south through Oak Harbor.

PUBLIC TRANSPORTATION

The campus is served by Island Transit and the Tri-County Connector. Route 10 has a stop on campus and operates Monday through Friday with limited service on Saturday. Other routes provide service to Harbor Station Transfer Center which is less than a mile west of campus. The Tri-County Connector connects Whidbey Island to Mount Vernon as well as other surrounding areas. There is no campus stop at either the Whidbey Island or Mount Vernon Campuses, but the Tri-County Connector does stop at locations with transfers to the local buses connecting to campus.

VEHICLE ACCESS AND PARKING

Existing Conditions

Typically, those who drive to the Whidbey Island Campus come from the west along SE Pioneer Way. Drivers must then turn on SE Regatta Drive to access the main entry and parking lot located just north of Oak Hall. Figure 41 shows a diagram of vehicular circulation. A passenger drop-off is located in front of Oak Hall for the campus, and a second drop-off is located in front of Hayes Hall for the college and public library. Parking is readily available on campus with a large parking lot serving both the College and the library. The parking lot is tiered due to the steep topography. Stairs connect pedestrian pathways between each tier. Accessible parking is available near both Hayes and Oak Halls.

Vehicular access to the southern portion of campus is disconnected from the northern half, so a secondary parking lot off SE Pioneer Way serves Old Main and Sprague Hall. The entry/exit to this parking lot can be dangerous due to the blind corner for drivers trying to exit onto SE Pioneer Way.

Service vehicle access is very limited on the campus. Old Main has a small service area on the south side of the building. Hayes Hall has a lower level which is accessible to service vehicles by a drive on the east end of the building. Otherwise, much of Oak and Hayes Halls, particularly along their southern perimeter, is not accessible to service vehicles.

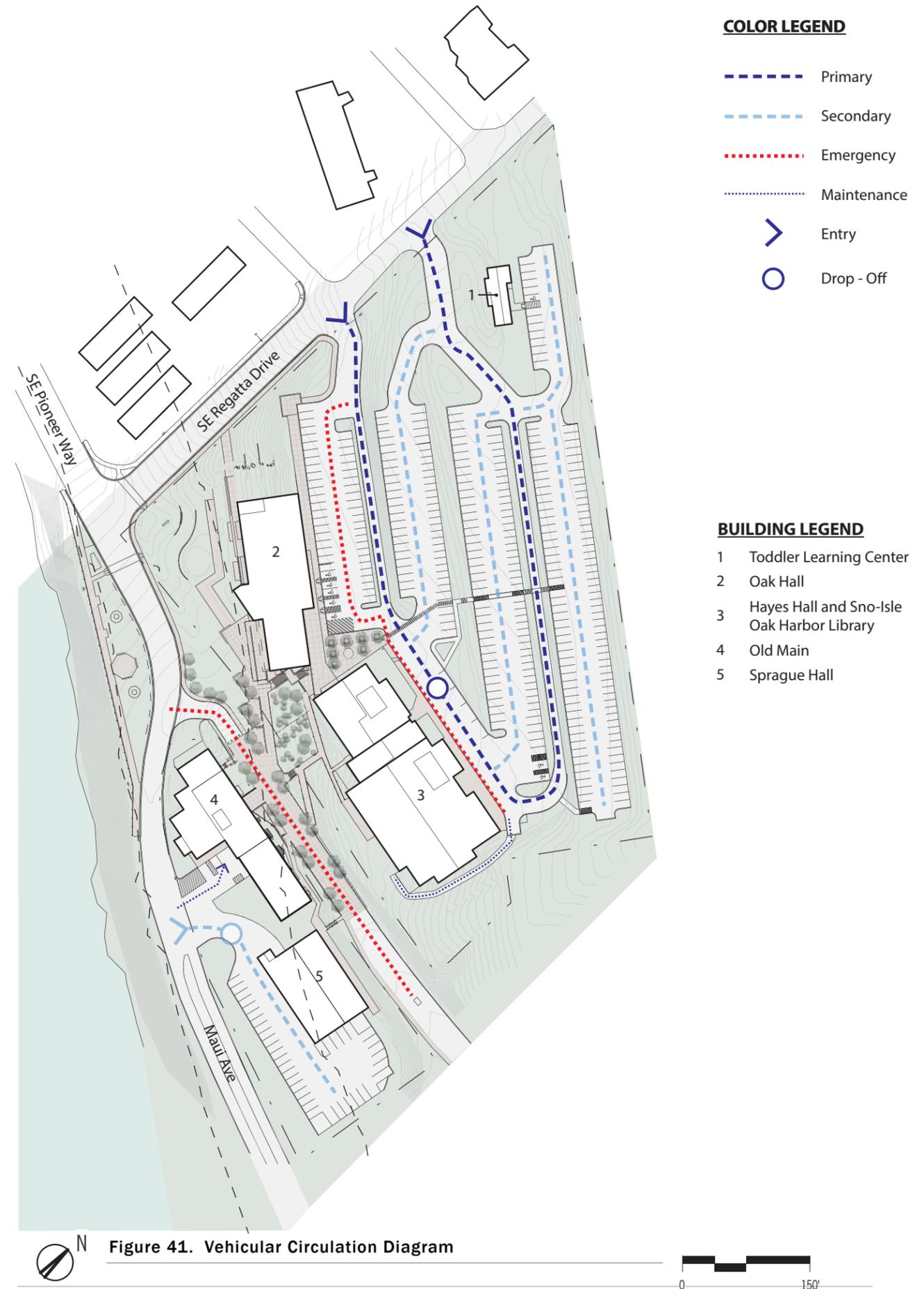
Needs Analysis

Multiple drop-offs can confuse first-time visitors, so simplification of drop-offs should be considered as a way to provide barrier-free access. A single, clearly-defined entry plaza can also mark arrival at the front door of campus.

Future consideration should be given to the parking tiers at the northern parking lot, as well as the ease of access for pedestrians from their cars to the campus buildings. However, there are significant stormwater requirements associated with impervious paving modifications. Revising the parking lot may be prohibitive because of stormwater challenges. The entry to the secondary parking lot located off SE Pioneer Way should be improved to provide better visibility around the corner.

Proposed Master Planning Strategies

- Enlarge drop-off area and move to a location serving both Oak and Hayes Halls
- Develop a main entry with a sense of arrival for new students
- Redevelop configuration of lower parking lot and relocate entry to improve safety



PEDESTRIAN CIRCULATION

Existing Conditions

While the campus is relatively small with only four campus buildings, there are significant challenges for pedestrians due to the steep topography. Figure 42 shows a diagram of pedestrian circulation. The grade drops away sharply on the southern side of Oak and Hayes Halls making accessible circulation to the lower campus particularly challenging. Currently, ramping south of Hayes Hall does not provide barrier-free accessibility. Circulation from the upper campus to the lower campus for those in wheelchairs or with limited mobility is navigated within Oak Hall. From Oak Hall there is a lower level pathway that leads to the pedestrian plaza, Old Main and Sprague Hall. This circulation route can be confusing for first time visitors to campus.

The need for view corridors along pedestrian pathways is an important component for campus wayfinding, and clear sightlines can help mitigate topographic challenges. However, sightlines and visual connection to the lower campus is obstructed by Oak and Hayes Halls. These buildings are oriented east-west, parallel to Oak Harbor Bay, creating a visual wall from the upper campus and reinforces the topographic disconnect.

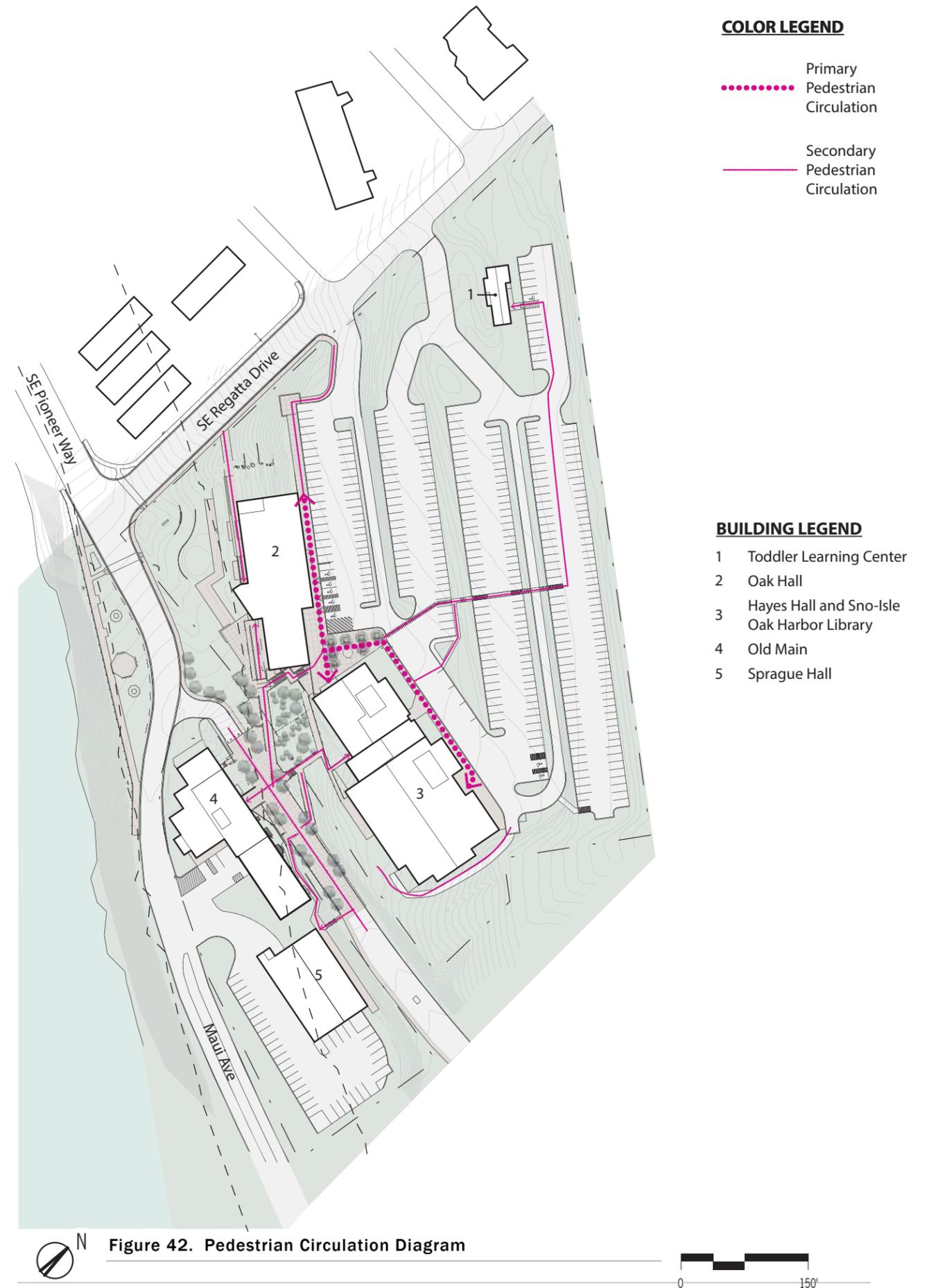
Needs Analysis

Improved accessibility between the upper and lower campus is a necessity. Accessible routes needs to be clear and visible. A drop-off area at grade with the main entry for both Hayes and Oak Halls is needed.

Walkways leading down from the upper terrace parking are not weather protected and can be dangerous in icy or slippery conditions.

Proposed Master Planning Strategies

- Remove inaccessible pathways and replace with other means of barrier-free circulation
- Integrate pathways with the landscape
- Install weather protection for upper parking pathways



7.4 OPEN SPACE AND LANDSCAPE

GATHERING AND RECREATION SPACES

Existing Conditions

The majority of outdoor gathering space is provided along the Pioneer Way Plaza created at the vacated right of way (see Figure 43). This is a former roadway with bollards at the west end prohibiting traffic from SE Pioneer Way and preserving the area for pedestrians. Smaller gathering spaces are available adjacent to Oak Hall, Hayes Hall and Old Main.

On the south side of Oak Hall is a terrace with tables and chairs, giving students a place to study and relax between classes. Balconies on the south side of Hayes Hall are available for both the public library and the SVC library, providing another area of respite with views out to the bay. Additional outdoor gathering space is located on the south side of Old Main. Wind breaks have been installed on the slope south of Oak and Hayes Hall to make these outdoor spaces more pleasant.

Needs Analysis

Currently the Pioneer Way Plaza is infrequently used. Better connection of the plaza to major activity areas would improve its visibility on campus.

Currently there is no recreational or athletic space on campus. An area for informal student recreation is needed.

Additional opportunities for outdoor gathering are desired on the upper campus. Additional wind breaks or weather protection is needed to extend the use of outdoor spaces throughout the year.

Proposed Master Planning Strategies

- Develop outdoor activity space on upper campus, potentially linked to the main drop-off and entry plaza
- Provide on campus recreational space
- Develop protected outdoor space through weather protection and wind breaks

LANDSCAPE

Existing Conditions

The landscape of the Whidbey Island Campus is largely dominated by two elements, the steep slope down to the bay and the large north parking lot. The parking lot is mostly a field of asphalt with intermittent planting strips of grass. There are few trees within the parking lot and little relief from heat island effect. Limited trees and plantings are along the perimeter of the parking lot on SE Regatta Drive. The slope down to the bay provides much of the “softscape” for campus. Lawns, trees and a raingarden to treat stormwater are on the south and west sides of the upper campus.

Needs Analysis

The Whidbey Island Campus is located in an environmentally-sensitive location along the Puget Sound at Oak Harbor Bay. Being sensitive to the shoreline ecology and providing slope stabilization through native vegetation is one of the tenets of the Shoreline Master Plan. The landscape and design of the Whidbey Island Campus should create a place that works well for the students, faculty and staff and is responsive to the environment and local ecology. The College can employ a variety of methods to achieve this, such as minimization of impervious surfaces, use of native plants, and implementation of stormwater management strategies including raingardens, filtration areas and treatment.

A better designation of the campus entry on SE Regatta Way and screening of the parking lot is needed to improve the first impression of the campus. Additional trees and planting in the parking lot should also be provided. This strategy will improve sustainability and add to the aesthetics of the campus.



Proposed Master Planning Strategies

- Use planting to designate entries, both to campus and building on the campus
- Provide low shrubs to screen the parking lot
- Add plants and trees to reduce heat island effect in the parking lot
- Employ sustainable landscaping strategies including use of native plants and slope stabilization measures

7.5 INFRASTRUCTURE

CIVIL

Existing Conditions

Campus water services are provided by the City of Oak Harbor public utilities. Public water mains serve the campus from SE Regatta Drive and SE Pioneer Way. Domestic water services are metered separately at each building. Similarly each building has its own dedicated fire sprinkler supply and sprinkler system.

Past studies have indicated adequate fire flow on campus. Fire hydrants appear to be adequately distributed around the campus; however, it would require more study to confirm coverage to all campus buildings. There are irrigation systems on campus which are metered separately from the domestic water services.

The campus sanitary sewer service is provided by the City of Oak Harbor public utilities. Oak Hall and Hayes Hall are served by a private side sewer installed as part of the 2002 Oak Hall construction project. The side sewer discharges to a public manhole at the southwest corner of the site, near the intersection of SE Regatta Way and SE Pioneer Way.

The City of Oak Harbor does not require stormwater flow control for this campus given its proximity to the bay. Campus stormwater largely discharges from the site to the southwest into a public storm main which crosses Pioneer Way SE and outfalls into the bay. The upper campus, including parking and plaza areas, discharges through this route. The lower campus discharges to the west into a separate storm pipe which discharges at the same outfall to the bay as previously mentioned.

Needs Analysis

As long as future development does not increase stormwater flows beyond the downstream storm system's ability to function, then no future detention systems will be required. Water quality systems are required for pollution-generating impervious surfaces, such as any new parking lots with impervious paving.

An existing driveway that provides access to parking on the lower campus has poor sightlines to the east for those exiting the parking lot.

Proposed Master Planning Strategies

- Future development on the lower campus that addresses parking must improve sightlines for vehicles exiting the parking

ELECTRICAL

Existing Conditions

The electrical service(s) for the Whidbey Island campus consist of multiple secondary utility services from the local utility, Puget Sound Energy. Each building has a separate utility service and corresponding utility meter. A campus primary power system does not exist.

Old Main and Sprague Hall are both fed from an overhead utility line from Pioneer Way to the south. A pole-mounted utility transformer is installed on campus. The other campus buildings are fed from utility lines located on Regatta

Drive to the west. Both Oak and Hayes Halls have individual pad-mounted utility transformers, and associated underground utility feeds, located in the campus parking area north of the buildings.

Site electrical infrastructure is mostly limited to connections to individual buildings. Site lighting is provided by a variety of lamp types and controlled via individual buildings. Currently there is not a networked fire alarm system for campus.

Needs Analysis

Unless significant campus growth is planned, the existing secondary metering approach to power utilities seems appropriate. The existing Puget Sound Energy utility infrastructure can easily accommodate campus changes and growth.

Whidbey Island Campus personnel report that the existing site lighting system has some deficiencies for illumination levels and light quality.

Proposed Master Planning Strategies

- Remove existing aerial utility services as buildings are removed. Serve new buildings with underground utility services.
- As campus expands, provide emergency/standby generator to support main telecommunications equipment.
- For systems (e.g. fire alarm, lighting controls, etc.), consider providing a standard list of manufacturers to reduce impact on maintenance and operations
- Replacement projects should improve site lighting and allow it to be controlled independently of the buildings served

TELECOMMUNICATIONS

Existing Conditions

The campus Equipment Room (ER) which houses the campus telephone system, servers, network equipment and other system head ends is located in Oak Hall. There is sufficient power and cooling to support the current and future equipment installed in the space. The ER has available floor and rack space to accommodate additional equipment. Telecommunications rooms (TR) in the other buildings vary with respect to size, power and cooling capacity and may share the space with other maintenance and storage functions.

Backup power to equipment in the ER and TR spaces is provided by standalone Uninterruptible Power Supply (UPS) units located in the spaces. These provide temporary power in the case of power outages, but the UPS units do not have the capacity to allow support staff to complete an orderly shutdown of equipment. Independent UPS units also require regular maintenance and can be difficult to expand as technology changes and equipment is added.

The campus cabling and network infrastructure supports a variety of administrative and instructional applications including internet access, file and print services, virtual desktops, and email applications. The campus network also supports an interactive video conference application to the Mount Vernon Campus running over a dedicated T1 data service.

The existing wireless networking system is limited to relatively few wireless access points in the buildings. There is a separate student wireless service provided by Xfinity.

Needs Analysis

As reliance on technology increases, the future plans for the campus should include a standby generator to provide a reliable backup power system for the mission-critical network systems.

The existing horizontal cabling is adequate for current academic and administrative use, but will not be suitable for future applications.

The existing infrastructure and bandwidth is acceptable for the current set of applications, but network bandwidth may need to be expanded in the future as network traffic increases due to additional wired and wireless users, and more interactive and bandwidth intensive applications.

The existing Avaya telephone system is aging but provides an acceptable level of telephone service for the current set of users on the campus. However, the system will need to be upgraded or replaced as the campus grows.

The existing data center located in Oak Hall is an adequate facility for the foreseeable future and should be maintained.

Proposed Master Planning Strategies

- Address the limited underground conduit pathways system and provide separate pathways from the central Equipment Room in Oak Hall to each building in a star typology (see appendix for more information on telecommunications for the Whidbey Island Campus). This will support high-bandwidth cabling infrastructure and reduce the possibility of campus-wide service outages.
- Specify the most current industry-standard twisted-pair copper and optical fiber cabling to provide the bandwidth required to support the growing demand for wireless access, virtual desktop and cloud computing, interactive audio and video and other high-speed applications.
- As the campus grows and expands, the College should consider including exterior video surveillance cameras and emergency phones to support the personal safety objective.
- Provide a standby generator for reliable back-up power.

8.0 BUILDINGS - WHIDBEY ISLAND CAMPUS

8.1 BUILDING SYSTEMS

Existing Conditions

As previously stated in the Mount Vernon Campus facilities narrative, Skagit Valley College must continue to provide state-of-the-art facilities in keeping with contemporary educational standards. The College's strategic objectives are tied to the condition and functionality of their buildings and campus. Facilities which have maintenance, operational or functional issues will be addressed in this master plan.

All campus buildings are reviewed by the State through the Facility Condition Survey (FCS). Buildings with a lower FCS score have fewer deficiencies and are in better condition. Life expectancy of buildings are shown as having less than 5 years to greater than 35 years of projected lifespan. Buildings noted as having 5-15 years of remaining life are recommended as replacement or renovation projects. The determination between renovation and replacement is based on a number of factors including cost of renovation as well as the efficiency and functionality of the building after renovation. See Figure 45 for the facilities conditions diagram.

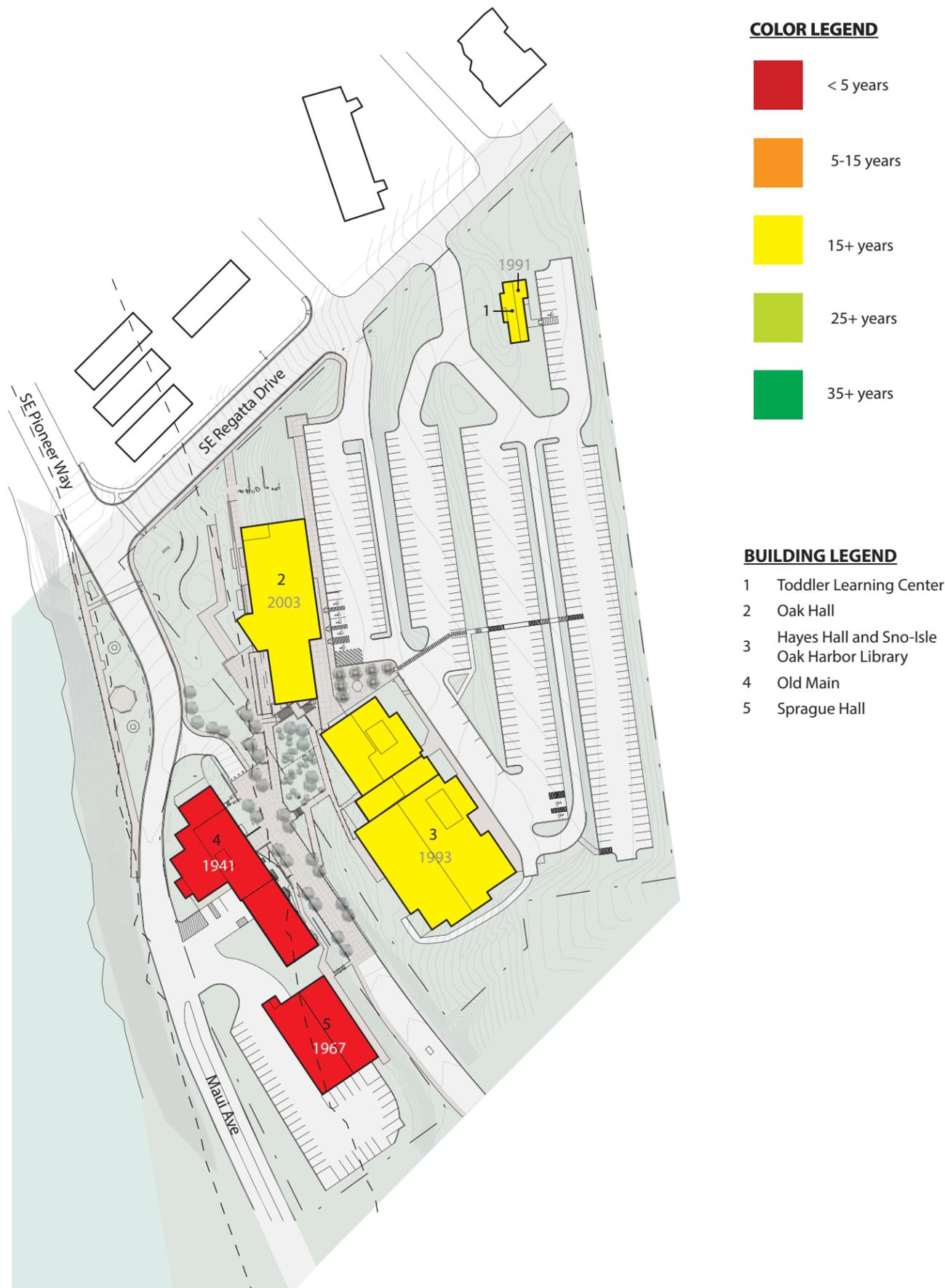
Figure 44. Facility Conditions Table (FCS)

Building	Year Built	Remodel	Existing SF	FCS 11 Score	Life Expectancy	Notes
Old Main	1941	2003 (only siding & window replacement)	27,342	390	< 5 yrs	Roof is degrading and needs to be replaced HVAC equipment is deteriorated Building is not insulated Fire Sprinklers are 50 years old and may be in danger of failing
Sprague Hall	1967		6,048	460	< 5 yrs	Temporary construction Plumbing has some recurring leaks HVAC equipment is deteriorated
Hayes Hall	1993		15,562	226	> 15 yrs	HVAC equipment is deteriorated and needs to be replaced Insulation is not to current standards
Oak Hall	2003		40,725	158	> 15 yrs	Facility is well maintained and building systems are good condition

OLD MAIN

As shown in the FCS above, Old Main is projected as having less than 5 years of remaining useful life. Old Main is primarily used as an administrative building with some classrooms. The building was originally designed as a Navy Hospital and was never intended to facilitate educational uses. Classrooms are improperly sized for student instruction, and many rooms can only be assigned as storage. There are issues with the building's general layout and corridors. The student activity space is buried within the building making it difficult to locate. Due to its location on campus and visibility within the building, the activity space is infrequently used.

In addition to Old Main's functional issues, the building systems are difficult and expensive to maintain. The mechanical equipment is generally deteriorated and may be inadequate for capacity, zoning and distribution. Ventilation is inadequate, and there is no air conditioning making the building inhospitable on hot days. Old Main is not insulated contributing to high heating costs and minimal energy conservation. The building may also be subject to seismic vulnerability in the event of an earthquake.



SPRAGUE HALL

Similar to Old Main, Sprague Hall is indicated as having less than 5 years of remaining useful life. It was originally constructed as a temporary structure which was never intended to be used as an educational building. The building currently is used for art and photography classrooms and offices. Portions of the building are assigned to storage because it is otherwise not functional.

Sprague Hall’s mechanical equipment is generally deteriorated and may be inadequate in capacity, zoning and distribution. Ventilation is poor, and there is no air conditioning. Because the building was constructed as a temporary structure, it is not cost effective to maintain in the long term.

HAYES HALL

Hayes Hall was built in conjunction with the Sno-Isle Library district and is jointly maintained and operated. The eastern section of the building contains the Oak Harbor Sno-Isle Library which is adjacent to the SVC library. In addition to these two libraries the building also has classrooms and offices for SVC’s use. The building has a diagonal ramping corridor that connects a lower level west entrance to the upper main entrance on the north side. The way in which the corridor slices through the building causes some inefficient residual spaces. Some landings along the ramp lead to stairs up to rooms which are inaccessible to those with limited mobility.

Hayes Hall is generally in good condition, but the rooftop mechanical equipment will need to be replaced in a few years. The equipment is over twenty years old and experiences high rates of component failure. The units are no longer cost effective to maintain or repair.

OAK HALL

Oak Hall is the newest building and is best equipped to meet current educational modes. The building is a multipurpose general classroom building with dedicated instructional spaces for the Nursing program. Informal student gathering space is located on each floor providing areas for students to study or socialize between classes. With appropriately sized classrooms, a clear layout and student study spaces, Oak Hall is the most frequently used building by the College. However, the labs for the Nursing program could be improved by adding additional demonstration space. One of the biggest complaints is that there is no hand washing station in the skills lab which forces students to use the restrooms. Also, the program could be expanded and would need additional classrooms and/or labs.

Needs Analysis

The building and mechanical deficiencies of Old Main and Sprague Hall need to be addressed. These buildings will most likely need to be removed due to their age, condition and quality of original construction. Student services and administrative spaces need to be relocated from Old Main to a prominent location on campus. Student gathering and informal learning spaces should be developed adjacent to classrooms for ease of use.

As buildings are replaced or renovated an emphasis should be placed on sustainable buildings that are easy to maintain and not a burden on resources. Proper solar orientation and efficient building envelopes for energy conservation are needed.

The Nursing and Allied Health programs are in high demand at the Whidbey Island Campus and need to have facilities appropriate for their curriculum. Upgrades and additional support spaces are required and growth should be planned for because the current programs are at or near capacity.

Hayes Hall’s internal circulation and layout deficiencies should be addressed to maximize the building’s area. All classrooms and offices should be universally accessible.

Proposed Master Planning Strategies

- Consolidate programs and resources on the upper campus allowing for removal of underperforming buildings
- Consolidate programs on upper campus to allow for future growth on lower campus

Figure 45. Facilities Conditions Diagram



- Remodel Hayes Hall and/or demolish a portion of Hayes and construct new addition to create a more efficient floor plan
- If the public library moves out of Hayes Hall, renovate the building for College use
- Provide energy efficient, sustainable buildings
- Provide appropriate facilities for Nursing and Allied Health program



Figure 46. Whidbey Island Campus' Oak Hall

9.0 DEVELOPMENT PLANS – WHIDBEY ISLAND CAMPUS

The Master Plan for the Whidbey Island Campus of Skagit Valley College presents a broad vision for the strengthening and transformation of the existing campus. The master plan describes the development of the campus in two time frames, the 15-year Development Plan and the Long-range Development Plan. The 15-year Development Plan addresses buildings and their adjacent sites that are shown in the State's Facility Condition Survey to have 5-15 years of remaining life. The Long-range Development Plan (LRDP) looks beyond this first phase of development to future growth of the campus. The proposed development of the campus is based on analysis of current and projected program trends, facility needs and the campus environment. The following themes characterize the Master Plan.

9.1 MASTER PLAN THEMES

CONSOLIDATION OF FACILITIES

A theme of this master plan is to consolidate buildings that are reaching the end of their useful life into larger replacement buildings instead of replacing them at their current size and location. As discussed in Chapter 6 – Development Plans for the Mount Vernon Campus, learning happens collaboratively inside the classroom and out. There is a net benefit for the College to place similar programs adjacent to each other to share support spaces and foster interdisciplinary learning.

Consolidating smaller buildings into a larger replacement project frees up future sites on campus for long-term development. Maintaining a denser, smaller campus increases efficiency of infrastructure and reinforces the sense of the college community. An added benefit is a reduced need for the College to acquire land to facilitate future growth.

IMPROVING CAMPUS EXPERIENCE FOR STUDENTS

As facilities are replaced, the reorganization of buildings, open space and circulation improves the student experience. Universal accessibility and visual cues in wayfinding create a campus without barriers. Highlighting and designing gathering spaces that take advantage of the beauty of the natural environment will create a campus setting and can aid in marketing towards prospective students. Finally, providing separated vehicular and pedestrian circulation, emergency vehicle access, and well lighted pathways creates a safe campus environment for all users.

PLANNING RELATIVE TO FUNDING RESOURCES

Planning and project sequencing are guided by funding sources available to implement the Master Plan. The SVC projects proposed in the 15-year Development Plan are based on criteria for state funding. The College will be eligible to request capital funding from the State in the spring of 2016. Scoring criteria for state funding along with need will determine sequencing of projects for the 15-year Development Plan.

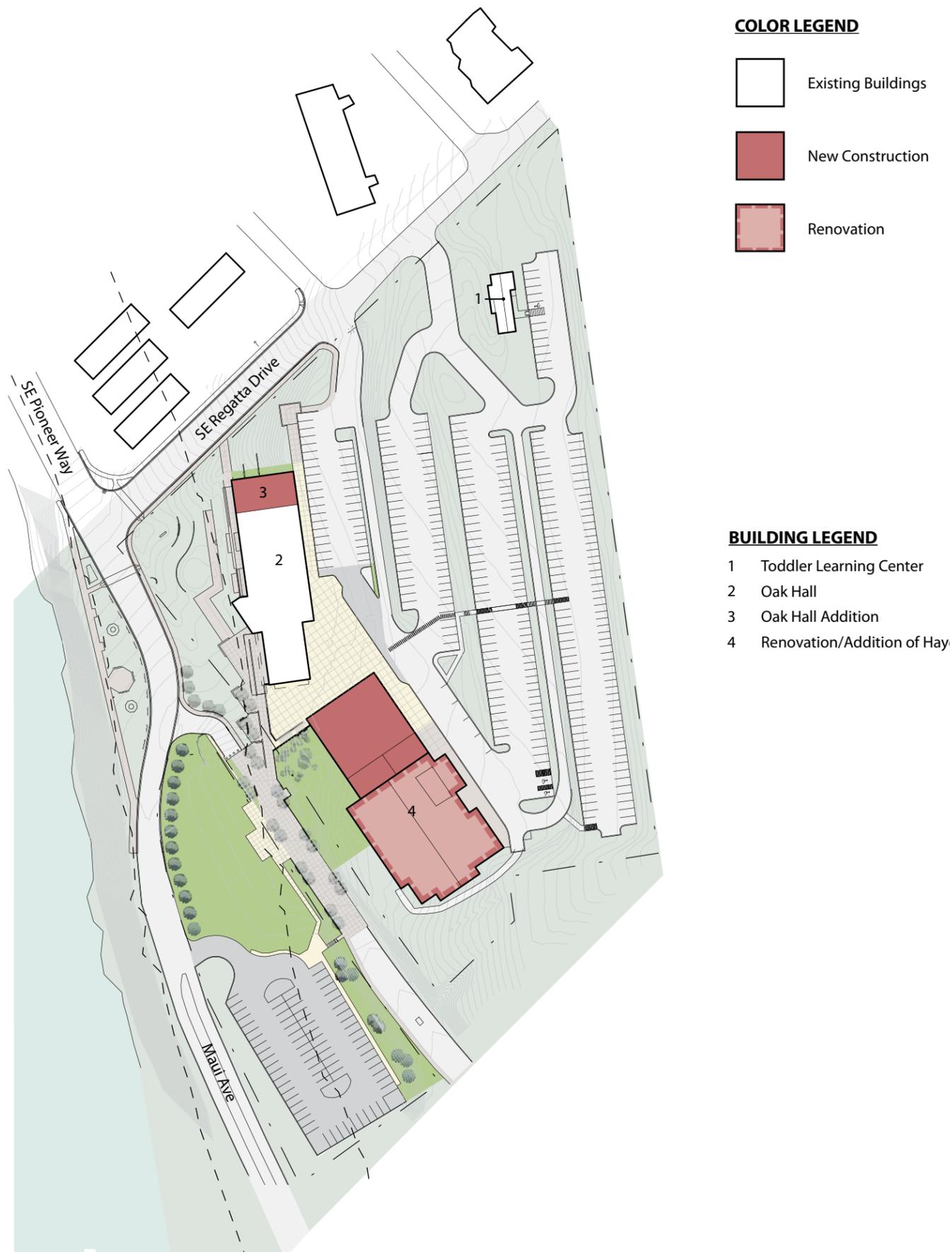


Figure 47. 15-year Development Plan



9.2 15-YEAR DEVELOPMENT PLAN FOR FACILITIES

The 15-year Development Plan reflects capital requests that respond to the anticipated needs of SVC and to the funding criteria of the State Board of Community & Technical Colleges. This phase consists of a combination of renovation and replacement projects and accompanying site development. Completion of these projects is the first step toward implementing the vision of the master plan. See Figure 47 for 15-year Development Plan.

CLASSROOM ADDITION TO OAK HALL

The original design for Oak Hall included four additional lower level classrooms on the west end of the building. This portion of the building was not built because of limited funds available at the time of construction. However, it was designed in a way to allow for these classrooms to be added when funding became available. The 15-year Development Plan proposes that these classrooms are added as originally intended, but instead of a one-story addition it would be a two-story addition. On the upper level, two additional classrooms are proposed, and the new addition would total 4,200 SF. These classrooms could be general purpose classrooms and/or nursing skills labs and supplemental support space for the Nursing and Allied Health programs already located in Oak Hall.

ADDITION AND RENOVATION OF HAYES HALL

The Sno-Isle Library district has expressed interest in relocating the Oak Harbor Sno-Isle Library to a new facility off the Whidbey Island Campus. If this were to occur, it would provide the College with the opportunity to comprehensively renovate the building and remedy the internal circulation. However, due to the way the building was constructed with the ramping corridor, the most efficient way to fix the floor levels and accessibility issues is to demolish 7,000 SF of the building at the western end. A two-story, 14,500 SF addition would be constructed in its place.

Through partial demolition, renovation and new construction Hayes Hall would be optimized for functionality and useable space (See Figure 48 below). The added building area dedicated to SVC use would total 20,000 SF. (That includes the two-story addition at 14,500 SF, the demolition of 3,400 SF of assignable space, and 8,900 SF renovation of the Sno-Isle library)

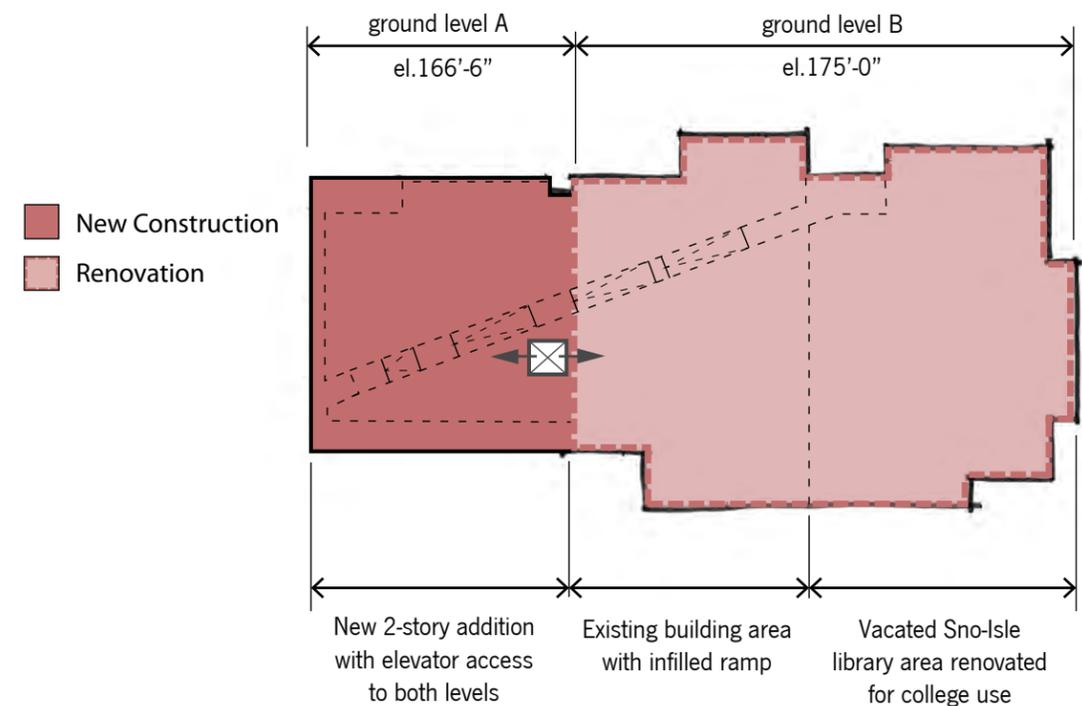
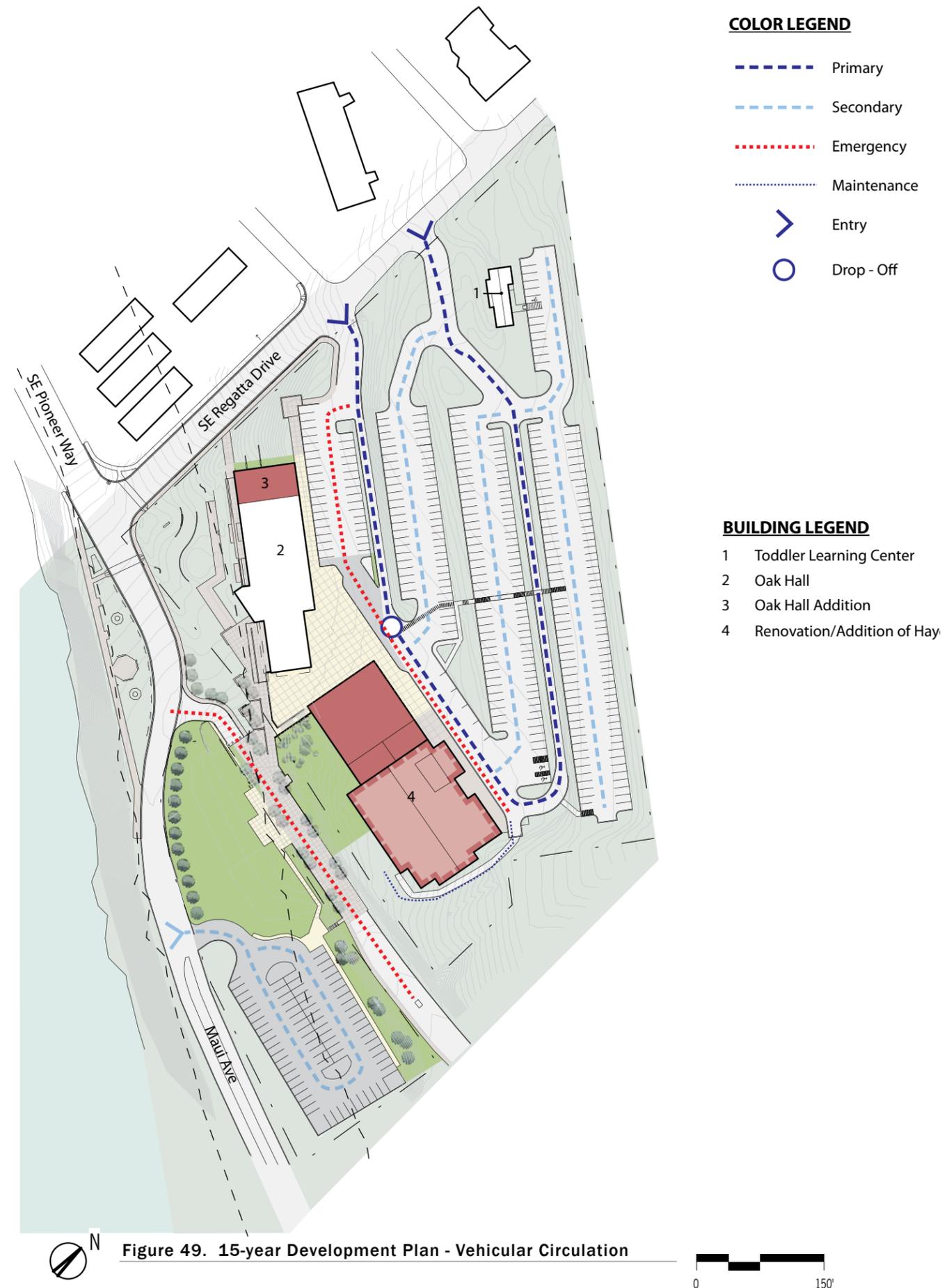


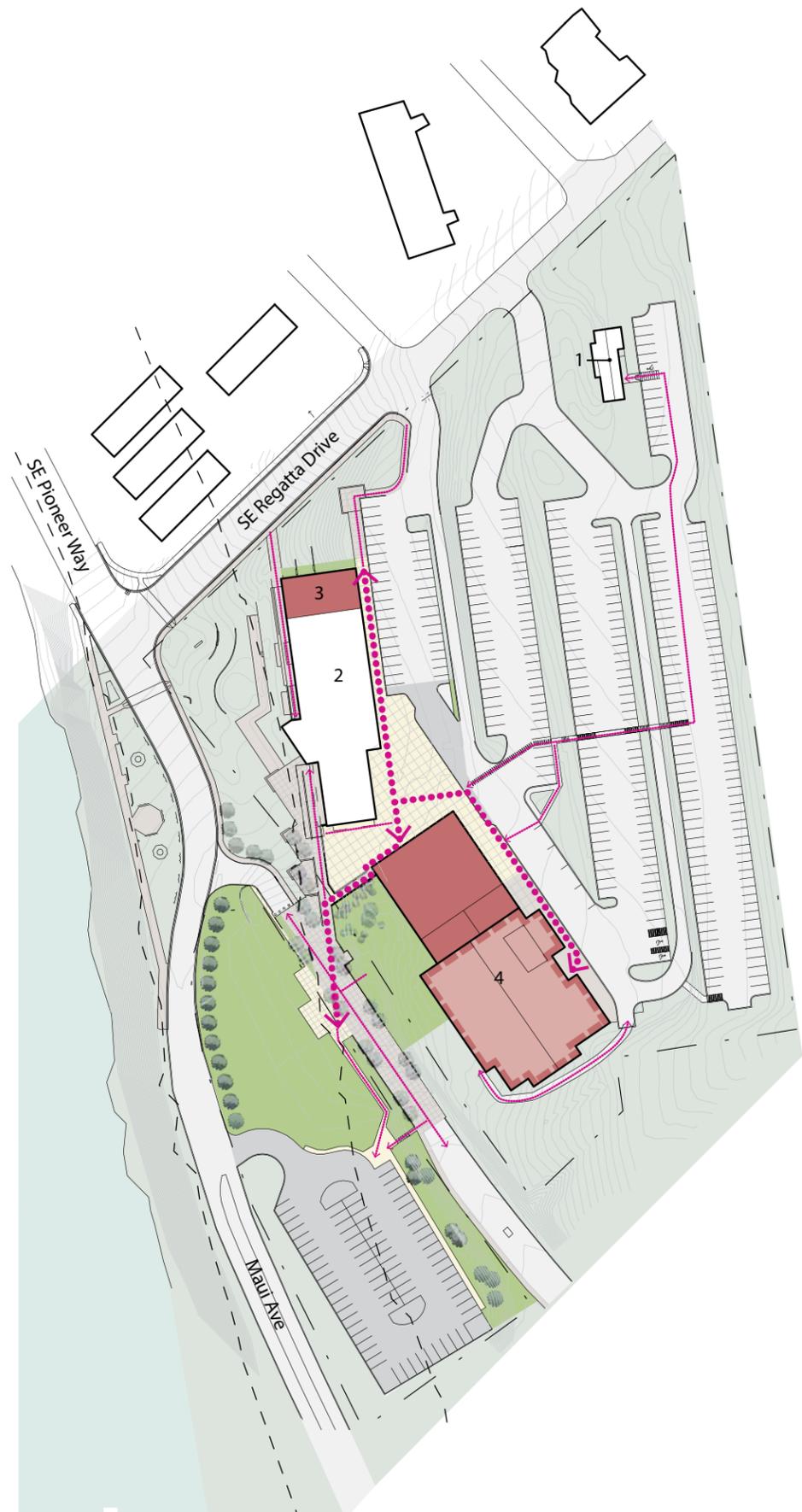
Figure 48. Hayes Hall Addition and Renovation

Building the new addition with entry level access at grade with the proposed courtyard would allow for barrier free circulation between Hayes Hall and Oak Hall. This two-story structure on the courtyard would create a visual marker, defining the main entry to campus. Placement of admissions and student services in this area would create an easily identifiable first stop for new students. The remainder of Hayes Hall could be renovated for instructional spaces, faculty offices, student study and an improved library. An elevator would be installed in the middle of the building providing a connection to the existing eastern portion of the building as well as the second story of the new addition.

DEMOLITION OF OLD MAIN AND SPRAGUE HALL

As stated previously, both Old Main and Sprague Hall have exceeded their useful life. Renovation of these buildings would not be advisable because the cost would outweigh the benefit. The topographic disconnect of these buildings from the rest of campus is another reason not to renovate. All programs which currently occupy Old Main and Sprague Hall could be accommodated through the additions and renovation of the upper campus buildings. Today Old Main and Sprague Hall represent 28,304 SF. Demolition of these two buildings and relocation of all campus functions to the upper campus would consolidate programs allowing for a future growth project site.





- COLOR LEGEND**
- Primary Pedestrian Circulation
 - Secondary Pedestrian Circulation

- BUILDING LEGEND**
- 1 Toddler Learning Center
 - 2 Oak Hall
 - 3 Oak Hall Addition
 - 4 Renovation/Addition of Hay

Figure 50. 15-year Development Plan - Pedestrian Circulation



- COLOR LEGEND**
- Open Gathering Spaces

- BUILDING LEGEND**
- 1 Toddler Learning Center
 - 2 Oak Hall
 - 3 Oak Hall Addition
 - 4 Renovation/Addition of Hay

Figure 51. 15-year Development Plan - Open Gathering Spaces



9.3 15-YEAR DEVELOPMENT PLAN FOR SITE IMPROVEMENTS AND INFRASTRUCTURE

The facilities projects proposed for the 15-year Development Plan also include accompanying site improvements to address Site Master Planning Strategies noted in Chapter 7 and below:

- Enlarge drop-off area and move to a location serving both Oak and Hayes Halls; provide sense of arrival for new students
- Remove inaccessible pathways
- Develop outdoor gathering space on upper campus with link to main drop-off and entry plaza

The landscape goal for the SVC master plan is to improve the campus environment by enhancing campus identity, student activities and interaction, spatial orientation and usability of outdoor spaces. The Whidbey Island Campus is set in beautiful surroundings, on a hillside overlooking Oak Harbor Bay. Developing spaces to preserve views, use local plants and practice sustainable landscaping is a way to unite the campus identity with its surroundings and make it distinctively Whidbey Island. Feature planting and signage are proposed to designate the main entrance of the campus. Low shrubs and trees along the parking lot would be added to screen the parking from the road and reduce heat island effect. A covered walkway through the parking lot would provide weather protection and reinforce the axis towards the main entry courtyard.

SITE IMPROVEMENTS FOR THE CENTER OF CAMPUS

Figure 52 shows the following site and facilities improvements of the 15-year Development Plan:

2. Oak Hall - Existing building
3. Oak Hall Addition (42,000 SF)
4. Hayes Hall Addition and Renovation (additional 20,000 SF for SVC use)
5. Enlarged entry courtyard and drop-off
6. Lower campus terrace and recreation field where Old Main is removed

Entry Courtyard and Drop-off

As part of the addition and renovation project for Hayes Hall, an enlarged entry courtyard and drop-off would be developed between Oak and Hayes Halls. The existing parking stalls adjacent to Oak Hall would be removed and the library drop-off at the eastern end of Hayes Hall would be relocated. This would simplify access to campus and provide one destination for students, faculty and the community. Barrier-free access from the courtyard to both Hayes and Oak Halls would be provided. See Figures 49 and 50 for vehicular and pedestrian circulation diagrams.

The courtyard would extend south between the two buildings. To maximize this terrace area the existing non-conforming ramps and fountain would be removed. With the removal of Old Main and Sprague Hall the need for an accessible route is reduced, but the lower level access within Oak Hall and out to Pioneer Way Plaza would be maintained.

The courtyard would be revised to provide seating at the upper terrace to create an outdoor space for students to congregate between classes. Images of proposed seating materiality and style are shown in Figures 53 and 54. Seating could be designed as an integral component of the courtyard through the use of natural materials that are organic in form. Preservation of views and gardens of native plants would enhance the connection of the campus to its surroundings. A stair and terraces would lead down to the Pioneer Way Plaza and the future growth project site .



 Figure 52. 15-year Development Plan - Site Improvements



Figure 53. Main Entry Courtyard Seating Example

LOWER CAMPUS TERRACE AND VIEWING PLATFORM

After the removal of Old Main and Sprague Hall the lower campus site can be used as overflow parking and a recreational area. Because this area would be reserved for a future growth project it is not necessary to invest a lot of funds in landscape or hardscape. Currently there are no recreational or sports fields on campus, so allocating a place for informal sports or recreation would be an amenity for the College (see Figure 52).

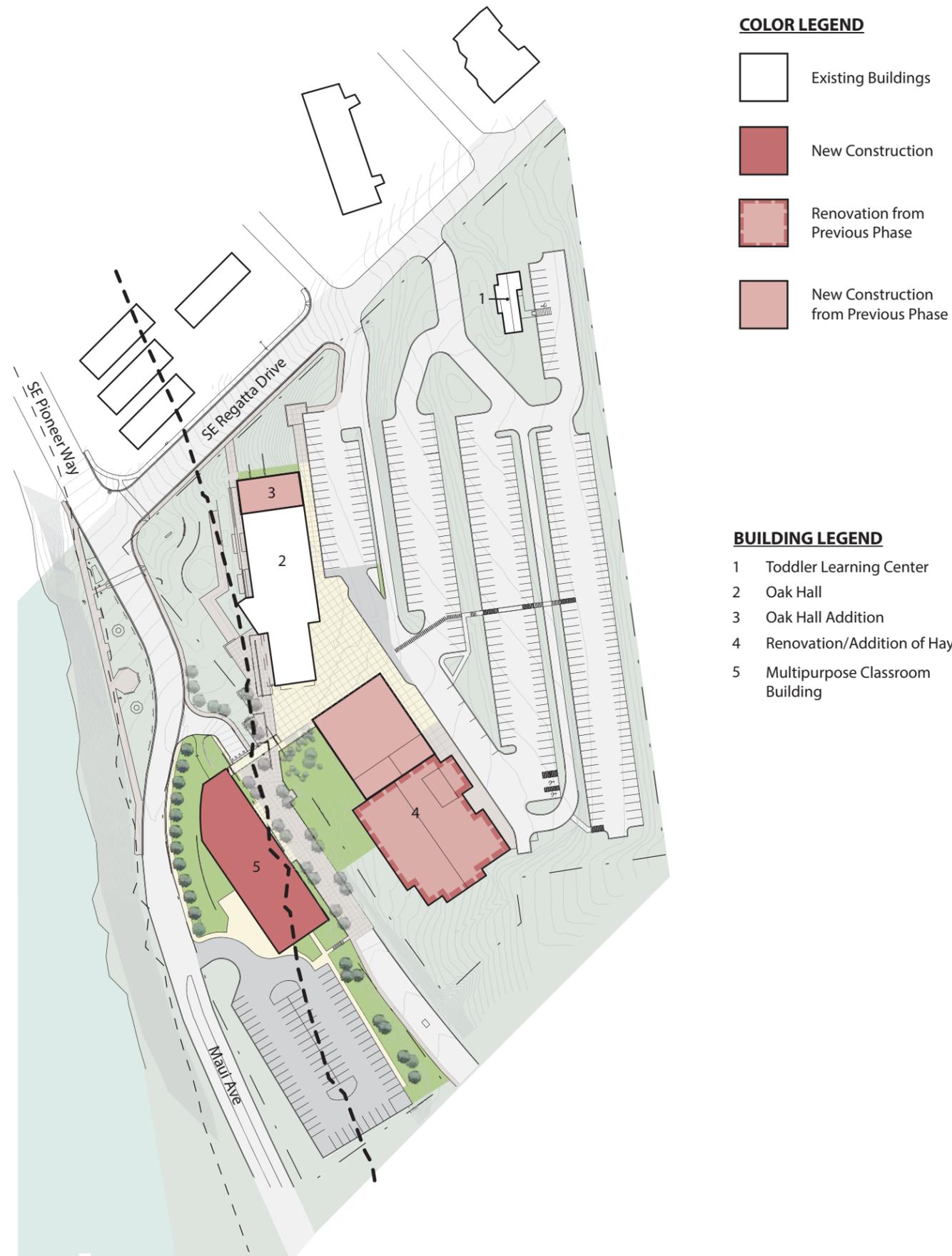
A hardscape zone is proposed as an extension of the Pioneer Way Plaza with views towards the Oak Harbor Bay. This would provide a link between the lower parking lot and the upper terrace. In the future, it could also provide an entry plaza for the future growth project.

Telecommunications

The 15-year Development Plan proposes consolidation of facilities on the upper campus with additions to Oak Hall and Hayes Hall. The Oak Hall addition will impact the existing Wide Area Network service conduit pathway. The scope of the project will need to include intercepting the existing service entrance conduits and providing a new section of underground conduit through the planned addition.



Figure 54. Main Entry Courtyard Seating Example



COLOR LEGEND

- Existing Buildings
- New Construction
- Renovation from Previous Phase
- New Construction from Previous Phase

BUILDING LEGEND

- 1 Toddler Learning Center
- 2 Oak Hall
- 3 Oak Hall Addition
- 4 Renovation/Addition of Haystack
- 5 Multipurpose Classroom Building

9.4 LONG-RANGE DEVELOPMENT PLAN FOR FACILITIES

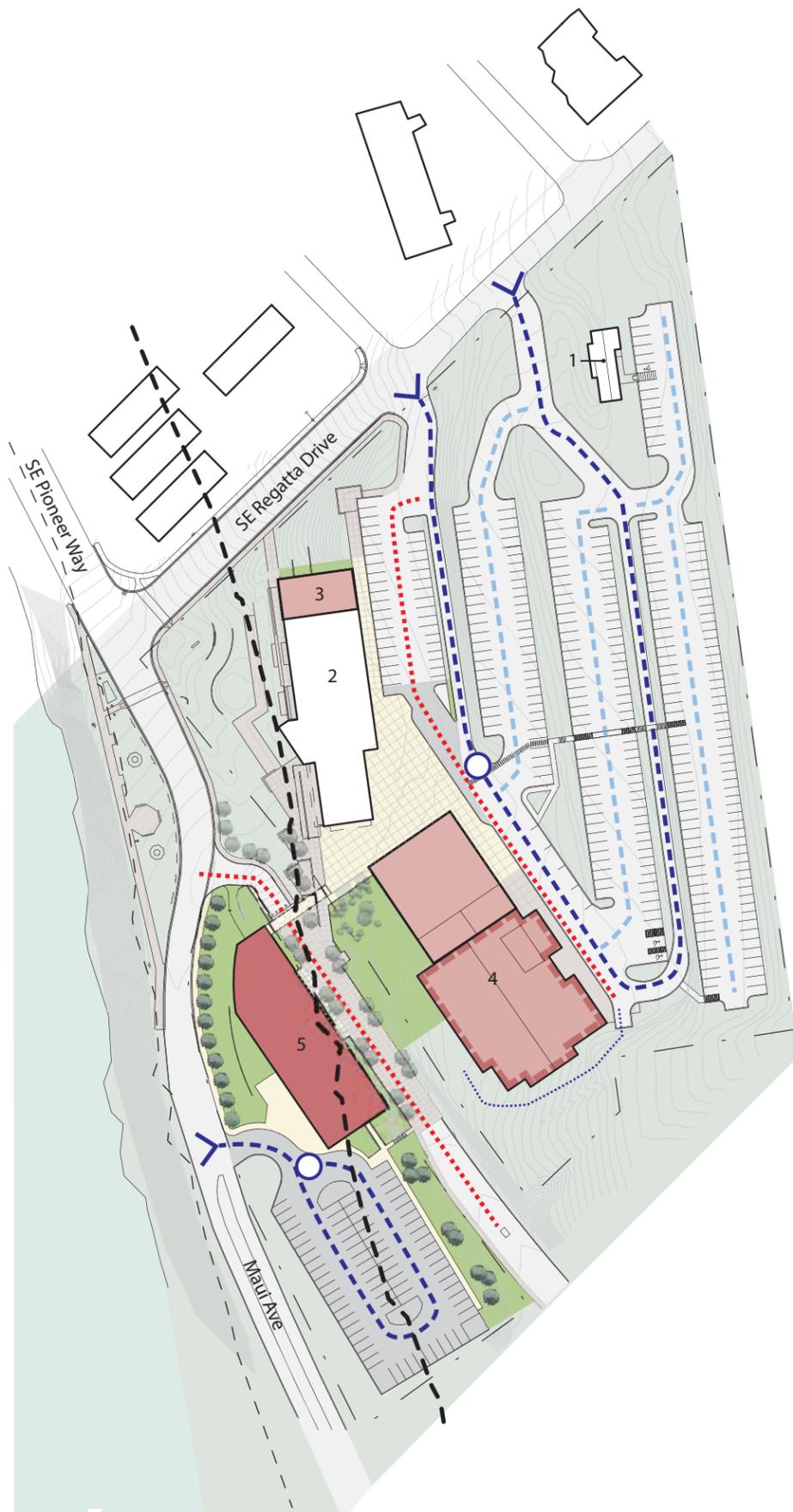
The Long-range Development Plan (LRDP) provides a framework for continued growth of the campus to address the master planning strategies and themes noted throughout the Master Plan document. The projects outlined in the LRDP could commence development within the next 25 years.

The campus is not expected to grow rapidly over the next 25 years; consequently only one growth project is envisioned. This project would most likely be a multipurpose classroom building and could be located on the site vacated by Old Main. This site lies within the 200 foot Shoreline Master Plan zone and is regulated as Urban Mixed Use. The zoning does not specifically allow institutional uses; consequently development of this site would require a conditional use permit.

Proposed is a two-story building with a second story connection to the upper campus via a pedestrian bridge (see Figure 55). The bridge would be tall enough to allow for continued use of the Pioneer Way Plaza as emergency vehicle access. An elevator between the upper and lower campus would be an alternate solution to provide accessibility. Ramps are impractical because the grade change is so severe. An entry plaza on the south side of the building would define the building entry from the lower parking level and provide additional student gathering space. Diagrams of the vehicular circulation, pedestrian circulation and gathering spaces on campus are shown in Figures 56 - 58.

Figure 55. Long-range Development Plan





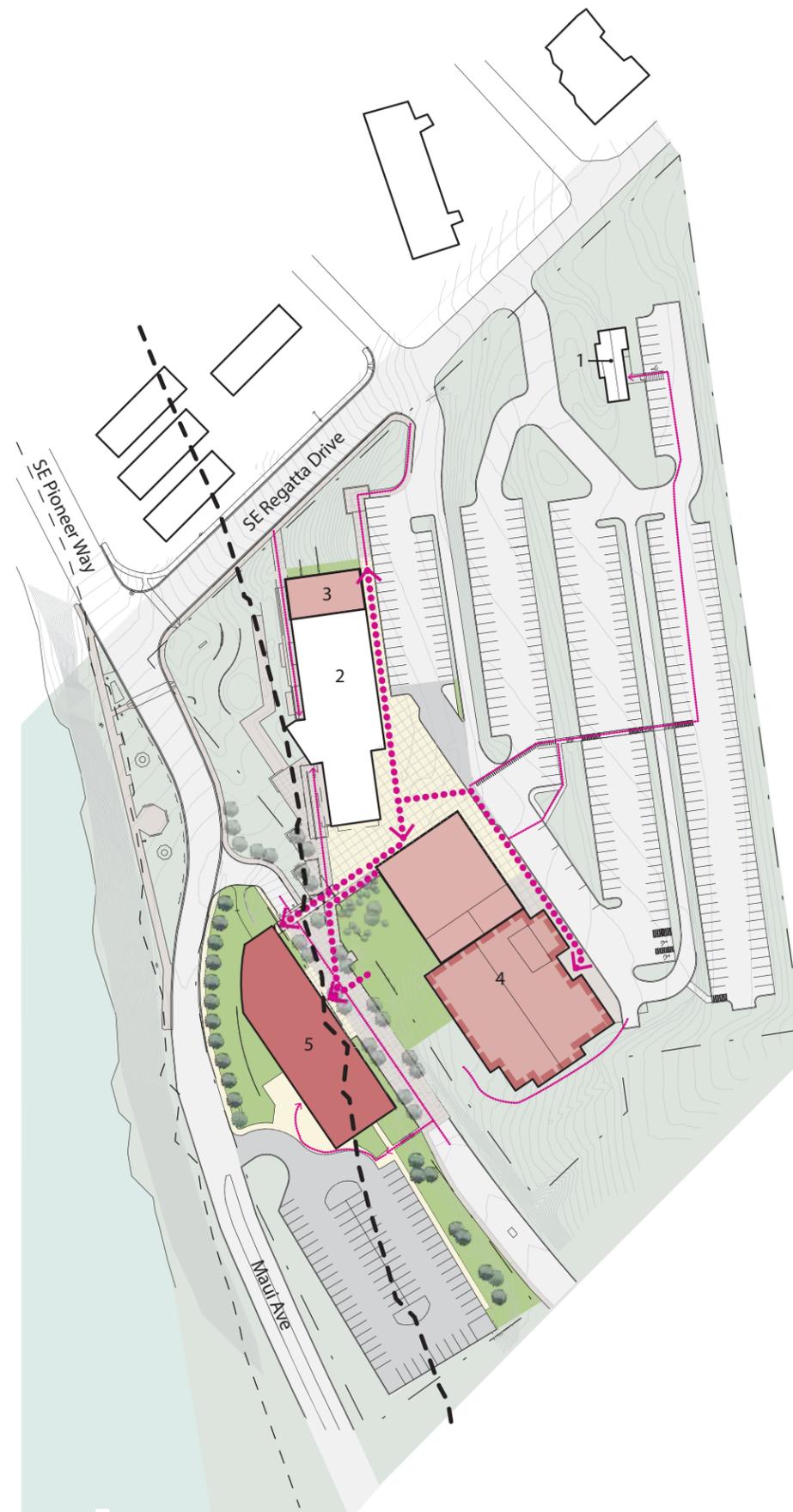
COLOR LEGEND

- - - Primary
- - - Secondary
- - - Emergency
- ⋯ Maintenance
- > Entry
- Drop - Off

BUILDING LEGEND

- 1 Toddler Learning Center
- 2 Oak Hall
- 3 Oak Hall Addition
- 4 Renovation/Addition of Haystack
- 5 Multipurpose Classroom Building

Figure 56. Long-range Development Plan - Vehicular Circulation



COLOR LEGEND

- ⋯ Primary Pedestrian Circulation
- Secondary Pedestrian Circulation

BUILDING LEGEND

- 1 Toddler Learning Center
- 2 Oak Hall
- 3 Oak Hall Addition
- 4 Renovation/Addition of Haystack
- 5 Multipurpose Classroom Building

Figure 57. Long-range Development Plan - Pedestrian Circulation



COLOR LEGEND

 Open Gathering Spaces

BUILDING LEGEND

- 1 Toddler Learning Center
- 2 Oak Hall
- 3 Oak Hall Addition
- 4 Renovation/Addition of Hay
- 5 Multipurpose Classroom Building



Figure 58. Long-range Development Plan - Open Gathering Spaces



10.0 STANDARDS - MOUNT VERNON CAMPUS

10.1 ARCHITECTURAL DESIGN GUIDELINES

The following guidelines are offered to clarify and enhance the existing campus systems and to facilitate the future development of a cohesive and uniquely identifiable Mount Vernon Campus. These guidelines are offered as a reference tool for implementing individual building projects in a manner that reinforces the identity of campus. A language has emerged with recent projects from the past five years. Efforts to reinforce the continuity of the campus and future buildings based on these recent projects are a requisite principle. However, it is important to understand that these guidelines prescribe a general approach and philosophy while encouraging flexibility and creativity in the design of specific projects.

Defined within these guidelines is a reference for building mass and scale, building's relationship to open space, materials and detailing, and sustainable design.

BUILDING MASS AND SCALE

Building massing should reinforce the pedestrian oriented character of campus and acknowledge the importance of the spaces between the buildings. Two to three-story structures are appropriate to create a dense, active campus which is in scale with open spaces and existing buildings. Buildings are not anticipated to exceed the 50 foot height limit as established by the City of Mount Vernon zoning.

Buildings should maximize the floor plate efficiency while providing natural light to the interiors. Building modulations and stepped facades are not required as the buildings are of limited size. However, buildings intended as a landmark, such as the proposed Library Classroom Building, should receive special consideration in form and scale. Form and scale should relate to a building's function. Finally, buildings should be designed to provide flexibility for changing program needs and adaptability.

BUILDING'S RELATIONSHIP TO OPEN SPACE

Buildings and open space should reinforce one another. There should be continuity of campus that extends between both the landscape and built structures. New building projects or additions should contribute to, create, or complete adjacent open spaces.

There should be a clear sense of entrance on all buildings with entries on major paths of travel or on plazas or quads. Entrances and public spaces within buildings should engage and enhance adjacent outdoor open spaces. Transitions from exterior to interior should be provided and designed to include weather protection. Interior spaces should have visual connections to the landscape. Gathering spaces, in particular, should take advantage of views and when possible should highlight views to the Cascade foothills beyond.

MATERIALS AND DETAILING

The recent projects on campus, Lewis Hall, Angst Hall, Knutzen Cardinal Center Renovation, and Hodson Hall Renovation, have worked with a similar palette of materials. Brick, glass curtain walls, and stainless steel sunshades have been consistently used on these projects. Metal panel and/or corrugated metal should be used in lesser quantities, roughly 25 - 30% of the total exterior cladding would be acceptable. The campus has been moving to a darker brick color as a unifying element, while steel structures have been painted in a dark blue as an accent to the neutral colors. A mix of warm and cool materials will help create a more collegiate feel for Skagit Valley College.

The specific materials used for Lewis Hall are a good reference for future projects:

- Brick – Red Veritone from Mutual Materials
- Composite Wall Panels – Silver Metallic Cool from Alucobond
- Prefinished Metals and Window Frames – Weathered Zinc
- Sunshades – Stainless Steel

SUSTAINABLE DESIGN

Future building projects should use sustainable design strategies. Incorporating environmentally conscious design solutions into buildings that respect their natural setting is paramount to the campus and responds to the Skagit Valley College Strategic Priority of Environmental Stewardship. LEED is a good reference for designing sustainable buildings and should be used for future building projects or renovations.



Figure 59. Rendering of Lewis Hall



Figure 60. Angst Hall



Figure 61. Knutzen Cardinal Center

10.2 LANDSCAPE DESIGN GUIDELINES

On a campus, buildings often vary drastically in style, purpose and area. A consistent landscape, one with the same furnishings, paving and planting throughout, can unite these disparate elements into a cohesive whole and create a unique character campus-wide. A standard can also coordinate individual projects by different designers over time to accomplish larger spatial goals. Finally, a standard can promote broader school goals for sustainability, safety and universal access. The result is a coordinated, navigable campus that reflects the values of the college with unique regional character.

Detailed Landscape Design Guidelines can be found in the Appendix. The Landscape Design Guidelines include a kit of standard materials for site furnishings, plant species selection, pavers, best practices and techniques that will support a united character.

10.3 OTHER STANDARDS

The College will separately publish standards for interior and exterior lighting, interior and exterior signage, exterior furnishings, and custodial guidelines.

11.1 SAN JUAN CENTER



The College's San Juan Center is located in Friday Harbor on four acres of land leased from the Port of Friday Harbor. The 5,200 SF building was built in 1995 and serves as a full-service center providing registration, admissions, financial aid and tutoring support for students. The Center also houses the College's Road Scholar program (formerly Elderhostel) which provides educational travel opportunities primarily in the San Juan Islands.

In 1998, San Juan County formed an Interlocal Agreement with the Port of Friday Harbor to build out ground floor space in the Center for the Washington State University's County Extension Agent. After twenty years (2018), this addition will revert to college ownership.

The center contains classrooms, a computer lab, testing area, administrative office space and general student space. In addition, on its lower level is a large community room. While classes are offered at the center, many students enroll in classes online.

The center is large enough to meet current enrollment demand, but improved technology and a dedicated interactive television space would improve operations. The center lacks a basic science

lab. Degree requirements for lab sciences and the newly completed hospital located one mile from the center may drive demand for allied health training, which would drive the need for a science lab at the San Juan Center.

It is anticipated that the next community-based project (following the successful completion of the hospital) will be for a community center, with the possibility of construction of dormitories to house summer teacher institutes. This could offer great potential for the College's Road Scholar program, which generally does not operate in summer due to the high cost of hotel space at peak season. Alternatively, the College/Road Scholar program could develop its own housing, which would allow the Road Scholar program to expand and for the College to rent space for retreats, conferences and other educational activities.

11.2 SOUTH WHIDBEY CENTER

The College operates a 4,300 SF center in the town of Clinton, located at the southern end of Whidbey Island. This center has always been located in leased space, and for the past ten years, in retail shopping center space at a major intersection and on the main island north/south highway. The current lease expires in 2016.

While the Center's location is quite visible, there is little college identity for the center. Among its drawbacks are poor technology and connectivity, poor infrastructure and lack of lab space. At the last lease renewal, the center's administration searched for alternative space but opportunities are very limited in that part of the island, especially with visibility along the highway. Development along the highway is strictly limited. The South Whidbey Center is closed in the summer months.

Enrollment demand has been generally good for developmental courses and university transfer courses, including math, English, art, physical education, etc. Budget reductions over the last three years have significantly impacted enrollment. The center should recover with increased enrollment in the next 3-5 years with more outreach efforts.

Opportunities for program development include academic transfer programs, nursing pre-requisite course, computer courses and art. The current lease space has sufficient capacity to meet these needs in the immediate future, except for possibly needing to add lab space.



11.3 ANACORTES MARINER TECHNOLOGY CENTER

The College, in cooperation with six local K12 school districts, developed a joint facility located on land owned by the Port of Anacortes to house its Marine Technology Program. The program was formerly housed in a college-owned building near the Oak Harbor campus. In 2009, a 30-year lease was signed and construction began on 20,000 SF building. Classes began in fall 2010.

NCTA Anacortes is a highly specialized facility with state-of-the-art laboratories, classrooms and a large shared work space for student projects. The K12 school districts operate two sessions per day, and the College offers its two-year Marine Technology degree in the afternoon and evening hours.

An additional, more recent development in the College's use of the building is as support to the College's nascent Advanced Manufacturing program. The NCTA Anacortes has a composites lab that serves one component of Advanced Manufacturing program in addition to the Marine Technology program. It is extremely expensive to equip a composites lab, so at this time the College uses it to support both programs. As the programs grow, the lab will not be adequate to support demand.

The College is currently weighing whether to co-locate its Composites/Manufacturing programs to a different facility than Marine Technology.

Regardless of the decision about how to further develop Composites and Manufacturing, the College intends to keep its Marine Technology program in the NCTA Anacortes facility. This location, near the water and marine industries, has invigorated the program and serves it well. In addition, this current facility can expand if needed based on enrollment growth at NCTA, the College or both in the marine trades.



12.1 LANDSCAPE ARCHITECTURE - MOUNT VERNON CAMPUS



SKAGIT VALLEY COMMUNITY COLLEGE MASTER PLAN LANDSCAPE STANDARD

EXISTING SITE CONDITION NARRATIVE:

Skagit Valley's Mount Vernon Campus sits in a residential area a few blocks from the Skagit River, and has a panoramic view of the Cascade foothills. Major roads define its south and west sides. Mount Vernon is a relatively large campus, with extensive athletic fields in the east, automotive facilities located between the main campus and student housing, and parking around much of the perimeter.

CHALLENGES:

The proposed Mt Vernon Campus Master Plan presents solutions to a series of challenges in the current layout. The following solutions generally fit into two larger goals: improved navigability and contextual connections.

Wayfinding and Navigation

The first set of challenges involves users moving through the site. Mount Vernon's campus is relatively large and evolved over time, so issues of hierarchy, of space, and of wayfinding are critical and complex. The site can be confusing and lacks clear circulation through and to campus buildings. The best way to one's destination is not always clear, especially for wheelchair users. The gentle slopes, generally from the northwest to the southeast, are enough to create challenges for people with limited mobility.

Context and Character

The other major class of challenges for the Master Plan involve fitting the campus into its context. Currently, the campus doesn't take full advantage of its location. Connections to the surrounding community are lost due to the fact that much of the site's perimeter is taken up by parking. This also affects perceptions of the college. The site's climate, tucked in the foothills of the Cascade Mountains, can make landscape maintenance challenging and resource-intensive, but is also a great opportunity. The mountains and valley provide spectacular views and unique cultural context.

In campus settings, buildings often vary drastically in style, purpose, and era. A consistent landscape, one with cohesive furnishings, paving, and planting standards, can unite disparate elements into a cohesive whole to create a signature campus-wide identity. Landscape standards can also coordinate individual projects by different designers and phased over time to accomplish larger spatial goals. Finally, a standard can promote broader school goals for sustainability, safety, and universal access. The result is a coordinated, navigable campus that reflects the values of the college within a unique regional character.

CAMPUS GOALS:

Sustainability

Skagit Valley College includes environmental awareness in its school vision. Sustainable practices on campus are also learning opportunities. Employees and contractors involved in capital and maintenance components should look for opportunities for collaboration or tie-ins with curriculum. LEED projects will require additional documentation and sustainable strategies in plant selection, stormwater management, and irrigation.

Plant selection:

- Native and adapted
- Drought tolerant
- Disease and pest resistant
- Low maintenance

Stormwater management:

- Infiltration: minimizing paving, using porous paving and rain gardens
- Filtration: filter strips, settling ponds, and infiltration areas
- Trap and treat stormwater as close to the source as possible (downstream strategies are more expensive)

Irrigation:

- Low-water rotators
- Drip irrigation
- Weather and moisture monitors
- Water only high-priority lawns

Safety and Security

CPTED (Crime Prevention Through Environmental Design) consists of strategies to help create places that deter crime. The basis of these strategies is the conclusion of academic studies on crime prevention: the prime deterrent to crime is not the severity of the punishment, but the perceived risk of getting caught. Crime prevention is a critical consideration because students are living on campus and utilizing facilities at all hours. The following strategies have been shown to deter crime.

- Landscape – utilize low shrubs and high tree canopies to provide open site lines
- Surveillance
- Access control
- Territorial reinforcement
- Maintenance
- Activity support
- Lighting

Inclusion and Accessibility

Skagit Valley College is committed to diversity and inclusion. These values manifest in the landscape through Universal Design. Universal design goes beyond ADA compliance. It is a school of thought that advocates accommodation of as many people as possible, rather than just the most common type of person.

Routes that are technically ADA may meet the law but fail to welcome students and staff who are physically handicapped. Practically and emotionally, this can be a significant setback. A truly inclusive campus experience accommodates everyone together.

By applying this principle to the landscape, designers actually make campus easier to negotiate for everyone. Routes accessible for a wheel chair are also more accessible for elderly or pregnant people, people with carts or strollers, people wearing high heels, maintenance staff, people with crutches, walkers, or canes, or even just people carrying heavy books.

OVERALL LANDSCAPE MASTER PLAN NARRATIVE:

Pedestrian Circulation

The Master Plan includes a graded system of pedestrian circulation that creates a hierarchy of walkways to guide users through the site. Common materials, sightlines, and broad thoroughfares clarify circulation and improve wayfinding.

The main pedestrian axes are the most broad and cut all the way across campus, including through the main parking area and north to student housing. Lines of trees and a canopy shelter in the parking area create comfortable, safe, high-capacity walkways for the most important routes through campus. Broad secondary routes off this major spine connect to building entry plazas and other popular destinations. Narrower tertiary walks make up the remaining pathways to less frequented areas, like emergency exits and maintenance facilities.

The majority of the existing campus pedestrian pavement is composed of natural grey concrete – a good selection for ease of maintenance, slip prevention, and reduced heat island effect. The Master Plan incorporates grey concrete pedestrian pavement into the landscape standards.

Parking and Vehicular Circulation

The Master Plan proposes low shrubs around the perimeter of the site to screen parking, and feature plantings to mark vehicular access points. These plantings will improve views of campus from outside and guide visitors toward entrances. Taller plantings have been set back to maintain safe sightlines for drivers and pedestrians.

Planting islands and shade trees have been added to parking areas. The trees will help shade the parking lot, which will reduce the heat island effect and shade parked cars. Rebuilding parking areas, as proposed in the master plan, is an excellent opportunity to switch to a permeable material, such as permeable asphalt, to reduce runoff and filter water through the water table, protecting the Skagit River. Fire lanes, another substantial area of pavement, have been depicted as only partially paved with traditional pavement. Remaining segments of the fire lane will be constructed with GrassPave or a similar product – combining the structural integrity to accommodate fire trucks with stormwater permeability and the aesthetics of traditional turf grass.

Building Entry Plazas

A building entry plaza has been added at the main entry of each building. This will help users find the correct entry point and create a transitional space between inside and out. Individual plazas may respond to the architecture and purpose of each individual building, but will still maintain cohesion with the rest of the site through a combination of the standard materials, site furnishings, and plants. Each

entry plaza will use pavers and benches (see design kit) to create an outdoor room affiliated with the building. The seating will be sufficient to accommodate individuals or small groups.

Aesthetics

The proposed plantings and materials connect the site to its cultural context. For example, rows of tall, columnar trees run alongside each covered walkway cutting through the parking lot, like the agricultural windbreaks found in the surrounding valley. The existing site has some spectacular specimens of Giant Sequoias (*Sequoiadendron giganteum*). The Master Plan plant list includes Giant Sequoias to promote this striking and special element. The plant list also includes many native species. Using local plants and materials will give the campus a clear sense of place, not generic or anonymous, but uniquely Mount Vernon and Skagit Valley.

Mt Vernon Subdivided Plant Lists

Parking Windbreak Trees

Adapted (non-native):

Botanic Name	Common Name	Min. Spacing	Notes
<i>Acer platanoides</i> 'Columnare'	Columnar Norway Maple	10' o.c.	50'X15', Columnar
<i>Fagus sylvatica</i> 'Dawyck'	Dawyck Beech	15' o.c.	50'X25', Columnar
<i>Populus tremuloides</i> 'Erecta'	Sweedish Aspen	7' o.c.	40'X10', Columnar

Parking Island Trees

Adapted (non-native):

Botanic Name	Common Name	Mature Size	Notes
<i>Gleditsia triacanthos</i> var. <i>inermis</i>	Thronless Honeylocust	50'X50'	6' min. branching ht.
<i>Tilia cordata</i> 'Corzam'	Chancole Linden	35'X20'	6' min. branching ht.
<i>Ulmus</i> 'Frontier'	Frontier Elm	15' wide	6' min. branching ht.
<i>Ulmus</i> 'Homested'	Homested Elm	60'X40'	6' min. branching ht.
<i>Ulmus Parviflora</i> 'Emer I'	Athena Classic Elm	30'X35'	6' min. branching ht.
<i>Zelkova serrata</i> 'Greenvase'	Greenvase Zelkova	45'X40'	6' min. branching ht.
<i>Zelkova serrata</i> 'Village Green'	Village Green Zelkova	45'X40'	6' min. branching ht.

Formal Areas

Native:

Botanic Name	Common Name	Mature Size	Notes
<i>Betula nigra</i> 'Heritage'	Heritage River Birch	40'X40'	4' min. branching ht.
<i>Chamaecyparis nootkatensis</i>	Yellow Cedar	60'X30'	branching to ground
<i>Cornus</i> 'Eddie's White Wonder'	Eddie's White Wonder Dogwood	20'X15'	5' min. branching ht.
<i>Quercus garryana</i>	Western White Oak	60'X60'	5' min. branching ht.
<i>Thuja plicata</i>	Western Red Cedar	120'X60'	branching to ground
<i>Tsuga mertensiana</i>	Mountain Hemlock	30'X15'	branching to ground

Shrubs and Groundcovers

Botanic Name	Common Name	Spacing	Notes
<i>Amelanchier alnifolia</i>	Serviceberry	10'	
<i>Arctostaphylos uva-ursi</i>	Kinnikinnick	12"	
<i>Gaultheria shallon</i>	Salal	18"	
<i>Mahonia compacta</i>	Compact Oregon Grape	3'	
<i>Mahonia nervosa</i>	Dwarf Oregon Grape	2'	
<i>Myrica californica</i>	California Bayberry	6'	
<i>Pachistima myrsinites</i>	Oregon Box	24"	
<i>Pachistima canbyi</i>	Canby Paxistima	24"	
<i>Physocarpus capitatus</i>	Pacific Nine-bark	6'	
<i>Ribes sanguineum</i>	Red-flowering Currant	5'	
<i>Rhododendron macrophyllum</i>	Pacific Rhododendron	5'	
<i>Spiraea betulifolia</i>	Shiny-leaf Spiraea	3'	

Perennials and Ferns

Botanic Name	Common Name	Spacing	Notes
<i>Anthyrium filix-femina</i>	Lady Fern	24"	
<i>Camassia quomash</i>	Camas	9"	
<i>Fragaria chiloensis</i>	Beach Strawberry	12"	
<i>Iris tenax</i>	Oregon Iris	12"	
<i>Juncus effusus</i>	Soft Rush	30"	
<i>Maianthemum dilatatum</i>	False Lily of the Valley	12"	shade
<i>Oxalis oregana</i>	Oregon Oxalis	12"	shade
<i>Similacina racemosa</i>	False Solomon's Seal	24"	shade
<i>Tolmiea menziesii</i>	Youth-on-age	18"	shade

Vancouveria hexandra

Inside Out Flower

18"

Adapted (non-native):

Botanic Name	Common Name	Mature Size	Notes
<i>Acer X freemanii</i>	Freeman Maple	40'X30'	5' min. branching ht.
<i>Acer grandidentatum</i> 'Schmidt'	Rocky Mt. Glow Maple	25'X20'	Columnar
<i>Acer griseum</i>	Paperbark Maple	30'X20'	4' min. branching ht.
<i>Acer platanoides</i> 'Columnare'	Columnar Norway Maple	50'X15'	5' min. branching ht.
<i>Acer rubrum</i> 'Scarsen'	Scarlet Sentinel Maple	40'X25'	5' min. branching ht.
<i>Acer saccharum</i> 'Commemoration'	Commemoration Sugar Maple	50'X35'	5' min. branching ht.
<i>Acer saccharum</i> 'Green Mountain'	Green Mountain Sugar Maple	50'X35'	5' min. branching ht.
<i>Acer saccharum</i> 'Legacy'	Legacy Sugar Maple	50'X35'	5' min. branching ht.
<i>Aesculus x carnea</i> 'Briotii'	Red Horsechestnut	30'X35'	5' min. branching ht.
<i>Amelanchier x grandiflora</i> 'Autumn Brilliance'	Autumn Brilliance Serviceberry	20'X15'	
<i>Carpinus caroliniana</i>	Musclewood	25'X20'	5' min. branching ht.
<i>Carpinus japonica</i>	Japanese Hornbeam	20'X25'	5' min. branching ht.
<i>Cornus controversa</i> 'June Snow'	Giant Dogwood	30'X20'	5' min. branching ht.
<i>Cornus kousa</i> 'Chinensis'	Kousa Dogwood	20'X20'	5' min. branching ht.
<i>Davidia involucrata</i>	Dove Tree	40'X30'	5' min. branching ht.
<i>Fagus sylvatica</i> straight species	Silver Beech	50'X40'	5' min. branching ht.
<i>Fagus sylvatica</i> 'Dawyck'	Dawyck Beech	50'X25'	3' min. branching ht.
<i>Magnolia denudata</i>	Yulan Magnolia	40'X40'	5' min. branching ht.
<i>Metasequoia glyptostroboides</i>	Dawn Redwood	50'X25'	branching to ground
<i>Parrotia persica</i>	Persian Parrotia	30'X20'	4' min. branching ht.
<i>Populus tremuloides</i> 'Erecta'	Sweedish Aspen	40'X10'	branching to ground
<i>Prunus x yedoensis</i> 'Akebono'	Akebono Flowering Cherry	25'X25'	5' min. branching ht.
<i>Quercus coccinea</i>	Scarlet Oak	60'X40'	6' min. branching ht.
<i>Quercus frainetto</i>	Italian Oak	40'X30'	6' min. branching ht.
<i>Quercus rubra</i>	Red Oak	60'X45'	6' min. branching ht.
<i>Sequoiadendron giganteum</i>	Giant Sequoia		branching to ground
<i>Sophora japonica</i> 'Regent'	Japanese Pagodatree	40'	5' min. branching ht.
<i>Sorbus aucuparia</i> 'Michred'	Cardinal Royal Mountain Ash	35'X20'	5' min. branching ht.
<i>Styrax japonica</i>	Japanese Nowbell	25'X25'	3' min. branching ht.
<i>Taxodium distichum</i> 'Mickelson'	Shawnee Brave Bald Cypress	20'	5' min. branching ht.
<i>Taxodium distichum</i> straight species	Bald Cypress	55'X35'	5' min. branching ht.
<i>Ulmus</i> 'Frontier'	Frontier Elm	15'	6' min. branching ht.
<i>Ulmus</i> 'Homested'	Homested Elm	60'X40'	6' min. branching ht.
<i>Ulmus Parviflora</i> 'Emer I'	Athena Classic Elm	30'X35'	6' min. branching ht.
<i>Zelkova serrata</i> 'Greenvase'	Greenvase Zelkova	45'X40'	6' min. branching ht.
<i>Zelkova serrata</i> 'Village Green'	Village Green Zelkova	45'X40'	6' min. branching ht.

Shrubs and Groundcovers

Botanic Name	Common Name	Spacing	Notes
<i>Abelia x grandiflora</i> 'Rose Creek'	Rose Creek Abelia	42"	
<i>Buxus microphylla</i> 'Compacta'	Little-leaf Boxwood	24"	
<i>Choisya ternata</i>	Mexican Mock-orange	5'	
<i>Cornus sericea</i> 'Islanti'	Istanti Red Osier Dogwood	4'	
<i>Cornus sericea</i> 'kelseyii'	Dwarf Red Twig Dogwood	3'	
<i>Cotoneaster dammeri</i>	Bearberry Cotoneaster	2'	
<i>Hydrangea quercifolia</i> 'Pee-Wee'	Dwarf Oakleaf Hydrangea	3'	
<i>Ilex crenata</i> 'Compacta'	Japanese Holly	3'	
<i>Lonicera pileata</i>	Box-leaf Honeysuckle	30"	
<i>Pachysandra terminalis</i>	Japanese Spurge	12"	
<i>Pieris japonica</i>	Andromeda	5'	
<i>Potentilla fruticosa</i>	Sinquinifol	4'	
<i>Prunus laurocerasus</i> 'Mt Vernon'	Mt Vernon Laurel	3'	
<i>Rosa rugosa</i>	Rugosa Rose	3'	
<i>Rhododendron</i> 'PJM Princess Susan'	Compact PJM Rhododendron	4'	
<i>Sarcococca hookeriana</i> var. <i>humilis</i>	Sweet Box	2'	
<i>Spirea japonica</i> 'Little Princess'	Little Princess Japanese Spirea	30"	
<i>Spirea japonica</i> 'Magic Carpet'	Magic Carpet Japanese Spirea	30"	
<i>Viburnum acerifolium</i> 'Nana'	Nana Cranberrybush Viburnum	30"	

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<i>Viburnum davidii</i>	David Viburnum	4'	
<i>Viburnum trilobum</i> 'Compactum'	Dwarf Cranberrybush Viburnum	30"	

Perennials, grasses, and Ferns

Botanic Name	Common Name	Spacing	Notes
<i>Epimedium X rubrum</i>	Barrenwort	18"	
<i>Euphorbia amygdaloides robbiae</i>	Mrs Robb's Bonnet	12"	
<i>Geranium macrorrhizum</i>	Bigroot Cranesbill	18"	
<i>Hakonechloa macra</i>	Japanese Forest Grass	30"	
<i>Hemerocallis</i>	Daylily	24"	
<i>Heuchera sp.</i>	Coral Bells	12"	
<i>Iris</i> "Pacific Coast Hybrids"	Pacific Coast Hybrid Iris	12"	
<i>Liriope sp.</i>	Lily Turf	18"	
<i>Miscanthus sinensis 'Yakushima'</i>	Dwarf Maiden Grass	36"	
<i>Oxalis ssp</i>	Wood Sorrel	18"	
<i>Pennisetum alopecuroides 'Hameln'</i>	Dwarf Fountain Grass	36"	
<i>Penstemon sp</i>	Beardtongue	18"	
<i>Sedum X 'Autumn Joy'</i>	Autumn Joy Sedum	18"	

Rain Garden/Wetland

Adapted (non-native):

Trees

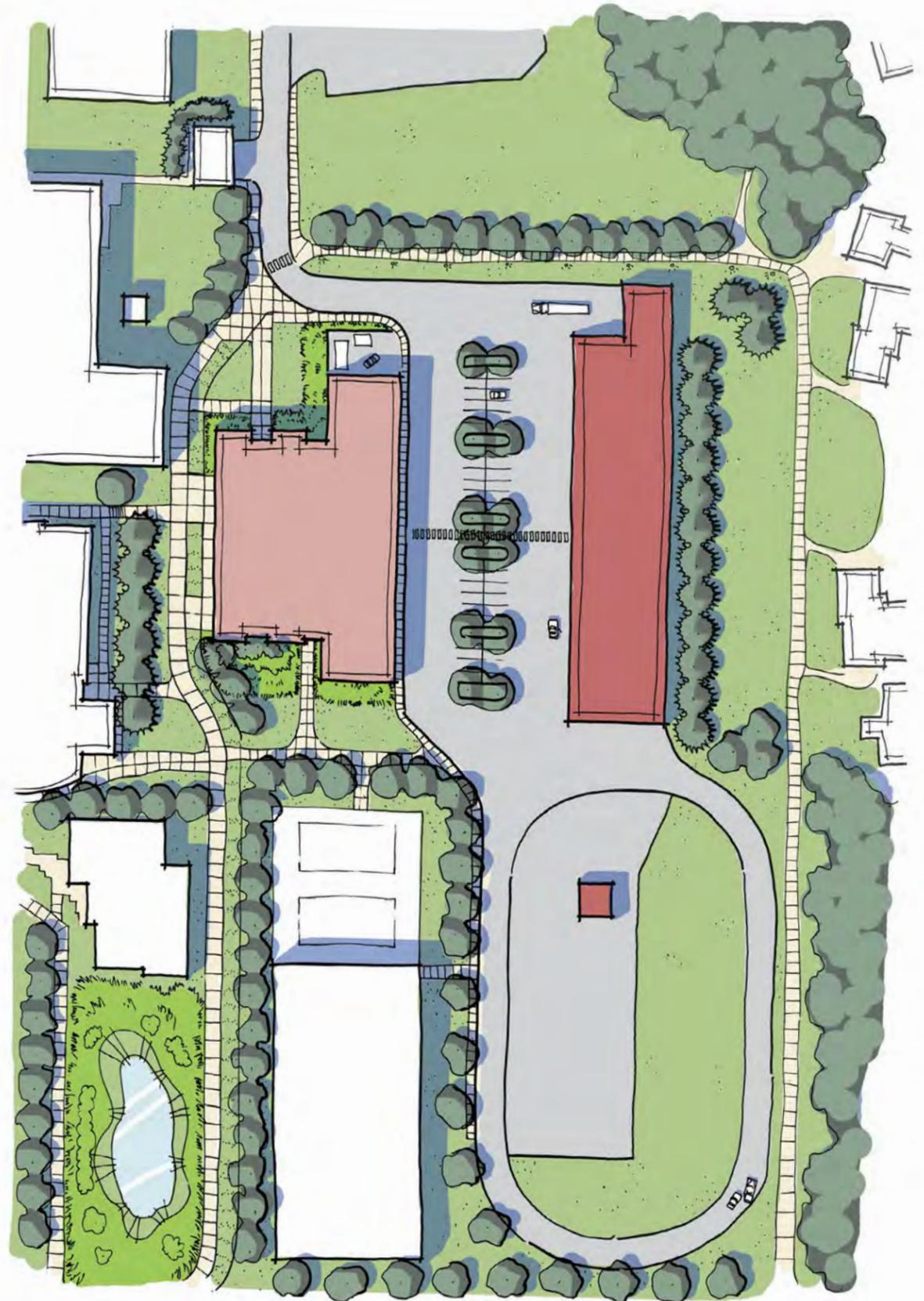
Botanic Name	Common Name	Spacing	Notes
<i>Betula nigra</i> 'Heritage'	Heritage River Birch	20'	
<i>Salix hookeriana</i>	Hooker's Willow	15'	

Shrubs and Groundcovers

Botanic Name	Common Name	Spacing	Notes
<i>Cornus sericea 'Isanti'</i>	Dwarf Redtwig dogwood	4'	
<i>Gaultheria shallon</i>	Salal	18"	
<i>Spiraea douglassii</i>	Hardhack	4'	

Perennials, grasses, and Ferns

Botanic Name	Common Name	Spacing	Notes
<i>Caltha palustris</i>	Bog Marigold	12"	
<i>Carex kelloggii</i>	Sedge	18"	
<i>Iris versicolor</i>	Blue Flag Iris	18"	
<i>Juncus effusus</i>	Common Rush	18"	
<i>Mimulus ringens</i>	Monkeyflower	18"	



15-Year Plan - Trades Buildings - MURASE ASSOCIATES



15-Year Plan - East Campus Entry and Library - MURASE ASSOCIATES



Long-Range Development Plan - Central Campus - MURASE ASSOCIATES

1) Design Kit

a) Furnishings

Standardization of furnishings can lend a cohesive air to the campus and simplify maintenance, repair and replacement. While individual spaces may have their own themes and styles that dictate a variation in furnishings, use at least some of the standard design elements, and use standard furnishings in interstitial spaces.

i) Seating



Hudson Bench from Forms+Surfaces

Model: Various companies sell products in this style, though some research may be required to find the right piece for a given application. For example, for a wooden seat on a seat wall, the new plaza at Mt Vernon used the “Sonoma” bench, available from Landscape Forms Inc.,(Tim Gish, (800) 430-6206 ext 1319). For a stand-alone bench, they used “Hudson” from Forms+Surfaces, (Mike Benz, (425) 996-6192). Columbia Cascade, a company close enough to achieve MRc5, regional materials, also has a similar model.
Finish: Natural weathering wood
Mounting: Varies
LEED Credits: MRc4- Recycled Content, MRc5- Regional Materials, MRc6- Rapidly Renewable Materials, MRc7- Certified Wood

ii) Bicycle Rack



Key Bicycle Rack

Model: “Key” Bicycle Rack from Landscape Forms Inc., (Tim Gish, 800-430-6206 ext 1319) , or approved equal.

Constructed of high density polyurethane plastic molded over galvanized ASTM A513 carbon steel tubing. Base is cast aluminum.

Finish color: red.

Mounting: Embedded.

Recycled material content: minimum 43%.

LEED Credits: MRc4- Recycled Content, SSc4.2- Bicycle Storage and Changing Rooms

iii) Bicycle Shelter



Van-Gard Bicycle Shelter

Model: Van-Gard, 9’ deep, length varies, with black or accent color powder coat steel structure by Duo-Gard, Tel: (734)207-9700. Install shelter per manufacturer’s instructions. Provide shop drawings.

iv) Waste Receptacles



Model: Cascadia, CCT series, Steel Trash Receptacle
Manufactured by Creative Pipe, Inc. 1-800-644-8467
(manufacturer within 500 mi) or approved equivalent.

Features: Side-opening. Optional canopy for exposed locations.

Finish Color: grey or black

LEED Credits: MRc4- Recycled Content, MRc5 Regional Materials

v) Bollards

(1) Ornamental Bollards

These bollards separate vehicular traffic from pedestrian walkways in high-profile areas. They may be removable in locations where certain vehicular traffic will need to be admitted periodically.

Specification: 6" round bollard with slightly domed top

Model: Creative Pipe CBR-6-DT or approved equivalent

Finish: stainless steel or gray or black powder coat to match other site furniture. 6" schedule 40 pipe with slightly domed top, as pictured from Creative Pipe, Inc. (manufacturer within 500 mi) or equivalent.

Removable model: CBR-6-RE-DT

LEED Credits: MRc4- Recycled Content, MRc5 Regional Materials

(2) Utilitarian Bollards

These bollards protect structures in service areas or low-profile areas, like loading docks and maintenance areas, garbage enclosures, etc.

Specification: 6" steel pipe bollard, cast into the ground and filled with concrete, provide domed top, and paint with yellow reflective paint.

Round Bollard with Slightly Domed Top

vi) Lighting

(1) On Standards

(a) Pedestrian Scale:

Model: Kim Lighting Architype Small, standard type 5, with tamper-resistant latch. Previous installations have been Metal Halide. Consider the LED version for power conservation and cost savings.

finish: Light Grey

(b) Parking Lot Scale:

Model: Kim Lighting Architype Large, Standard Type 3, with tamper-resistant latch. Previous installations have been Metal Halide. Consider the LED version for power conservation and cost savings.

Finish: Light Grey



(2) Lit Bollards



Bega 8657 LED

Model: Bega 8657 LED, <http://www.bega-us.com/productdetail.aspx?groupid=264&itemid=5913&familyid=21>

Finish: Grey

LEED Credits: SSc8.1- Light Pollution Reduction, EAc1- optimize energy performance

b) Planting

i) Species Selection

The included plant list is a starting point. It is possible that, through trial and error, a few plants on the list may prove unsuitable. It is likely that staff and project designers will have other favorite species that have performed well on campus. Consult with campus maintenance staff and resources at the end of this document to evaluate plant lists for specific projects. Select additional species and evaluate current species using the following plant selection criteria.

- (1) Mt Vernon Campus has opportunities for connection with the surrounding agricultural context through planting selection. Rows of trees reminiscent of wind rows shelter pedestrian corridors through the parking lot. Repetition of this feature or other regional plant materials or practices are an opportunity to acknowledge the valley's agricultural heritage.
- (2) Select pest-resistant species to minimize application of pesticides or herbicides.
- (3) Use native and adapted species. Native plantings evolved to withstand Skagit County's wet winters and dry summers and are therefore generally good choices. Some species have proved adaptable to local conditions because they are versatile or evolved under similar conditions. These may also be good selections.
- (4) Keep plantings low and trees trimmed up high to maintain sightlines for CPTED.
- (5) In order to prevent pests or diseases of a specific tree species taking out a whole group of plantings, mix plant species and don't create vast stands or only use one species of street tree for more than a block.

ii) Planting- Best Practices

- (1) Maintain 3"-6" depth of mulch pulled away from the base of plantings in shrub and perennial beds, and a 3' dia. ring of mulch around the base of trees, min. Trees may benefit from mulching from their trunks to as far out as their driplines to reduce competition between turfgrass and surface roots. This mulched bed may be a good place for less competitive plantings.
- (2) Soil in new planting beds should be tested and recommendations for amendments followed when preparing new beds for planting. These recommendations should be based on the type of planting intended. For example, woody plantings have different requirements from herbaceous, and some plants do better and are more competitive in nutrient-poor soils.
- (3) Mt Vernon plantings should be placed to preserve views of the mountains.

LEED credits: SSc2-Brownfield Redevelopment, SSc5.2- Protect or restore Habitat, SSc6.x Stormwater Quantity and Quality, SSc7.1 Heat Island Effect, WEc1 Water-Efficient Landscaping, MRc5 Regional Materials

c) Irrigation

i) Equipment

(1) Drip Irrigation

'Drip irrigation' applies water directly into the soil reduces evaporation related loss of irrigation water. This can save between 5% and 20+% of the applied water. Drip systems generally cost between 10% and 20% more to install than pop-ups sprinkler systems so there must be a calculation which demonstrates that this extra cost is justified by the benefits—environmental and financial-- of water use reduction.

(2) Drip irrigation problem solving Model: "CV" dripper line by Netafim

(3) Drip irrigation is a relatively new technology. Many maintenance teams prefer traditional sprinkler systems which have been developed and are relatively standard. Earlier styles of dripper line required that it be placed on top of soil and mulch, leading to degradation by sun, maintenance damage, and vandalism. When installation requirements were not followed and pipe was installed below the surface the emitters became clogged, reducing the usefulness of the dripper line. New "CV" dripper line by Netafim has an improved emitter with a check valve which allows for burial of the pipe, thus eliminating this serious drawback. Though technology has overcome many problems, maintenance teams may still be reluctant to adopt drip, and it is not appropriate in certain settings. The following may help the designer address some of the most common problems and concerns.

(a) Locating Leaks:

One complaint is that a drip system does not allow maintenance staff to conveniently verify the operation of the drip zones; if a zone or portion of a zone stops functioning, the only way it is known is if the plants become stressed or die.

(i) Action items:

1. Monitor moisture levels, either by hand or with a moisture sensor
2. Install an emitter at the end of the zone to indicate system function.

(b) Emitter clogs

Another complaint is that the small size of the water emitting ports makes drip systems vulnerable to clogging.

(i) Action items:

1. Install pre-filtering or screening to remove water-borne particles.

(c) New planting failure

The tighter soils of plant root balls absorb water more slowly. Until roots grow beyond the root balls, they are at a serious risk of drying out.

(i) Action Items:

1. Supplement with temporary sprinkler irrigation systems until new plantings are established

(d) Surface line breakage

Because of the placement of the drip lines near the surface, they are vulnerable to exposure and weathering, vandalism, or damage from bed maintenance.

(i) Action items:

1. Do not use drip irrigation in high-traffic areas, beds that are often disturbed or replanted, like annual beds, or steep or erosion-prone areas.
2. Make maintenance staff aware of location of lines.
3. Integrating drip systems at a facility
4. Trial run
Evaluate and gain experience with drip irrigation by establishing a trial bed before implementing it on a larger scale.
5. Involve staff in the decision to use drip irrigation. Their needs, suggestions, cooperation, and problem-solving will be a major factor in the success of this new technology.

(4) Sprinklers and Rotators

For use in shrub beds, ground covers, planting beds and smaller lawns.

Model: Hunter MP Rotator or similar. Hunter MP Rotators are recommended in all lawn areas and in shrub beds. The multi-trajectory rotating streams apply water at a slower application rate and in a more even distribution than traditional spray heads. Increased efficiency results in up to 30% water reduction compared to traditional spray nozzles. Other brands are developing similar products and may also be acceptable.

- (a) All sprinklers and rotors shall be part of a pop-up assembly. They shall pop up 4 inches in lawn areas and 6"-12" in planting beds, depending on the height of the planting.
- (b) All connections to rotors and sprinklers shall be to the bottom port of the pop-up body.
- (c) All sprinklers and rotors shall be connected to lateral pipe with pre-manufacture triple action schedule 40 or 80 swing joint assemblies.

(5) Rotors

For use in larger lawns and athletic fields. Rotors are less efficient and require separate zones for each head type. Where possible, use rotators instead.

Model: HUNTER I-40 or similar

ii) Installation Standards

When materials and equipment are well installed they provide superior performance and do so for a longer period of time and with less repairs and adjustments needed. These are savings that represent the sustainable practices. The following presents recommendations for detailing and specifying which will achieve these types of sustainability benefits.

(1) Backfill Materials

- Irrigation trench backfill should only use clean sand and soil. There should be no stone, gravel, and debris allowed in backfill material. Such materials damages pipe during the backfilling operations and over time will cause holes to be worn through pipe walls. Such pipe damage leads to wasting of water. Fixing such damage requires significant time and money.
- Where soils are rocky, pipes should be set on a 3 inch deep layer of clean sand or soil. This will protect the pipe from being damaged by the in-situ stone.

(2) Mainline, Lateral, and Sleeve Pipe

- All lateral and mainline pipes shall be schedule 40 PVC.
- Sleeves shall be schedule 80 PVC
- Sleeves shall be provided for all pipe and wire passing below paving and curbs and below or through walls. The sleeve shall be sized to allow for free and unhindered passage of pipe and wire and shall have an inside diameter at least 2 inches greater than the outside diameter of all pipe within.
- Sleeves shall extend at least 12 inches beyond the edge or face of pavements, curbs, and walls passing under.
- 1 1/2" size surveyors "Mag" nails shall be provide in the top of pavements and curbs and in the face of walls, 2" above finish grade. These sleeve marking nails shall be set directly above and centered on the sleeve below. Sleeves ends shall remain exposed or be exposed to allow the Owner to view the installation and approve location.

(3) Pipe Depth and Position

- All pipes should be installed with at least 18" and no more than 24" of cover.
- Pipes set at a common depth, with at least 3" of horizontal separation, also improves maintenance efficiency by allowing individual pipes to be located, exposed, and repaired without damaging and having to dig under other pipes. This reduces the time required to make a repair and reduces the chances of damaging another pipe during the repair operation.
- Pipe shall remain exposed until after inspection by Owner to assure compliant installation.

(4) Control Valve Assemblies

- Union fittings should be provided on both sides of the control valve and a manual shut off valve (ball valve) should be provided on the up-stream side of each valve.
- Only one control valve shall be installed in each valve box. Valve boxes shall be the rectangular type, standard size or jumbo sized as needed to fit the entire assembly within the box

- There shall be 1/2"-1" size round river pebble at least 10" deep below the entire area of each valve box. This stone shall be clean and free of dirt and debris. The valve shall be set on top of this layer of stone
- Valve boxes shall be set on brick or concrete pavers to prevent vertical deflection under load
- Pipe passing through the ends of valve boxes shall have at least 2" of clearance on the sides and 3" above, between the outside of the pipe and the valve box edges
- Each valve shall have a plastic label affixed indicating the zone number and controller designation on both sides. The zone number must match the number of the station in the controller which operates that control valve
- The top of the valve shall be set 6" below the top of the valve box lid
- The valve shall be set above the level of the pipes connecting at both ends and shall be brought up to this level with symmetrical nipples and elbows.

(5) Isolation Valves

- Brass, line size, ball type manual valves, with unions on both sides shall be installed on mainlines at all branches in mainlines, as needed to isolate mainline loops into at least two sections, and at no more than 500 feet on center (max
- Isolation valves shall be accessed via a standard rectangular valve box (standard or jumbo size as needed) with extensions as needed

(6) Drain Valves

- Manual drain valves shall be provided as needed to allow for gravity drainage of all mainlines and lateral lines. (There shall be no presumption that irrigation lines will be clear by 'blowing out'. Complete drainage must be achieved by gravity flow to the manual drain valves.)
- Provide a manual drain valve at all low points on mainline and laterals. Additionally a drain valve shall be provided just up-stream of each control valve and at one end of mainline piping passing through sleeves.
- Manual drain valves shall be connected to the bottom of piping being drained and the entire drain line and valve outlet shall be at least 2 inches below that level and be sloping positively to the drain outlet.
- Manual drain valves shall be 3/4 inch size brass gate valves pointed down into a 3 foot deep, 12 inch diameter round pebble-filled sump.
- 10" round valve box with schedule 40 PVC pipe shall be provided over and for access to the drain valves. There shall be at least 3 inches clear between piping to the valve and the edge of the access pipe and box. The bottom of the access assembly shall be set upon (3) 4x8 bricks.

(7) Quick Couplers

- 3/4" brass quick coupler shall be provided at a spacing of no more than 150 feet on center along mainline.

- The quick couplers shall be connected to the mainline with triple action pre-manufactured schedule 80 PVC swing valve assemblies.
- Quick couplers shall be installed in a 10" diameter valve box with (3) 4x8 bricks supporting the valve box base. Piping to the coupler shall have at least 3" of clearance above and 2" on all sides from the edge of the valve box wall penetration.
- The quick coupler shall be attached to a #4 rebar with (2) stainless steel screw adjustable ban clamps. The rebar shall extend up to 1/2" below the bottom of the coupler lid and be driven at least 24 inches into firm sub-grade soils
- The top of the quick coupler shall be set no more than 4 inches below the top of the valve box.
- The quick coupler shall be situated within the box as needed to allow for unimpeded connection.

iii) Strategies for Sustainability

- (1) Provide central monitoring and control of irrigation systems to allow for efficient and timely adjustment, automatic shutting down of areas when breaks occur, and collection of data for easy review of water use;
- (2) Provide in-ground moisture sensors to determine the moisture content of soils in the root zones to better understand how and when to apply water;
- (3) Select or supplement control stations with weather data features that automatically adjust watering to account for future precipitation.
- (4) Allow secondary lawn areas to go dormant during the summer months. Summer is a time when few students will be on campus and when water demand is highest. For safety purposes, sports fields should be irrigated as needed to maintain a soft playing surface.
- (5) Maintenance best management practices include the following:
 - (a) Mow with lightweight mulching mowers,
 - (b) Aerate,
 - (c) Top dress, and over-seed lawn
 - (d) Water deeply but infrequently to promote deeper root development, helping trees grow deeper, more stable roots, and lawns grow deeper roots that take advantage of environmental water and build up less thatch.

iv) Staff Training and Collaboration

- (1) Provide staff with training and educational resources to keep up on relevant science and technology, especially when introducing new irrigation strategies.
- (2) Consult maintenance staff when considering irrigation strategies. Take advantage of local knowledge and recognize staff capabilities and maintenance budget constraints.

v) Water Harvesting

Water harvesting reduces potable water applied to the landscape and purchased from utilities by collecting rainwater from roofs and impermeable surfaces, such as parking lots and plazas, and storing it for later use in irrigation. Unfortunately, Rain water harvesting for irrigation in the Pacific Northwest requires huge volumes of storage to compensate for the seasonality of rain and irrigation. The Mt. Vernon campus receives, on average, 33 inches of rainfall per year. With this amount of rainfall, water harvesting may be a feasible option, given sufficient storage. Storage options can take the form of an open reservoir such as a pond, or an underground storage facility. Underground storage and related pumping and piping can cost in the range of \$0.50-\$1.00 per gallon of water stored.

Perhaps a more feasible option is harvesting greywater--discarded building water produced by sinks and showers--for irrigation. A smaller volume of storage would be required, where greater was constantly replenished. In a campus setting, however, we have the same problem; more grey water is produced during the school year when less irrigation is required anyway.

Unless municipal water costs are extremely high, the costs of installing and maintaining water storage facilities rarely make economic sense. Water harvesting must be seen by the institutions as integral to their sustainability culture, its value based on ecology and the environment, rather than finances.

LEED Credits: WEc1-Water-Efficient Landscaping

vi) Design

Zoning

Subdivide areas to be irrigated by planting type and microclimate, that is, slope, sun exposure, and wind exposure, or any other factors that may affect water use. Further divide areas that require more water than the school water pressure can support. These subdivided areas are zones. Each zone operates on its own valve.

d) Paving



Abbotsford Saturna Tan

Wausau Tile EP-40, SRI=33.3

Wausau Tile EG-20, SRI=33.p

i) Pavers:

Size: 24"X24" square

Color: Tan

Finish: Exposed aggregate.

Use: Incorporate pavers in plazas and at site boundaries.

Model: Abbotsford Saturna HydraPressed Slabs have some precedence on site, as they were used at Mt Vernon Community College's Lewis Hall, in Tan. Please note, this product meets **LEED MRc5 Regional Materials**, but not **SSc7 Heat Island Prevention**. Consider a project's LEED credit list and a site's microclimate when deciding whether to use this product. Tan 24"X24" pavers are available from many other companies as well. For instance, very similar products with lower SRI values are available from Wausau Tile. Wausau's EG-20, a tan exposed granite tile, qualifies for **credit SSc7**. Wausau's EP-40, a tan EcoPremeir paver, contains shells and post-industrial porcelain qualifies for **SSc7 Heat Island Reduction** and contributes to **MRc4, recycled content**.

When considering an alternative product, consider whether the proposed pavers will clash with adjacent existing paving.

ii) Concrete:

(1) Walkways: Grey Concrete with a broom finish perpendicular to the direction of travel. Primary walkways- 10' wide. Secondary walkways- 8' wide.

(2) Plazas: Sand-blasted grey concrete.

LEED Strategies: **SSc7.1 Heat Island Prevention-Non-roof**: establish a maintenance plan to power-wash the walks every two years to maintain an SRI of at least 29.

e) A mow strip, that is, a buffer around obstacles in the lawn and along buildings, will simplify mowing, minimize edging and trimming, and reduce accidents and wear on equipment. Mow strips can be concrete, pavers, asphalt or even mulch that is renewed regularly, anything that simplifies the outline of obstacles and creates a simplified outline.

Mount Vernon – Civil Narrative Overview

Stormwater Management

Existing Conditions – The campus contains several stormwater connections to the public systems in both LaVenture and College way at the northwest, southwest and southeast corners of the campus. Onsite conveyance is generally provided by catch basins and underground piped system however there are a few open conveyance swales on the east side. Past projects on campus have complied with City stormwater codes and have provided detention and water quality facilities as required, however these facilities only serve the project being constructed. Examples include the stormwater detention pond south of the tennis courts which was constructed for Nelson Hall and an underground detention chamber system was constructed with the New Lewis Hall construction project.

A comprehensive approach to stormwater management provides more flexibility for implementing the individual pieces of the master plan development. Large surface ponds, raingardens, or similar facilities for water quality and flow control strategically placed on campus would allow projects to be constructed without providing localized and independent drainage systems. The City of Mount Vernon has currently adopted the 2005 Ecology Manual for stormwater design, however will be adopting the 2012 Ecology Manual sometime before the year 2016. The City and the State Department of Ecology will be requiring sites to implement low impact development strategies to mitigate stormwater and future campus development will be required to comply. The City has stated that they support low impact development strategies and emerging technologies and the College should utilize these to the maximum extent feasible.

A topographic “ridge” splits the campus into two drainage sub-basins, west and east. This dividing line which runs north-south is located approximately in alignment with the east end of the new Lewis Hall, up through the center of Hodson Building, and north along the west side of Roberts Hall. Projects constructed to the west of this line would be treated or detained in separate systems than projects to the east of this line.

10-15 yr Development Plan – The New Trades Building, the New Library / Classroom and all associated site improvements, as well as the large east parking lot expansion could feasibly be treated and detained in a shared stormwater facility located in the southeast quadrant of the campus, discharging to College Way. The YMCA building and Field Support / Fieldhouse buildings may be better served by a combined facility in closer proximity to those developments. Drainage features could be designed with sufficient excess capacity such that future long range development could drain to these features without requiring future upsizing or modification.

Long Range Development Plan – The new 75,000 sf building and associated site improvements would be treated and detained in a system discharging to LaVenture to the west. The new 30,000 sf building, 70,000 sf building, and Campus Quad could be served by the east drainage facilities constructed early in the 10-15 yr plan.

Water

Existing Conditions – Domestic water and fire protection water services on the campus have been previously converted to privately owned campus utilities. The service to the campus and within the campus to each building is adequate and no current issues have been identified.

10-15 yr Development Plan and Long Range Plan – It is anticipated that as existing buildings are removed and replaced with new buildings in the 10-15 yr plan and long range development plans that available water capacity for both systems will remain sufficient. Future “fire flow” studies may be needed to ensure adequate pressure and flow is available as demands increase with added building square footage. Utilities may be able to be extended from the existing east campus building utilities to serve the proposed Child Care Center, however further study would be necessary to determine existing capacity. Water loop extensions for both fire and domestic will be necessary to serve the new YMCA and Athletic Complex in the northeast quadrant of the campus. The near term design for the YMCA should ensure that utility sizes are adequate to support the future long range expansion of the athletic complex. As new buildings are constructed, existing water mains may be disrupted by building locations and localized relocation and reconstruction will be necessary. New fire hydrants strategically placed around new development may be necessary to provide adequate fire protection of structures.

Sanitary Sewer

Existing Conditions – The campus sanitary sewer waste is all routed to the west to two discharge locations in LaVenture. No known capacity problems exist.

10-15 yr Development Plan and Long Range Plan – No significant upgrades or main extensions are anticipated within the 10-15 yr plan for the main campus buildings; however some sewer system rerouting and reconnections will likely be necessary where new buildings are planned over the top of existing pipes. Utilities may be able to be extended from the existing east campus building utilities to serve the proposed Child Care Center, however further study would be necessary to determine existing capacity. A sewer main extension from College Way will be necessary to serve the YMCA building. The sewer main should be designed with sufficient capacity to convey additional flows from the athletic complex when constructed in the long range plan.

Utility Tunnel

Existing Conditions – The campus has a utility tunnel network routed to many buildings throughout campus. The tunnels are reinforced concrete approximately 6-feet high and 8-feet wide. The tunnel network was initially constructed with the original campus buildings and the system has expanded with subsequent projects. The steam plan feeds all buildings through tunnel connections, with the exception of Maintenance, Diesel Building, Fire Fighter Training Tower, Field House, Administrative Annex, McIntyre Hall, East Campus Building, Child and Family Learning Center, and the Greenhouse.

10-15 yr Development Plan and Long Range Plan – It is expected that major new building construction projects study the feasibility of constructing extensions of this tunnel system as it is considered an important asset of the utility system on campus. Given the expense of the tunnel network, it is not anticipated that the tunnel network would extend out to the YMCA and long range athletic complex to the north east.

Natural Gas

Existing Conditions – Natural Gas is provided by Cascade Natural Gas. The campus is supplied by a gas main on LaVenture Road which provides service to the Boiler Building near the north part of campus. The gas is routed through a valve and meter cluster at the boiler building and is subsequently routed to multiple buildings on campus including Central Receiving, Diesel building, Roberts Hall, Hodson Hall, Cardinal Center, and Duvall Pavilion. A gas connection in LaVenture provides separately metered gas service to Angst Hall and the Greenhouse. McIntyre Hall has a separate gas meter and service feed from College Way.

10-15 yr Development Plan and Long Range Plan – Future main campus buildings will infill spaces resulting from the removal of existing campus buildings. It is anticipated that gas services could be reconnected to the new buildings provided pipe sizes are adequate to serve the new demands. Calculations will be needed for each building during detailed design to determine if new gas piping is required. A new gas main extension from College Way will be required for the new YMCA and Field House and future athletic complex. It would be desirable that gas main constructed for the YMCA will have sufficient capacity for the future demands of the athletic complex.



UTILITY LEGEND

EX FIRE LINE	
EX SEWER	
EX WATER	
EX STORM	
EX GAS	
EX UTILITY TUNNEL	



EXISTING CONDITIONS

SKAGIT VALLEY COLLEGE

COUGHLIN PORTER LUNDEEN
STRUCTURAL · CIVIL · SEISMIC ENGINEERING



UTILITY LEGEND

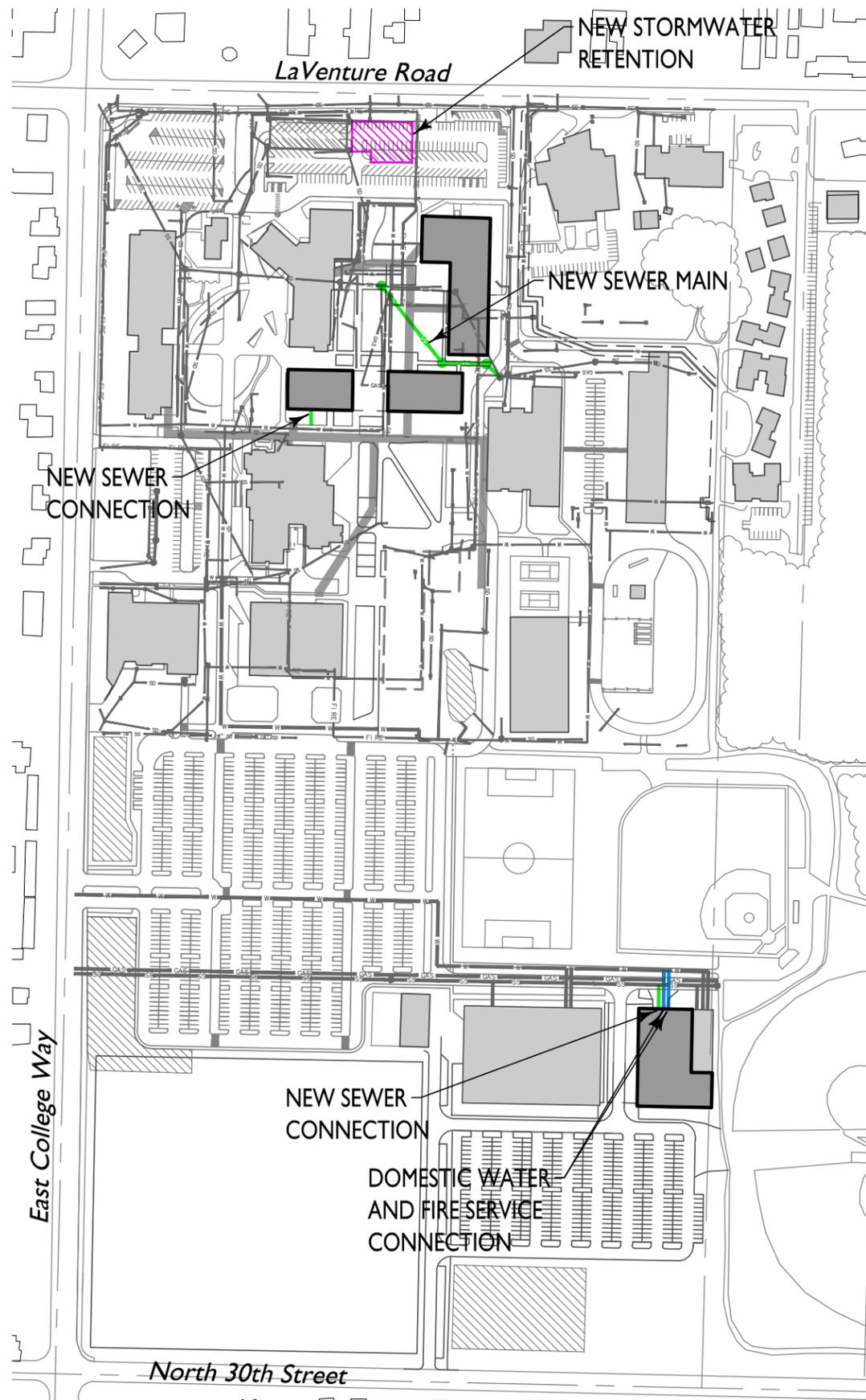
EX FIRE LINE	
EX SEWER	
EX WATER	
EX STORM	
EX GAS	
EX UTILITY TUNNEL	
NEW FIRE LINE	
NEW SEWER	
NEW WATER	
NEW STORM	
NEW GAS	



10 - 15 YEAR

SKAGIT VALLEY COLLEGE

COUGHLIN PORTER LUNDEEN
STRUCTURAL · CIVIL · SEISMIC ENGINEERING



UTILITY LEGEND

EX FIRE LINE	— FI RE —
EX SEWER	— SS —
EX WATER	— W —
EX STORM	— SD —
EX GAS	— GAS —
EX UTILITY TUNNEL	— —
NEW FIRE LINE	— FI RE —
NEW SEWER	— SS —
NEW WATER	— W —
NEW STORM	— SD —
NEW GAS	— GAS —



12.3 ELECTRICAL - MOUNT VERNON CAMPUS

LONG TERM

INFRASTRUCTURE – MOUNT VERNON CAMPUS

ELECTRICAL SYSTEMS

Power:

The electrical service for the Mount Vernon campus consists of a primary utility service from the local utility, Puget Sound Energy (PSE), at 12,470 Volts, 3 phase. The point of electrical service for the campus is a pad-mounted primary utility metering cabinet located immediately north of the Northwest Career and Technical Academy building, fed from PSE utilities on North Laventure Road. A pad-mounted primary sectionalizing cabinet at this location – labeled “PRIMARY SWITCHGEAR #1” – serves as the SVC campus electrical disconnect as well as the origination point for two primary radial feeders serving additional primary power distribution equipment on campus.

Per the available as-built drawings, the primary service consists of a single primary feed with 3#350kcmil, 15kV cables providing a total system capacity of 390 Amps, assuming copper MV-90 cables, based on the 2011 National Electrical Code, Table 310.60(C)(77). The campus primary distribution feeders consist of 3#3/0 copper, 15kV rated cables each protected by 200 Amp fuses.

Two lineups of primary power metal-enclosed switchgear - labeled “PRIMARY SWITCHGEAR #2” and “PRIMARY SWITCHGEAR #3” distribute primary power to the individual campus buildings and secondary distribution points. Both of these switchgear lineups are a double-ended configuration with a tie-switch, with each switchgear lineup feed by two primary feeders with feed-thru primary terminations; campus primary power feeder #1 serves one end and primary power feeder #2 serves the other end.

PRIMARY POWER SWITCHGEAR #2 is located outdoors, in a freestanding outdoor enclosure, just south of the Maintenance Building and distributes power to many of the buildings at the north end of campus including the Boiler Building, Reeves Hall, Hodson Hall and Maintenance and Diesel Buildings. PRIMARY POWER SWITCHGEAR #3 is located indoors, within an electrical room southeast of Building 3, and distributes power to many of the buildings at the central and south parts of campus including Angst Hall, Ford Hall, Roberts Hall, Campus Center, Library, Duvall Pavillion, Administrative Annex and Lewis Hall, which is under construction.

Primary power distribution system feeders consist of a mix of underground feeders in ducts and conduit feeders installed with an extensive campus tunnel system. The tunnels reach most buildings on campus and typically are 6 feet tall by approximately 8 feet wide. The College would like to extend the tunnel system as the campus expands.

Emergency Power:

An emergency/standby generator system does not exist on campus, except for very select locations. One generator provides emergency/standby power to the campus data center at Roberts Hall and a second generator provides emergency power for McIntyre Hall. Emergency power needs are generally addressed at the building level with individual batteries for lighting and fire alarm systems. Server rooms and IT infrastructure, with the exception of the campus data center, are not currently backed by a standby power system.

Site Lighting:

Campus site lighting consists of a mix of pole-mounted luminaires for area lighting, bollards and building-mounted lighting. Campus site lighting luminaire types vary; a campus standard luminaire is not currently identified. A recent energy services project replaced some campus lighting with pole-mounted LED luminaires. Per SVC personnel, the existing site lighting system is performing well, with no perceived deficiencies for illumination levels and light quality.

Power and lighting controls for campus site lighting are via individual buildings. For future projects, as the campus grows, consideration should be given to use of a campus power and controls system independent from the buildings for flexibility and consistency.

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ENGINEERS



Fire Alarm System:

A campus style, networked fire alarm system does not exist at the Mount Vernon campus. Most building systems report "Alarm" and "Trouble" signals back to a Siemens fire alarm panel in the Campus Center building, where the campus dialer is located. Numerous fire alarm system manufacturers are installed on campus. For future projects, as the campus grows, consideration should be given to use of a campus fire alarm network. A campus network would provide more reliability, operational flexibility and maintenance consistency.

CONSIDERATIONS FOR ELECTRICAL SYSTEMS

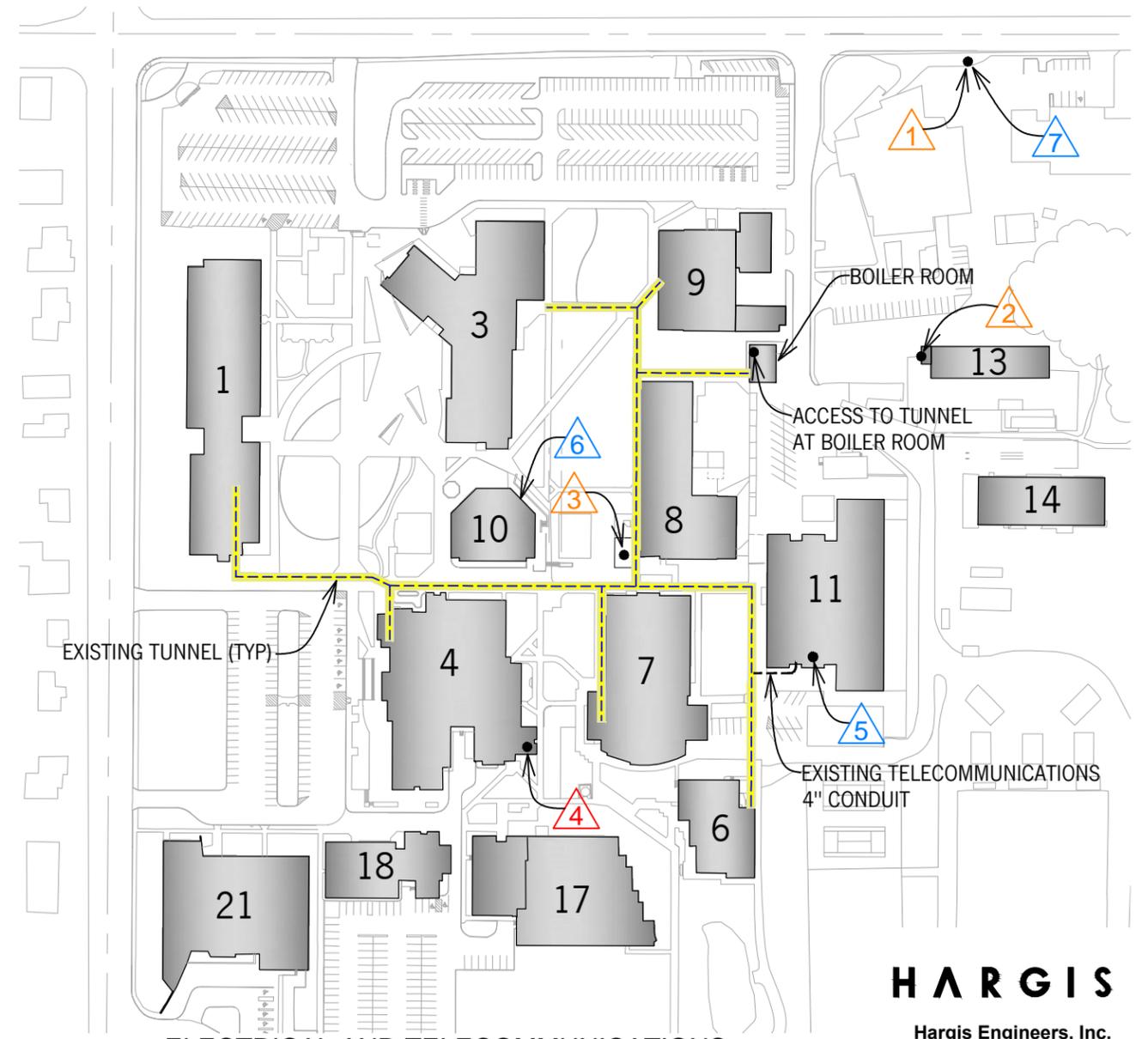
1. Maintain existing campus primary electrical service. Protect and maintain existing primary switchgear on campus. Continue to utilize existing utility tunnel system for building utilities. Extend tunnels to new buildings where practicable.
2. As replacement projects are implemented as part of the new master plan, we recommend that consideration be given to addition of a second utility primary power service from the east or south side of campus, as well as new primary power switchgear to provide a level of redundancy to the campus utility system while providing options for offloading some of the building services from the heavily utilized Primary Switchgear #2 in the middle of campus. Access to the existing tunnel system will be critical. We would recommend the campus primary power service be considered as part of the proposed Library/Classroom/Administration Building replacement project.
3. Incorporate state-of-the-art electrical systems into new and renovated buildings.
4. Incorporate electrical systems that are low-maintenance. For systems (e.g. fire alarm, lighting controls, etc.), consider standardizing on a couple of manufacturers to reduce impact on maintenance and operations.
5. Incorporate electrical systems that allow for flexible learning environments.
6. Incorporate state-of-the-art energy efficiency strategies into lighting and electrical systems to optimize energy performance and minimize carbon footprint.
7. Incorporate distributed, renewable energy systems where viable.

CAMPUS BUILDINGS

1. ANGST HALL
3. LEWIS HALL
4. KNUTZEN CARDINAL CENTER
6. NELSON HALL
7. DUVALL PAVILION
8. HODSON HALL
9. REEVES HALL
10. FORD HALL
11. ROBERTS HALL
13. MAINTENANCE BUILDING
14. DIESEL BUILDING
17. COLE LIBRARY
18. ADMINISTRATIVE ANNEX
21. MCINTYRE HALL

KEYNOTES

-  PRIMARY POWER SERVICE, UTILITY METER AND PAD-MOUNTED PRIMARY POWER SWITCHGEAR #1
-  OUTDOOR PRIMARY POWER SWITCHGEAR #2
-  INDOOR PRIMARY POWER SWITCHGEAR #3
-  CAMPUS FACP & DIALER (SIEMENS CERBERUS)
-  CAMPUS DATA CENTER W/ GENERATOR BACKUP
-  CAMPUS FIBER HUB
-  INTERNET SERVICE POINT



**ELECTRICAL AND TELECOMMUNICATIONS
 MOUNT VERNON EXISTING CAMPUS PLAN**
 NOT TO SCALE

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12.4 TELECOMMUNICATIONS - MOUNT VERNON CAMPUS

TELECOMMUNICATIONS SYSTEMS

The telecommunications systems on the Mount Vernon Campus include a campus data center and a separate telephone room located in Roberts Hall. These spaces house the campus telephone system, servers, network equipment, cabling infrastructure, emergency notification and radio system head end equipment. The spaces are supported with backup power from a 120KVa generator and an 80KVa uninterruptible power supply (UPS), redundant air conditioning systems, and a fire suppression system.

There is redundant core networking equipment and mission critical equipment typically contains redundant power supplies connected to separate power circuits. The College implements a backup strategy for disaster recovery which includes copy to tape, disk-to-disk backup and mirroring of student data to an off-site location.

The data center has capacity to accommodate additional equipment and more capacity is being created as older equipment and technology is replaced with newer more compact systems. The data center and telephone rooms meet the IT needs of the College and are acceptable facilities for the foreseeable future.

The telecommunications rooms (TR) in the other buildings vary with respect to size, power and cooling capacity and may share the space with other maintenance and storage functions.

Backup power to equipment in TR spaces is provided by standalone Uninterruptible Power Supply (UPS) units. These provide temporary power in the case of power outage, but the UPS units do not have the capacity to provide temporary power for a period of time that allows support staff to complete an orderly shutdown of equipment. Independent UPS units also require regular maintenance and battery replacement.

The telecommunications cabling pathways consist primarily of cable trays located in an extensive tunnel system. However, there are portions of the campus pathways which are restricted in size, congested with cabling and do not provide the capacity for additional cabling. Most importantly the pathways to the data center consist of underground conduits to the tunnel system which are at capacity and do not have room for additional cabling to be installed. The tunnel system to the Library is restricted in size and requires crawling to reach the Library. The Administrative Annex and McIntyre Hall are served by underground conduits which have limited capacity to accommodate additional cabling.

The campus is currently served by a 100Mb/sec optical fiber Internet service from the state of Washington's K-20 network. Current data indicates that network traffic peaks at 40 – 50 Megabits per second.

The optical fiber and copper telephone service cabling come to the site from a pole line located on North Laventure Road. The service cables are then routed via underground conduits to the data center in Roberts Hall.

The wide area network services also include T1 data circuits to the San Juan and South Whidbey campuses for distance learning and video conferencing. The demand for interactive video services at these remote campuses is increasing.

The existing Internet and telephone service is adequate for the current level of voice, video and data traffic and can be expanded to provide additional capacity as demand increases for higher-bandwidth applications such as video conferencing.

The cabling infrastructure consists of unshielded twisted-pair (UTP) horizontal station cabling and optical fiber and multi-pair copper backbone cabling systems.

The horizontal station cabling includes older category 3 for telephony applications and category 5, 5e, 6, and 6A cabling for data applications. The majority of existing horizontal cabling consists of category 5 or older cabling and only supports 10 Megabit (Mb) per second applications. There is some category 5e and 6 horizontal cabling installed on the campus which supports 1 Gigabit (Gb) per second applications. Category 6A cabling which supports 10 Gb per second applications is being installed in the new Lewis Hall building.

Multimode optical fiber backbone cabling connects all the campus buildings. Higher bandwidth singlemode optical fiber cabling is installed from Roberts Hall to Angst Hall, Ford Hall, and the East Campus Building. Singlemode cabling has also been installed from Ford Hall to McIntyre Hall. Ford Hall was the original fiber hub for the campus and still houses a substantial portion of the fiber infrastructure and cross-connects. The newer optical fiber backbone supports 10 Gb/sec bandwidth to some buildings but other buildings are operating with only 100Mb/sec bandwidth.

Multi-pair copper backbone cabling is installed from the Telephone Room to each of the buildings to provide telephone service throughout the campus.

Wireless Networks:

The campus wireless network includes Wireless access points (WAP) located in buildings throughout the campus. The wireless network is administered with a central

service and a point-to-point wireless connection serving Connite House located on the southeast corner of the campus.

Students and staff are encouraged to bring their own wireless devices (BYOD) to the College. The quantity of personal mobile devices (e.g. cell phones and tablets) present on campus is increasing rapidly and this trend will require additional bandwidth and network resources.

The existing telephone system provides an acceptable level of telephone service for the current set of users on the campus. However the system will need to be expanded as the campus grows and consideration should be given to upgrading the system to provide Voice over IP (VoIP.)

The campus cabling and network infrastructure supports a variety of administrative and instructional applications including internet access, file and print services, virtual desktops, and email applications.

However, bandwidth demands on the network are increasing, driven in part by new instructional models and applications. Students and staff are accessing more and more content on the internet and students are remotely accessing content located on the College's network. Further, much of the content is in audio and video formats, graphical intensive or interactive all of which require significant network resources and bandwidth to provide an acceptable level of service. A new administrative system scheduled for 2015 will require substantially more bandwidth than the current system.

The College is also moving quickly forward with virtual desktop workstations and thin clients where the applications and files reside on virtual servers located in the data center. This technology requires high-speed networks to effectively transport the data and provide the user with acceptable response times. It also increases the need for network fault tolerance and redundancy as the system relies on the network to operate.

The campus includes some dedicated distance learning classrooms equipped with extensive audio video systems and control rooms. There are also digital signage displays placed at various locations throughout the campus with the video content distributed over the network.

The existing cabling and network equipment infrastructure does not provide adequate capacity and bandwidth and at times there are network bottlenecks and delays in network response times.

CONSIDERATIONS FOR TELECOMMUNICATIONS SYSTEMS

1. Roberts Hall Renovation

- Maintain the existing data center in Roberts Hall to avoid the costs of relocating the data center and minimize impacts to on-going operations at the College.
- Address the restricted conduit pathway from the tunnel to the campus data center. Due to the depth of the existing tunnel in this area of the campus, extending the tunnel to Roberts Hall may require building the tunnel extension above the existing tunnel and including a vertical transition such as a ship ladder or other method.

2. Library Project

- Address the restricted underground conduit pathway serving the Library by including a new full height tunnel extension of the existing tunnel to the Library to increase the pathway capacity and accommodate additional cabling.
- Include additional site pathways to East College Way for a second Internet service that can serve as backup to the current single-provider service and avoid potential service outages.
- Replace the existing campus fiber backbone cabling and fiber hub infrastructure located in Ford Hall with new fiber backbone cabling and fiber hub facility. The new fiber cabling and infrastructure would provide higher network bandwidth and capacity and allow the space in Ford Hall currently housing the existing fiber hub facility to be repurposed. The fiber hub facility would be located on the south end of the campus and connected to the data center in Roberts Hall. Shorter runs of fiber would be installed from the hub to other buildings and would avoid the cost of installing new fiber from each building to Roberts Hall. The fiber hub could also provide redundant pathways and could include backup facilities in case the existing data center in Roberts Hall was impacted. One option is to locate the fiber hub in the new Library building since that building would be the next capital project.

3. General Considerations

- Specify the most current industry-standard twisted-pair copper and optical fiber cabling to provide the bandwidth required to support the growing demand for wireless access, virtual desktop and cloud computing, interactive audio and video and other high-speed applications.
- Where funding is available replace the older horizontal cabling installed in buildings with new category 6A cabling
- Expand the campus-wide student and administrative wireless networks to increase coverage and capacity and support the growing number of wireless devices, users, and applications.

- Develop a comprehensive and integrated campus-wide security system including surveillance video, intrusion detection, emergency notification, emergency telephones, duress buttons and access control to implement and automate the College's security and safety objectives, policies, and procedures and enable the College to quickly identify and respond to security threats and concerns.

12.5 LANDSCAPE ARCHITECTURE - WHIDBEY ISLAND CAMPUS



SKAGIT VALLEY COMMUNITY COLLEGE MASTER PLAN LANDSCAPE STANDARD

EXISTING SITE CONDITION NARRATIVE:

Skagit Valley College's Whidbey Island campus is located in the City of Oak Harbor and adjacent to a military facility on an oceanfront site that slopes down steeply to Puget Sound. The smell of the ocean and expansive views give the site a unique character. The rarely used military road bisects the campus, dividing the upper and lower segments. Water flows from a rain garden feature at the southwest corner of campus down to a lower infiltration area.

CHALLENGES:

The master plan addresses the site's steep slopes, the circulation needs and preferences of college students and staff, and the site's unique maritime character.

Steep Slopes

A substantial vertical separation between the upper and lower campus creates opportunities for views, but also challenges to ADA compliance and circulation - both vehicular and pedestrian. Several student activity spaces in the lower buildings are under-used due to the vertical separation from the more active upper campus. The slopes leave few level outdoor spaces for students to gather comfortably, particularly those spaces which are adjacent to active circulation routes. The slopes have also prohibited the creation of spaces where people can appreciate the spectacular view of the water; the existing buildings block the way, leaving only narrow view corridors between them.

Accessibility and Circulation

Navigating the steep site is especially challenging for disabled users. Currently, a series of ramps and stairs connects the upper and lower campuses. They dominate the landscape and do not appear to meet ADA standards. Compounding the separation, the military base access road bisects the campus, creating a wide, empty space. Fortunately, the campus is small enough that wayfinding is not an issue, but due to size constraints and topography, there are no spaces suitable for outdoor classroom use.

CAMPUS GOALS:

Sustainability

Skagit Valley College includes environmental awareness in its school vision. The Whidbey Island campus in particular is sited at an environmentally sensitive location. Sustainable practices on campus are also learning opportunities. Employees and contractors involved in capital and maintenance components should look for opportunities for collaboration or tie-ins with curriculum. LEED projects will require additional documentation and sustainable strategies in plant selection, stormwater management, and irrigation.

Plant selection:

- Native and adapted to coastal soils and conditions
- Drought tolerant
- Disease and pest resistant
- Low maintenance

Stormwater management:

- Infiltration: minimizing paving, using porous paving and rain gardens
- Filtration: filter strips, settling ponds, and infiltration areas
- Trap and treat stormwater as close to the source as possible (downstream strategies are more expensive and damaging)

Irrigation:

- Low-water rotators
- Drip irrigation
- Weather and moisture monitors
- Water only high-priority lawns

Safety and Security

CPTED (Crime Prevention Through Environmental Design) consists of strategies to help create places that deter crime. The basis of these strategies is the conclusion of academic studies on crime prevention: the prime deterrent to crime is not the severity of the punishment, but the perceived risk of getting caught. Crime prevention is a critical consideration because students are living on campus and utilizing facilities at all hours. The following strategies have been shown to deter crime.

- Landscape – utilize low shrubs and high tree canopies to provide open site lines
- Surveillance
- Access control
- Territorial reinforcement
- Maintenance
- Activity support
- Lighting

Inclusion and Accessibility

Skagit Valley College is committed to diversity and inclusion. These values manifest in the landscape through Universal Design. Universal design goes beyond ADA compliance. It is a school of thought that advocates accommodation of as many people as possible, rather than just the most common type of person.

Routes that are technically ADA may meet the law but fail to welcome students and staff who are physically handicapped. Practically and emotionally, this can be a significant setback. A truly inclusive campus experience accommodates everyone together.

By applying this principle to the landscape, designers actually make the campus easier to negotiate for everyone. Routes accessible for a wheel chair are also more accessible for elderly or pregnant people, people with carts or strollers, people wearing high heels, maintenance staff, people with crutches, walkers, or canes, or even just people carrying heavy books.

OVERALL LANDSCAPE MASTER PLAN NARRATIVE:

Pedestrian Circulation

The master plan strengthens the connection between the upper and lower campus by providing direct sightlines and easy movement between the levels from the entry plaza. As part of phase one, an inviting, gently-sloped lawn will entice users to the lower level. Broad steps in phase one, in conjunction with a conveniently located elevator and bridge in phase two, make the connection easy for all users.

As part of phase two, the bridge will lead to the lower campus building, which will feature a front entrance terrace on the downhill side.

Parking and Vehicular Circulation

The Master Plan proposes low shrubs around the perimeter of the site to screen parking, and feature plantings to mark vehicular access points. These plantings will improve views of campus from outside and guide visitors toward entrances. Taller plantings have been set back to maintain safe sightlines for drivers and pedestrians.

Planting islands and shade trees have been added to parking areas. The trees will help shade the parking lot, which will reduce the heat island effect and shade parked cars. Rebuilding parking areas, as proposed in the master plan, is an excellent opportunity to switch to a permeable material, such as permeable asphalt, to reduce runoff and filter water through the water table, protecting Puget Sound.

The master plan minimizes the disruption and transforms the infrequently used military road into an opportunity for more usable space by paving segments of it with GrassPave or a similar product. The GrassPave portions of the road will combine the structural integrity to accommodate military vehicles with stormwater permeability and the aesthetics of traditional turf grass.

Building Entry Plaza

A building entry plaza has been added at the main entry of the upper campus. This will help users find the correct entry point and create a transitional zone that connects indoor and outdoor spaces. The seating will be sufficient to accommodate individuals or small groups, and have views of the drop-off area.

Aesthetics

The plant list also includes many native species. Using local plants and materials will give the campus a clear sense of place, not generic or anonymous, but uniquely Whidbey Island. The master plan retains the existing rain garden, which is a good example of a stormwater treatment strategy and an attractive feature.

In order to take advantage of the fantastic views and create more usable outdoor space, the master plan proposes a series of terraces and plazas. The entry plaza at the front of the upper buildings consists of two areas. The front area welcomes students at the drop-off at the lower edge of the parking lot. Curved stone benches create a central gathering space and a place to wait for a ride or people-watch. The second area of the plaza features naturalistic stone seating and leads people further back, between the two buildings to a space dominated by the spectacular view.

Whidbey Island Subdivided Plant Lists

Parking Island Trees

Adapted (non-native):

Trees

Botanic Name	Common Name	Mature Size	Notes
<i>Gleditsia triacanthos</i> var. <i>inermis</i>	Thornless Honeylocust	50'X50'	6' min. branching ht.
<i>Tilia cordata</i> 'Corzam'	Chancole Linden	35'X20'	6' min. branching ht.
<i>Ulmus</i> 'Frontier'	Frontier Elm	15' wide	6' min. branching ht.
<i>Ulmus</i> 'Homestead'	Homestead Elm	60'X40'	6' min. branching ht.
<i>Ulmus Parviflora</i> 'Emer I'	Athena Classic Elm	30'X35'	6' min. branching ht.
<i>Zelkova serrata</i> 'Greenvase'	Greenvase Zelkova	45'X40'	6' min. branching ht.
<i>Zelkova serrata</i> 'Village Green'	Village Green Zelkova	45'X40'	6' min. branching ht.

Formal Areas

Native:

Trees

Botanic Name	Common Name	Mature Size	Notes
<i>Betula nigra</i> 'Heritage'	Heritage River Birch	20'	
<i>Cornus</i> 'Eddie's White Wonder'	Eddie's White Wonder Dogwood	20'X15'	Shade
<i>Gaultheria shallon</i>	Salal	18"	
<i>Mahonia aquifolium</i>	Tall Oregon Grape	3'	
<i>Mahonia repens</i>	Low Oregon Grape Holly	3'	
<i>Myrica californica</i>	California Bayberry	6'	
<i>Pachistima myrsinities</i>	Oregon Box	24"	
<i>Paxistima canbyi</i>	Canby Paxistima	24"	
<i>Pseudotsuga menziesii</i>	Douglas Fir	100'X50'	
<i>Quercus garryana</i>	Garry Oak	60'X60'	
<i>Rosa nutkana</i>	Nootka Rose	3'	
<i>Spiraea betulifolia</i>	Shiny-leaf Spiraea	3'	
<i>Spiraea douglassii</i>	Hardhack	4'	
<i>Vaccinium ovatum</i>	Evergreen Huckleberry	5'	

Shrubs

Botanic Name	Common Name	Mature Size	Notes
<i>Arctostaphylos densiflora</i> 'Howard McMin'	Howard McMin Vine Hill Manzanita	36"	
<i>Arctostaphylos pumila</i>	Sandmat Manzanita	36"	
<i>Arctostaphylos uva-ursi</i>	Kinnikinnick	12"	
<i>Gaultheria shallon</i>	Salal	18"	
<i>Mahonia repens</i>	Low Oregon Grape Holly	3'	
<i>Myrica californica</i>	California Bayberry	6'	
<i>Pachistima myrsinities</i>	Oregon Box	24"	
<i>Paxistima canbyi</i>	Canby Paxistima	24"	
<i>Physocarpus capitatus</i>	Pacific Nine-bark	6'	
<i>Ribes sanguineum</i>	Red-flowering Currant	5'	
<i>Rosa nutkana</i>	Nootka Rose	3'	
<i>Spiraea betulifolia</i>	Shiny-leaf Spiraea	3'	
<i>Vaccinium ovatum</i>	Evergreen Huckleberry	5'	

Perennials and Ferns

Botanic Name	Common Name	Spacing	Notes
<i>Anthyrium filix-femina</i>	Lady Fern	24"	shade
<i>Camassia</i> ssp.	Camassia	8"	
<i>Deschampsia cespitosa</i>	Tufted Hairgrass	24"	
<i>Dicentra formosa</i>	Pacific Bleeding Heart	12"	
<i>Fragaria chiloensis</i>	Beach Strawberry	12"	
<i>Smilacina racemosa</i>	False Solomon's Seal	24"	shade

Adapted:

Trees

Botanic Name	Common Name	Mature Size	Notes
<i>Acer grandidentatum</i> 'Schmidt'	Rocky Mt. Glow Maple	25'X20'	4' min. branching ht.
<i>Acer griseum</i>	Paperbark Maple	30'X20'	4' min. branching ht.

<i>Acer rubrum</i> 'Bowhall'	Bowhall Maple	40'X20'	5' min. branching ht.
<i>Acer rubrum</i> 'Scarsen'	Scarlet Sentinel Maple	40'X25'	5' min. branching ht.
<i>Acer rubrum</i> straight species	Red Maple	50'X25'	5' min. branching ht.
<i>Acer saccharum</i> 'Commemoration'	Commemoration Sugar Maple	50'X35'	5' min. branching ht.
<i>Acer saccharum</i> 'Green Mountain'	Green Mountain Sugar Maple	50'X35'	5' min. branching ht.
<i>Acer saccharum</i> 'Legacy'	Legacy Sugar Maple	50'X35'	5' min. branching ht.
<i>Acer X freemanii</i>	Freeman Maple	40'X30'	5' min. branching ht.
<i>Aesculus x carnea</i> 'Briotii'	Red Horsechestnut	30'X35'	5' min. branching ht.
<i>Calocedrus decurrens</i>	Incense Cedar	30'X10"	branching to ground
<i>Carpinus caroliniana</i>	Musclewood	25'X20'	5' min. branching ht.
<i>Carpinus japonica</i>	Japanese Hornbeam	20'X25'	5' min. branching ht.
<i>Cornus controversa</i> 'June Snow'	Giant Dogwood	40'X30'	4' min. branching ht.
<i>Cornus kousa</i> 'Chinensis'	Kousa Dogwood	20'X20'	4' min. branching ht.
<i>Crataegus phaenopyrum</i>	Washington Hawthorn	25'X20'	4' min. branching ht.,thor
<i>Crataegus x lavalii</i>	Lavelle Hawthorn	25'X20'	5' min. branching ht.
<i>Davidia involucrata</i>	Dove Tree	40'X30'	5' min. branching ht.
<i>Fagus sylvatica</i> straight species	Silver Beech	50'X40'	6' min. branching ht.
<i>Magnolia denudata</i>	Yulan Magnolia	40'X40'	5' min. branching ht.
<i>Pinus nigra</i>	Austrian Pine	70'X30'	branching to ground
<i>Prunus x yedoensis</i> 'Akebono'	Akebono Flowering Cherry	25'X25'	5' min. branching ht.
<i>Quercus coccinea</i>	Scarlet Oak	60'X40'	6' min. branching ht.
<i>Quercus frainetto</i>	Italian Oak	35'X20'	6' min. branching ht.
<i>Quercus rubra</i>	Red Oak	60'X45'	5' min. branching ht.
<i>Sophora japonica</i> 'Regent'	Japanese Pagodatree	45'X40'	5' min. branching ht.
<i>Sorbus aucuparia</i> 'Michred'	Cardinal Royal Mountain Ash	35'X20'	4' min. branching ht.
<i>Styrax japonica</i>	Japanese Snowbell	25'X20'	branching to ground
<i>Taxodium distichum</i> 'Mickelson'	Shawnee Brave Bald Cypress	50'X30'	branching to ground
<i>Taxodium distichum</i> straight species	Bald Cypress	55'X35'	6' min. branching ht.
<i>Tilia cordata</i> 'Chancole'	Chancole Linden	35'X20'	6' min. branching ht.
<i>Tilia cordata</i> 'Greenspire'	Greenspire Linden	40'X30'	6' min. branching ht.
<i>Ulmus</i> 'Homsted'	Homsted Elm	60'X35'	6' min. branching ht.
<i>Ulmus Parviflora</i> 'Emer I'	Athena Classic Elm	30'X35'	6' min. branching ht.
<i>Zelkova serrata</i> 'Greenvase'	Greenvase Zelkova	45'X40'	6' min. branching ht.
<i>Zelkova serrata</i> 'Village Green'	Village Green Zelkova	45'X40'	6' min. branching ht.

Shrubs and Groundcovers

Botanic Name	Common Name	Spacing	Notes
<i>Abelia x grandiflora</i> 'Rose Creek'	Rose Creek Abelia	42"	
<i>Arbutus unedo</i> 'Compactum'	Strawberry Bush	6'	
<i>Berberis darwinii</i> 'Compacta'	Paleleaf Barberry	5'	
<i>Berberis stenophylla</i> 'Corallina Compacta'	Dwarf Coralhedge Barberry	36"	
<i>Berberis thunbergii</i>	Japanese Barberry	varies	
<i>Buxus microphylla</i> 'Compacta'	Little-leaf Boxwood	24"	
<i>Calluna vulgaris</i>	Heather	varies	
<i>Caryopteris</i> sp.	Bluebeard	36"	
<i>Ceanothus gloriosus</i>	Point Reyes Mountain Lilac	36"	
<i>Ceanothus</i> 'Julia Phelps'	Small-leaf Mountain Lilac	6'	
<i>Choisya ternata</i>	Mexican Mock-orange	5'	
<i>Cistus x corbariensis</i>	White Rock Rose	4'	
<i>Clethra alnifolia</i>	Coastal Sweet Pepperbush	4'	
<i>Cornus sericea</i> 'Islanti'	Istanti Red Osier Dogwood	4'	
<i>Cornus sericea</i> 'Kelseyii'	Dwarf Redtwig Dogwood	3'	
<i>Cornus sericea</i> straight species	Red Osier Dogwood	6'	
<i>Cotoneaster dammeri</i>	Bearberry Cotoneaster	2'	
<i>Cotoneaster horizontalis</i>	Rockspray Cotoneaster	4'	
<i>Escallonia</i> 'Compacta'	Compact Escallonia	4'	
<i>Genista lydia</i>	Hardy Dwarf Broom	24"	
<i>Hydrangea quercifolia</i> 'Pee-Wee'	Dwarf Oakleaf Hydrangea	3'	
<i>Ilex crenata</i> 'Compacta'	Japanese Holly	3'	
<i>Juniperus communis</i>	Common Juniper	5'	
<i>Pachysandra terminalis</i>	Japanese Spurge	12"	
<i>Pieris japonica</i>	Andromeda	5'	
<i>Potentilla fruticosa</i> 'Red Ace'	Red Ace Cinquefoil	4'	
<i>Prunus laurocerasus</i> 'Mt Vernon'	Mt Vernon Laurel	30"	

<i>Rhapiolepis umbellata</i> 'Minor'	Dwarf Indian Hawthorn	3'	
<i>Rhododendron</i> 'PJM Princess Susan'	Compact PJM Rhododendron	4'	
<i>Rhus aromatica</i> 'Gro-low'	Gro-low Sumac	4'	
<i>Rhus typhina</i>	Staghorn Sumac	4'	
<i>Sarcococca hookeriana</i> var. <i>humilis</i>	Sweet Box	2'	
<i>Spirea japonica</i> 'Little Princess'	Little Princess Japanese Spirea	30"	
<i>Spirea japonica</i> 'Magic Carpet'	Magic Carpet Japanese Spirea	30"	
<i>Viburnum acerifolium</i> 'Nana'	Dwarf Cranberrybush Viburnum	30"	
<i>Viburnum davidii</i>	David Viburnum	4'	
<i>Viburnum dentatum</i>	Arrowwood Viburnum	5'	
<i>Viburnum trilobum</i> 'Compactum'	Dwarf Cranberrybush Viburnum	30"	

Perennials, Grasses and Ferns

Botanic Name	Common Name	Spacing	Notes
<i>Achillea</i> 'Coronatin Gold'	Coronation Gold Yarrow	18"	
<i>Achillea millefolium</i>	Yarrow	18"	
<i>Aster</i> sp	Aster	varies	
<i>Baptisia australis</i>	Blue Wild Indigo	36"	
<i>Dianthus</i> ssp.	Pinks	10"	
<i>Dierama pulcherrimum</i>	Angel's Fishing Rods	4'	
<i>Epimedium X rubrum</i>	Barrenwort	18"	
<i>Eupatorium purpureum</i>	Sweet Joe-pye Weed	36"	
<i>Geranium macrorrhizum</i>	Bigroot Cranesbill	18"	
<i>Helictotrichon sempervirens</i>	Blue Oat Grass	4'	
<i>Hemerocallis</i>	Daylily	24"	
<i>Heuchera</i> sp.	Coral Bells	12"	
<i>Iris</i> "Pacific Coast Hybrids"	Pacific Coast Hybrid Iris	12"	
<i>Liriope muscari</i>	Lily Turf	18"	
<i>Pennisetum alopecuroides</i> 'Hamlin'	Fountain Grass	3'	
<i>Penstemon</i> sp	Beardtongue	18"	
<i>Perovskia atriplicifolia</i>	Russian Sage	30"	
<i>Romneya coulteri</i>	Matilija Poppy	3'	
<i>Rudbeckia</i> sp	Brown-eyed Susan	18"	
<i>Sedum</i> ssp.	Stonecrop	varies	
<i>Solidago sempervirens</i>	Seaside Goldenrod	24"	
<i>Stipa gigantea</i>	Giant Feather Grass	5'	
<i>Zauschneria californica</i>	California Fuscha	18"	

Rain Garden/Wetland

Adapted (non-native):

Trees

Botanic Name	Common Name	Spacing	Notes
<i>Betula nigra</i> 'Heritage'	Heritage River Birch	20'	
<i>Salix hookeriana</i>	Hooker's Willow	15'	

Shrubs and Groundcovers

Botanic Name	Common Name	Spacing	Notes
<i>Cornus sericea</i> 'Isanti'	Dwarf Redtwig dogwood	4'	
<i>Gaultheria shallon</i>	Salal	18"	
<i>Spiraea douglassii</i>	Hardhack	4'	

Perennials, grasses, and Ferns

Botanic Name	Common Name	Spacing	Notes
<i>Caltha palustris</i>	Bog Marigold	12"	
<i>Carex kelloggii</i>	Sedge	18"	
<i>Iris versicolor</i>	Blue Flag Iris	18"	
<i>Juncus effusus</i>	Common Rush	18"	
<i>Mimulus ringens</i>	Monkeyflower	18"	

12.6 CIVIL - WHIDBEY ISLAND CAMPUS

Oak Harbor – Civil Narrative

Stormwater Management

Existing Conditions – The campus storm largely discharges from the site to the southwest into a public storm main which crosses Pioneer Way SE and outfalls into the bay. Oak Hall, Hayes Hall, the upper parking areas, and plaza areas discharge through this route. Old Main, Old Pioneer Way, and Sprague Hall discharge to the west into a separate storm pipe which flows west and discharges at the same outfall to the bay as previously mentioned. In previous years the campus has experienced sub surface flow problems resulting from seepage from an offsite pond located north of the Child Learning Center. Recent improvements by the City appear to have reduced seepage issues for the present time; however seepage is still evident within the upper parking lot following large storm events.

10-15 yr Development Plan and Long Range Plan – The City of Oak Harbor does not require storm water flow control for this campus given its proximity to the bay. As long as future development does not increase storm flows beyond the downstream storm system’s ability to function, then no future detention systems will be required. Water quality systems are required for pollution generating impervious surfaces and therefore a water quality system will be necessary as part of the proposed parking lot in the lower campus.

Water

Existing Conditions – Campus water services are provided by the City of Oak Harbor public utilities. Public water mains serve the campus from SE Regatta Drive and SE Pioneer Way. Domestic water services are metered separately at each building. Similarly each building has its dedicated fire sprinkler supply and sprinkler system. Past studies have indicated adequate fire flow on Campus. Fire Hydrants appear to be distributed around the campus. There are irrigation systems on campus, metered separately from the domestic water services.

10-15 yr Development Plan and Long Range Plan – The addition to Oak Hall may require upgrades to the existing water services should the demand of the new space require it. However it is feasible that no new water system would be required. New building construction on the lower campus will require new fire sprinkler and domestic water service extensions. Fire hydrant distribution and coverage must be considered at the time of development to ensure adequate fire protection is available.

Sanitary Sewer

Existing Conditions – The campus sanitary sewer service is provided by the City of Oak Harbor public utilities. Oak Hall and Hayes Hall are served by a private side sewer installed as part of the 2002 Oak Hall construction project. The side sewer discharges to a public manhole at the southwest corner of the site, near the intersection of SE Regatta Way and SE Pioneer Way. Old Main sewer waste discharges to a sanitary sewer main in SE Pioneer Way.

10-15 yr Development Plan and Long Range Plan – No new sanitary sewer would be required for the addition to the west side of Oak Hall provided any new plumbing fixtures can connect to the existing building pipe network. New building construction on the lower campus would likely construct a new sanitary sewer connection given the age of the existing Old Main sewer.

Natural Gas

Existing Conditions – Natural Gas is provided by Cascade Natural Gas. The campus is supplied by gas mains in SE Regatta Drive and SE Pioneer Way and serves Oak Hall, Old Main, Hayes Hall, and the Toddler Learning Center with individual meters for each building. There appears to be a gas main on the site adjacent to Old Pioneer Way which continues to the northeast to the Naval Base. It is the understanding of the College that this main provides service to the Naval Base so it must remain active, however it does not serve any buildings on the College campus.

10-15 yr Development Plan and Long Range Plan – New building construction on the lower campus will either utilize the existing gas service which feeds Old Main, or a new connection would be required and likely provided by the gas main within SE Pioneer Way.

12.7 ELECTRICAL - WHIDBEY ISLAND CAMPUS

INFRASTRUCTURE – WHIDBEY ISLAND CAMPUS

ELECTRICAL

Power:

The electrical service(s) for the Whidbey Island campus consist of multiple secondary utility services from the local utility, Puget Sound Energy. Each building has a separate utility service and corresponding utility meter. A campus primary power system does not exist.

Old Main and Sprague Halls are both fed from an overhead utility line from Pioneer Way to the south. A pole-mounted utility transformer is installed on campus. The other campus buildings are fed from utility lines located on Regatta Drive to the west. Both Oak and Hayes Halls have individual pad-mounted utility transformers, and associated underground utility feeds, located in the campus parking area north of the buildings.

Unless significant campus growth is planned, the existing secondary metering approach to power utilities seems appropriate. The existing Puget Sound Energy utility infrastructure can easily accommodate campus changes and growth.

Emergency Power:

An emergency/standby generator system does not exist on campus. Emergency power needs are addressed at the building level with individual batteries for lighting and fire alarm systems. Server rooms and IT infrastructure are not currently backed by a standby power system.

Site Lighting:

Campus site lighting consists of a mix of pole-mounted luminaires for area lighting, bollards and building-mounted lighting. Photo 1 represents the typical luminaire style observed on campus, utilized parking lot areas and the major pedestrian areas. Per SVC personnel, the existing site lighting system has some perceived deficiencies for illumination levels and light quality.



Photo 1: Typical Site Lighting

Power and lighting controls for campus site lighting are via individual buildings. For future projects, as the campus grows, consideration should be given to use of a campus power and controls system independent from the buildings for flexibility and consistency.

Fire Alarm System:

A campus style fire alarm system does not exist at the Whidbey Island campus. Each of the buildings has independent, standalone fire alarm systems with local dialers. Multiple manufacturers are present on site. For future projects, as the campus grows, consideration should be given to use of a campus fire alarm network. A campus network would provide more operational flexibility, maintenance consistency and reduced monthly charges for leased telephone lines.

Mass Notification System:

A campus mass notification system, manufactured by BRG Precision Products, is installed at the Whidbey Island campus. The system consists of head-end equipment located in Oak Hall and distributed wireless speaker systems located within individual campus buildings.

Master Clock System:

A campus master clock system does not currently exist on campus. Individual, non-synchronized clocks are installed in many locations in campus buildings requiring maintenance to address synchronization and time changing due to daylight savings time, etc.

H A R G I S

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MECHANICAL ELECTRICAL TELECOMMUNICATIONS

ENGINEERS

ELECTRICAL

1. Remove existing aerial utility services as buildings are removed. Serve new buildings with underground utility services.
2. As campus expands, provide emergency/standby generator to support main telecommunications equipment.
3. Incorporate state-of-the-art electrical systems into new and renovated buildings.
4. Incorporate electrical systems that are low-maintenance. For systems (e.g. fire alarm, lighting controls, etc.), consider standardizing on a couple of manufacturers to reduce impact on maintenance and operations.
5. Incorporate electrical systems that allow for flexible learning environments.
6. Incorporate state-of-the-art energy efficiency strategies into lighting and electrical systems to optimize energy performance and minimize carbon footprint.
7. Incorporate distributed, renewable energy systems where viable.
8. Use a campus master clock system for automatic synchronization and time changing. One option could include use of add-on clock modules to the existing mass notification system.

12.8 TELECOMMUNICATIONS - WHIDBEY ISLAND CAMPUS

TELECOMMUNICATIONS

The campus Equipment Room (ER) is located in the Oak Hall. There is sufficient power and cooling to support the current and future equipment installed in the space. The ER houses the campus telephone system, servers, network equipment and other system head ends. The ER has available floor and rack space to accommodate additional equipment. The telecommunications rooms (TR) in the other buildings vary with respect to size, power and cooling capacity and may share the space with other maintenance and storage functions.

Backup power to equipment the ER and TR spaces is provided by standalone Uninterruptible Power Supply (UPS) units located in the spaces. These provide temporary power in the case of power outage, but the UPS units do not have the capacity to allow support staff to complete an orderly shutdown of equipment. Independent UPS units also require regular maintenance and can be difficult to expand as technology changes and equipment is added.

As reliance on technology increases, the future plans for the campus should include a standby generator to provide a reliable backup power system for the mission critical network systems.

The design of campus facilities should include dedicated telecommunications spaces with adequate space, power and cooling capacity for equipment and future growth.

Existing campus pathways consist of underground conduits and utility vaults in a linear daisy-chain arrangement. Starting with Oak Hall, conduit pathways are installed to Hayes Hall and from Hayes Hall the underground pathway extends to Old Main and then from Old Main to Sprague Hall. This linear topology increases the potential for a planned or unplanned event impacting one pathway or building to also affect other building networks down the line.

The campus is currently served by a fiber optic service cable from Xfinity, the local cable TV provider, and a copper telephone service from Frontier Communications. The service cables come to the site at pedestals located on Regatta Drive. The service cables are then routed via underground conduits to the Equipment Room in Oak Hall. A 30Mb Internet service is provided from the state of Washington's K-20 service using the Xfinity fiber. The existing Internet and telephone service is adequate for the current level of voice, video and data traffic and could be expanded further to provide additional capacity if demand increases for higher-bandwidth applications such as video conferencing.

The cabling infrastructure consists of unshielded twisted-pair (UTP) horizontal station cabling and optical fiber and multi-pair copper backbone cabling systems. The horizontal station cabling includes older cabling as well as newer category 6 cabling. The newer cabling supports 1 Gigabit (Gb) per second applications, but will not support 10 Gb or faster applications. The existing horizontal cabling is adequate for current academic and administrative use, but will not be suitable for future applications.

Singlemode optical fiber cabling is installed from the Equipment Room (ER) located in Oak Hall to the TR in Hayes Hall. Old Main and Sprague Hall are connected using multimode optical fiber. The fiber backbone supports 10Gb bandwidth between Oak Hall and Hayes with 1Gb transmission to the other buildings. Multi-pair copper backbone cabling installed from the ER to each of the TR's provides telephone service throughout the campus.

The existing Avaya telephone system is aging but provides an acceptable level of telephone service for the current set of users on the campus. However the system will need to be upgraded or replaced as the campus grows.

The campus cabling and network infrastructure supports a variety of administrative and instructional applications including internet access, file and print services, virtual desktops, and email applications. The campus network also supports an interactive video conference application to the Mount Vernon Campus running over a dedicated T1 data service. The existing infrastructure and bandwidth is acceptable for this current set of applications, but network bandwidth may need to be expanded in future as network traffic increases due to additional wired and wireless users, and more interactive and bandwidth intensive applications.

Existing wireless networking system is limited to relatively few wireless access points in the buildings. There is a separate student wireless service provided by Xfinity.

Security Systems

The current security systems are limited in their scope with only the Old Main building containing a monitored intrusion detection system.

TELECOMMUNICATIONS CONSIDERATIONS

1. Oak Hall and Hayes Hall Additions
 - The existing data center located in Oak Hall is an adequate facility for the foreseeable future and should be maintained.

- The Oak Hall addition will impact the existing Wide Area Network service conduit pathway and the scope of the project will need to include intercepting the existing service entrance conduits and providing a new section of underground conduit through the planned addition.
 - Address the limited underground conduit pathways topology and provide separate pathways from the central Equipment Room in Oak Hall to each building in a star topology. This will support high-bandwidth cabling infrastructure and reduce the possibility of campus-wide service outages.
2. General Considerations
- Specify the most current industry-standard twisted-pair copper and optical fiber cabling to provide the bandwidth required to support the growing demand for wireless access, virtual desktop and cloud computing, interactive audio and video and other high-speed applications.
 - As campus grows and expands, the College should consider including exterior video surveillance cameras and emergency phones to support personal safety objectives.

12.9 RESEARCH AND ARTICLES

Building tomorrow's workforce

Skagit Valley College expands manufacturing program to meet local demands

By MARK STAYTON

@Mark_SVH

MOUNT VERNON — Big changes are underway at Skagit Valley College to help better prepare students for the Pacific Northwest's rapidly evolving and expanding industries.

Working with industry partners in manufacturing, health care, automotive technology, agriculture and more, the college has taken a second look at its organization from all levels: from big picture goals in a new strategic plan to ground-level program changes coming from additional specialty certificates and micro-certificates.

For the first time, the college has a strategic plan that includes specific, measurable priorities, SVC President Tom Keegan said. These priorities will be evaluated at least every three years to ensure they are current and relevant, he said.

One priority is listed as "aligning educational programs with regional and state economic development strategies."

Keegan said he holds quarterly meetings with representatives of regional industries, unions and economic development organizations to keep track of population, employment and industry growth trends.

"We want to make sure we are only adding and expanding programs that are supporting our existing and future economic development strategies," Keegan said.

Manufacturing has been the most affected program so far. The college formerly offered one certificate program in manufacturing foundations that was led by a parttime adjunct faculty member.

Six full certificates have been added within the last two years, including advanced composites, computer-aided technical design and manufacturing technology. Barry Hendrix was brought on full-time in January to head the program.

Like all program leaders at the college, Hendrix meets regularly with an advisory board of industry representatives who review curriculum and learned skills to offer advice on how courses could better prepare students.

Hendrix said input from the board has helped develop programs that teach not only the technical training needed for manufacturing jobs, but math, computing and soft skills like written and verbal communication that help make well-rounded, flexible workers. He said many local manufacturers, like Hexcel and Janicki Industries, are looking for technicians who pump out identical parts on an assembly line and work in groups to produce custom, one-off products.

"People have this misconception about manufacturing, that it's mass-production. Really, it's mass-customization," Hendrix said. "Making not the same thing over and over, but a similar thing with custom needs."

Numerous microcertificates — which often require one quarter of coursework — were added to the program in high-demand fields like composites windblade repair, quality assurance and technical drawing.

Hendrix said the microcertifications can be taken individually to diversify a worker's skills or can be strung together to flesh out a certificate or associate degree.

"We're trying to build a program that will allow anybody to get back into the workforce, or into the workforce for the first time," Hendrix said. He said the majority of his students are in workforce retraining.

Kevin Ridge, a 42-yearold former construction supervisor from Oak Harbor, said he is pursuing an associate degree in welding while earning microcertifications in manufacturing and composite windblade repair. He said he is working to find a job with a high-tech aviation manufacturer like Boeing or Janicki Industries.

"M y t r a d e i s d e a d," Ridge said during a break in his welding class at SVC's Mount Vernon campus. "I was thinking about going to the refineries, but I'd like to work inside. I've worked out there before, and the refineries are a young man's game."

Ann Avary, director of SVC's Northwest Center for Excellence in Marine Manufacturing and Technology, said courses in composites manufacturing and repair have greatly expanded in the last few years with plans to continue to evolve to meet expected demand in those fields.

She said the lightweight, high-strength materials are becoming more popular in all kinds of industries, from automobiles and aircraft to alternative energy and industrial uses.

"The use of composites materials is exploding exponentially," Avary said. "... the need for qualified technicians to repair those parts — whether it's a turbine blade, an airplane wing or an auto part — is going to grow and increase."

She said the composites windblade repair microcertificate will be offered for the first time this summer, and a course working with recycled composite materials will likely start in the fall.

Tom Doughty, vice president of administration for Janicki Industries, is the manufacturing representative at Keegan's quarterly meetings. Doughty said the company plans to continue working with the college to help produce competent workers locally for a changing industry.

"The best employees we can get are the ones that are already here," Doughty said. "We don't have to convince them that Sedro-Woolley or the Skagit Valley is a great place to live. They already know that."

Reporter Mark Stayton: 360-416-2112, mstayton@ skagitpublishing.com, Twitter:@Mark_SVH, facebook.com/byMarkStayton



Scott Terrell / Skagit Valley Herald

Skagit Valley College student Daniel Muir uses a metal inert gas-welding system on a roll bat the welding class installed in the school's auto club's drag-racing car.



Scott Terrell / Skagit Valley Herald

Jake Massey, who is scheduled to graduate from Skagit Valley College in June, cuts a metal plate using an oxy-acetylene torch.

Date: Jun 21, 2012; Section: Local; Page: A3

SVC's new aerospace composite class will begin in July

By MARK STAYTON

Staff Writer

A N A C O R T E S — A new composite manufacturing course at Skagit Valley College's Marine Technology Center is still accepting students for its first class on July 9, hoping to fill local and national demand for skilled workers.

The class is the result of a \$334,000 grant SVC received last fall, a portion of \$20 million in federal funds designed to help Washington community colleges provide cuttingedge educations for those looking to enter the state's growing aerospace industry.

The class will focus on materials used in aerospace applications, but learned skills are widely transferable to automotive and construction industries, among others looking to exploit composite materials' strength and light weight, said Ann Avary, director of the Center of Excellence for Marine Technology in Anacortes.

The 10-credit class will take students from basic construction and repair through advanced processes and tools over the course of the summer.

Avary said the composites lab at the center had previously focused on marine applications, but the federal grant will help the center expand to training for other industries. She said local companies manufacturing companies such as Janicki and Hexcel have worked with SVC to help acquire grant funds, and Boeing's 787 Dreamliner production and repair will need a steady supply of composites technicians.

Date: Jun 26, 2012; Section: Local; Page: A3

SVC sees jump in degrees awarded

MOUNT VERNON — The number of degrees, certificates and diplomas awarded by Skagit Valley College this year has jumped from last year by about 25 percent, with 1,277 students earning their credentials.

By August 2011, students had earned 1,018 degrees at Skagit Valley College for that year.

"Typically, when the economy is weak, we see an increase in enrollment at SVC," Arden Ainley, the college's public information officer, wrote in an email.

"So, the numbers at commencement this year are a reflection of the economy where, during the last two years, people came to us to train for a new career, to upgrade their skills, or to begin their college experience close to home," she said.

A total of 1,023 credentials are expected to be awarded this year from the Mount Vernon campus, with another 254 from the Oak Harbor campus. At Mount Vernon, students earned 605 professional or technical degrees and certificates, 380 transfer degrees and 38 high school diplomas.

There may be even more graduates this year, specifically from the Northwest Career and Technical Academy, as final numbers are not available until early August, Ainley said.

— Erinn Unger

Skagit Valley College Master Plan Update
Mount Vernon Campus

Meeting Minutes | SWOT Workshop

DATE: 20 February 2013

LOCATION: Skagit Valley College Mount Vernon Campus (MVC)

PRESENT:

Mary Alice Grobins (MAG)	Vice President for Administrative Services
Dave Scott (DS)	Skagit Valley College Facilities Director
Scott Hall	Automotive Technology Faculty
Jim Beattie	Skagit Valley College Facilities
Mindy Coslor	Skagit Valley College Library
Chad Pettay	Campus View Village
Carl Young	Foundation and International Programs
Al Willis	Information Technology
Alex Perez	Security
Dave Paul	Dean of Student Services
Tom Bates	Information Technology
Juan Blanco	Student Life
Cliff Palmer	Biology Faculty
Joan Youngquist	Academic Dean
Gary Knutzen	Athletics
Walter Schacht	Schacht Aslani Architects
Cima Malek-Aslani	Schacht Aslani Architects
Evan Bourquard	Schacht Aslani Architects

I.	Introduction – Overview of Master Planning Approach	
B.	<p>Overview of coordination with institutional planning: strategic, instruction, and technology plans</p> <ul style="list-style-type: none"> • The campus master plan is driven by the Colleges institutional planning. Facilities support programs. • The strategic plan and identified department and facilities needs will set direction for proposed improvements • Information collection through SWOT process, strategic planning, and departmental information gathering • Importance of coordination with current stormwater and other municipal and state requirements • Incorporation of current modes of education both in the classroom and 	

	online	
II.	SWOT Overview – what are the questions to answer	
A.	<p>SWOT analysis is designed to view the campus facilities relative to their 3 basic issues:</p> <ol style="list-style-type: none"> 1. Who is our Audience? <ol style="list-style-type: none"> a. What is the student profiles, who are our potential students? b. What is the makeup of current faculty and where is that trending? c. International students and “all-day” populations, how/where are they accommodated and what facilities are needed? 2. Where is higher education going at SVC <ol style="list-style-type: none"> a. Which are the unique identifying programs? b. What are the unique facilities? 3. Sustainability <ol style="list-style-type: none"> a. Environmental sustainability <i>and</i> sustainability of the institution b. What is the role of the physical campus in online education? 	
IV.	SWOT Review	
A.	<p>Strengths</p> <ul style="list-style-type: none"> - SVC is already a “brick and click” institution with established and integrated online programs - Strong high demand programs that already exist at SVC, include the following: <ul style="list-style-type: none"> o Nursing / Allied Health program o Parks Law Enforcement Program (PLEP) (1 of 9 in US) o Basic Law Enforcement Reserve Academy o Nationally accredited firefighting program o Broad range of professional technical programs <ul style="list-style-type: none"> ▪ Automotive ▪ Welding o An established Athletics program o Academic transfer o Professional technical programs are supported by math and academic programs which provides a strong foundation for transfer to 4 year institutions to pursue a BA. - The campus has a rare 85 year history in this location and a real sense of ownership within the community. <ul style="list-style-type: none"> o There is a strong Alumni network. o The campus is well known in its geographic region. o There are many repeat or legacy families coming back to SVC. - The campus serves several community/public functions which introduce non-students to campus. These events include: <ul style="list-style-type: none"> o Performing arts events at Macintyre Hall 	

	<ul style="list-style-type: none"> ○ Basketball and other regional sporting events on the weekends ○ The campus is considered a “neutral ground” for many city and county areas. - There are also several partnerships already in place within the community: <ul style="list-style-type: none"> ○ The field complex to the NE is part of county/city partnerships. ○ The Campus View campus housing project is a 501c.3 organization. ○ The gym is managed by the County through a partnership with local schools. ○ The campus is well served by public transit for the region (students are coming from as far away Bellingham/ Everett/Anacortes/Concrete). - The teaching environment is well regarded. <ul style="list-style-type: none"> ○ The faculty/Student ratios are good (small class sizes). ○ There is a strong culture of educational support and tutoring. ○ Several of the programs on campus are nationally recognized and unique. - The shared Firefighting training facility with local department is a unique partnership. - There are several campus life strengths, including: <ul style="list-style-type: none"> ○ There is already a dedicated space for veterans on campus. ○ The culinary program is a big benefit to campus (catering) and a well-regarded program. ○ The fitness center is well liked. ○ More student space is coming with the eventual Campus Center renovation. - Commuting to SVC is easier than commuting towards larger city centers like Seattle and Everett. 	
<p>B.</p>	<p>Weaknesses</p> <ul style="list-style-type: none"> - Campus parking (though plentiful) is perceived to be far from classes / campus and not well related to class locations: <ul style="list-style-type: none"> ○ This is particularly important to part–time students. - The wayfinding on campus is poor, making it difficult to find classes. <ul style="list-style-type: none"> ○ This also makes public use of the facilities difficult. - Some entries (especially those from the East parking lots) do not feel like entries to a campus, and are not welcoming to students. Coming to campus from the East is a “back door” experience. - There are no culturally specific spaces honoring student diversity or other cultures specifically as there are on other campuses. - Lines of sight are non-existent through campus, limiting views and making way finding difficult. - The campus has no perceived center. - The open spaces on the northern portion of campus are not welcoming, and there are some potentially dangerous overlaps between automotive testing 	

	<p>and pedestrian walkways. This part of the campus also feels very utilitarian.</p> <ul style="list-style-type: none"> - Stormwater detention ponds have trash problems, not well integrated into campus open spaces. - The facilities for Welding, PLEP, and firefighting (signature programs) are poor, and some of the buildings housing these programs are older and inflexible (Roberts & Diesel Halls mentioned). - There is a lack of student gathering and collaborative spaces for project based learning on campus. <ul style="list-style-type: none"> o The cafeteria one of the few spaces on campus that offers WIFI, and meeting space. It is used currently for informal student gathering. o The library has some gathering space, but the acoustical zoning is poor, making it difficult for staff to manage groups and group activities. - The library does not provide the services and amenities of a contemporary academic library. - Evening food on campus is non-existent – which is a problem for students coming after work. The hours of the culinary program are also limited. <ul style="list-style-type: none"> o It would be nice to have a “grab and go” Starbucks model to at least provide some kind of evening food – now students go off campus. - There is a lack of family support and no daycare on campus. This amenity is common on other similar sized community college campuses. - There is no faculty gathering space. 	
<p>C.</p>	<p>Opportunities</p> <ul style="list-style-type: none"> - The open areas to the North of the Campus View housing may be a potential opportunity to expand that program in the future. These parcels are already owned by the 501c.3 organization and have been identified for possible future expansion. - The international student and co-curricular programs could be strengthened through greater access to on-campus housing. - Running Start and the NWTC are a potential source of SVC students and partnership opportunities. - There is a potential to expand mentoring model of education on campus to draw more students. This is a current trend in contemporary education and ties in well with partnership opportunities. - Expanded industry partnerships could support and improve the large number of professional technical programs already offered. <ul style="list-style-type: none"> o Boeing is the largest employer and benefits from strong WA support. o Specialty manufacturing in the region (Janeke, Paccar, etc) could also be potential partners. - Growing populations in Mount Vernon and Skagit Valley are opportunities for student recruitment. - The existing strong hospital connections could be built upon – move to strengthen 	

	<ul style="list-style-type: none"> - Partnership with the MV YMCA could provide access to daycare on campus. - Partnerships with 4-year institutions could be strengthened. - SVC does not have a citizenship assistance program. This could be an opportunity to attract Latino or other non citizen students to campus. 	
<p>D.</p>	<p>Threats</p> <ul style="list-style-type: none"> - The for-profit institutions could move into the area as the local market grows. <ul style="list-style-type: none"> o These schools offer more flexible and modular enrollment which could be perceived as a benefit to some student populations. o These schools honor VA benefits. o These schools provide access to 4-year baccalaureate programs. o These schools offer open enrollment and credit for prior learning which are not available at SVC. - SVC has limited active learning facilities, and has a lack of program/use flexibility in many of the current facilities. - The current state tuition and budgeting environment makes competition for campus improvements more intense, limiting growth possibilities. - A 4-year institution could open a satellite campus, taking away FTE's from SVC. - Not maintaining the current level of athletic facilities / improvements could cause SVC to lose recruits. - Utility costs at on-campus housing coupled with other difficulties on that part of campus could impact co-curricular enrollment. - SVC is missing a career center / job placement program, which is offered at other similar sized institutions. 	

Skagit Valley College Master Plan Update
Mount Vernon Campus

Meeting Minutes | Workshop 3

DATE: 15 March 2013

LOCATION: Skagit Valley College Mount Vernon Campus (MVC)

PRESENT:

Mary Alice Grobins (MAG)	Vice President for Administrative Services
Dave Scott (DS)	Director, Facilities and Operations
Scott Hall	Automotive Technology Faculty
Lynn O'neill	AHE
Anne Ziomkowski	Counseling
Gary Knutzen	Athletic Director
Walter Schacht	Schacht Aslani Architects
Cima Malek-Aslani	Schacht Aslani Architects
Evan Bourquard	Schacht Aslani Architects
Carl Young	Director, Foundation and International Programs
Ken Lawson	Instruction
Alex Perez	Campus Security Officer
Chad Pettay	Resident Director, Campus View Village
Juan Blanco	Student Life Director
Joan Youngquist	Dean, Academics and Basic Skills
Tamara Carlson	Administration Services
Mindy Coslor	Director, Mount Vernon Library
Tom Bates	Dean of Information Technology
Dave Paul	Dean of Student Services
Al Willis	Information Technology
Jim Beattie	Assistant Director, Facilities and Operations

Please note: *These minutes are organized by issue. All discussion has been paraphrased to convey the speaker's intent. Please notify us immediately of any corrections or additions. Prepared by Schacht | Aslani Architects.*

Introduction:

Workshop 3 (findings and preliminary analysis) included a slideshow which accompanied the following discussion items. Please refer to the corrected slideshow for additional information and documentation. Please refer to the attached agenda for a review of the presentation contents. The following is a summary of the primary items discussed during and after the presentation.

Item	Programming Analysis Discussion	
1	International students: This group needs space as well as support. Would like to see consideration of the housing opportunities discussed as part of the master plan. Even though these areas are “off campus” and controlled by the non-profit, their integration is essential and future expansion should be considered as part of the overall master planning process. Consideration of off campus programs are not part of the Board for Community and Technical Colleges master plan requirements for capitol requests.	
2	Music program: The current space allocated in Ford and Hodson Hall is limited, and expansion of the music program and practice space is desired. Practice spaces were moved previously because of acoustical conflicts with other programs.	
3	Drama: Discussion of a scene shop and expansion of the drama program. Facilities in McIntyre Hall are not accessible to students.	
4	Baccalaureate programs: There are several baccalaureate programs being considered in addition to Environmental Conservation (listed in presentation), such as Business Development. At a minimum some of these programs will be consolidated.	
5	Consolidation/collaboration: Aligning programs such as Parks Law Enforcement Academy, Criminal Justice, and Fire Protection Technology would foster opportunities for collaboration between these related programs. This could also be applicable to the Automotive Technology and Diesel Power Technology programs.	
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II.	Site Analysis Discussion	
1	Diagram Corrections: <ul style="list-style-type: none"> • Campus View should be shown as a category on the program diagram • Nelson Hall should be professional technical • The Arts programs can be shown as academic space (no separate color) • Some Student Services are found in Campus Center and should be shown • The Tarro theater should be considered a community space • Student gathering space should be shown in Hodson Hall • The Automotive test track should be colored as part of “professional technical” 	EB
2	Pedestrian hazards at Roberts Hall: There is a safety hazard around Roberts Hall because of conflicts between auto traffic heading to the test track and pedestrians in the vicinity. All agreed that this area needs improvement. The test track is an	

	important part of the Automotive program and needs to remain in some form.	
3	Signage needs: Many students assume that Administrative Annex means “start here” and need to be redirected to campus center. This is part of a larger overall orientation and signage problem that will be addressed.	
4	Bikes: Where do bikes go now? What are the typical bike storage and route locations? DS to advise.	DS
5	Fire Access / loop: SAA observed that there is no existing fire loop, which means emergency responders may enter the wrong entrance and would have to leave campus as return. This lack of a loop road connection also causes confusion over internal campus circulation. DS to review diagram of existing fire lanes and advise if correct.	DS
6	Changes to off campus circulation: In progress city improvements to the regional street grid may change the primary flow to and from campus, and may route more vehicle trips and pressure onto N. Laventure Road. SAA to investigate and incorporate in Master Plan.	EB
7	Left turns from E College Way: It may also become more difficult to make the left turn into the primary parking area from E College Way as that arterial becomes busier. This should be incorporated into longer term plan thinking.	
8	Campus presence / where is the front door?: WS noted that with the steel up for New Lewis it is becoming more apparent that one wing of that building is oriented to the corner. Also the new open spaces and student services will shift the reorientation of campus to the East. Is this the new “front door” to campus?	
9	Parking on the corner: Some question about the parking on the corner, and whether that may be a better position for a future building or green space to better identify the campus, and “hold” the corner.	
10	Outdoor Rooms/axes: WS suggested that it may be possible to understand campus as a series of outdoor rooms, connected with thematic elements.	
11	ADA access: No ADA access map currently exists for the campus, and there are some areas where ramping and pathways exceed the maximum slopes. ADA access needs to be incorporated into overall campus planning and future projects. DS to verify if any studies have been completed on existing conditions. If not, it may be necessary to inventory the worst locations for access.	DS
12	North campus: Several observations were made about the benefits of consolidation of the buildings and programs on the north of campus. This area has been identified as a hazardous and underutilized area, and there is the potential for collaboration and resource sharing between the professional technical programs located there (which are currently in separate buildings). Automotive is also undersized for current student population. Some repairs are also needed to fire facilities.	
13	Campus parking and the loop road possibilities: it was noted that a campus loop road would also have benefits to campus circulation and locating parking. Currently	

	there are 5 separate entrances to 3 campus parking lots, and many new campus users are confused about the correct lot or entrance to use. A loop road connection around the north end of campus would allow for internal circulation of these users. In addition such a campus loop could become the organizing element for future infrastructure improvements.	
14	Loop road pedestrian conflicts: It was noted that a loop road might conflict with pedestrian access to Campus View Village to the North. WS suggested that this could be addressed with either a grade separation or traffic calming measures.	
15	Pedestrian circulation from the East / Administrative Annex: It was noted that the majority of parking and user traffic is from the East parking lots, and that the current east side of campus has no front door to greet students. It is a tight squeeze around the Administrative Annex which also continues to be an issue. Long term it may be worth considering removal of this building to improve access from the East side.	
16	East Campus / athletics: What are the possibilities for east campus expansion? This could be a home for the Athletic program expansion. This would also place those uses adjacent to the east parking areas, which are the most heavily used during events.	

End of minutes

Attachments:

Meeting Agenda

**Skagit Valley College Master Plans Update
Mount Vernon Campus**

11 April 2013

Meeting Minutes - Mount Vernon Campus

1.	Schedule for Remaining Workshops
	Workshop 4: April 11, 2013 Review Facility Development Program
	Workshop 5: May 7, 2013 Present Planning Options
	Workshop 6: June 4, 2012 Review Master Plan, Capital Plans, Campus Standards
2.	Program Analysis Findings
2.1	<p>Growing Professional Technical Programs</p> <ul style="list-style-type: none"> • Increase enrollment: Automotive, Manufacturing, Technical Design • Opportunities for expanded industry partnerships: Boeing, specialty manufacturing • Opportunities to align educational programs with economic development strategies in manufacturing, healthcare, Homeland Services • Facilities upgrades are needed in Auto, Welding, Diesel, Fire Program
2.2	<p>Strengthening Student Services & Support</p> <ul style="list-style-type: none"> • Library • Childcare • Tutoring • Support for Latino Students, International Students
2.3	<p>Developing New Programs</p> <ul style="list-style-type: none"> • School of Business & International Studies • Baccalaureate in Environmental Conservation • Center for Communications Studies
2.4	<p>Planning for Athletic Programs</p> <ul style="list-style-type: none"> • Need better support facilities: restrooms, concession stands, clubhouse, field house, practice space
3.	Site Analysis
3.1	Pedestrian Circulation: Pedestrian patterns emerging as east/west and north south but building obstacles prevent clarity of circulation to east and north parts of campus.
3.2	Vehicular Circulation: Vehicular patterns are limited to moving from separate parking lots back to main arterials. There is no through campus road that give a sense of orientation for vehicular circulation relative to the campus.
3.3	Age of Buildings & Remaining Lifespan: The Facility Condition Survey (FCS) from 2011 notes that some buildings on the campus have 5-15 years of life remaining. Planning for these buildings in the near term (10-15 years) is driving the master plan update.

4.	FCS Implications for Master Plan
4.1	Reeves Hall is currently scored in the FCS as a renovation or replacement project. The current renovation of the exterior will likely lower its FCS score and make it a future renovation project rather than replacement option. Reeves could be upgraded for program renewal by a series of minor works projects.
4.2	The other buildings on the 5-15 year list are listed in fair condition on the last FCS. While they are not yet ready to replace, they may be by the time the next capital request is written.
5.	Development Program
5.1	Paring buildings for replacement opens up future sites in center of campus for future growth. <ul style="list-style-type: none"> • Roberts could be paired with Diesel building for a Prof Tech replacement project. • Ford could be paired with the Library for a classroom/library replacement project.
5.2	Sequence is always a challenge for the first project when it occupies the same site. A Prof Tech building replacement and/or a Library Ford replacement could occupy roughly the same sites.
5.3	The Prof Tech replacement sets up the campus for improving vehicular circulation. Also there may be growth opportunity which could help with the FCS Scores.
5.4	The Library Ford Replacement also has potential to change the character of the campus from the east, where most people park and then enter the campus. Programs that foster retention by providing student support space such as the library could provide favorable scores for future capital requests.
5.5	The proposed replacement projects for the next 10-15 years based on securing capital funds from the State are attached.
6.	Sequence of Projects
6.1	The Executive Committee favored the Prof Tech project as the next major capital request but may elect to do the Library/Ford replacement first depending on how the best case can be made for programs at the time of the capital request. The Master Plan should allow for these options.
7.	Other Comments
7.1	A future Athletic complex on the east side of the current ball fields will be studied.
7.2	The proposed YMCA could also be built in this east strip of land owned by the College. This location would reinforce the existing shared community recreation area on the east side.
7.3	A decision on whether to keep the track will need to be made in the future. Removing the track would provide an area for future expansion for the campus.

Skagit Valley College Master Plan Update
Whidbey Island Campus

Meeting Minutes | SWOT Workshop

DATE: 12 February 2013

LOCATION: Skagit Valley College (SVC) Whidbey Island Campus (WIC)

PRESENT:

Mick Donahue (MD)	Skagit Valley College Vice President WIC
Mary Alice Grobins (MAG)	Skagit Valley College Vice President for Administrative Services
Dave Scott (DS)	Skagit Valley College Facilities Director
Cima Malek-Aslani (CMA)	Schacht Aslani Architects
Andrew Ellis (AE)	Schacht Aslani Architects
Jeff Stady	Academic Faculty SVC WIC
Jan Helm	Professional/Technical Faculty SVC WIC
Marilyn Haren	Student Services SVC WIC
Mary Darden	Student Services SVC WIC
Chari McRill	Library SVC WIC
Sherry Walker	Administrative SVC WIC
Dave Morgan	Information Technology SVC WIC
Susie Ames	Planning SVC WIC

I.	Introduction – Issues Driving Master Plan Update	
A.	<p>Enrollment Growth and Academic Programs</p> <ul style="list-style-type: none"> • Enrollment growth strategies will dictate course offerings and drive the need for campus facilities. • Possible enrollment growth strategies include offering more courses that prepare students for ‘in-demand’, vocationally oriented jobs. Program examples included: <ul style="list-style-type: none"> - Massage Therapy - Gerontology - Dental Hygiene - Phlebotomy • WIC to incorporate additional student services focused on jobs (Career Center) as well as outreach to the Naval Station and Oak Harbor communities. Student service & community outreach suggestions include: <ul style="list-style-type: none"> - Career & Art Fairs - An Event Center - Additional Technical Programs - Additional On-line Learning offerings • MD stated that ownership of Hays Hall is split 50/50 between SVC and the 	

	<p>City of Oak Harbor (the building has separate facilities for the SVC and City libraries). The city has expressed an interest in relocating their library from SVC's campus to a downtown location. If the city library moves downtown, then there is a possibility SVC could fully own or otherwise occupy the entire building.</p>	
B.	<p>Updates per Regulatory Requirements</p> <ul style="list-style-type: none"> • Parking and Stormwater 	
C.	<p>Infrastructure Updates to support Campus programs</p> <ul style="list-style-type: none"> • Needed campus infrastructure updates will dictate much of the new master plan. 	
D.	<p>Overall Context for Campus Decision Making</p> <ul style="list-style-type: none"> • Campus decision making for small as well as big picture items. 	
E.	<p>Preparing For Capital Requests</p> <ul style="list-style-type: none"> • The updated campus master plan will replace the current master plan and act as the basis for future capital requests. 	
II.	Process & Schedule	
A.	<p>Design Team = Architect, Civil Engineer, Electrical & Telecom Engineers, Landscape Architect</p>	
B.	<p>Information Gathering & Analysis, Planning, and Documentation</p> <ul style="list-style-type: none"> • We are beginning our information gathering process with our meetings today. 	
C.	<p>Coordination with Institutional Planning: Strategic, Instruction, and Technology Plans</p> <ul style="list-style-type: none"> • The campus master plan is driven by the Colleges institutional planning. Facilities support programs. 	
III.	Current Trends in Higher Education	
	<ul style="list-style-type: none"> • Changes in learning/teaching methods and technologies will be considered in master planning. • CMA listed examples of current teaching and learning pedagogies and related physical spaces: <ul style="list-style-type: none"> -Active-Learning classrooms: circular tables and wall-mounted screens to encourage more teacher-student and student-student interaction during classes. -Classroom adjacencies to breakout/informal-learning spaces -Online course offerings that encourage enrollment and provide improved teacher-student feedback • Students are increasingly interested in job-specific courses & programs and becoming less attracted to general liberal-arts degrees. Such courses are often highly dependent on new technologies and can often necessitate state-of-the-art facilities (e.g. facilities for the Nursing program's simulation models). • CMA noted that while there is an increasing pressure for higher education institutions to strengthen their ability to engage, instruct, and test students via online course offerings, traditional 'brick-and-mortar' campuses will 	

	continue to be valid as there is a continued student desire for the structure, human interaction, and facilities they provide.	
IV.	SWOT Review	
A.	Strengths <ul style="list-style-type: none"> - The campus adjacency to the growing city of Oak Harbor and Naval communities is a strength. - The waterfront location is attractive to faculty and staff. - Strong Nursing program - Already instituted online course-offerings and technologies - Tutoring and math are strengths. 	
B.	Weaknesses <ul style="list-style-type: none"> - Campus visibility is lacking. The non-central location to downtown and lack of visual landmarks makes community awareness more difficult. - On-site way-finding is difficult due to limited signage and lack of funding for receptionists. - More 'breakout'/informal learning spaces are needed. - The campus lacks community gathering spaces both inside and outside that characterize a college campus. - A clear front door to campus is needed. It should be related to student services, the first place a new student comes. - Nursing has a classroom but lacks the proper support spaces including simulation lab and break out spaces. - The campus needs better Internet access. - The campus needs testing lab and a Physics lab. 	
C.	Opportunities <ul style="list-style-type: none"> - Provide Program space for both student and community use. - The addition of Music, Fine & Culinary Arts, and Performance offerings could not only bring students to campus for study but also increase community outreach with on-campus attractions/activities such as food and art fairs. Such activities can attract future students by making campus more visible in the community. - Addition of transparency at new and existing facilities is a relatively affordable way to activate and connect the campus as well as advertise to the community. - Addition of programs and facilities for Physics and in-demand technical/vocationally-oriented degrees is a way to compete in an increasingly competitive enrollment environment. - There is an opportunity to generate revenue through rental of facilities to community (e.g. weddings, large meetings) due to the waterfront location. - The neighboring naval base population is a renewable source of enrollment. Providing short term certificate programs for health occupations such as medical assisting and pharmacy assisting could attract naval spouses to campus. 	

	<ul style="list-style-type: none"> - There is the possibility to incorporate ‘Green’ power in campus facilities as well as green course offerings. - Coordinating educational offerings with the newly formed Economic Development Council goals could increase enrollment. - Strengthen tutoring program which brings people to campus. - WIC to build on the success of its Nursing program and offer classroom facilities better suited for this program’s needs. - Oak Harbor is a growing community. Strengthening community education could be an enrollment opportunity. 	
<p>D.</p>	<p>Threats</p> <ul style="list-style-type: none"> - Competition from increasing online course offerings by other higher-education institutions threatens future enrollment. - How does WIC attract students to its campus without competing or duplicating course offerings with other SVC district campuses? - A critical mass related to on campus programs that attracts students to the campus is needed to manage enrollment. - While Oak Harbor’s retirement age population has increased, the traditional ‘college-aged’ demographic is decreasing. - The increasing WA State budget challenges will likely further threaten public education funding. 	

**Skagit Valley College Master Plan Update
Whidbey Island Campus**

Meeting Minutes | Workshop 3 (DRAFT)

DATE: 15 March 2013

LOCATION: Skagit Valley College Whidbey Island Campus (WIC)

PRESENT:

Mick Donahue	(MD) Vice President WIC
Mary Alice Grobins (MAG)	Vice President for Administrative Services
Dave Scott (DS)	Director, Facilities and Operations
Cima Malek-Aslani (CMA)	Schacht Aslani Architects
Walter Schacht (WS)	Schacht Aslani Architects
Evan Bourquard (EB)	Schacht Aslani Architects
Marilyn Haren	Student Services
Jan Helm	Professional/Technical Faculty
Sherry Walker	Administration
Dave Morgan	Information
Jeff Stady	Academic Faculty
R Straine	Student Government
Chari McRill	Library
David Hauser	Maintenance

Please note: *These minutes are organized by issue. All discussion has been paraphrased to convey the speaker's intent. Please notify us immediately of any corrections or additions. Prepared by Schacht | Aslani Architects.*

Introduction:

Workshop 3 (findings and preliminary analysis) included a slideshow which accompanied the following discussion items. Please refer to the corrected slideshow for additional information and documentation. Please refer to the attached agenda for a review of the presentation contents. The following is a summary of the primary items discussed during and after the presentation.

Item	Discussion	
1	Bus routes and campus circulation: The upper parking lots feature single lanes intended for buses to have direct access to the library pick up and drop off. If this is to be modified (either to accommodate a new building or to modify the parking layout), any change would need to be coordinated with the bus routes that use this turnaround. It may be possible to have bus drop off along the street, but topography is a challenge for ADA access. Para-transit also would need to continue to use the front door drop off as long as the library is still in place.	
2	Library: MD advised that the city is currently very interested in relocating the library (which is currently in Hayes Hall), and the Sno-Isle library district has expressed interest in either a relocation or expansion of the current facility. SAA to review current capitol plans for this branch. Relocation of the library would be advantageous in terms of freeing up existing square footage, or as part of a replacement project for Hayes Hall.	EB
3	Loading access: Loading access is currently very limited on campus.	
4	Shoreline setback: The current shoreline setback impacts the two existing buildings of lower campus and may limit replacement sites for any new building or parking. SAA noted that there is a draft set of new shoreline development standards in for SEPA review, created by the City of Oka Harbor. SAA to review these with the consultant team and with federal regulations to determine feasibility of replacement project on that portion of campus. This is a critical issue as it will limit potential expansion.	EB
5	Replacement Scenarios: Both lower campus buildings are likely replacement candidates. Any new replacement or expansion project is very constrained because of the property boundary and existing topography. WS identified 3 possible expansion/replacement scenarios for further exploration, as follows: <ol style="list-style-type: none"> 1. Develop a lower lot replacement building on or near the existing building footprints. 2. Renovate Hayes and expand, or replace Hayes with a single larger multistory building on the Hayes footprint to accommodate the program of all three removed buildings. 3. Develop a new building on the upper parking lot footprint (north of Oak hall or East of Hayes) and develop parking on the footprints of the lower buildings. 	
6	Student outdoor gathering space: The current campus lacks outdoor gathering space for students and events. This has been discussed as a possibility on the lower campus if redeveloped. SAA to review previous plans and integrate into master planning for this area. The college has previously expressed interest in developing a public/private space that could be used for local public events.	EB
7	Consolidation of programs: Currently programs are scattered amongst the 4 primary campus buildings. These programs should be better consolidated and scheduled.	

8	Toddler center: This program operates well as a self-contained facility in its current location, and should remain.	
9	Navy Museum: Master Plan needs to address this function and how it could be integrated with lower campus redevelopment. This could mean pedestrian access, or parking connection.	
10	Topography and circulation: Topography currently limits access and connection between upper and lower campus. An all upper level campus would have the distinct advantage of better on grade access and improved ADA access.	
12	Fire/emergency access: Currently emergency access is provided via the parking lot to the north and the closed street in the center of campus. Ideally this access would be improved but topography may limit the possibilities. Consolidation of campus to upper level may be an improvement to emergency access.	

End of minutes

Attachments:
Meeting Agenda

**Skagit Valley College Master Plans Update
Whidbey Island Campus**
11 April 2013

Workshop 4: Whidbey Island Campus

1.	Update on Master Plan Process	
	Refer to Mount Vernon for schedule of remaining workshops.	
2.	Program Analysis Findings	
2.1	Professional Technical Programs <ul style="list-style-type: none"> Nursing is strong but lacks proper support facilities 	
2.2	Strengthen Student Services & Support <ul style="list-style-type: none"> Career Center Tutoring is a strength, brings people to campus Need more collaborative student learning spaces 	
2.3	Future New Program Development <ul style="list-style-type: none"> Short term certificate programs that appeal to Navy spouses Community Education Reintroduce art offerings, add music Culinary Arts 	
3.	Site Analysis	
3.1	Program: Educational Uses are spread between four buildings on two major campus levels due to campus topography.	
3.2	Vehicular circulation: There is a conflict between bus traffic and automobiles exiting the parking lots that is not safe.	
3.3	Age of Buildings & Remaining Lifespan: Two buildings on the lower level have less than 15 years of remaining life. Planning for these changes is a focus of the master plan update. While Hayes has more than 15 years of remaining life, having all the programs in two buildings on the upper campus level would be desirable.	
3.4	The campus topography challenging. As a result options for building sites on the lower and upper campus were explored.	
4.	FCS Implications for Master Plan	
4.1	Old Main is noted as a renovation in the State Facility Condition Survey (FCS) while Sprague is to be replaced.	
4.2	Both buildings have high scores indicating their poor condition.	
5.	Development Program	
5.1	The amount of square feet to plan for in the replacement buildings has not been clarified. Two possibilities were shown: Replacing only Sprague and Old Main, and replacing Sprague, Old Main and Hayes Hall together in one building.	
5.2	Space vacated by Nursing in Oak Hall could be repurposed for Student Services which would strengthen Oak's front door function.	
5.3	Educational programming for replacement building still needs to be	

	addressed to make a compelling case to the State for capital funding.	
6.	Planning Options	
6.1	There is a height limitation of 35 Feet per zoning regulations on all parts of the campus. As a result buildings were planned to be only 2 stories.	
6.2	The setback from street governs the placement of buildings on the lower campus.	
6.3	Three options for new construction were presented: one on the lower campus at the level of Old Main, and two on the upper campus.	
6.4	The option that leaves Hayes Hall in place and builds on the upper campus was favored. This option also had green open space associated with it.	
6.5	Parking lost to the upper campus site would be replaced on the lower campus.	
7.	Sequence of Projects	
7.1	The rules for scoring capital requests result in a single capital request per college per biennium. All branch campuses of Skagit Valley College are considered to be one college.	
7.2	At the time of request, which is at least two years away, SVC will have to decide which of three projects that will be in the master plan updates will make the most compelling case for funding.	