2010
Campus Master Plan

UNIVERSITY OF ALASKA FAIRBANKS

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Cover:
The moon rises over the University of Alaska Museum of the North on a clear early-March evening.
Photo: John Wagner

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Photographs
All UAF photographs by Todd Paris unless noted.

Chancellor's Message

UAF has developed approximately six campus master plans since we opened our doors as the Alaska Agricultural College and School of Mines in 1922. The campus master planning process is an insightful one that requires much analysis and projection of factors, from enrollment to assessment outcomes. This Campus Master Plan was crafted from an intensely data driven process, beginning in the summer of 2009 with an assessment of the current campus conditions and space analysis. We compared UAF's main campus facilities with peer institutions, although we were challenged to find a university with similar student enrollments that also has the magnitude of research we do.

Campus master plans are, by their very nature and purpose, unfailingly optimistic. This plan is no exception. However, I'm confident in its vision for the future campus. The plan is built upon solid data and analysis of need. By focusing on short-, mid-, and long-term priorities, the plan allows for the unpredictable nature of funding, be it public, private or a combination thereof. It also provides flexibility, allowing us to be responsive to changing needs and shifting priorities. With specific implementation steps to back up the recommendations, the plan is an intensely usable document.

I am confident that the goals, priorities and actions of this plan are executable. I look forward to being part of the momentum as we move forward during this critical phase in the development of Alaska's First University.

Brian Rogers, Chancellor
University of Alaska Fairbanks

UAF
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A statue of Charles E. Bunnell, founding president of the University of Alaska, in Cornerstone Plaza on Lower Campus.

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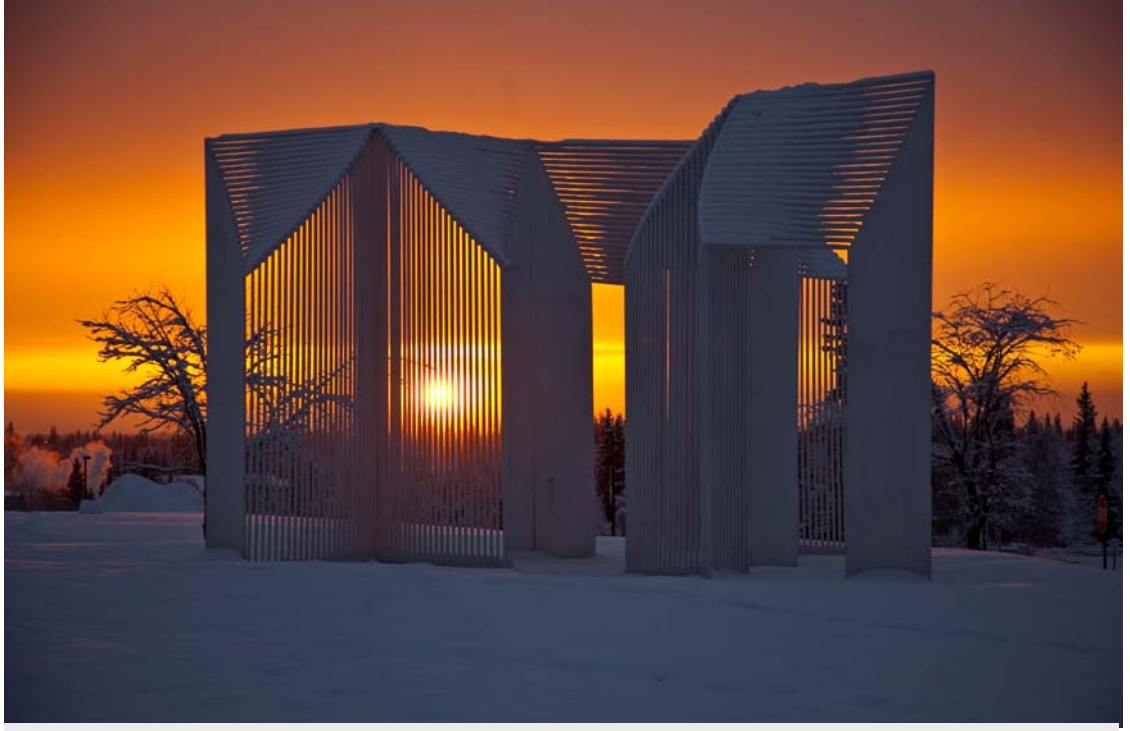
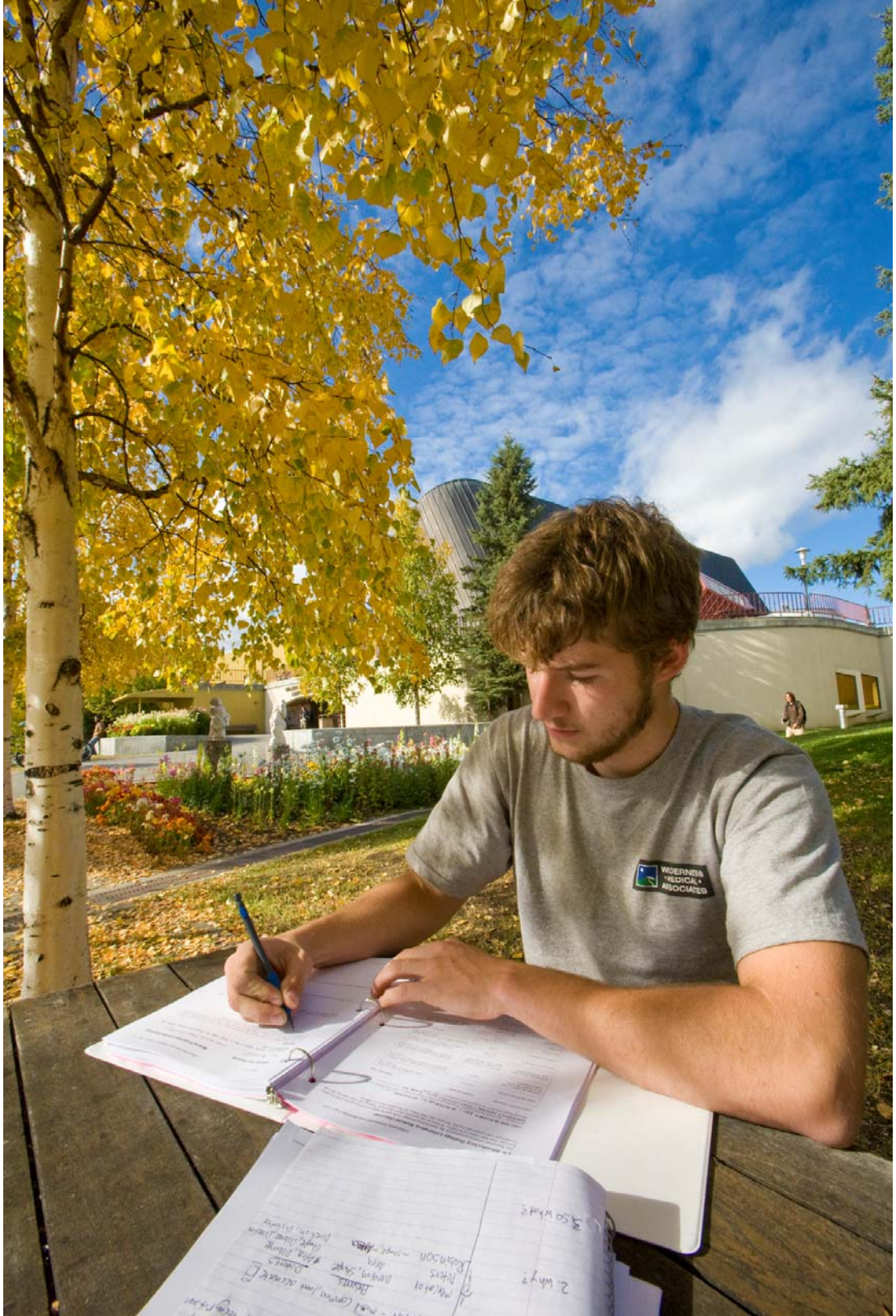


The sun sets about 3:15 p.m. near the end of the fall semester behind the Elysian sculpture on the Fairbanks campus.

Figures



Max Bartlett studying outside Wood Center.

Executive Summary i

introduction /// vision /// dynamic document /// goals /// actions /// the future campus /// compliance with UA Board of Regents' master planning policy

A UAF banner hangs along Yukon Drive on the Fairbanks campus.

Executive Summary

***The University of Alaska Fairbanks**, the nation's northernmost Land, Sea and Space Grant university and international research center, advances and disseminates knowledge through teaching, research and public service with an emphasis on Alaska, the circumpolar North and their diverse peoples. UAF—America's arctic university—promotes academic excellence, student success and lifelong learning.*

UAF Mission Statement

Introduction

The University of Alaska Fairbanks 2010 Campus Master Plan (CMP) is designed to guide and shape the physical environment of the Fairbanks campus. The culmination of a nine-month participatory planning process, the CMP reflects UAF's unique location and its distinctive role as the nation's northernmost Land, Sea and Space Grant university and an international research center. The plan furthers the university's mission to advance and disseminate knowledge through creative teaching, research and public service with an emphasis on Alaska, the North and their diverse peoples.

Vision

The campus master plan strives to create a campus environment that supports the institutional mission of UAF. The plan seeks to strengthen the academic experience for students by fostering the integration of teaching and research facilities and improving connectivity across the campus. The plan also endeavors to create a campus environment that reflects its unique natural and cultural setting, incorporating sustainability practices that are pertinent to UAF's northern location.

Dynamic Document

The campus master plan is a dynamic document that results from an ongoing process of addressing both existing and anticipated conditions, desires, programs and space demands. It will be used in guiding, developing and evaluating capital funding needs, designing and constructing new facilities and enhancing the built and natural campus environments. The plan is designed to accommodate changing needs.

Goals

The 2002 CMP and subsequent special-focus plans revitalized the campus planning process at UAF. Building on that momentum, the 2010 CMP provides a more focused and data-driven approach to building, open space, and circulation and parking.

The goals of the campus master plan are designed to achieve the vision of a well-ordered and attractive campus. The success of one goal may depend upon the success of others. These goals are:

I. Support the integration of teaching and research through building location and use, circulation and open space.
II. Ensure the campus environment enhances both the academic and student life experience.
III. Improve access to and circulation within the campus.
IV. Preserve and highlight the unique natural and cultural aspects of UAF's northern location.
V. Enhance space quality and maximize effective utilization.
VI. Employ best practices in sustainability for northern environments.

Actions

A set of planning actions was developed that best achieves the goals for the campus. Since the goals are interrelated, one action can address several goals at once. Furthermore, these actions will have a much greater impact if they occur concurrently rather than individually.

A set of matrices that relates the planning actions to the CMP goals can be found in Section 4: Implementation.

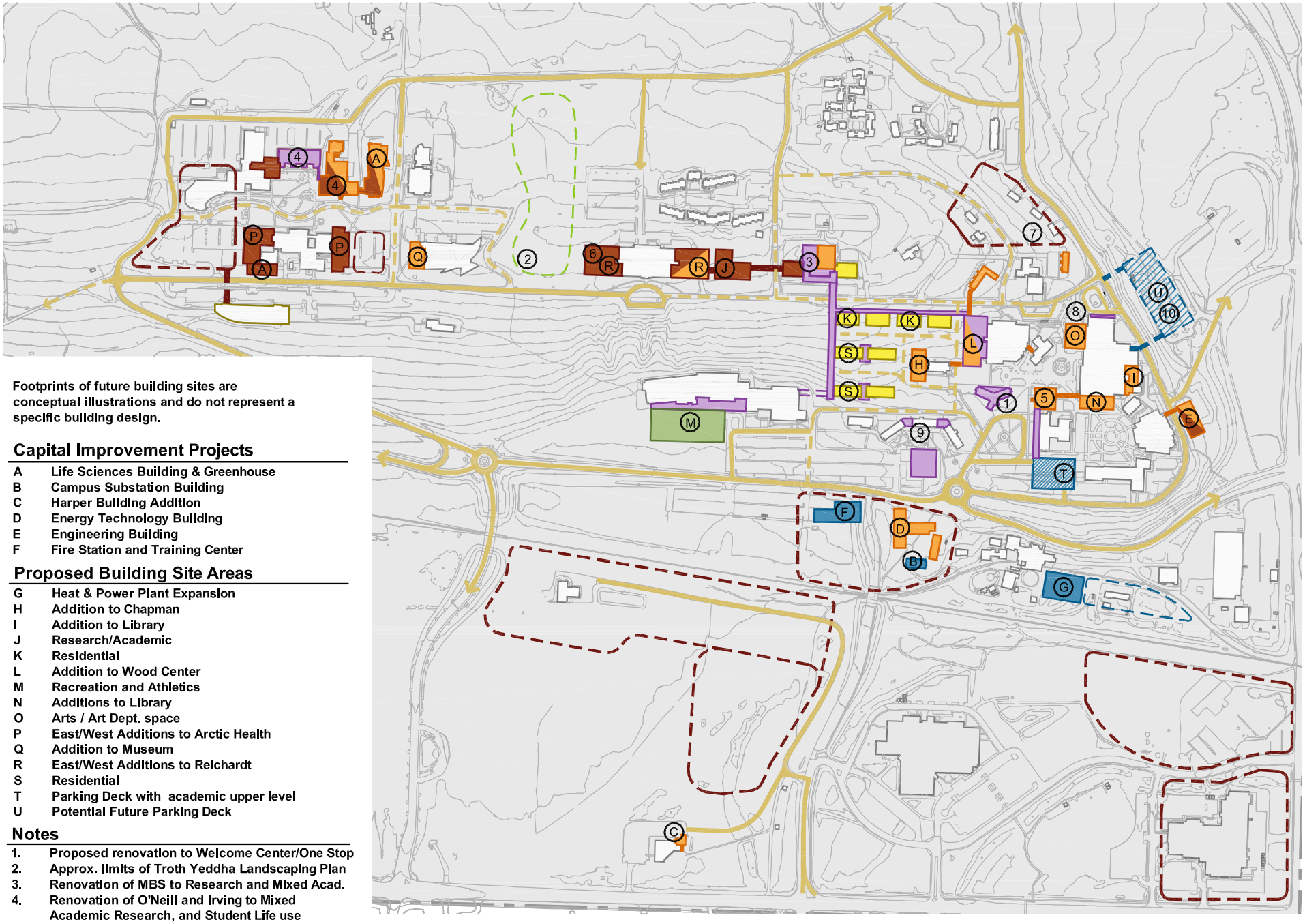
The Future Campus

The long-term plan for UAF includes the following major elements:

- A strengthened campus spine with new facilities along Yukon Drive.
- Integrated teaching and research facilities across campus.
- Accommodation of anticipated enrollment increases to 4,100 FTE.
- Higher density student housing with better connections to facilities on Lower Campus.
- Increased gathering spaces for residential and commuter students.
- Entrance gateway on Lower Campus.
- Improved community access through drop-off and parking areas near major destinations.
- Public-private partnership zones.
- East-west campus greenway.
- Parking garages at entrance gateway.

Compliance with UA Board of Regents' Master Planning Policy

One: Projected enrollment - Sections 2 and 3
Two: Land acquisition and disposal - Section 3
Three: Infrastructure and utilities - Sections 1 and 3
Four: Demolition - Sections 1 and 4
Five: New facilities - Sections 3 and 4
Six: Landscaping - Sections 3 and 4
Seven: Open Space - Sections 1 and 3
Eight: Signage - Sections 3 and 4
Nine: Guidelines - Sections 3 and 4
Ten: Energy, environment, and ADA - Sections 1 and 3
Eleven: Community land use planning - Section 1
Twelve: Capital projects - Section 4



Footprints of future building sites are conceptual illustrations and do not represent a specific building design.

Capital Improvement Projects

A	Life Sciences Building & Greenhouse
B	Campus Substation Building
C	Harper Building Addition
D	Energy Technology Building
E	Engineering Building
F	Fire Station and Training Center

Proposed Building Site Areas

G	Heat & Power Plant Expansion
H	Addition to Chapman
I	Addition to Library
J	Research/Academic
K	Residential
L	Addition to Wood Center
M	Recreation and Athletics
N	Additions to Library
O	Arts / Art Dept. space
P	East/West Additions to Arctic Health
Q	Addition to Museum
R	East/West Additions to Reichardt
S	Residential
T	Parking Deck with academic upper level
U	Potential Future Parking Deck

Notes

1. Proposed renovation to Welcome Center/One Stop
2. Approx. limits of Troth Yeddha Landscaping Plan
3. Renovation of MBS to Research and Mixed Acad.
4. Renovation of O'Neill and Irving to Mixed Academic Research, and Student Life use
5. Renovation to Academic & Student Support
6. Research/Study linkage to Troth Yeddha
7. Potential development area for high density res.
8. Covered access and drop off for Fine Arts
9. Renovation/Addition for Student Life use
10. Potential occupied space on upper level

Mixed Academic
Research
Gathering & Student Life
Recreation & Athletics
Residential
Facility Support
Partnership Development Areas

Figure 0.1
Long Term Plan: Primary Building Use

0 350 700 1,400

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The Georgeson Botanical Garden, maintained by UAF's School of Natural Resources and Agricultural Sciences, is nationally recognized and a member of a national network of educational and research institutions dedicated to plant culture and conservation.

Existing Campus Conditions **1**

introduction /// land /// facilities /// open space /// infrastructure
/// supporting plans /// supporting standards

The University of Alaska Fairbanks campus occupies a hillside on the northwest edge of Alaska's second-largest city.

Section 1: Existing Campus Conditions

Introduction

Community Context

Located at what is often referred to as “the end of the road,” Fairbanks, Alaska is the largest, northernmost city in the U.S. The Fairbanks North Star Borough (FNSB), which is bigger than many states in the continental US, has approximately 7,460 square miles of land within its boundaries. Current population of the borough is nearing 100,000, which includes two military installations, Ft. Wainwright (US Army) and Eielson Air Force Base. An even greater land mass known as Alaska’s Interior stretches from the Brooks Range on the north to the Alaska Range on the south, the US/Canada border on the east, and the Bering Sea on the west. It is a vast area characterized by expansive tracts of wilderness, small communities, and limited road access (in many cases, none). The Golden Heart City, as Fairbanks is known, serves as the urban hub for this region.

Established in 1922, the University of Alaska Fairbanks is the flagship institution of the university system. It has the unique distinction of being a Land, Sea and Space Grant institution, with a primary mission of teaching, research and service. UAF also contributes significantly to the Fairbanks community through both public service and its many cultural venues. It is considered by many to be the intellectual and cultural hub of Alaska’s Interior.

Location

Situated on a hilltop overlooking the Alaska Range and the vast Tanana Valley to the south, the campus is highly visible to the community. The campus property comprises nearly 2,250 acres of which approximately 10 percent is fully developed. The remaining acreage is characterized by special use areas, including the Agricultural and Forestry Experiment Station (AFES) and North Campus, a boreal forest that is primarily used for outdoor instruction, research and recreation.

Climate

The subarctic climate of Fairbanks is remarkable. Characterized by long, cold winters and short, mild summers, the diverse annual temperature ranges and variable daylight levels — +80° F days in July with nearly 24 hours of daylight and occasionally to -50° F days in January with extended twilight — provide a compelling environment in which to study, live and work. The climate is arid with annual precipitation of roughly 10 inches. The ground is snow covered for roughly 6 months per year (October through March).

Engineering major Brennon Haag uses his bike to get around, despite the cold temperatures of a Fairbanks winter.

Local residents take a walk past the time and temperature sign on Alumni Drive on a hot day in July.

Denali looms to the south of campus.

Land

Land Use

The Land Use diagram illustrates the extent of the campus and outlines the various land uses. Acquisition of additional land or disposal of existing lands is not anticipated to implement this CMP.

Campus Core and View Sheds

The campus core, the area in which academic, research and residential functions are concentrated, occupies approximately 229 acres of a total 2,250 acres. Bounded by Tanana Loop, the campus core sits on a ridge top with spectacular views across the Tanana Valley to the Alaska Range. The campus can be seen at a considerable distance from the highway and approach roads and it has a strong visual presence in the community. The view sheds to the east and south are areas in which development has been limited in order to maintain clear views to and from the campus.

The site's topography, coupled with an administrative decision in the late 1960s to locate research separately from the academic core, led to the present east-west alignment of the campus. A nearly mile-long distance separates the facilities on Lower Campus from those on West Ridge. The approximately 200-feet elevation difference between the highest and lowest point on campus further increases the sense of separation.

Facility Support

The southeast corner of campus houses facility support, including the heat and power plant and the Facilities Services operations. The physical constraints of roadway and railroad boundaries present both development and aesthetic challenges at the eastern gateway entrance. The Alaska Center for Energy and Power is located in this area as well, but it is a research facility.

Special Use Areas

The Agricultural and Forestry Experiment Station (AFES) is located southwest of the campus core and contains crop and forest land, laboratories and greenhouses for research and demonstration. The Georgeson Botanical Garden is also located in this area. On the northern boundary of campus, the Large Animal Research Station (LARS) facilities allow students and researchers to study the high-latitude biology of ungulates. The North Campus area (approximately 1,300 acres) is representative of Interior Alaska with soils, topography, plants and wildlife typical of a boreal forest. The North Campus includes outdoor research and instructional areas as well as an extensive system of recreation trails available to the public year-round.

These special use areas preclude expansion of the core campus to the west and north.

Partners and Outreach

Existing partnerships include leased land south of the Alaska Railroad (ARR) tracks to the Fairbanks North Star Borough School District (FNSBSD) and the Cold Climate Housing Research Center (CCHRC). On-campus partnerships exist with the Alaska State Department of Public Health and the International Arctic Research Center (IARC).

Areas for partnership ventures were identified in the 2002 CMP; however, many of these areas have since been deemed unsuitable due to poor soil conditions.

Off Campus Facilities

Several facilities are located off campus, including the Administrative Services Center on College Road, and University Park Building on University Avenue. The latter is still on university-owned land but somewhat removed from campus. A research facility is located in the southern part of town in the more industrial zone. These buildings are all owned by the university.

In addition to university-owned buildings, it has been necessary to lease space off campus in recent years due to space deficits. These multiple off-campus leases exist throughout the Fairbanks area and support a variety of university activities. While it would be preferable to have the units on campus that are currently housed in leased space, it would require almost 75,000sf of space to meet the need. That is the equivalent of the Bunnell Building, a major facility on campus.

Community Land Use Planning

The campus of the University of Alaska is located outside of the city of Fairbanks and within the Fairbanks North Star Borough (FNSB), a regional government with community planning authority.

The campus edges are bounded by the Parks Highway, Geist Road, University Avenue, Farmers Loop and Yankovich Road. The university will continue to work cooperatively with the FNSB and other planning agencies relative to any land use decisions that would affect university operations or campus edges. The FNSB's Regional Comprehensive Plan guides land use throughout the borough, and the Fairbanks Metropolitan Area Transportation System oversees Alaska Department of Transportation and Public Facilities (ADOT/PF) projects that have potential to affect campus lands.

Campus lands are currently (2010) being affected by the Alaska Department of Transportation and Public Facilities Miller Hill/Yankovich Road Bike Path Project. This project will enhance bicyclist and pedestrian safety on the north and west sides of campus and is being designed in cooperation with the university.

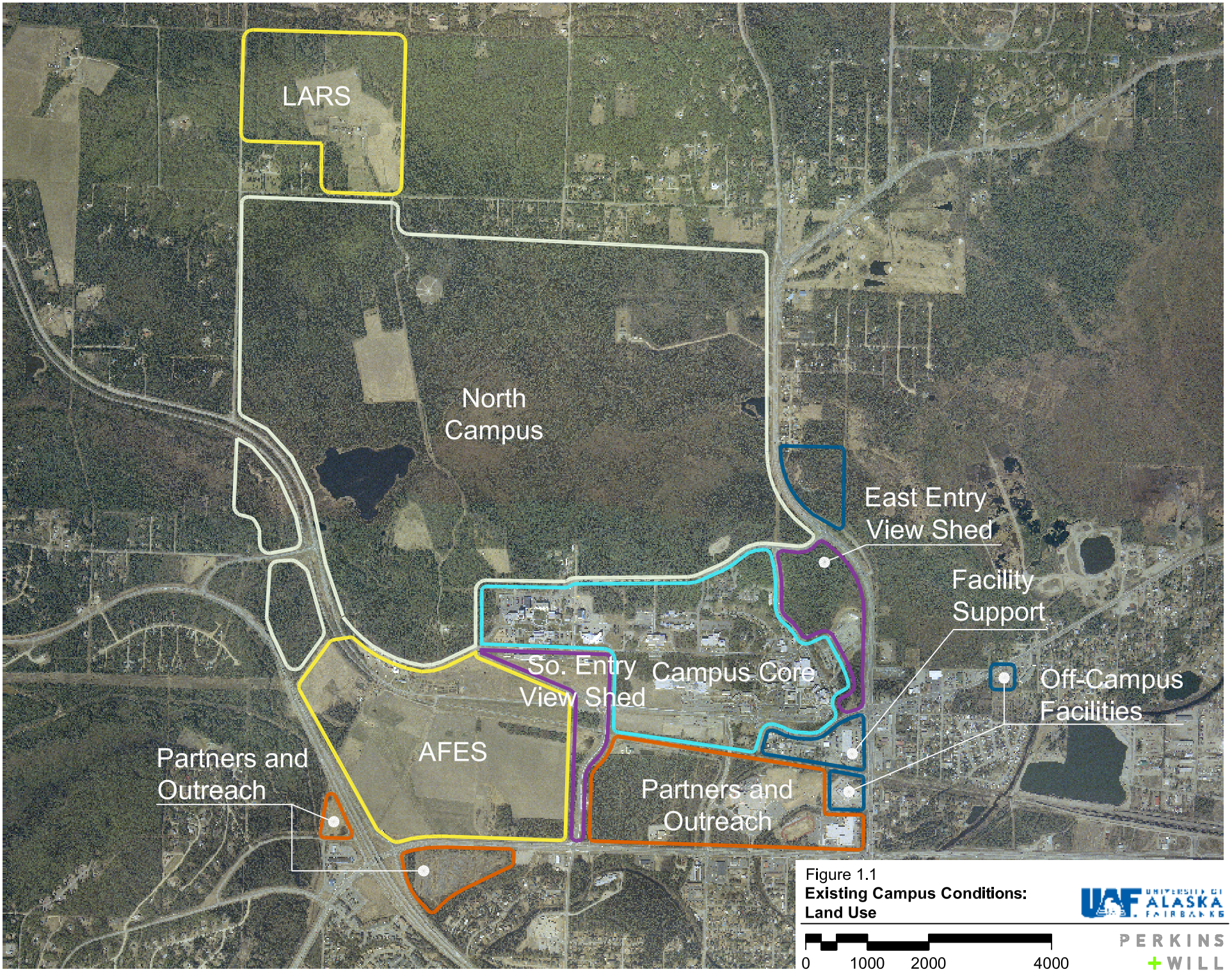

Figure 1.1
Existing Campus Conditions: Land Use

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Soil Conditions

The Soil Conditions diagram outlines three types of soils near the campus core: unfrozen, discontinuous permafrost and frozen. In general, soil conditions pose significant constraints to campus development. While most of the campus core falls within the zone of generally unfrozen soils, discontinuous permafrost encircles most of the campus core. Within this area, intermittent areas of permafrost, or perennially frozen ground, may be found amongst unfrozen soils. Permafrost conditions were encountered during construction of the Akasofu Building, for example. Subsequently, the location of the building was moved south to avoid the frozen soils.

Frozen soils are located on the south and southwest of the campus core, as well as beyond the zone of discontinuous permafrost. Building construction within the frozen areas should be avoided.

A thermokarst that opened up during construction of the West Ridge Research Building.
Photo: Shannon and Wilson Inc.

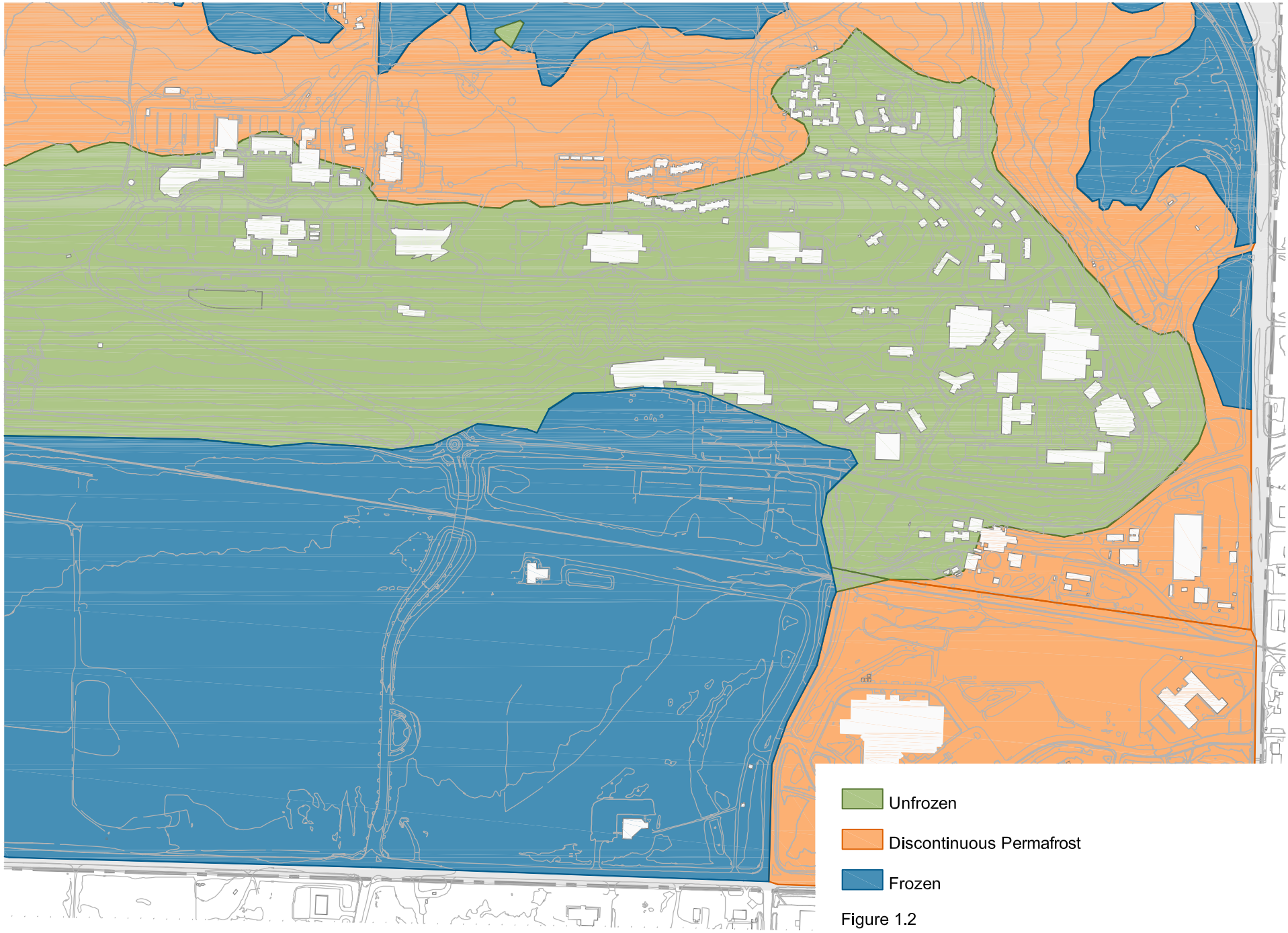

Figure 1.2
Existing Campus Conditions: Soil Conditions

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Facilities

Primary Building Use

The Building Use diagram illustrates the existing campus buildings in terms of their primary building use: instructional, research, student support, residential, recreation and athletics, administrative, support and community engagement. The intent of this diagram is to understand the building use patterns that currently exist on campus.

Instruction and Research

Building use within the campus core falls into fairly distinct zones. In general, research facilities are located on West Ridge; academic and administrative facilities are located on Lower Campus. While the two areas are connected by an east-west road, Yukon Drive, only one facility, the Reichardt Building, ties them together.

Over the years, a few facilities on the perimeter of campus have developed to meet a variety of expanding needs, both programmatic and administrative. As these facilities age or programs expand, careful evaluation of location and / or function needs to be conducted.

Residential and Student Support

Residential planning on campus has been based more on creating distinct zones than on connectivity with existing facilities. Originally, the core of student housing and dining was centered on the undergraduate experience on Lower Campus. A second phase of residential life expansion occurred on Yukon Drive with the Moore-Bartlett-Skarland complex (MBS). Continued development has expanded housing north toward Tanana Loop with the construction of the Cutler Apartment Complex. The emphasis on zones has effectively segregated housing from academic and other student life facilities.

In addition to Lola Tilly Commons, the primary food service venue, a number of retail dining options exist throughout the campus. Wood Center includes a newly renovated food court. MBS includes a convenience store and sandwich shop. West Ridge dining options are limited to the West Ridge Cafe located in the Arctic Health Research Building and the seasonal museum cafe. The sum of these food service options still doesn't meet the current student, faculty and staff needs or preferences.

Recreation and Athletics

Recreation and athletic facilities and fields are located south of Yukon Drive at the base of a very steep hill. This creates access issues for students. Conversely, the facilities are readily accessible for public use and community activities.

Administration and Support

Administrative facilities are centrally located on Lower Campus in Signers' Hall and the Eielson Building, as well as off campus along College Road in the Administrative Services Building. Administrative needs have contributed significantly to the increase in off campus leases. The UA systemwide administration is housed in the Butrovich Building on West Ridge.

As noted in the Land Use section, Facilities Services occupies a critical entry location with constrained opportunity for expansion. Similarly, due to access issues for the University Fire Department, a new facility location is required.

Community Engagement

A number of facilities provide community engagement opportunities including the Library, Patty Center and Fine Arts. Most significant is the UA Museum of the North. Retaining access to these facilities is paramount.

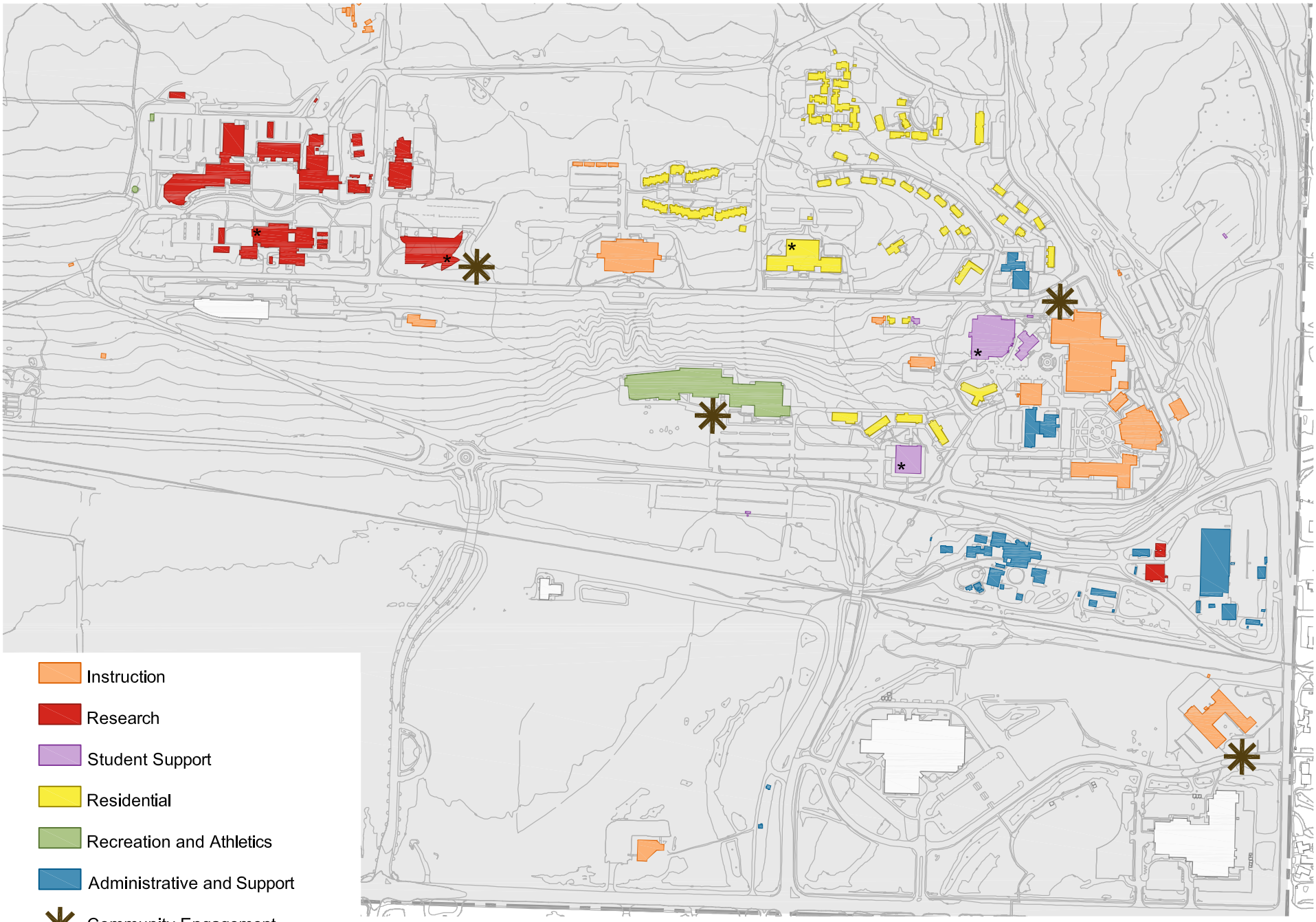

Figure 1.3
Existing Campus Conditions: Primary Building Use

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Building Conditions

The Building Conditions diagram illustrates assessment recommendations for campus facilities. The recommendations were developed with current input from Facilities Services as well as information from a building audit prepared by Bezek Durst Seiser Inc. (BDS) in 2001. The Building Conditions diagram reflects the most current facility information.

Assessment recommendations include five designations: Maintenance and Repair, Renewal and Replacement -Investment Needed, Major Revitalization, Adpative Reuse, Demolition. Demolition indicates that those facilities will be demolished to accommodate new facilities or programs.

Residential Facilities

The majority of residential facilities north of Yukon Drive are in need of significant upgrades, renovations or demolition. The aging, single-family homes along North Chandalar Drive are slated for demolition, as well as the adjacent residential facilities along Chatanika Drive and Tanana Loop Road. The Cutler Apartments are also in need of significant upgrades. The MBS housing complex is recommended for adaptive reuse. Residential facilities on Lower Campus are in better condition by virtue of relatively recent renovation.

Student Life Facilities

Currently, there are two student life facilities on campus, Wood Center and Hess Commons. Wood Center is recommended for renewal and replacement.

Instructional Facilities

The instructional facilities on Lower Campus date from 1931 to 1973. Currently, a significant number of those buildings require renewal and replacement.

To the east of Cornerstone Plaza, the building that currently houses the Cooperative Extension Service is designated for demolition to make way for the new Engineering Building. University Park Building is also recommended for demolition.

Research Facilities

On West Ridge, a significant number of research buildings that date from the late 1960s to the early 1970s are in need of major revitalization or adaptive reuse. These include the Elvey, Irving, O'Neill and Arctic Health Research (AHRB) buildings. Renovations have already begun on AHRB. The greenhouse east of the Irving Building will be replaced by a new structure on the south side of AHRB. This structure is necessitated by the Life Sciences Project.

A number of temporary research structures, currently located on West Ridge that address unmet research space needs, are slated for removal. Additionally, two structures just west of Facilities Services will be removed.

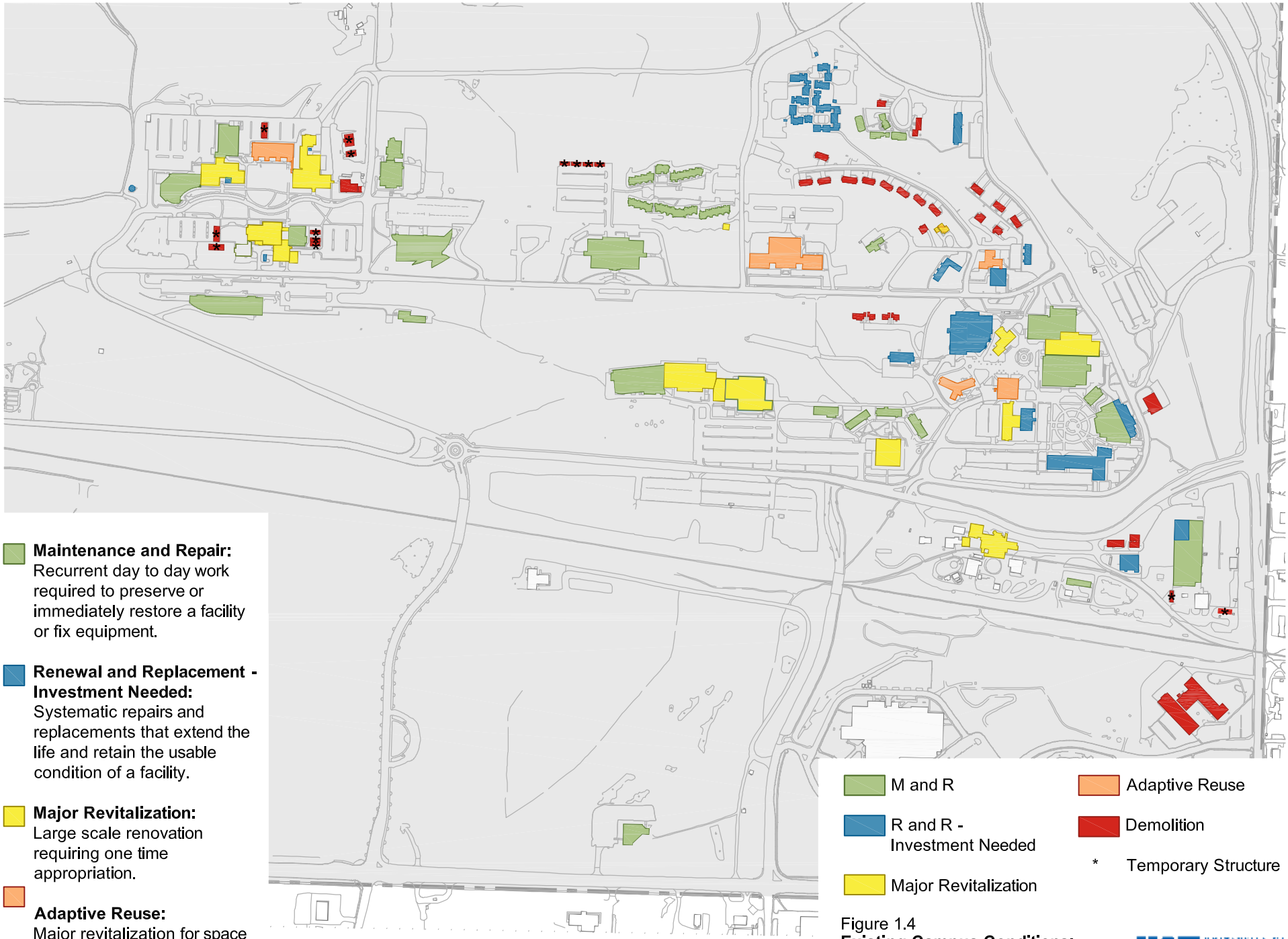

Figure 1.4
Existing Campus Conditions: Building Conditions

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Open Space

Two types of open space diagrams were developed to illustrate the character and use of campus open spaces: Open Space Use diagram and Open Space Type diagram.

Open Space Use

The open space use diagram illustrates the manner in which open spaces are used on campus.

Forest Research and Recreation

Located at the perimeter of the campus core, this open space use is unique to the campus, providing an example of central Alaska's subarctic ecosystems within close proximity of research and academic facilities. In addition, the forest research and recreation area to the north of the campus core includes an extensive system of trails, dating from the 1930s, that is used by the campus and surrounding Fairbanks communities.

Outdoor Gathering Space

Outdoor gathering spaces are located at the interior of the campus core and consist of formal or informal areas where the campus community gathers. The spaces are generally defined by building facades and paving, maintained landscape plantings, and often include outdoor art. Outdoor gathering spaces include Constitution and Cornerstone Plazas on Lower Campus and West Ridge Plaza.

Runners in the annual Equinox Marathon head toward the finish line on campus.

A family of skiers takes advantage of a pleasant March afternoon on the UAF trails.

Park

Troth Yeddha' is the only area formally recognized as a park. Consisting of an area between the museum and the Reichardt Building, Troth Yeddha' Park is intended as a gathering / interpretive space that celebrates Alaska Native culture and traditions.

View Shed Preserve

View shed preserves include undeveloped open space that allows views to and from the campus.

Gateway Landscape

The gateway landscape, which most people encounter when first visiting UAF, is located along the main roads to the south and east of the campus core. The landscape consists of roads and interrupted pedestrian paths.

Pedestrian Circulation

The primary off-road pedestrian way extends through a variety of campus open spaces. It is not a designated pedestrian path but an informal route that has developed over time. This path navigates the extreme elevation change between West Ridge and the Lower Campus. Formal pedestrian connections between open spaces and the built environment are being planned.

The existing campus network of pedestrian routes is ill-defined. Many border vehicular routes and lack pedestrian-friendly landscapes. Winter conditions, steep topography and icy sidewalks create difficult walking conditions.

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Lunch time at West Ridge Plaza, outside the Syun-Ichi Akasofu Building.
© James Barker

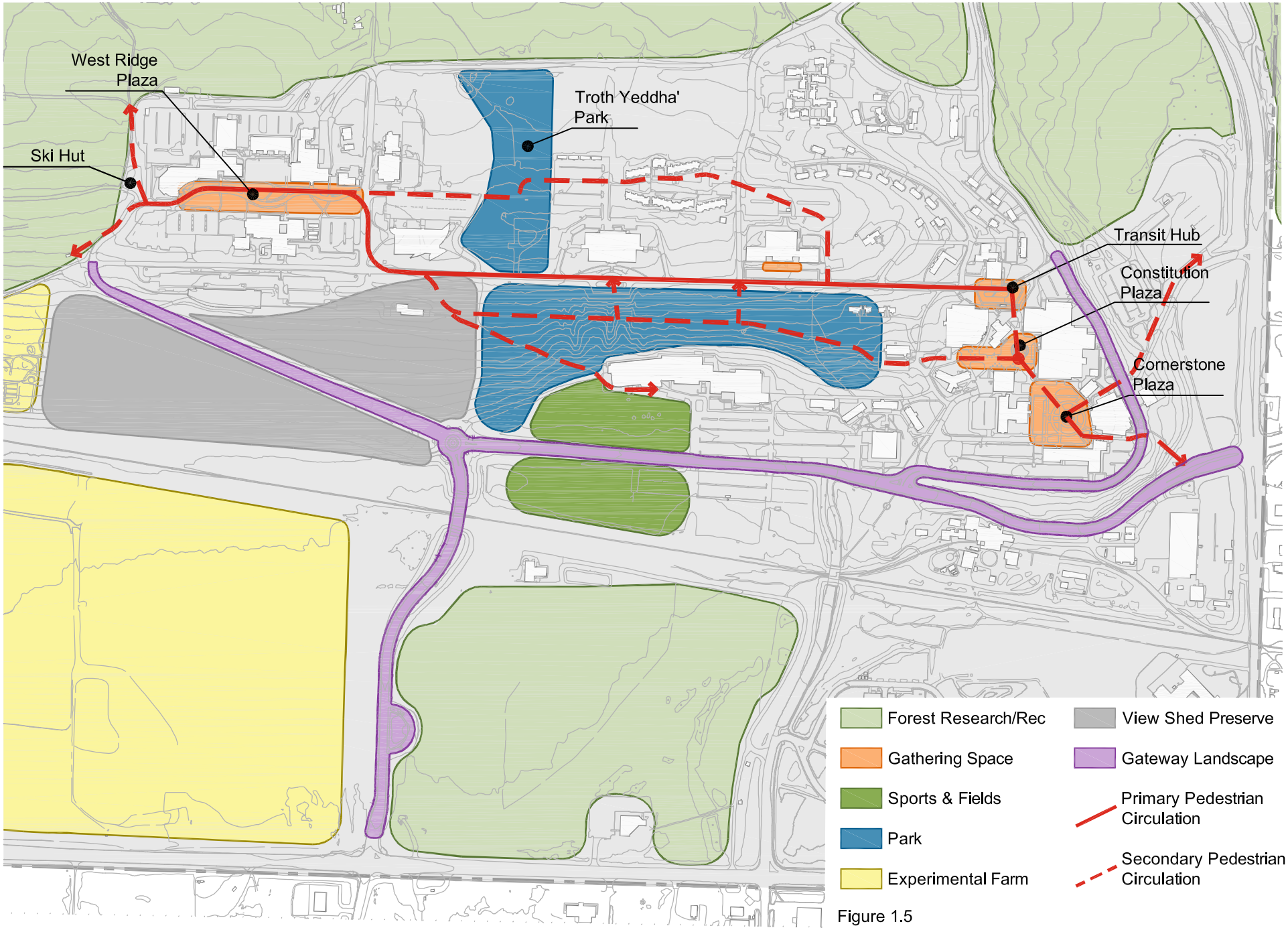

Figure 1.5

Existing Campus Conditions: Open Space Use

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Students take the trail through the woods on their way between the Reichardt Building and Wood Center on the Fairbanks campus. Elizabeth Tsigonis and Sam Joseph take the trail to class.

Students study for spring semester finals while enjoying warm temperatures.

Open Space Type

The Open Space Type diagram designates five types of open space on campus: boreal forest, managed forest, maintained lawn, rough lawn and cultivated farm field. The overall campus character is defined by the unique topography and views to the surrounding boreal forest.

Boreal Forest

The boreal forest open space landscape is located primarily along the north edge of the campus core. A smaller portion of this landscape is also located between the Alaska Railroad tracks and Geist Road, south of the campus core. The boreal forest, which gives the campus its unique Alaskan identity, is characterized by permafrost-dominated soils and expansive stands of spruce, birch, balsam poplar and aspen.

Managed Forest

Maintained forest landscape, characterized by coniferous and deciduous trees and managed undergrowth, is located to the interior of the campus core and includes habitat study areas and pedestrian paths through campus. Two large areas of maintained forest include the area north of the Cutler Apartments and between Yukon Drive and the recreation complex.

Maintained Lawn

Maintained lawn refers to those landscape areas characterized by lawn and landscape plantings that require maintenance by Facilities Services staff. These groomed landscapes include:

- Large sections of maintained lawn located along Yukon Drive.
- The central open space along Koyukuk on West Ridge.
- Sports and recreation fields southwest of the recreation and athletics complex.
- Open space adjacent to major campus roads at the south and east edges of the campus core.

Rough Lawn

Rough lawn refers to the open space located on the slope south of West Ridge. This landscape consists of unmaintained grasses and other low-profile vegetation. Informal pedestrian trails and paths, used throughout the year, pass through this lawn.

Cultivated Farm Field

The cultivated farm field open space consists of the Agricultural and Forestry Experiment Station and Georgeson Botanical Garden.

Students take advantage of warm temperatures to get in some ball practice near the end of the spring semester.

Barley ripens in the July evening sun in the campus fields managed by UAF's School of Natural Resources and Agricultural Sciences.

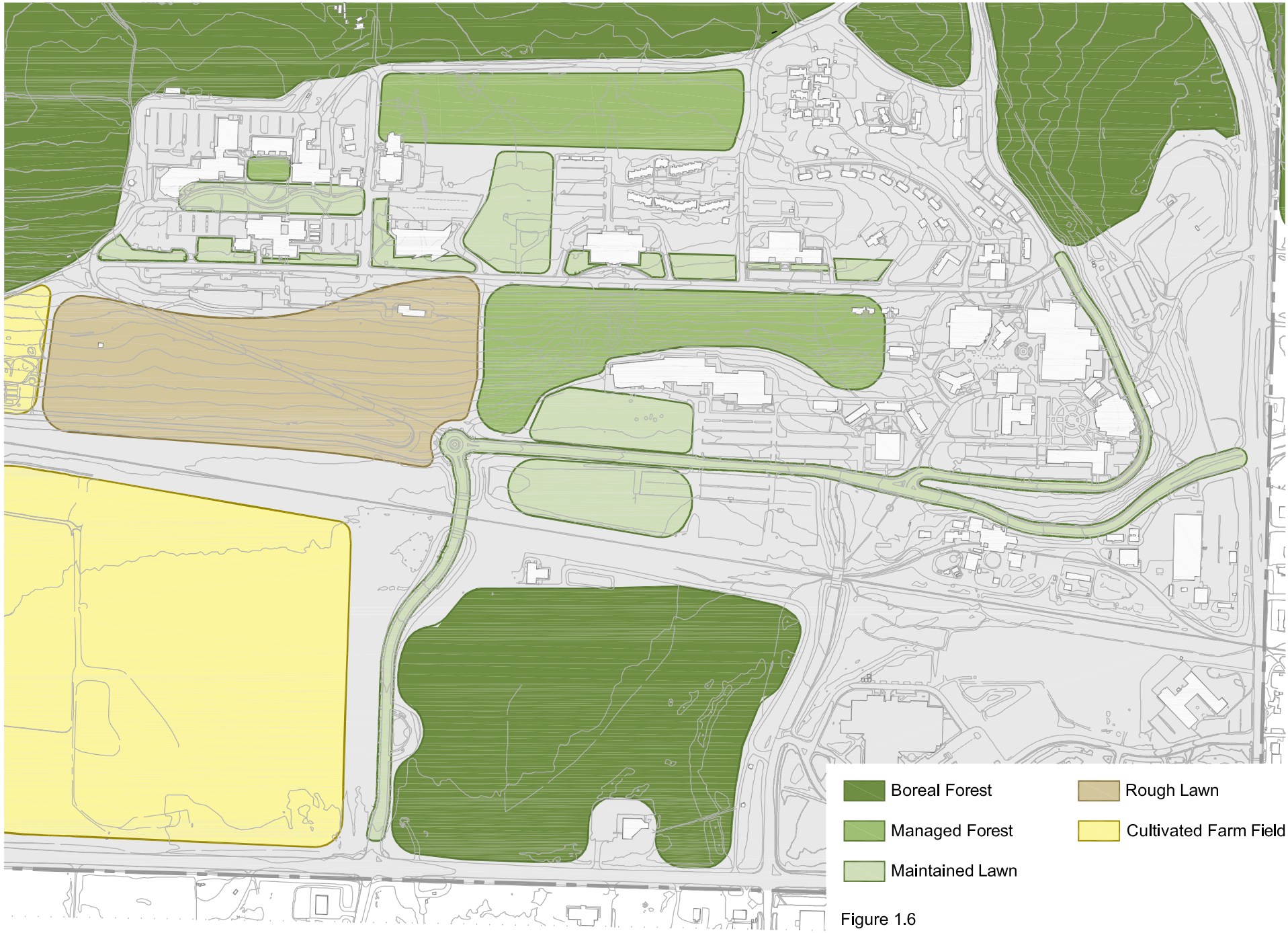

Figure 1.6

Existing Campus Conditions: Open Space Type

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Infrastructure

Circulation and Parking

The Circulation and Parking diagram illustrates primary vehicular circulation routes and parking.

Roadways

Unrestricted access roads are located throughout the campus. On Lower Campus, the access roads lead to housing and interior parking areas. On West Ridge, the access road winds through West Ridge Plaza. Yukon Drive forms the primary unrestricted access road that connects West Ridge and Lower Campus. Tanana Loop extends around the campus perimeter from the west end of Yukon Drive to Farmers Loop on the east. Tanana Loop provides access to student housing and parking areas north of Yukon Drive.

Parking

Despite a continuing effort to move most parking to perimeter lots, surface parking lots are still scattered throughout the campus. The numerous small lots in Lower Campus make inefficient use of space, are difficult to maintain, especially for snow removal, and detract from the safety and appearance of the pedestrian environment. Most of the Lower Campus lots are within a 5-to 10-minute walking distance of academic buildings. However, where steep slopes occur, particularly from the lot off Taku Drive, walking time increases and winter cold can add to the perception of distance.

Shuttle and Bus

The university operates an on-campus shuttle bus system, which is a critical component of the campus circulation system, given the dispersed layout of the campus and steep topography. As of fall semester 2009, four shuttle routes serve the core campus. The primary shuttle route runs along Yukon Drive and Tanana Loop. Two extensions of the primary shuttle route extend through the West Ridge Plaza and along Alumni Drive to the Taku Parking Lot east of Lower Campus.

Primary shuttle stops are located in three locations:

- The Nenana shuttle station located in the Nenana parking lot south of the recreation and athletic complex.
- The Taku shuttle station located at the Taku parking lot east of Lower Campus.
- The Transit Hub along Yukon Drive, northeast of the Wood Center.

Stops for the Fairbanks North Star Borough bus system (MACS) are located at the Transit Hub and the perimeter of the campus at Geist Road and University Avenue.

A shuttle bus picks up passengers at the Nenana shuttle station.

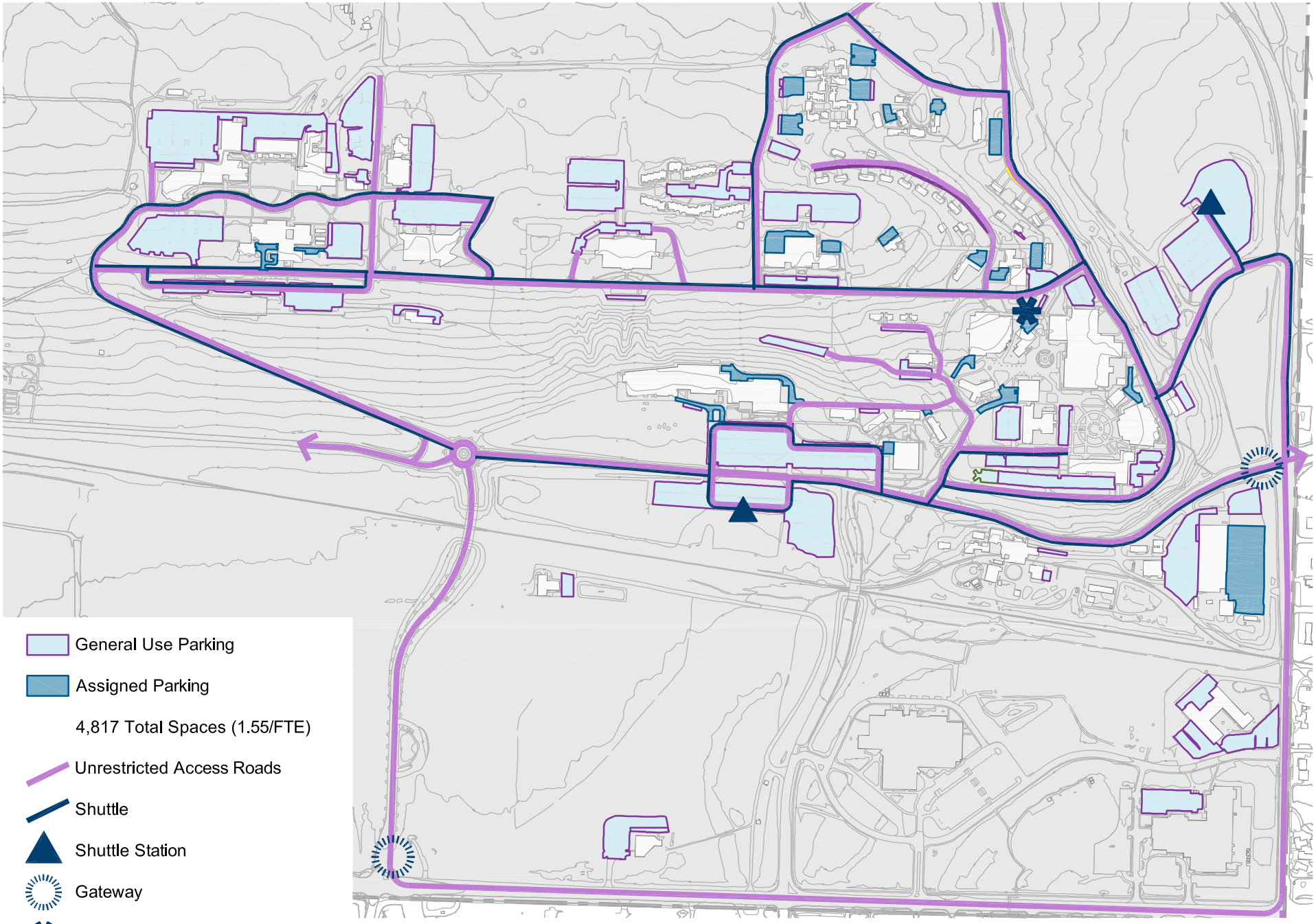

Figure 1.7

Existing Campus Conditions: Circulation and Parking

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UNIVERSITY OF ALASKA FAIRBANKS

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Utility Network

The Utility Network diagram illustrates the existing distribution of utility lines on campus. The underground utilidor system carries steam, condensate return, domestic water, chilled water (for Lower Campus only), deionized water for laboratory use, compressed air, electrical distribution lines and communications cable. Construction of new space on West Ridge will require significant investment in expanding campus utilities which are currently at capacity. Electrical distribution, steam and cooling capacities for the West Ridge are maximized at the present time. The first of three phases of a program to increase electrical distribution capacity is in construction and additional funding is anticipated. Steam distribution capacity improvements are planned and need to be implemented prior to the construction of additional buildings. Cooling capacity, for all future development, needs to be addressed either through the inclusion of individual chillers for each new facility or through the construction of a new district chilling facility for West Ridge.

All development on campus must include utilities and infrastructure accommodations. The majority of utilities are run within the extensive underground utilidor system which is a proven, reliable method.

The campus is creating a comprehensive storm drainage plan. Generally, a ditch and swale system, in combination with sewers, is used for site drainage. There are modest storm sewer systems for some building complexes, but approximately 50 percent for parking areas. Underground systems for site drainage must be carefully designed because storm inverts allow super cold air to freeze the lines, making them non-operational during surface thaws without substantial steam thawing of the pipes.

Campus storm lines empty onto hillsides or into retention ditches. The wetlands on the east side of campus are the receiving areas for storm water and melt water from Lower Campus. The roof drainage of many of the older buildings (1950s and 1960s) connect to the sanitary sewer lines and will have to be modified as they are renovated. Due to the lack of storm sewer access, a drywell system for the small winter flows is used in recent renovations. This type of system discharges large summer flows to surface swales. Natural filtration is a challenge on parking areas because of the tremendous melt water when the ground is still frozen and plants are dormant.

Drainage and contamination are also an issue in the areas used for dumping snow removed from roads and parking lots. The dirty snow leaves concentrations of debris and contaminants when it melts. Much of the gravel used to provide traction on icy roads is swept and reused in the next season. Currently, UAF uses vacant areas adjacent to the Taku and Nenana parking lots and along the right-of-way of the future north Tanana Loop as snow dump disposal sites.

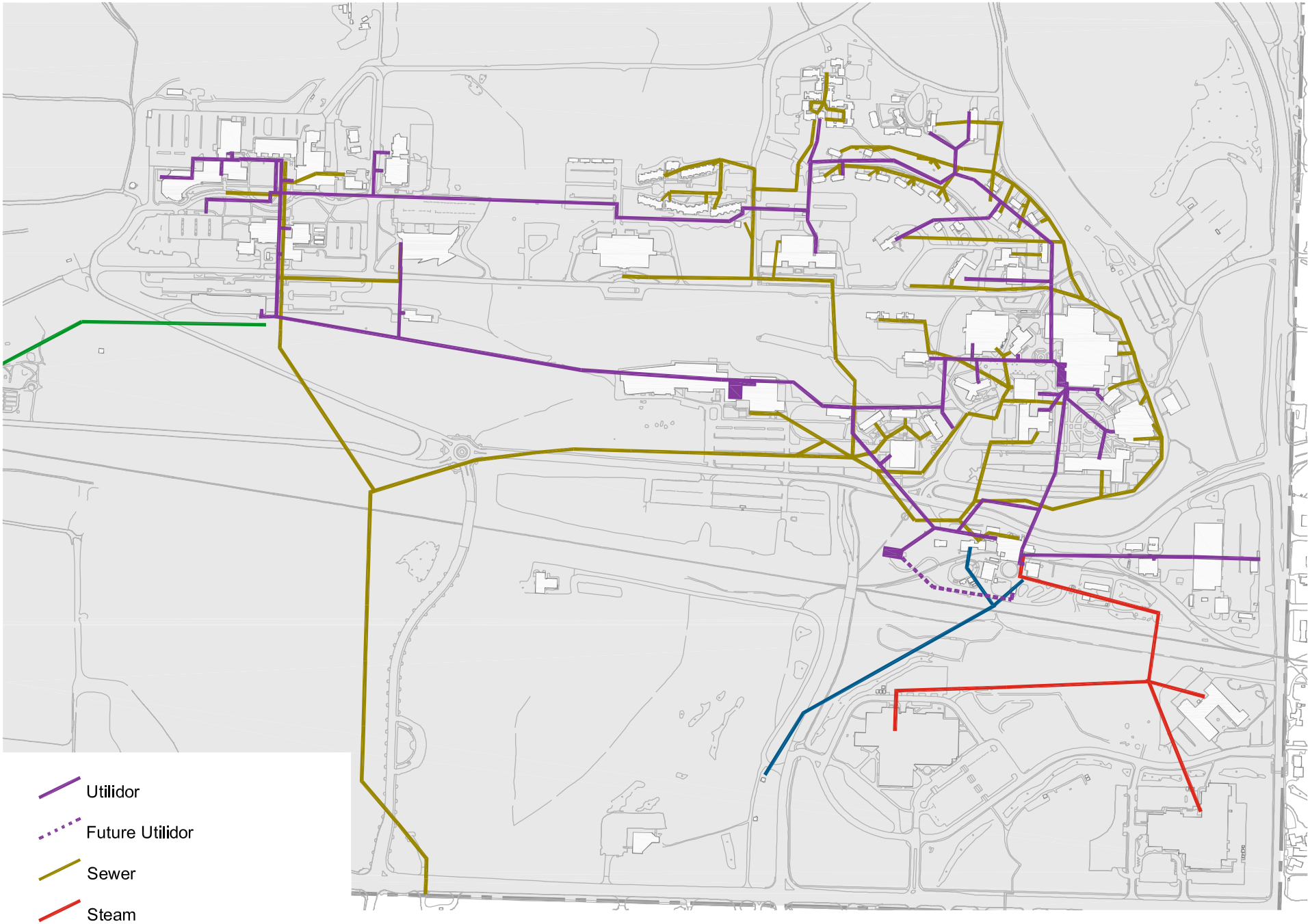

Figure 1.8

Existing Campus Conditions:
Utility Network

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Energy Infrastructure Zones

The campus is served by a Combined Heat and Power (CHP) plant that is highly efficient. The plant provides heating, cooling (Lower Campus only), electric power, and water (for domestic use and fire suppression), deionized water for laboratory use, and compressed air to campus facilities through a central utility infrastructure. Steam is generated to produce electric power, heating and cooling using a combination of coal, fuel oil and natural gas. The CHP operation is a substantially more efficient and economical process than other available alternatives such as separate heat plants for individual buildings. Supplemental electric power is also purchased from Golden Valley Electric Association. However, it is the primary source of greenhouse gas (GHG) emissions for the campus. Fuel and technology options are currently being evaluated for the future expansion or replacement of the existing CHP plant. The goals of the evaluation are to reduce GHG emissions and remain cost effective while providing reliable service. Obviously, a multi-fuel boiler would give the university flexibility in the future as different fuel sources, such as biomass, waste and natural gas, become available. Renewable energy options such as wind, solar and geothermal do not appear to be viable options at this point in time, but UAF should periodically re-evaluate these options.

"In recent years, increased campus energy use has generated peak demands in excess of cogeneration capacity. In 2008, roughly 50 percent of the university's $8 million fuel expense was spent on supplemental fuel oil and electricity that only supplied 15 percent of the university's energy." (October 2009, Combined Heat and Power Resource Paper) The existing plant is over 40 years old and critical components are in need of replacement as the capacity is increased to meet future demand. This situation makes it even more important to explore energy efficiency on campus to reduce future demand and GHG emissions.

University combined heat and power plant plume rises over campus on a cold February morning.

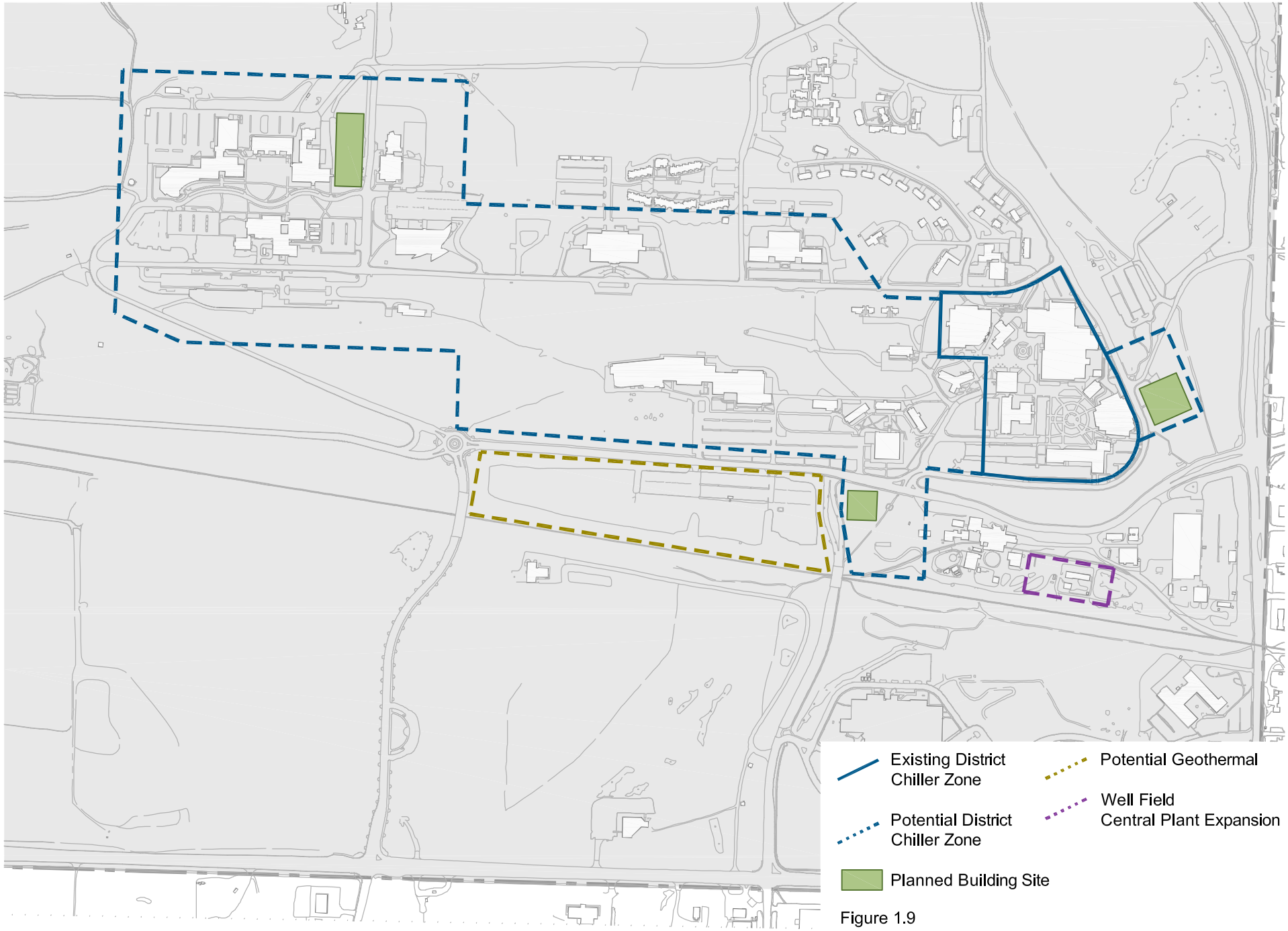

Figure 1.9

Existing Campus Conditions: Energy Infrastructure Zones

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Supporting Plans

In addition to the 2002 Campus Master Plan, several other plans supported development of specific areas of campus. These include, but are not limited to, the following plans. Specific guidelines contained in the plans are included in Section 3: The Future Campus. (See the UAF 2010 CMP website for links to these plans: http://www.uaf.edu/fs/uaf2010masterplan/)

Campus Landscape Plan - 2004

As stated in the plan, "The purpose of the campus landscape plan is to guide the preservation, enhancement, and care of the University of Alaska Fairbanks (UAF) landscape. . .The intent is to provide an overall framework and set of design guidelines for the entire 2,250-acre site to ensure that all future decisions affecting the landscape – regardless of scale – contribute to a unified vision of the campus."

During the years since the landscape plan was approved, many of the recommendations have been implemented. Most noticeable on campus has been the creation of the West Ridge Plaza, which replaces a large parking area and is characterized by seating areas, landscaping and teaching habitats. Troth Yeddha' Park, intended to celebrate Alaska Native traditions and culture, is located between the UA Museum of the North and the Reichardt Building, and is in the final planning stages. Cornerstone Plaza design is complete and awaiting funding.

Campus Life Master Plan - 2005

The objectives of the Campus Life Master Plan were to examine and define the needs for a wide variety of student life auxiliaries at the University of Alaska Fairbanks. These auxiliaries include housing, the bookstore, dining, the student union and recreation. The most critical findings of the report resulted in recommendations for an expansion of Wood Center focused primarily on consolidating dining services and a bookstore, renovation of Constitution Hall to better accommodate student activities, and housing options that offered suite-style housing. Various improvements and upgrades to the existing dining services facilities have been implemented and there are current plans to improve the bookstore. The most financially significant need is new student housing. Various options, including private / public partnerships are being explored. Recommendations for the Student Recreation Center include implementing short-term space allocation goals to expand available space for high-demand activities.

Circulation and Parking Plan - 2004

"The purpose of the Circulation and Parking Plan is to provide additional guidance toward implementing the transportation related items in the Campus Master Plan. . . The resulting plan includes a wide range of measures to improve circulation and parking throughout the UAF campus. It also includes a range of strategies, from significant infrastructure changes to pedestrian enhancements to modified parking management measures. Many of the measures are tied to existing campus plans, such as completing Tanana Loop, constructing Thompson Drive and the Visitors' kiosk, as well as to building sites identified for future development. In addition, changes to the existing parking permit system are identified to optimize use of existing facilities."

Throughout campus, improvements to circulation and parking are evident, from sidewalk enhancements to improvements to the parking system. Most significant was the construction of Thompson Drive, the main gateway entrance to campus. Shuttle service has been enhanced. While continuing to implement the plan recommendations, circulation and parking have become safer, more efficient and cost effective.

North Campus Plan - 2003

Often referred to as "the jewel in the crown," UAF's North Campus area is near and dear to the hearts of many, both on campus and in the community. The 2002 CMP clearly identified the North Campus as an important area of campus, with opportunities for teaching, research and recreation. The North Campus Plan set out a vision for the area, and developed a management process that, to date, has worked very well.

Among the notable actions that the plan implemented, the most important was to create a process whereby the interests of a diverse set of users would be considered in decision-making. A part-time manager was hired to oversee the area, and this position proved to be invaluable. While all has not been smooth sailing, several contentious issues have had positive resolution.

Utilities Development Plan - 2006

A Utilities Development Plan was written in 2006 to address the aging utilities issues for campus. In order to continue to reliably serve all campus utility needs over the next 20 years, the plan states that UAF must:

1. Invest substantially in utility system capital asset renewal and utility infrastructure improvements almost immediately.
2. Employ a long-term strategy of renewal and expansion of the Atkinson Building combined heat and power plant (CHP) using coal as the preferred fuel.

Currently, the options for a multi-fuel combined heat and power plant are being investigated for the expansion of the plant.

Supporting Standards

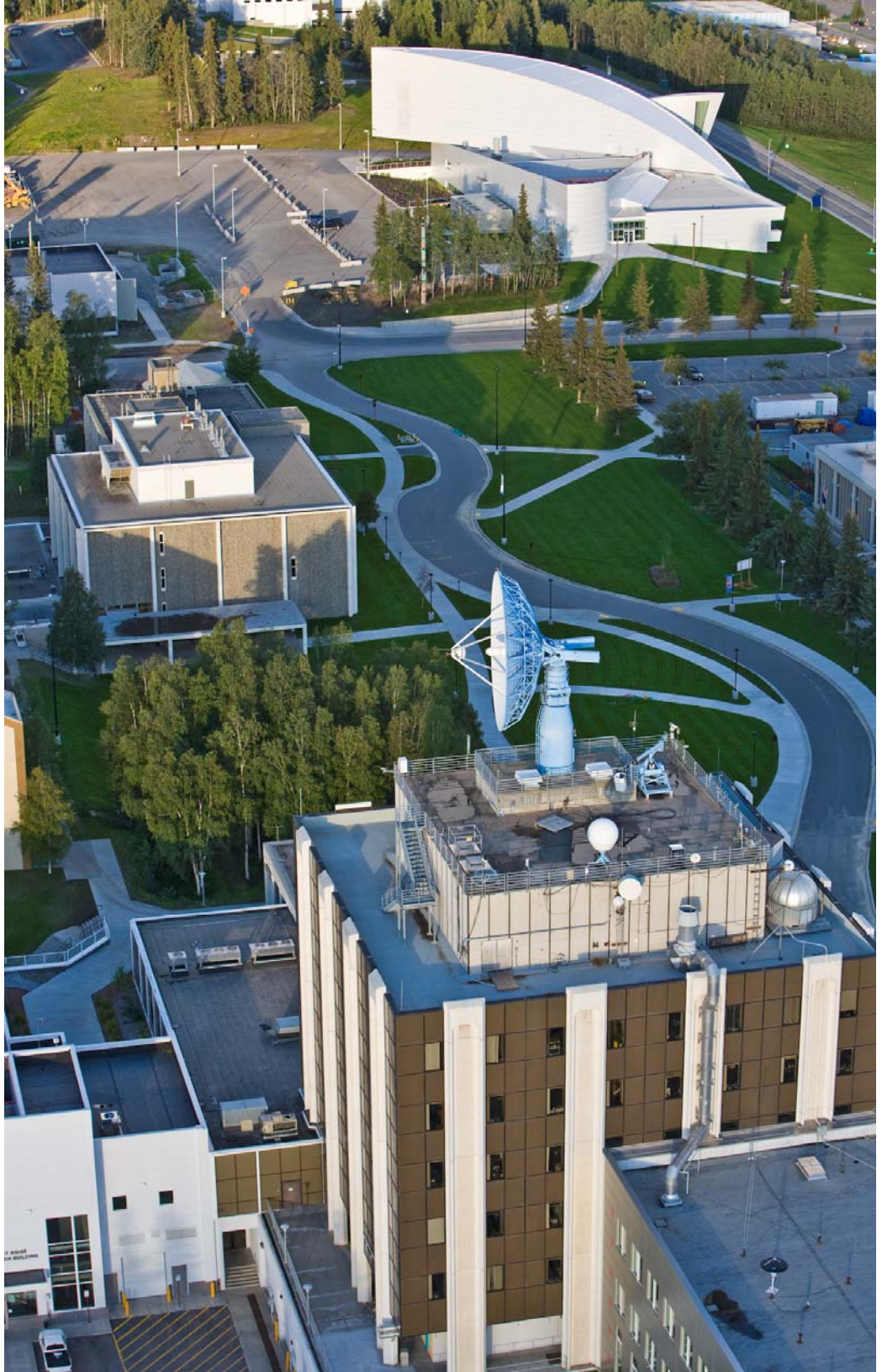
(See the UAF 2010 CMP website for links to these standards: http://www.uaf.edu/fs/uaf2010masterplan/)

Design Standards - 2005

The primary intent of the Design Standards is to identify the requirements, features and functions that are unique and important to UAF and to provide a vehicle to communicate those requirements to the design teams that are preparing construction documents for capital construction projects. The Design Standards are organized by construction disciplines. They provide general direction and guidance and do not replace architectural and engineering expertise or knowledge and do not repeat or replace building code requirements. There are specific and unique requirements stated such as classroom design elements, roof access control design and specific utility system requirements that are defined and required in order to ease building maintenance through consistent elements and systems.

Sign Standards – 2009

Sign Standards have been developed to create a coordinated directional system designed to assist visitors, students, faculty and staff in wayfinding around campus. The coordinated system uses a common design theme directing individuals to their desired location, whether it be on foot, by car, or within a building. Exterior signage addressed includes banners, street names, directional signs, parking lots, pedestrian maps, off campus locations, and building identification. Interior signage includes building directories, departmental identification, personnel door plates, and directional signs. The standards are intended to be a repeatable system that complements the campus and makes travel throughout campus consistent and informative.



Data-gathering satellite dishes sit atop the Elvey Building on UAF's West Ridge.

Current Facility Challenges **2**

introduction /// supporting teaching and research /// supporting academics
/// supporting student life /// supporting sustainability

Cornerstone Plaza marks the core of Lower Campus.

Section 2: Current Facility Challenges

Introduction

One of the more significant facility challenges for the university is the quantity and quality of space. Quality concerns are driven by inadequate maintenance and renewal funding. In addition, most campus facilities were built between 1958 and 1972 and are not configured or equipped for contemporary instruction and research. Related to this issue, many facilities are currently being used for programs that did not exist when they were originally designed.

Building on the 2002 CMP, the 2010 CMP process included a more extensive space analysis in order to provide links to the strategic goals and mission of the university. The space analysis confirmed both university-provided as well as anecdotal evidence from faculty and staff relative to space needs.

The space needs study for the CMP classified each space on campus according to CEFPI (Council for Educational Facilities Planner International) categories, a set of standards used as a national basis of comparison across educational institutions. The standards define a guideline assignable square footage (ASF) per full-time equivalent (FTE) student in each space category. (See Appendix A for ASF summaries per category.) Existing UAF building spaces were also compared with peer institutions and UAF's Capital Plan and its 2001 Accreditation Self Study were used to augment these findings. See Figure 2.1 for a summary of space surpluses or deficits at UAF.

To better assess space needs for student life and auxiliary facilities, the space needs predicted by CEFPI standards were compared with both previous studies and observations. These included the 2009 survey of commuter students, 2009 student stakeholder meetings and the 2005 Campus Life Master Plan.

In addition to analyzing the space use of existing facilities, the space needs study also outlines the projected space needs of the university as the enrollment increases from the existing 3,100 FTE to an envisioned 4,100 FTE. Those future space needs are reflected in the space needs diagram. See Appendix A for a detailed space category deficit and surplus comparison to CEFPI guidelines.

Supporting Teaching and Research

The integration of teaching and research is a primary goal of the institution. The space needs analysis highlights a number of issues particular to the research enterprise at UAF.

The university's space use patterns for research can be characterized by the fact that UAF is a "high research, low FTE" institution. The Center for Measuring University Performance indicates that $153.47 million of research funding was generated in 2006, while the student population was at 3,244 FTE. The resulting $47,309 per student FTE is 5.6 times greater than the average of UAF's research peer institutions. (See Figure 2.2.)

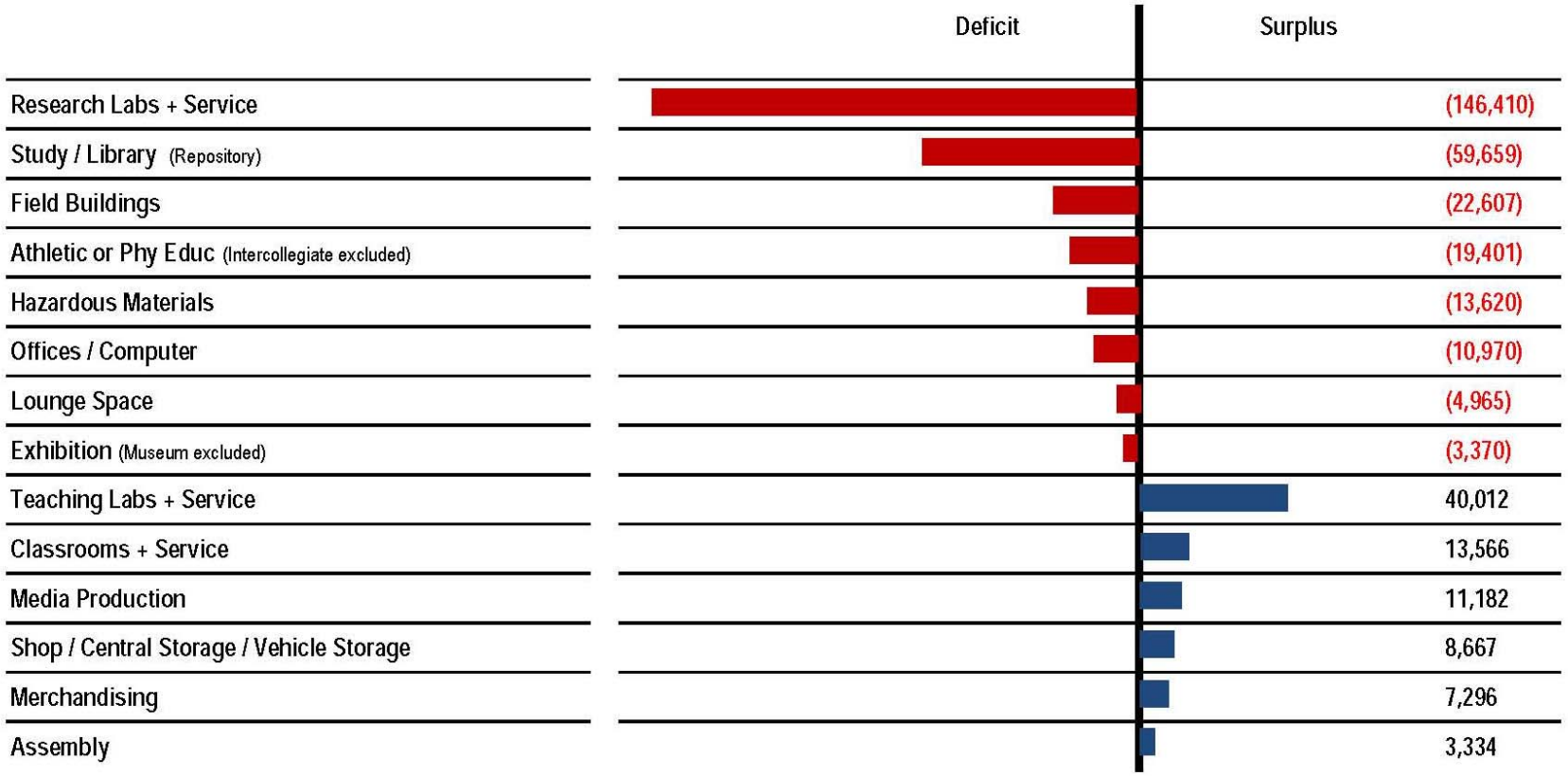
UAF's ASF/FTE for research space is quite high when compared to most institutions. UAF is producing more research dollars per ASF than virtually all institutions, including MIT and Stanford. Only Purdue and New Mexico Institute of Mining and Technology approach the level of UAF's productivity. UAF has been very successful securing research dollars; unfortunately, faculty cannot increase their level of research due to limited research facilities.

Research space use was analyzed on a variety of levels, including ASF/Principal Investigator and ASF/dollar of research income. In both instances, UAF's level of income was far above virtually all benchmark comparisons. (See Figure 2.3.)

Current planning for research support includes final design for a Life Sciences Building, Energy Technology Building and an Engineering Building. However, these facilities only address a fraction of the existing research space needs to say nothing of the projected 30 percent growth in research and accompanying space needs.

Biology major Dominic Hondolero conducts undergraduate research.

Syun-Ichi Akasofu Building on West Ridge.
© James Barker



Note: Other spaces use types are within a surplus or deficit of 0 to 3,000 ASF

Figure 2.1:
Graphic Representation of ASF Space Variances

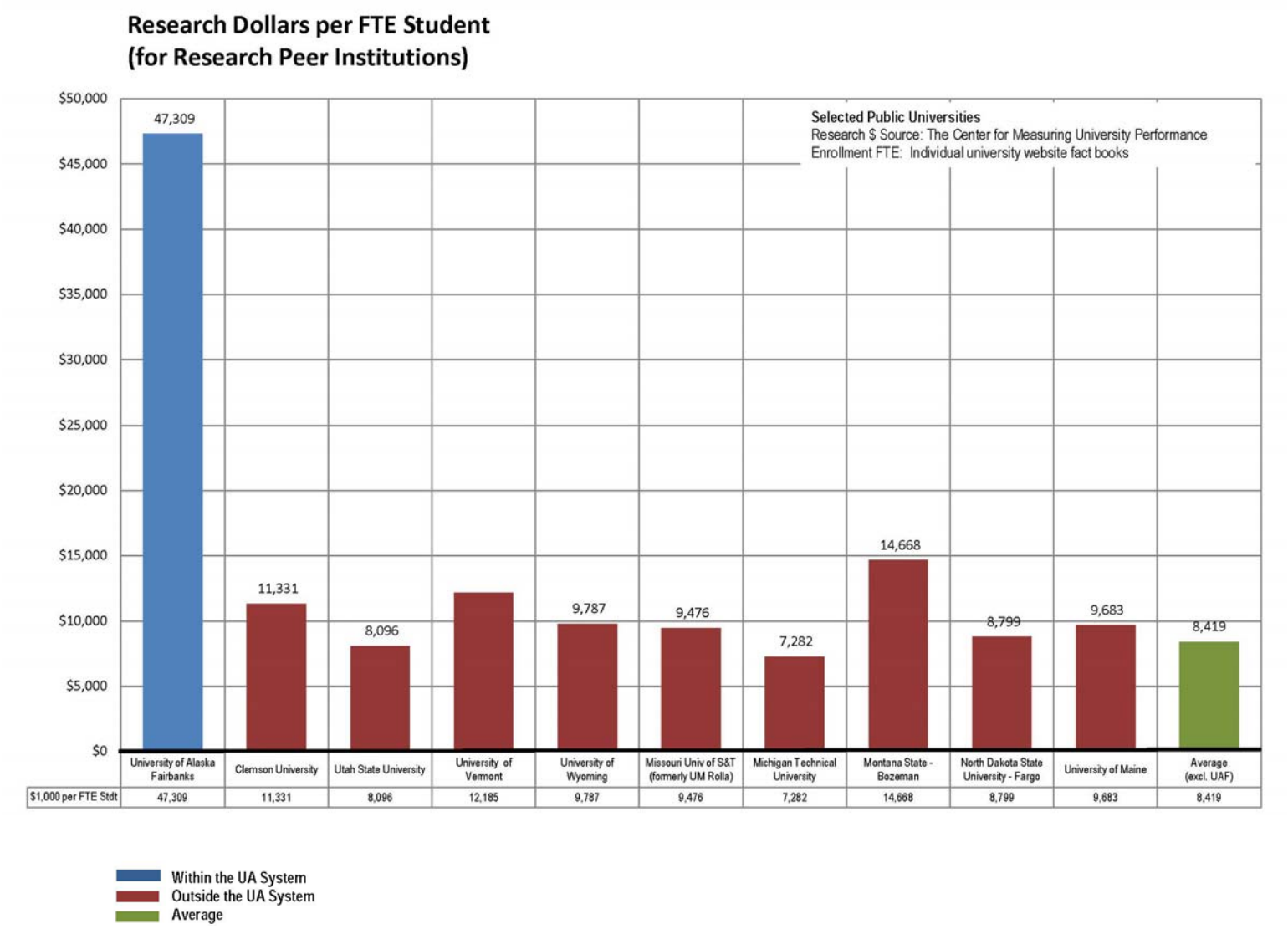


Figure 2.2:
UAF's research dollar per FTE student is 5.6 times greater than the average of UAF's peer institutions.

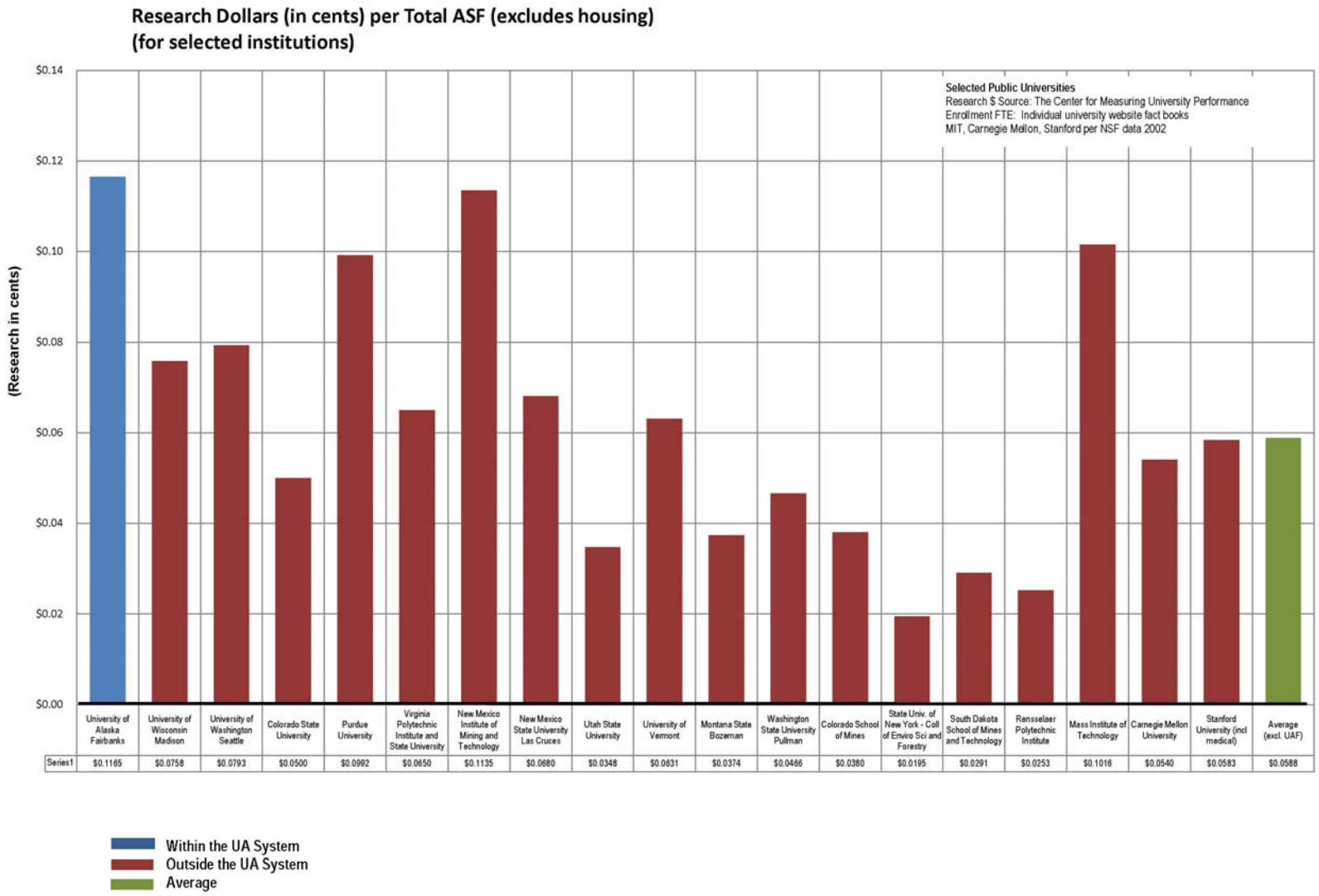


Figure 2.3:
UAF's level of research income is far above virtually all major research institutions.

Supporting Academics

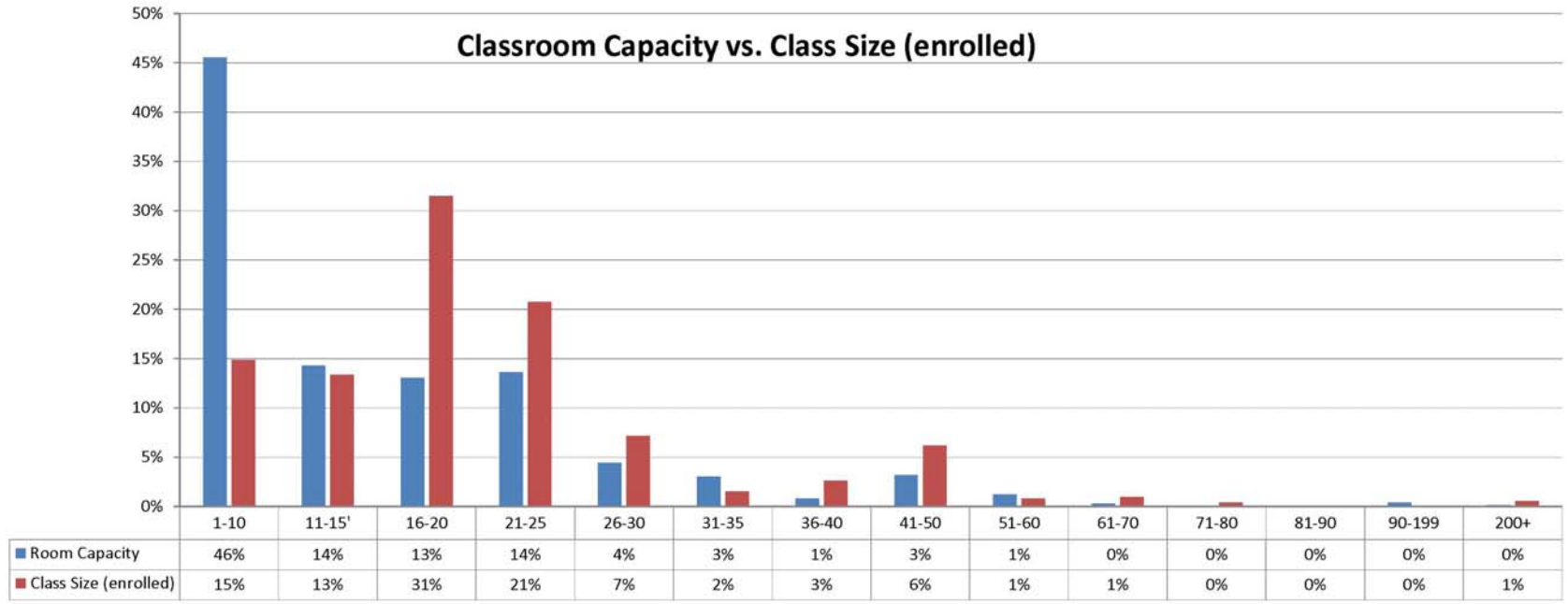
Classroom Distribution and Quality

A number of factors specific to classroom space were examined in considerable detail: station utilization rate, weekly room use, daily classroom use, and classroom capacity versus enrolled class size. The results of those explorations indicated that while classroom seats are filled above recognized national guidelines and standards, the weekly and daily room uses are below standards due in part to the quality of space and/or location on campus.

A significant impact on classroom space use is the misalignment between classroom capacities and enrollment. Figure 2.4 indicates the difference between available classroom capacity (blue) and actual enrollment (red). As the graph indicates, there is a surplus of classrooms in the 1-10 seat capacity range and a shortage of classrooms in the 16-20 and 21-25 seat range. Although there is not a significant demand for large lecture spaces, some need does exist. Biology 110, for example, requires 125 seats while Anatomy and Physiology requires 185 seats. These issues create shortages of classrooms in particular sizes that often cause a chain reaction in which classes are assigned to classrooms with too much seating capacity, creating inefficient classroom alignments.

Students in a School of Management classroom.

Students crowd into one of the few classrooms on West Ridge, which doubles as a class laboratory.
Photo: Maureen McCombs



	1-10	11-15'	16-20	21-25	26-30	31-35	36-40	41-50	51-60	61-70	71-80	81-90	90-199	200+
Room Capacity	46%	14%	13%	14%	4%	3%	1%	3%	1%	0%	0%	0%	0%	0%
Class Size (enrolled)	15%	13%	31%	21%	7%	2%	3%	6%	1%	1%	0%	0%	0%	1%

Figure 2.4

Improving the weekly room use could provide additional classroom capacity without the construction of new buildings. Classroom use varies considerably in regards to hours of the day and days of the week. By standardizing hours to start and end on a consistent campus-wide basis (as much as possible), space savings could be achieved. Classroom scheduling could be maximized. (See Figure 2.5 through Figure 2.10.)

While some improvement in utilization could be achieved, a significant challenge is the issue of classroom quality and location. Enrollment statistics indicate a surplus of space, but they do not recognize the quality or the locations of the classrooms across campus. Quality concerns include equipment, configuration, acoustics and lighting, sightlines, technology, etc. Geographic distribution of classrooms is not aligned with demand. West Ridge has a significant shortage of classroom space while Lower Campus has a surplus of small classrooms.

UAF continues to examine opportunities to repurpose underutilized classrooms and improve the quality of space. Budgeted deferred maintenance dollars should be prioritized for renovating existing classrooms.

Instructional Lab Distribution and Quality

Similar to classroom space, many of the same issues exist. The space needs analysis shows that there is a surplus of instructional lab space. The statistics do not, however, reflect considerations of the space apart from quantity. There is some degree of overlap between instructional lab and research lab activities, particularly in engineering programs, which artificially inflates the instructional lab square footage.

Most important, many lab spaces contain highly specialized lab equipment that restricts the usage for purposes other than lab classes. Because of the specialized lab equipment, scheduling and utilization are very limited.

Thinking long term, the teaching lab surplus may be an advantage in addressing anticipated increases in engineering programs, as well as new and emerging programs, change in industry (gas pipeline), etc. In addition, the surpluses may also provide opportunities to integrate teaching and research disciplines (and cultures) for both graduate and undergraduate student

Library and Study Quantity

Existing space needs indicate a deficit of library and study space on campus. Reasons for the increased need for library and study facilities include the following:

1. High level of research on campus and the need for supporting materials.
2. A federal documents repository, receiving 40 percent of the materials published by the U.S. Government Printing Office, as well as Alaska's U.S. Senatorial manuscripts and papers.
3. Houses more than 2.0 million items, making it a statewide resource and largest library in the state.

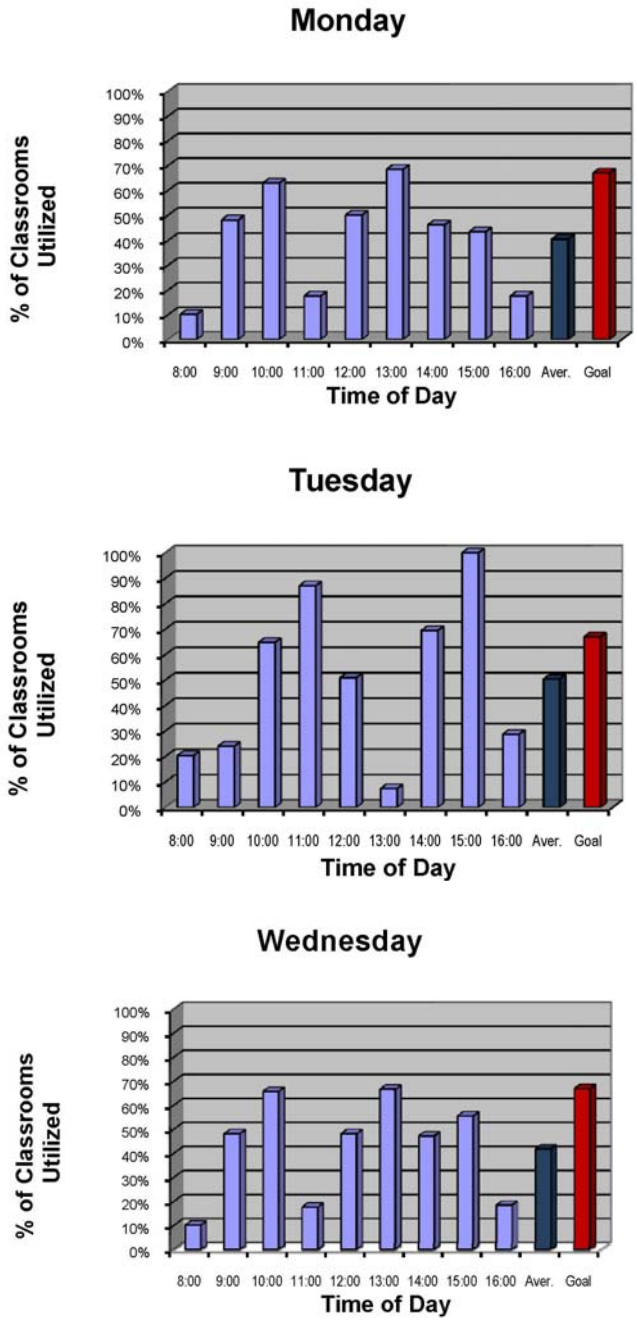
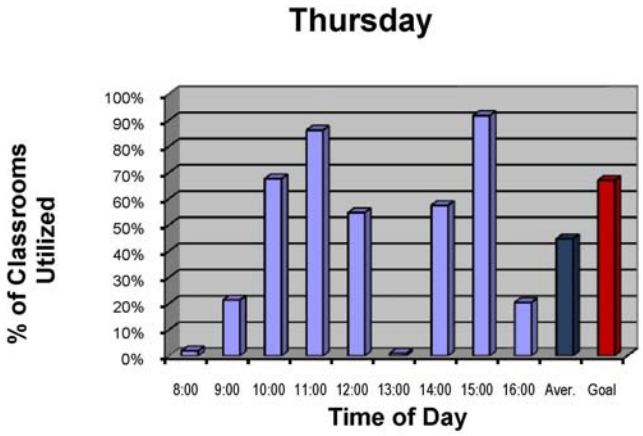
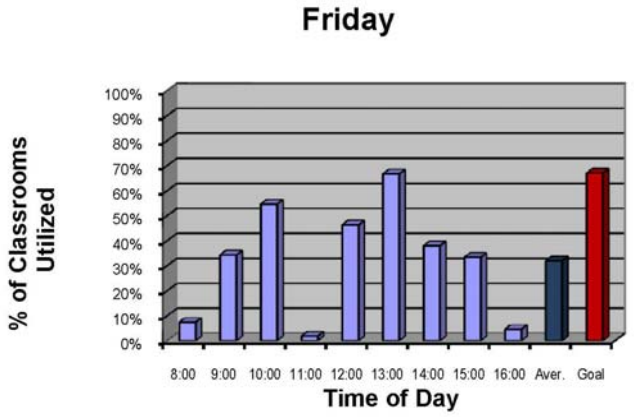
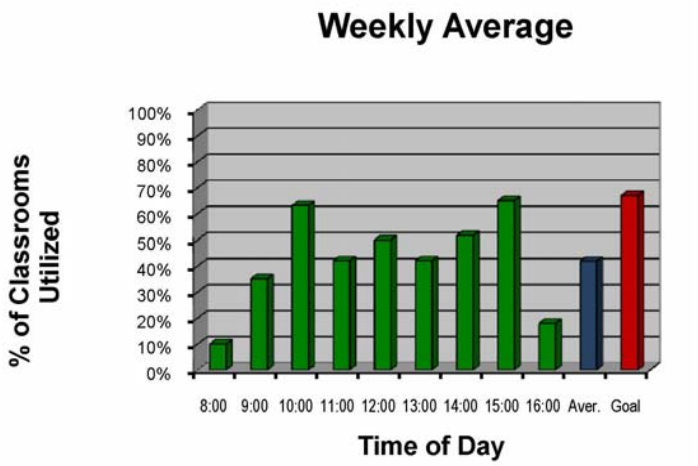


Figure 2.5: Classroom Utilization







4. The Alaska and Polar Regions collection is one of the world's finest but cannot absorb the Alaska Native language collection currently housed in another building in non-archival space.
5. Currently insufficient in number, library study areas are one of the few areas open to commuter students for individual and group study.

Office Quantity and Quality

There is a deficit of office space on campus including faculty, staff and graduate student office space. A contributing factor to the deficit is that a significant number of offices are needed for faculty and staff associated with research endeavors. A significant amount of off-campus leased space helps to address these deficits in office space. As with other space types on campus, there is also an issue of environmental quality and size relative to some office spaces.

Supporting Student Life

Housing

UAF has a high number of traditional double rooms but a shortage of suites and apartments. Adding suites or apartments to the campus would provide a better range of housing options desired by students. A varied inventory would encourage students of all ages to live on campus, thus enhancing campus life.

Although suites and apartments would be an added campus amenity, the existing traditional residence halls could be improved through the addition of more student life space such as study lounges, cooking facilities or cell phone booths where students could take private calls outside a shared room. Increased gathering space and flexibility for cooking and dining, in all housing options, would strengthen the on-campus experience. On-campus housing should support increased independence for students. The university is pursuing public-private partnerships and fundraising efforts to meet these needs.

Dining

Improvements to dining options and facilities are a high priority. Lola Tilly Commons needs significant renovations and should be considered for repurposing. The main dining facility should be moved within or directly adjacent to the Wood Center. Commuter and resident students alike would benefit from both convenient locations as well as diverse food options.

Campus Amenities

Amenities that encourage both resident and commuter students to remain on campus strengthen both the social and academic aspects of campus life. This is an especially critical need during the winter months.

Cutler Apartments are home to juniors, seniors and graduate students.

Mike Kennedy, left, Elizabeth Tsigonis and Lisa Fidino take time to study near the Wood Center food court.

Students congregate in the multi-level lounge in the Wood Center with laptop computers. From lower left to right are Joseph McGrady, Amber Smith, Randi Kaihoi, Elizabeth Tsigonis, Sam Joseph and Lisa Fidino.

Students Sean D'Alessio, Heather Neal and Michael Hazlett team up to study in the Hess Rec Center inside the Moore-Bartlett-Skarland residence hall complex.

Wood Center would benefit from amenities — such as a coffee house, improved late-night food options and game/bowling areas, comfortable lounge space and expanded retail opportunities — that would make it a destination point. While Wood Center has seating and gathering spaces available, students tend to pass through the building on their way to other locations. Providing additional social spaces for all ages at a variety of venues on campus, such as a movie theater, non-alcoholic club, juice bar and coffee house would enliven campus life. Offering more outdoor activities throughout the academic year is desired. One example would be the recently introduced disc golf course.

Strengthening connections between the campus and community is another way to enliven campus life and broaden use of campus amenities. The available performing arts opportunities, museum, and radio and television stations (KSUA and KUAC) are examples of programs that bring more people to the campus, thus making the university a destination for education and entertainment. A variety of activities draws more people to campus and creates a hub of activity.

The Associated Students of the University of Alaska Fairbanks (ASUAF) lacks sufficient meeting space and could benefit from better visibility and proximity to student organization space and student press. A central, visible location would improve student organization recruitment, participation and communication.

<u>Informal Assembly and Group Study Spaces</u>

Two-thirds of students live off-campus and commute to UAF for classes, recreation and other activities. There is a critical need for increased assembly spaces on campus, both for study and socialization, including more quiet spaces in buildings other than the library. While the Wood Center does offer some space for casual study, the negative physical issues (acoustics, lighting,

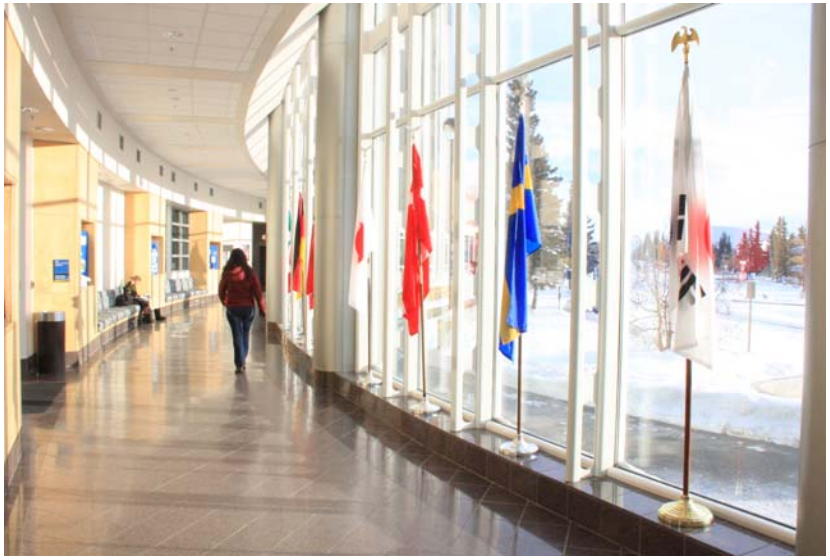
etc) and event scheduling limit its success as a study space. In addition, commuter students require on-campus storage for books, laptops, recreation equipment, lunches and other items.

Small assembly spaces are needed in or near residence halls for study, socialization and recreation. The location of assembly spaces is important in residence halls as, when placed near the front door or lobby, students are forced to walk through this space and come into contact with other students. They serve as catalysts for an active and closely knit student community. Assembly spaces also benefit commuter and graduate students. These dedicated spaces promote an on-campus community for non-resident students.

Enclosed, heated connections would promote easier and safer movement between buildings and throughout campus. They would also enhance the sense of campus community, especially in the cold winter months. They can provide small study areas, seating, indoor plantings and display areas — an interior crossroads encouraging productive collisions between students, faculty and staff.

Wellness

The winter climate presents unique challenges to student, faculty and staff populations. State-of-the-art lighting throughout campus, both natural and artificial, is critical. Due to the limited amount of sunlight during the winter, greenhouse-like assembly spaces can provide better lighting when access to daylight is limited. These assembly spaces enhance overall wellness and prevent social isolation.



The hallway between the Akasofu and Elvey Buildings is filled with sunlight on a winter day.
© James Barker

Jenny Day harvests vegetables from a production garden as part of her duties as landscape supervisor with Facilities Services. UAF Dining Services uses the vegetables whenever available.

Supporting Sustainability

Defining and supporting sustainability on campus is a concern shared by faculty, staff and students. To express their commitment, in 2009 the student body voted for a $20 per semester student fee to support sustainability efforts on campus. The funds generated from the fee will be used to address sustainability issues, including energy efficiency, transportation and education.

UAF has the potential to not only improve the sustainable aspects of its buildings and grounds, but also to integrate sustainability into instruction, research and outreach - the core mission of the university. Examples include research on deep well geothermal technology, cold climate energy efficiency, subarctic micro climates and ecology. Success and innovations in these areas can teach students valuable lessons in service to Alaska.

Defining Sustainability

It is important for the University of Alaska Fairbanks to create a definition of sustainability that is relevant to its northern environment. In 2008, the recommendations from the Chancellor's Sustainability Transition Team defined sustainability as:

> *Environmental sustainability is like old wine in a fashionable new bottle; the concept is old but the term is new. The concept is based on the fundamental rules of conservation that were recommended long before global warming was a concern. Those fundamentals are:*
>
> - *Reduce dependence on non-renewable, non-recyclable materials, as these will run out. Harvest*

renewable resources no faster than they can be renewed, or they will also run out.

- *Produce wastes no faster than nature can absorb or break them down, or we will poison our own nest.*

Sustainability will affect the triple bottom line of economy, environment and equity across all aspects of the university. A sustainability plan will be developed to supplement the CMP and map sustainability implementation actions for academics, research and operations.

The following activities have already been accomplished and can serve as the foundation of future work:

- UAF Campus Sustainability: Recommendations from the Chancellor's Sustainability Transition Team
- Draft Sustainability Plan created by Natural Resource Management students
- Honors Program student concept to retrofit a 1950s building on campus
- Chancellor pledged to achieve a better score on the College Sustainability Report Card

The shuttle station in the Nenana parking lot is powered by solar panels.

Researchers with UAF's School of Natural Resources and Agricultural Sciences harvest grass samples as part of their study into the feasibility of growing potential biofuels.

In addition, a great deal of work has been done to improve the performance of buildings, including new lights and better controls. During the master planning process, Facilities Services, in cooperation with the CHP management, have begun to develop an energy benchmarking program to track water use and waste stream performance. This program can be expanded in the future to track water and waste reduction. In the area of waste management, there is already a culture of salvaging and reusing materials and is an area of potential innovation. Continued efforts in these areas can capitalize on lessons learned in northern Europe, Canada and the northern United States.

Evaluation Tools

A number of organizations have benchmarking tools already used by the university. The College Sustainability Report Card is used in discussions to review major topics such as food and recycling, green building, student involvement, and shareholder engagement. The Association for the Advancement of Sustainability in Higher Education (AASHE) Sustainability Tracking, Assessment and Rating System (STARS) Program is an appropriate resource for guidance. UAF adheres to Leadership in Energy and Environmental Design (LEED) guidelines for sustainability practices. The university will continue to refine its internal metrics and best practices that are most reflective of the sustainable health of the university.

Energy Conservation

Design standards address the use of energy conservation methods and products through the design of mechanical and electrical systems, plumbing and building envelopes. A life cycle analysis is performed on each design to determine its long-term maintenance, financial and environmental impact.

An artist's rendering of the Life Sciences Building on West Ridge. Credit: SmithGroup

The Future Campus 3

introduction /// goals /// projected enrollment /// building use /// open space /// circulation and parking

The concept plan for Cornerstone Plaza. Credit: Land Design North

Section 3:
The Future Campus

Introduction

The final plan addresses UAF's instructional, research and student life needs, as well as sustainability issues. A series of drawings highlights the three key elements of the physical campus: building use, open space, and circulation and parking.

Goals

2002 CMP goals were refined to reflect emerging university priorities. The following goals were confirmed during the 2010 planning process:

I. Support the integration of teaching and research through building location and use, circulation and open space.

II. Ensure the campus environment enhances both the academic and student life experience.

III. Improve access to and circulation within the campus.

IV. Preserve and highlight the unique natural and cultural aspects of UAF's northern location.

V. Enhance space quality and maximize effective utilization.

VI. Employ best practices in sustainability for northern environments.

Projected Enrollment

The Future Campus is based on projected enrollment increases of 1,000 FTE as well as increased research activity. UAF has a current deficiency of space in numerous areas, even with the current enrollment and research activity. The CMP is being completed in a time of change: there is a new vice chancellor for students and new UA president, as well as uncertainty about new state investments in student financial aid and in new facilities. Therefore, the projections' accuracy is dependent on the stated governing conditions.

The enrollment projections shown are for two scenarios.

(1) Substantial investments in new recruiting efforts, plus a significant new state investment in merit and/or needs-based financial aid. This yields about 1,000 additional baccalaureate degree-seeking students in 10 years. In addition, growing research programs (if there is sufficient space) yield 100 new graduate students.

(2) Similar to (1) except no new state financial aid. This yields about 725 new baccalaureate degree-seeking students.

Both scenarios assume:

- 3 percent annual increase in Ph.D. student enrollment
- No change in master's student enrollment
- Numbers of Alaska high school graduates as predicted by WICHE[1]
- 5 percent annual increase in freshmen recruited from Matsu/Kenai/Anchorage
- 3 percent annual increase in in-state transfers
- 10-15 percent annual increase in nonresident transfers
- 5 percent improvement in retention for the period (a total of 5 percent in 10 years)
- No change in non-degree-seeking student enrollment

In addition to these, Scenario 1 assumes the following:

- 20 percent step increase in first-time freshmen (2012) due to state merit/need scholarship program

[1] Western Interstate Commission on Higher Education

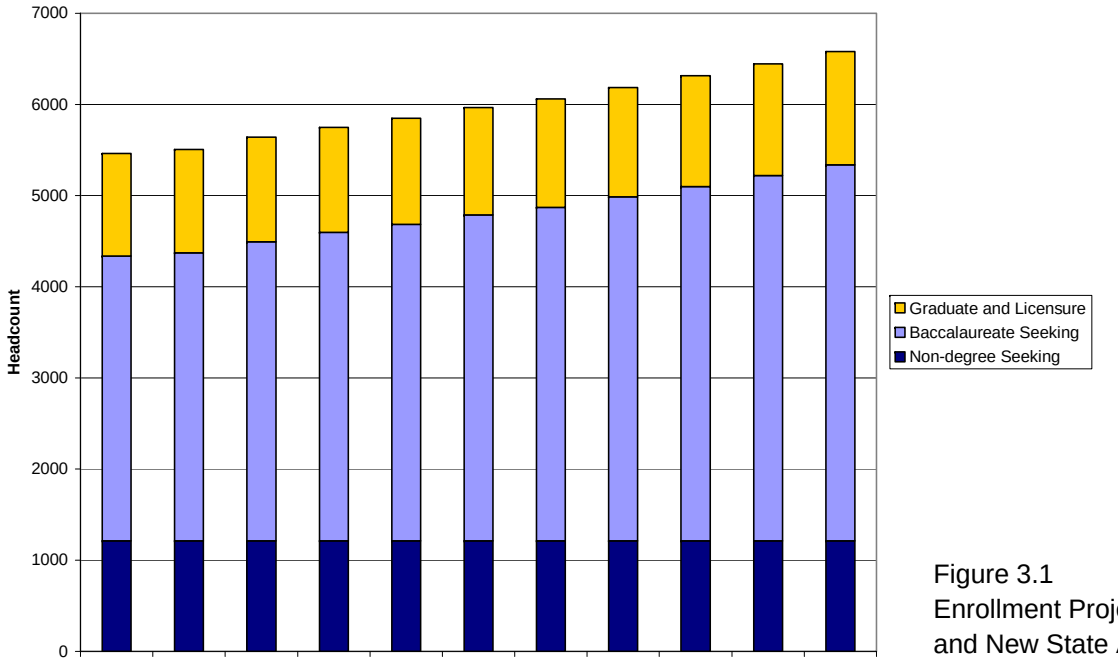


Figure 3.1
Enrollment Projection with High Recruiting Effort and New State Aid Program

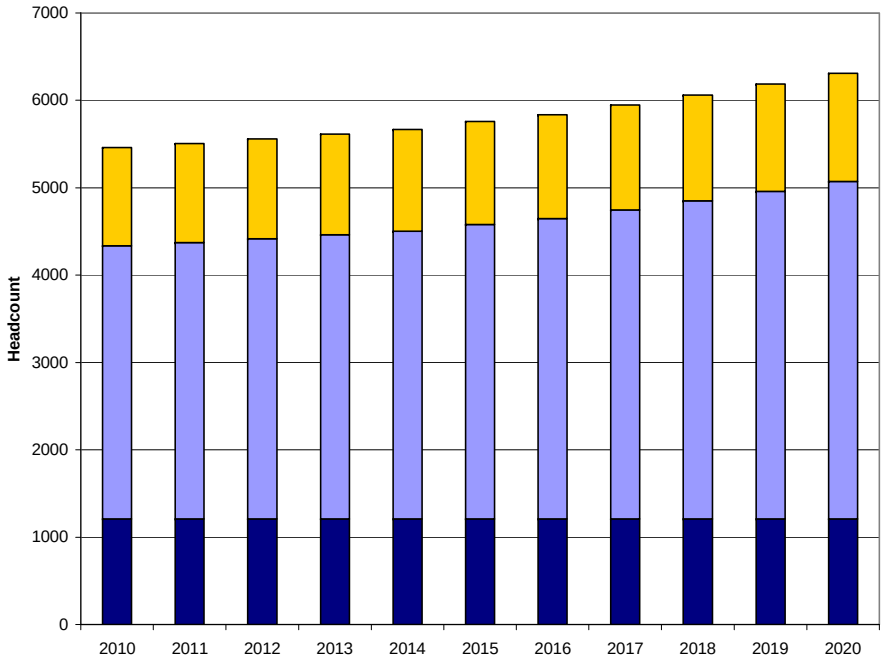


Figure 3.2
Enrollment Projection without New State Aid Program

Building Use

The ***Long Term Plan: Building Use diagram*** (Figure 3.3) illustrates the overall development areas on campus. Recommended development is designated by primary use but may contain spaces outside the primary space use category. Mixed academic facilities, for example, may contain spaces for classrooms, offices and study. Research facilities may contain both research laboratories, classrooms and associated administrative office space.

A critical piece to supporting all aspects of campus is the upgrade of UAF utilities. Currently in the planning stages is a new Combined Heat and Power Plant to supply utilities to the entire campus.

Supporting Academics and Research

Classroom improvements, relative to modern pedagogy and learning styles, will be achieved through a combination of renovation and new construction. This will take place throughout campus.

Locating research facilities closer to Lower Campus and including mixed academic facilities on West Ridge better integrates these functions and improves the undergraduate academic experience. The improved visibility and accessibility to these programs highlights the unique research that is particular to UAF, research tied to Alaska's natural history, climate and culture.

Recommended development also strengthens the campus spine. Locating additional research, academic, residential and student life facilities along Yukon Drive will create a more integrated campus community. It increases pedestrian activity, enlivens the campus environment and diminishes the sense of separation between West Ridge and Lower Campus.

Supporting Student Life

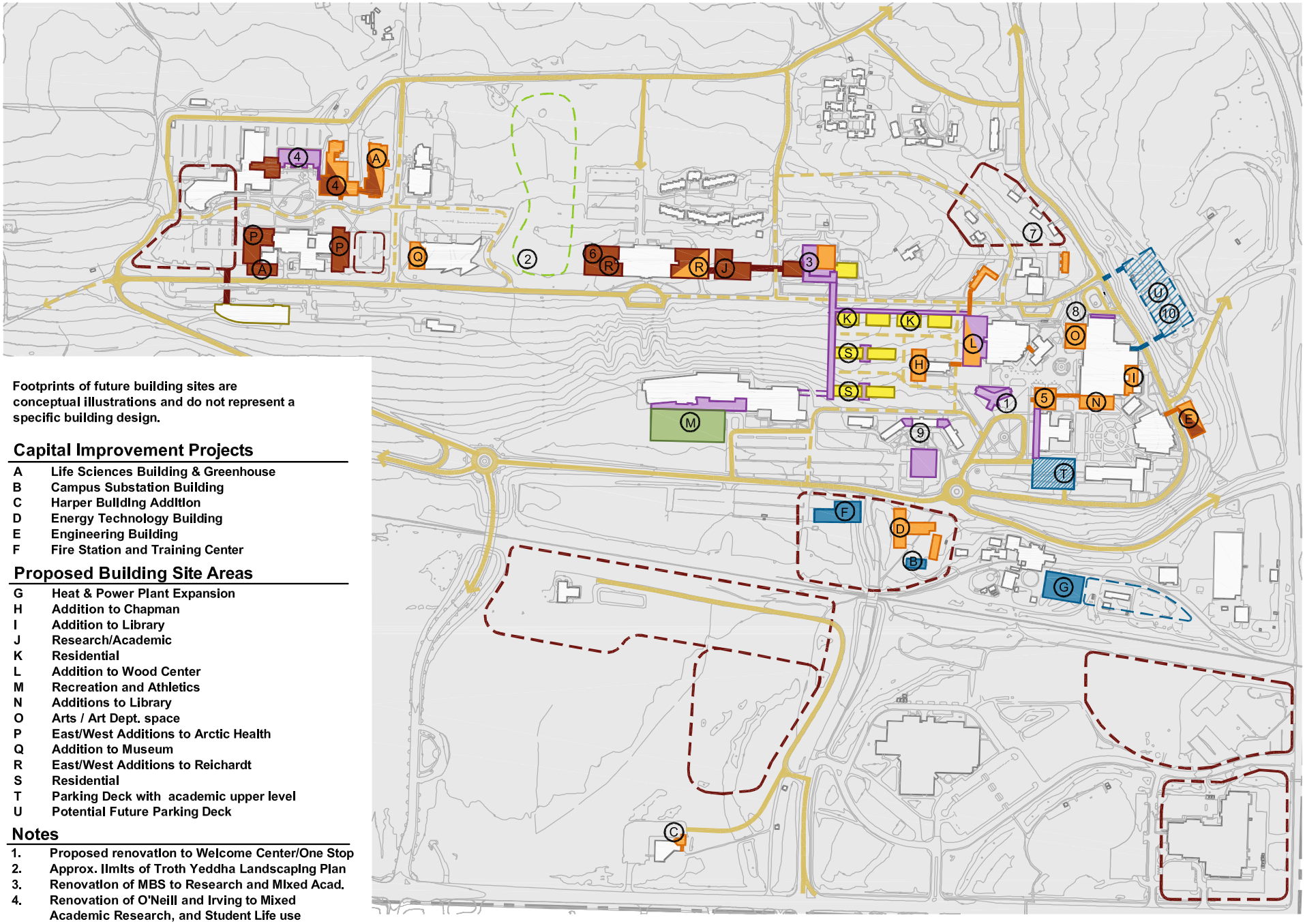
The CMP supports expansion of the residential housing neighborhood on the Lower Campus and the provision of diverse housing types, such as suite-style units with shared kitchen facilities. New residential facilities south of Yukon Drive include all-weather connections to gathering spaces in both Wood Center and Bartlett Hall, creating connectivity between housing, student life and academic facilities. Additional gathering spaces — including study space, recreation space or kitchen facilities — are located between Stevens, Nerland and MacIntosh halls.

Expansion of student life facilities at the Wood Center includes possible relocation of the main dining facility and bookstore and improves student organization spaces. Both the library and residential facilities have recommended physical connections to academic and student life facilities. The plan recommends that Lola Tilly Commons be repurposed. A Welcome Center is recommended for the new gateway entrance, possibly in a repurposed Wickersham Hall.

Providing gathering spaces throughout campus and increasing on-campus dining options addresses specific commuter student issues. Access to natural light and increased artificial lighting during the winter will provide attractive areas for on and off-campus students to study and work together.

Partners and Outreach

The recommended partnership development zones accommodate future partnership opportunities. The partnership development area on West Ridge, for example, defines an area for potential research. The development area along North Chandalar Road accommodates future housing for faculty or graduate students. The development areas at Geist Road and University Avenue accommodate community outreach opportunities.



Footprints of future building sites are conceptual illustrations and do not represent a specific building design.

Capital Improvement Projects

A	Life Sciences Building & Greenhouse
B	Campus Substation Building
C	Harper Building Addition
D	Energy Technology Building
E	Engineering Building
F	Fire Station and Training Center

Proposed Building Site Areas

G	Heat & Power Plant Expansion
H	Addition to Chapman
I	Addition to Library
J	Research/Academic
K	Residential
L	Addition to Wood Center
M	Recreation and Athletics
N	Additions to Library
O	Arts / Art Dept. space
P	East/West Additions to Arctic Health
Q	Addition to Museum
R	East/West Additions to Reichardt
S	Residential
T	Parking Deck with academic upper level
U	Potential Future Parking Deck

Notes

1. Proposed renovation to Welcome Center/One Stop
2. Approx. limits of Troth Yeddha Landscaping Plan
3. Renovation of MBS to Research and Mixed Acad.
4. Renovation of O'Neill and Irving to Mixed Academic Research, and Student Life use
5. Renovation to Academic & Student Support
6. Research/Study linkage to Troth Yeddha
7. Potential development area for high density res.
8. Covered access and drop off for Fine Arts
9. Renovation/Addition for Student Life use
10. Potential occupied space on upper level

Mixed Academic
Research
Gathering & Student Life
Recreation & Athletics
Residential
Facility Support
Partnership Development Areas

Figure 3.3
Long Term Plan: Primary Building Use

0 350 700 1,400

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Open Space

The ***Long Term Plan: Open Space diagram*** (Figure 3.4) illustrates the overall, recommended structure of open spaces on campus. The diagram builds upon existing systems to address issues of campus identity, pedestrian connections, campus environment and learning opportunities.

Supporting Academics

Open space development on campus enhances the student learning experience. The campus greenway provides an interpretive learning environment that includes natural, cultural and historical elements such as native plantings, Troth Yeddha' Park and Rainey Cabin. The ecosystem, research and recreation areas provide learning opportunities within the campus core environment. Squares and boulevards, outdoor gathering spaces and activity area, promote "productive collisions" between students, faculty and staff.

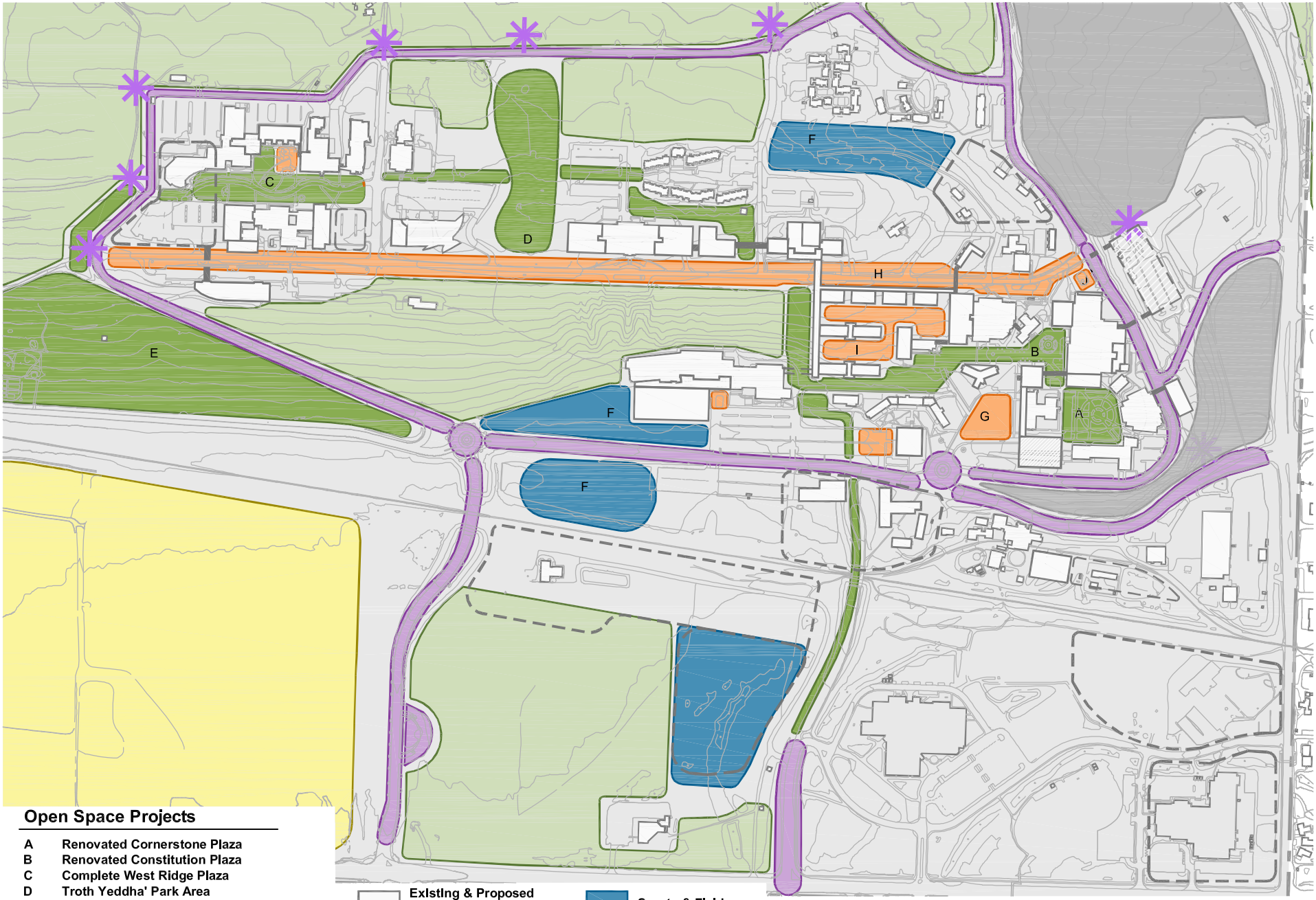
Supporting Student Life

The student life experience is augmented by open space. Expanded sports and recreation fields and formalized trail connections to North Campus provide increased sports and recreation opportunities. Connections between open space areas and student housing serve to strengthen the relationship between the built and natural environment.

Supporting Pedestrian Travel

Open space enables the creation of pedestrian corridors that are not adjacent to roadways. The campus greenway provides a pedestrian path that encourages connections to both the immediate and broader landscape. Traversing campus east to west, pedestrians experience everything from the highly structured Cornerstone Plaza, to more informal trailways north of Yukon Drive to the Georgeson Botanical Garden. As people move along the greenway, they have opportunities to enjoy a variety of views of the unique Alaska landscape, including the distant Alaska Range.

A view toward the UA Museum of the North across the future site of Troth Yeddha' Park.



Open Space Projects

A	Renovated Cornerstone Plaza
B	Renovated Constitution Plaza
C	Complete West Ridge Plaza
D	Troth Yeddha' Park Area
E	Botanical Gardens and expansion area
F	Potential sports field expansion area
G	New entry gateway and drop off
H	Yukon Drive pedestrian boulevard
I	Residential courtyard spaces
J	Drop off plaza for Fine Arts

- Existing & Proposed Building Areas
- Campus Streetscape
- Ecosystem Research, Instruction & Recreation
- Squares & Boulevards
- Trail Connections
- Sports & Fields
- Campus Greenway
- Agricultural Research
- Viewshed Preserve

Figure 3.4
Long Term Plan: Open Space

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Circulation and Parking

The ***Long Term Plan: Circulation and Parking*** (Figure 3.5) diagram illustrates recommended circulation routes across campus, a new gateway on Lower Campus, and the location of surface and structured parking.

Supporting Access

As in previous plans, the 2010 CMP calls for the completion of Tanana Loop. It provides the most logical circulation route around campus. A detailed analysis of the best route and engineering for the road is required.

The new Lower Campus gateway will provide a more direct route to the center of campus. The gateway, composed of a campus square and public access drive, orients visitors on campus. The construction of a parking garage nearby and the repurposing of Wickersham Hall as a Welcome Center will create a much improved sense of arrival on campus.

The plan also recommends a pick-up/drop-off facility on the north side of the Fine Arts Building to accommodate people attending on-campus exhibitions, conferences or performances. Parking (including a future parking garage) is provided at the Ballaine Lot east of Tanana Loop.

The creation of a consistent campus streetscape defines the vehicular path and helps motorists navigate their way through campus. Included in the streetscape would be visual nodes that would serve to provide a unifying theme to campus circulation.

Supporting a Pedestrian Environment

The creation of a campus boulevard and pedestrian spine along the extent of Yukon Drive will invigorate the pedestrian environment, strengthen the link between West Ridge and Lower Campus, and enhance the sense of a campus main street. The boulevard heightens a sense of community with the adjacent research, academic and residential facilities.

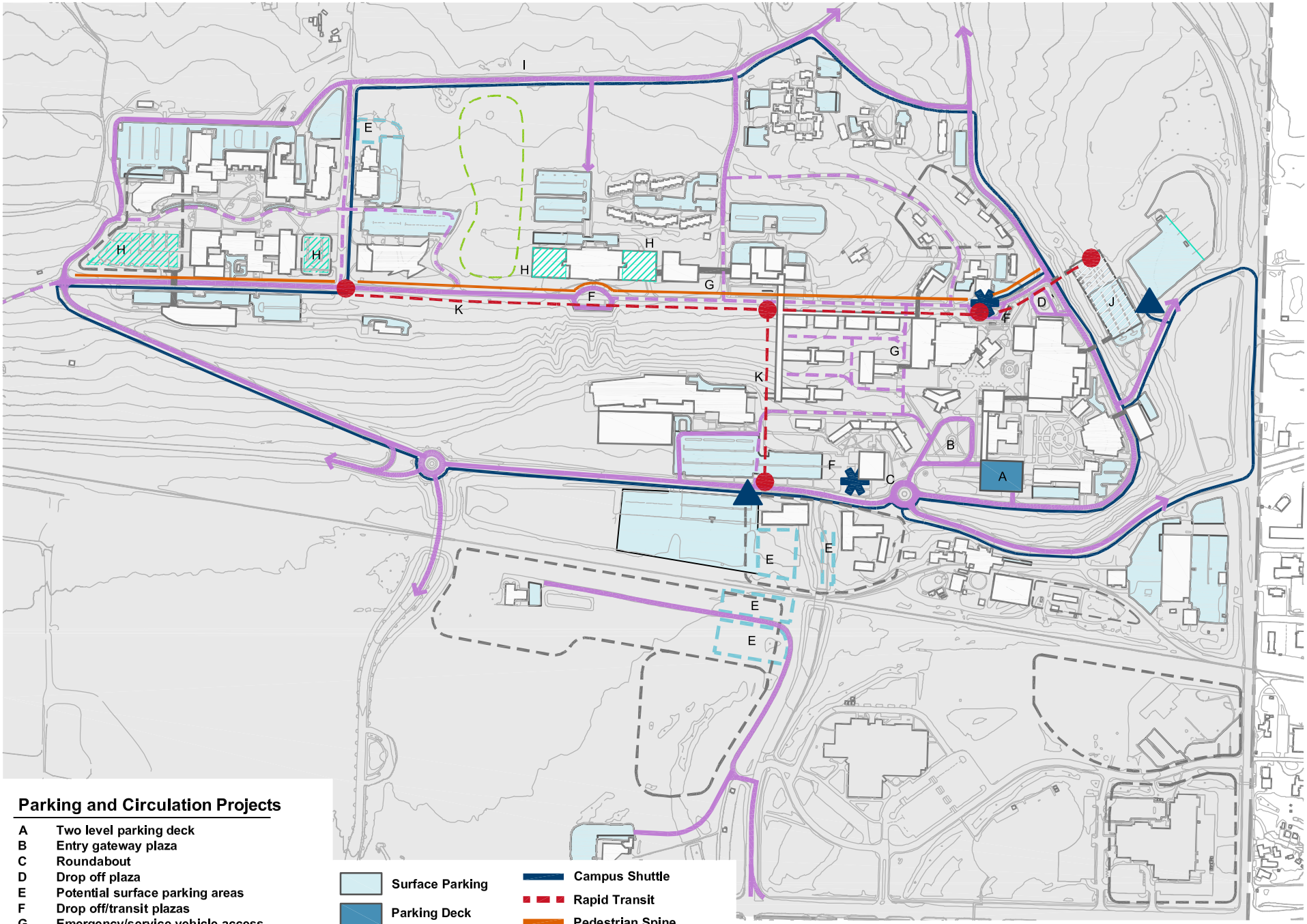
Because popular public attractions for visitors are located on campus, retaining a public access drive along Yukon Drive is important. Within Lower Campus, limited vehicular access is available for emergency and service vehicles, as well as students on move-in and move-out days. The recommended alignment of a potential rapid transit system would provide an efficient on-campus transportation system for students, faculty and staff but allow the campus spine to remain a predominantly pedestrian experience.

Widening and improving pedestrian walkways that provide adequate separation from vehicular traffic remains a critical action.

Supporting Parking

The plan recommends both above- and below-ground parking structures, as well as surface lots, to improve access to campus facilities. The location of structured parking near the Lower Campus gateway will accommodate students, faculty and staff, as well as visitors. The plan also recommends potential parking below the new facilities along Yukon Drive. These potential parking areas would be accessed from Tanana Loop, respecting limited vehicular access along Yukon Drive.

The on-campus parking ratio needs careful study in order to determine the appropriate replacement of underutilized perimeter parking areas. Perimeter parking should be coordinated with transit stops to ensure access to on-campus circulation systems such as the shuttle or rapid transit.



Parking and Circulation Projects

A	Two level parking deck
B	Entry gateway plaza
C	Roundabout
D	Drop off plaza
E	Potential surface parking areas
F	Drop off/transit plazas
G	Emergency/service vehicle access
H	Potential under-building parking with new buildings
I	Extension of Tanana Loop road
J	Potential future parking deck
K	Rapid transit system

Surface Parking
Parking Deck
Potential Parking Under Building
Transit Hub
Shuttle Station

Campus Shuttle
Rapid Transit
Pedestrian Spine
Limited Access Drive
Public Access Drive

Figure 3.5
Long Term Plan: Circulation and Parking

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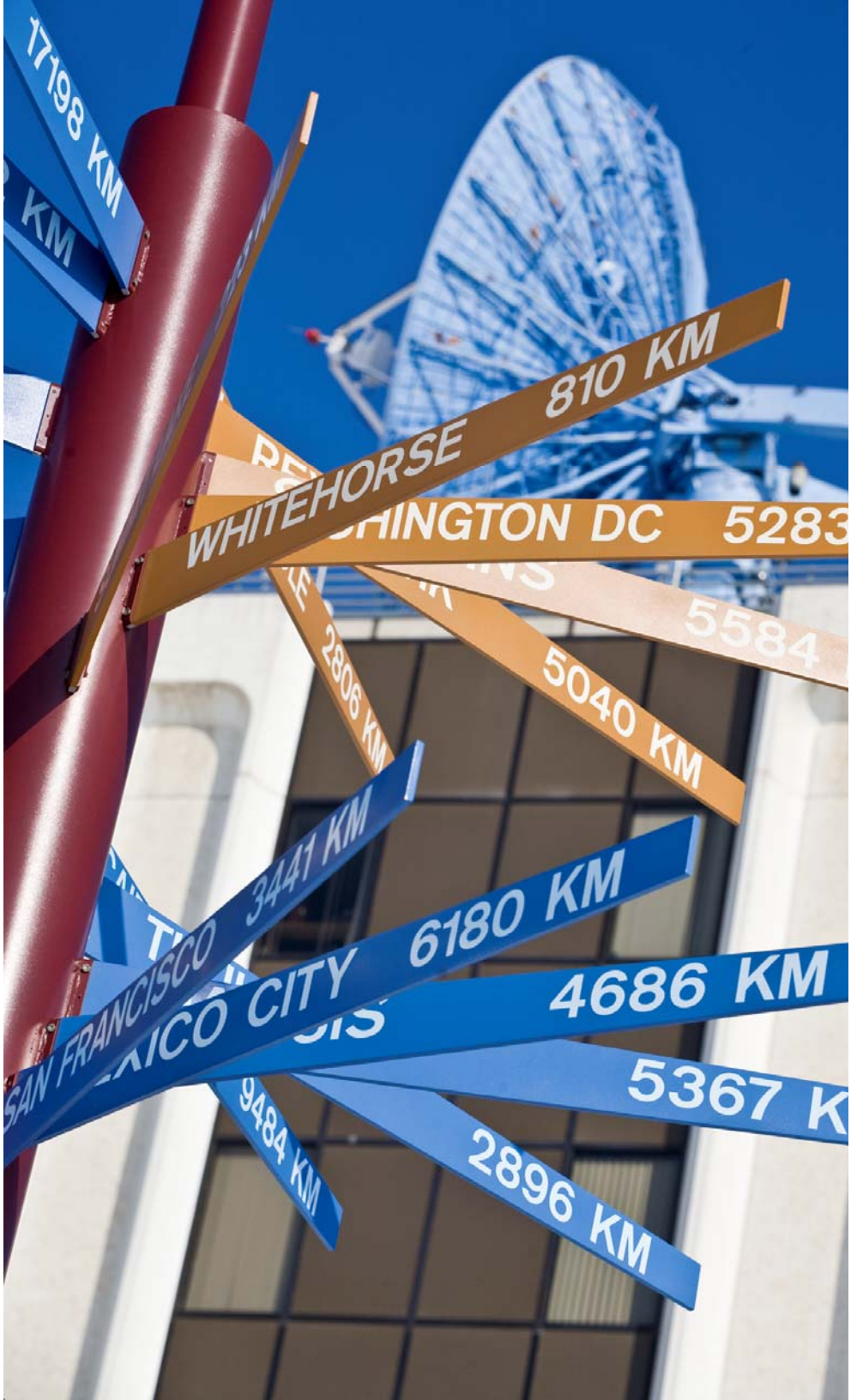
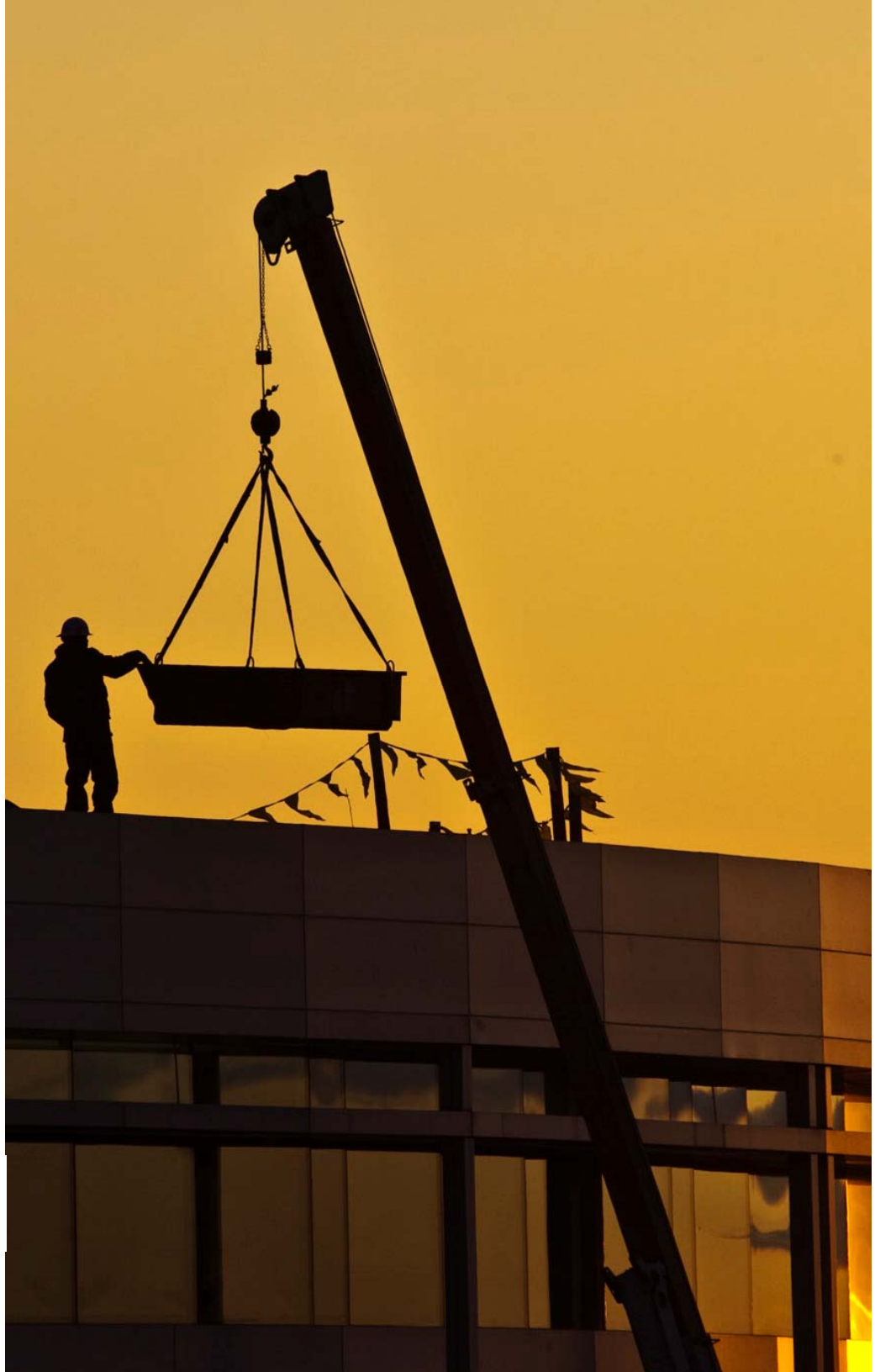


The Milepost sign on West Ridge.

Implementation 4

introduction /// guidelines /// short-term priorities /// mid-term priorities /// long-term priorities



Construction on the roof of the Butrovich Building.

Section 4: Implementation

Introduction

The following section outlines implementation strategies. A series of detailed actions accompanies the set of drawings that illustrate short-term, mid-term and long-term priorities. A precise implementation schedule is not specified in order to allow flexibility for programmatic changes and potential funding shifts. Matrices linking the CMP goals to the detailed actions appear at the end of this section.

The implementation strategies focus on future growth. Buildings that are planned for demolition are shown in Section 1 on the Building Conditions diagram (Figure 1.4). The sequence of this demolition is indicated in the building priorities for each phase.

Guidelines

Campus guidelines highlight the expectations for future construction. They express the character of recently constructed or designed campus improvements. The guidelines should be utilized to inform future detailed project development. Existing plans and standards (*see Section 1: Existing Conditions*) will continue to guide campus development in concert with the guidelines presented in this section.

Architectural Guidelines

- Develop a rational, unified design suitable for the academic environment at UAF.
- Encourage design that is responsive to the specific site as well as the local and regional context.
- Encourage design that is responsible and practical in terms of initial and long-term costs and maintenance.
- Create “neighborhoods” that integrate research, teaching, and student life through mixed-use buildings.
- Ensure that new construction and renovation efforts create compatibility between older and newer buildings including exterior finishes, landscaping and signage.
- Utilize landscape features as a design element to mitigate inconsistencies between older and newer campus architecture.
- Establish connectivity between buildings to enhance the campus experience and circulation while specifically unifying building functions as well as exteriors.
- Include gathering spaces in new and remodeled buildings primarily to enhance the student life experience for residential and commuter students.






UAF buildings that illustrate intentions of the architectural guidelines. Lower left photo: James Barker. Photos on the right: Jenny Campbell

Landscape Guidelines

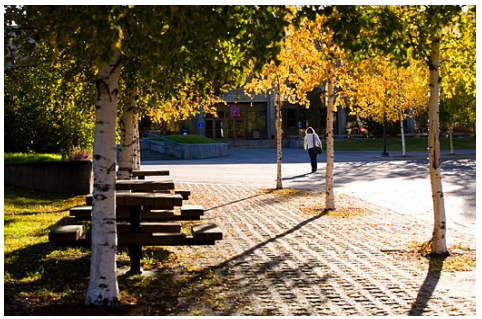
- Restore features of the indigenous natural environment and integrate ornamental species.
- Organize the landscape in a purposeful manner that conveys the history, location, culture and educational mission of the university.
- Optimize seasonal and temporal beauty of the subarctic environment.
- Ensure the health, safety and well-being of campus users.
- Create a campus greenway that connects the campus from east to west through a series of formal, interpretive and undeveloped landscapes.

Circulation and Parking Guidelines

- Provide access to both part-time and full-time students.
- Offer multi-modal access within the campus for pedestrians and bicycles, as well as motor vehicles.
- Provide a balanced parking system for staff, faculty, students and visitors.
- Create a gateway entrance to Lower Campus.
- Implement a rapid transit system.

Exterior Lighting Guidelines

- Use new lighting systems, such as LEDs.
- Use intelligent lighting controls, such as motion sensors and dimming controls.
- Reduce light pollution and glare through improved design of fixture installations.



Below:
Landscape plan of
West Ridge Plaza.
Illustration: Land Design North

Short-Term Priorities

Note: Italicized items indicate priorities not identified on the adjacent priority diagram.

Buildings

Construct and Occupy:

B1. Life Sciences Building (including demolition of SNRAS greenhouse)
B2. School of Natural Resources and Agricultural Sciences Greenhouse
B3. Alaska Center for Energy and Power
B4. University Fire Station
B5. Engineering Building (Including demolition of Forestry Building)
B6. Chapman Building addition for mixed academic use including large classrooms
B7. Rasmuson Library addition for special collections
B8. Harper Building addition for mixed academic use
B9. Campus Substation Building
B10. CHP expansion
B11. Construct gathering spaces between Stevens, Nerland, and McIntosh Halls

Renovate, Repurpose and Reassign:

B12. Arctic Health Research Building west wing
B13. Skarland Hall restrooms and shower rooms
B14. Honors House
B15. Continue to repurpose underutilized classrooms and computer laboratories to meet critical space needs, as appropriate
B16. Evaluate the Whitaker Fire Station for repurposing to meet critical academic or research space needs
B17. Implement the backfill plan for vacated space created by the occupancy of the Life Sciences Building
B18. Reduce the off-campus leases through re-purposing existing space on campus and/or the acquisition of new space

Plan and Design:

B19. Develop a comprehensive plan for renovation/replacement of research buildings on West Ridge
B20. Develop a backfill plan for the Gruening Building that is appropriate for the infrastructure capacity of the building
B21. Develop reuse plan for Lola Tilly Commons including large instruction and meeting spaces
B22. Design gathering spaces for use by both residential and commuter students in existing academic and research facilities
B23. Advance the connected campus concept through the design of new student residence halls sited on Yukon Drive with connections to academic, research and student life facilities
B24. Design suite-style housing options in residence hall design
B25. Include gathering and dining spaces in residence hall design
B26. Develop concept for high density housing for faculty and graduate students to be located on Chandalar Drive

Demolition and Miscellaneous:

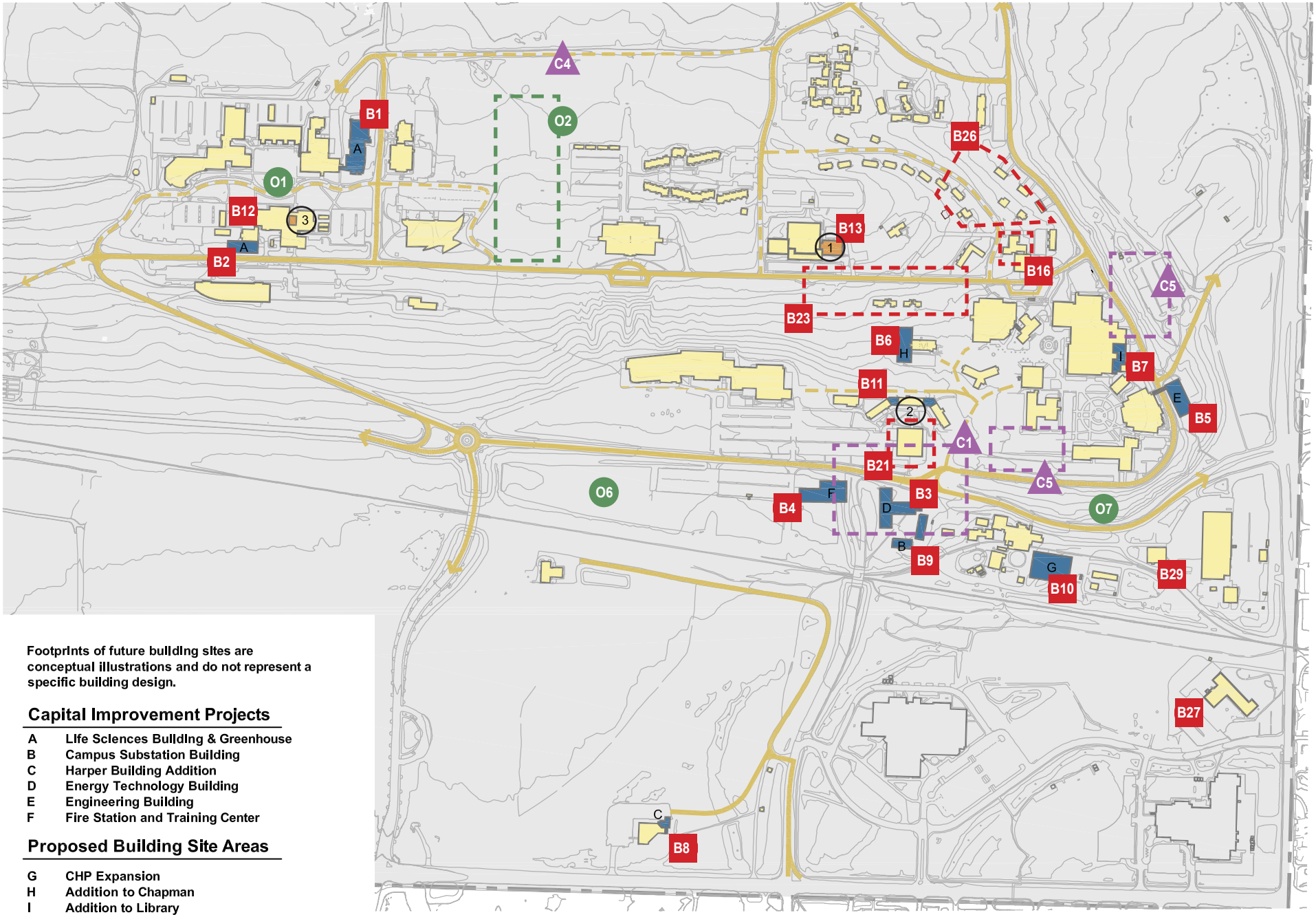
B27. Demolish the west wing of U Park
B28. Establish standards appropriate to the subarctic environment for building materials, energy and water efficiency, and waste reduction
B29. Demolish temporary research facilities.
B30. Develop architectural design guidelines

Open Space

O1. Complete the landscaping, signage and hardscape of West Ridge Plaza
O2. Finalize and implement plans for Troth Yeddha' Park
O3. Determine campus greenway route and specific features
O4. Begin to establish formal trail connections between core campus and the North Campus trail system
O5. Start integration of primary pedestrian routes with outdoor gathering areas
O6. Establish a new sports field on the south side of Tanana Loop opposite the Patty Center and west of the Nenana parking lot.
O7. Enhance the Alumni Drive corridor
O8. Establish sustainability standards for managed landscapes
O9. Design safe and effective trail crossings on Tanana Loop

Circulation and Parking

C1. Design the campus gateway to bring together Alumni Drive, Tanana Loop and South Chandalar Drive
C2. Conduct a feasibility study of rapid transit on campus
C3. Complete final design for Tanana Loop, including impact study of affected North Campus land
C4. Construct Tanana Loop to Sheenjek Drive as first step toward completion of Tanana Loop, including north entrance to the Reichardt Building and parking area
C5. Design parking structures for the east Bunnell and Taku sites
C6. Identify below grade parking opportunities within future buildings at Student Recreation Center (SRC) and along Yukon Drive
C7. Develop a campus boulevard concept to enhance the pedestrian environment along Yukon Drive
C8. Strengthen campus entry and perimeter through consistent streetscapes along Thompson Drive, Alumni Drive, Tanana Loop, and West Tanana Drive, including themed visual nodes
C9. Continue to balance the number of parking spaces to meet demand and remove excess lots
C10. Implement recommendations for standardized lighting and fixtures



Footprints of future building sites are conceptual illustrations and do not represent a specific building design.

Capital Improvement Projects

A	Life Sciences Building & Greenhouse
B	Campus Substation Building
C	Harper Building Addition
D	Energy Technology Building
E	Engineering Building
F	Fire Station and Training Center

Proposed Building Site Areas

G	CHP Expansion
H	Addition to Chapman
I	Addition to Library

Notes

1. Renovation of Skarland
2. Renovation/Addition for Student Life use
3. Renovation/Infill for Health Research

Existing Building
Renovated Building
New Construction
Campus Roads

Figure 4.1
Short-term Priorities
Max. Capacity: 3100 FTE/ Research Activities

0 350 700 1,400

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Mid-term Priorities

Note: Italicized items indicate priorities not identified on the adjacent priority diagram.

Buildings

Construct and Occupy:

B1. Research building, J, on the site at the corner of Kuskokwim and Yukon Drive
B2. Wood Center expansion, including the creation of multi-purpose spaces and general gathering areas
B3. Rasmuson Library expansion, including student gathering area
B4. Eielson Building addition as part of gateway entrance
B5. Student residence halls (including demolition of Copper Lane houses)
B6. Private-public partnership high density housing for faculty and graduate students on Chandalar Drive
B7. SRC addition to provide both recreational and student gathering space
B8. Fine Arts lobby and drop-off area

Renovate, Repurpose and Reassign:

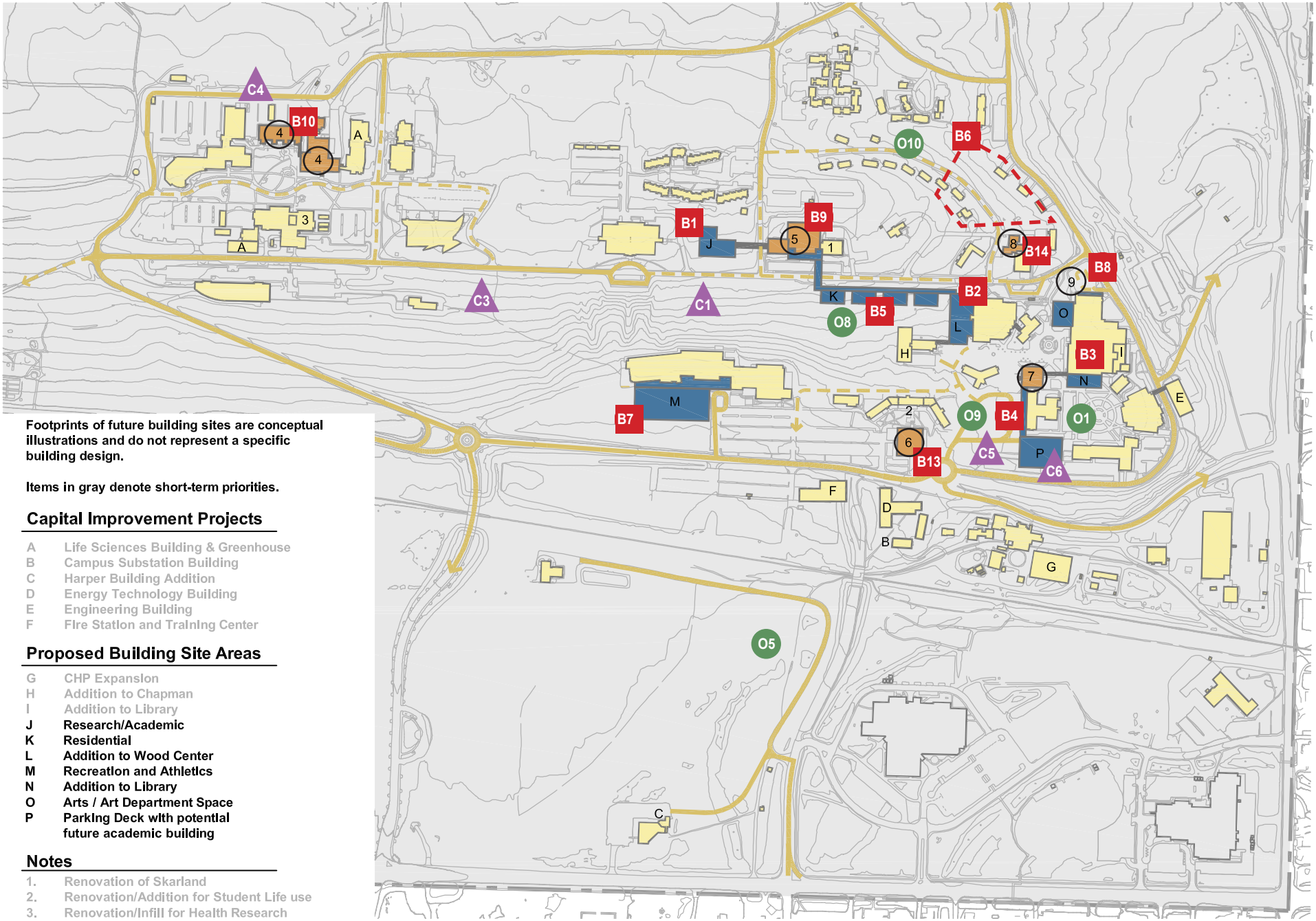
B9. Repurpose Moore and Bartlett halls for academic, research, administrative and student life functions
B10. Renovate the O'Neill, Irving I and II buildings on West Ridge
B11. Implement the Gruening backfill plan
B12. Relocate the bookstore from Constitution Hall to a more accessible location
B13. Repurpose Lola Tilly Commons for multipurpose spaces
B14. Repurpose the Whitaker Building for art studio space
B15. Plan for renovation of Great Hall and Theater
B16. Reassign space in Constitution Hall to better serve the Alumni Office and student organizations
B17. Fine Arts Building infill and addition for studio art space

Open Space

O1. Begin construction and landscaping of Cornerstone Plaza
O2. Plan upgrades to Constitution Plaza
O3. Continue to establish formal trail connections between core campus and the North Campus trail system
O4. Continue to integrate primary pedestrian routes with outdoor gathering areas as new areas are established
O5. Clear land south of the ARR tracks for a sports field, west of Fairbanks St.
O6. Establish greenway connection from Reichardt Building to West Ridge Plaza
O7. Establish greenway connection along Fairbanks Street from Geist Road to Lola Tilly Commons
O8. Include landscaped squares adjacent to new residence halls along Yukon Drive
O9. Construct and landscape entrance gateway on Lower Campus
O10. Establish a sports field along Chandalar Drive

Circulation and Parking

C1. Implement the campus boulevard concept by limiting vehicular access along Yukon Drive between the Reichardt Building and Wood Center
C2. Design the rapid transit system for campus
C3. Complete a continuous pedestrian walkway along Yukon Drive from the east to the west
C4. Construct Tanana Loop from Sheenjek Drive to Yukon Drive including streetscape features
C5. Construct Lower Campus gateway
C6. Construct a multi-level parking garage on the west Bunnell site



Footprints of future building sites are conceptual illustrations and do not represent a specific building design.

Items in gray denote short-term priorities.

Capital Improvement Projects

- A Life Sciences Building & Greenhouse
- B Campus Substation Building
- C Harper Building Addition
- D Energy Technology Building
- E Engineering Building
- F Fire Station and Training Center

Proposed Building Site Areas

- G CHP Expansion
- H Addition to Chapman
- I Addition to Library
- J Research/Academic
- K Residential
- L Addition to Wood Center
- M Recreation and Athletics
- N Addition to Library
- O Arts / Art Department Space
- P Parking Deck with potential future academic building

Notes

1. Renovation of Skarland
2. Renovation/Addition for Student Life use
3. Renovation/Infill for Health Research
4. Renovation of O'Neill and Irving to Mixed Acad., Research, and Gathering and Student Life use
5. Renovation of MB to Research and Mixed Acad.
6. Renovation to Gathering and Student Life use
7. Renovation to Study Space and Student Org.
8. Repurpose of Fire Station
9. Renovation to provide covered access to Fine Arts

Existing Building
Renovated Building
New Construction
Campus Roads

Figure 4.2
Mid-term Priorities
Max. Capacity: 3600 FTE/Research Activities

0 350 700 1,400

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Long-term Priorities

Note: Italicized items indicate priorities not identified on the adjacent priority diagram.

Buildings

Construct and Occupy:

B1. Additional student residence halls, if enrollments demand
B2. Additional research buildings on West Ridge (east and west ends of AHRB)
B3. Additional research space at both ends of the Reichardt Building
B4. Additional mixed academic space at the UA Museum of the North
B5. Top floor to accommodate administrative functions (as part of a parking garage - see Circulation and Parking below)

Renovate, Repurpose and Reassign:

B6. Renovate Stuart and Walsh halls
B7. Repurpose Wickersham Hall for potential Welcome Center
B8. Relocate and expand production greenhouses

Plan and Design:

B9. Continue to pursue public/private partnerships

Demolition and Miscellaneous:

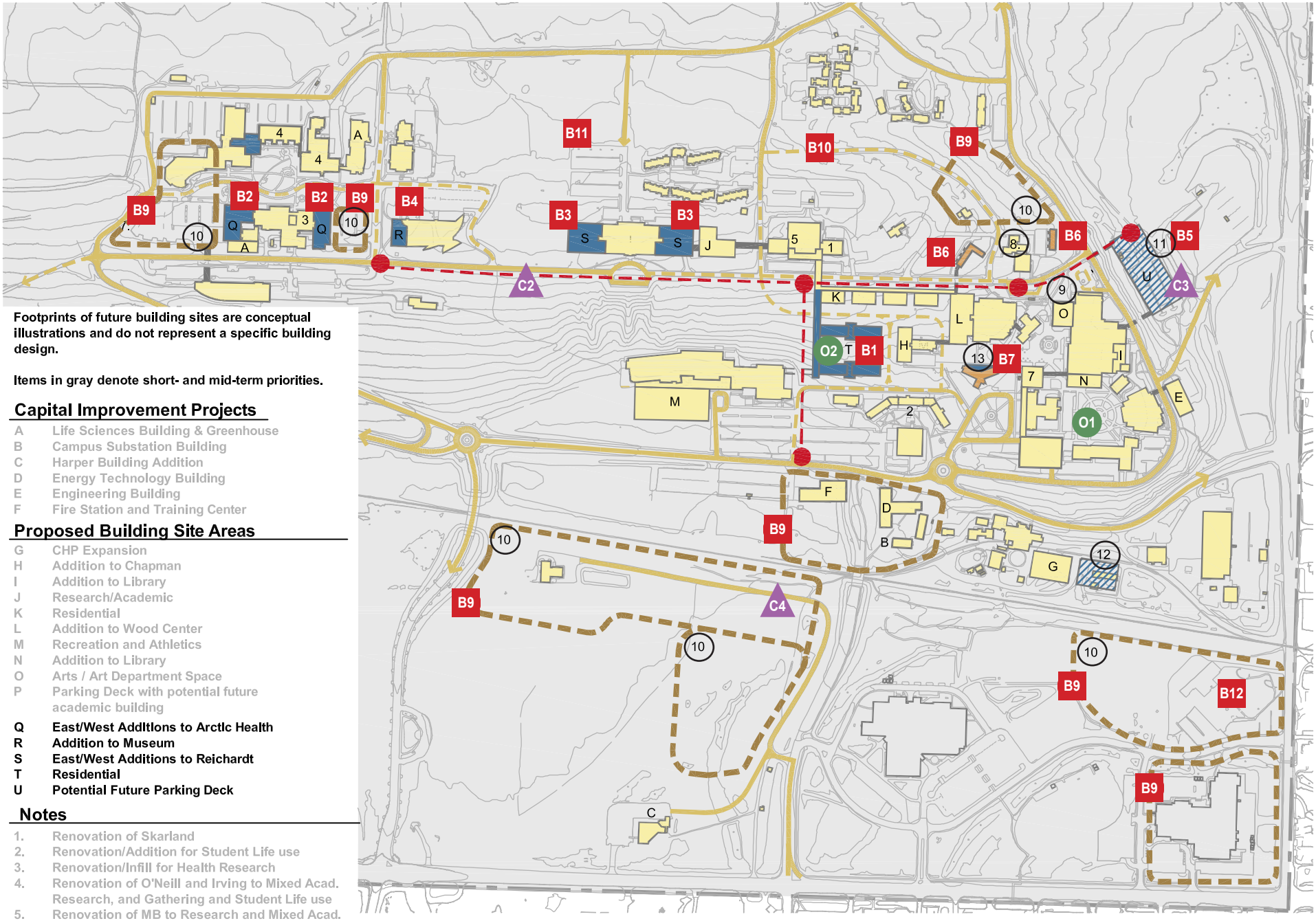
B10. Demolish student housing on North Chandalar Drive and replace with open space
B11. Demolish ATCO trailers
B12. Demolish remainder of University Park Building

Open Space

O1. Complete construction and landscaping of Cornerstone Plaza
O2. Construct landscaped squares adjacent to student residence halls, as demanded by new construction
O3. Construct campus greenway that connects Yukon Drive, Patty Center and Constitution Plaza
O4. Formalize connections between West Ridge Plaza and Georgeson Botanical Garden

Circulation and Parking

C1. Ensure access to new residence halls west of Wood Center for move-in/move-out, emergency vehicles, and delivery
C2. Build the rapid transit system
C3. Construct a multi-level parking garage on the Taku site
C4. Build new parking south of the railroad along Fairbanks St.



Footprints of future building sites are conceptual illustrations and do not represent a specific building design.

Items in gray denote short- and mid-term priorities.

Capital Improvement Projects

- A Life Sciences Building & Greenhouse
- B Campus Substation Building
- C Harper Building Addition
- D Energy Technology Building
- E Engineering Building
- F Fire Station and Training Center

Proposed Building Site Areas

- G CHP Expansion
- H Addition to Chapman
- I Addition to Library
- J Research/Academic
- K Residential
- L Addition to Wood Center
- M Recreation and Athletics
- N Addition to Library
- O Arts / Art Department Space
- P Parking Deck with potential future academic building
- **Q East/West Additions to Arctic Health**
- **R Addition to Museum**
- **S East/West Additions to Reichardt**
- **T Residential**
- **U Potential Future Parking Deck**

Notes

1. Renovation of Skarland
2. Renovation/Addition for Student Life use
3. Renovation/Infill for Health Research
4. Renovation of O'Neill and Irving to Mixed Acad. Research, and Gathering and Student Life use
5. Renovation of MB to Research and Mixed Acad.
6. Renovation to Gathering and Student Life use
7. Renovation to Study Space and Student Org.
8. Repurpose of Fire Station
9. Renovation to provide covered access to Fine Arts
10. **Potential private partnership development areas**
11. **Potential future parking deck**
12. **Potential CHP expansion area**
13. **Repurpose to Welcome Center**

Figure 4.3
Long-term Priorities
Max. Capacity: 4100 FTE/ Research Activities

UAF University of Alaska Fairbanks

PERKINS + WILL

Short-term Goals and Actions Matrix

UAF CAMPUS MASTER PLAN GOALS

I. Support the integration of teaching and research through building location and use, circulation and open space.
II. Ensure the campus environment enhances both the academic and student life experience.
III. Improve access to and circulation within the campus.
IV. Preserve and highlight the unique natural and cultural aspects of UAF's northern location.
V. Enhance space quality and maximize effective utilization.
VI. Employ best practices in sustainability for northern environments.

I	II	III	IV	V	VI	UAF PLANNING ACTIONS: SHORT-TERM
						BUILDINGS
						Construct and Occupy:
■	■			■		B1. Life Sciences Building (including demolition of SNRAS greenhouse)
■	■					B2. School of Natural Resources and Agricultural Sciences Greenhouse
■	■			■	■	B3. Alaska Center for Energy and Power
				■		B4. University Fire Station
■	■			■		B5. Engineering Building (including demolition of Forestry Building)
	■			■		B6. Chapman Building addition for mixed academic use including large classrooms
	■			■		B7. Rasmuson Library addition for special collections
	■			■		B8. Harper Building addition for mixed academic use
	■					B9. Campus Substation Building
	■			■		B10. CHP Expansion
	■			■		B11. Construct gathering spaces between Stevens, Nerland and McIntosh halls
						Renovate, Repurpose and Reassign:
■	■			■		B12. Arctic Health Research Building west wing
	■					B13. Skarland Hall restrooms and shower rooms
	■				■	B14. Honors House
	■			■		B15. Continue to repurpose underutilized classrooms and computer laboratories to meet critical space needs, as appropriate
■	■			■		B16. Evaluate the Whitaker Fire Station for repurposing to meet critical academic and research space needs
■	■			■		B17. Implement the backfill plan for vacated space created by the occupancy of the Life Sciences Building
				■		B18. Reduce the off-campus leases through re-purposing existing space on campus and/or the acquisition of new space
						Plan and Design:
■	■			■		B19. Develop a comprehensive plan for renovation/replacement of research buildings on West Ridge
				■		B20. Develop a backfill plan for the Gruening Building that is appropriate for the infrastructure capacity of the building
	■			■		B21. Develop reuse plan for Lola Tilly Commons including large instruction and meeting spaces
	■	■				B22. Design gathering spaces for use by both residential and commuter students in existing academic and research facilities
	■	■				B23. Advance the connected campus concept through the design of new student residence halls sited on Yukon Drive
■	■	■		■		with connections to academic, research and student life facilities
	■					B24. Design suite-style housing options in residence hall design
	■					B25. Include gathering and dining spaces in residence hall design
	■	■				B26. Develop concept for high density housing for faculty and graduate students to be located on Chandalar Drive
						Miscellaneous:
				■		B27. Demolish the west wing of U Park
	■				■	B28. Establish standards appropriate to the subarctic environment for building materials, energy and water efficiency, and waste reduction
				■		B29. Demolish temporary research facilities
	■		■		■	B30. Develop architectural design guidelines

Short-term Goals and Actions Matrix

UAF CAMPUS MASTER PLAN GOALS

I. Support the integration of teaching and research through building location and use, circulation and open space.
II. Ensure the campus environment enhances both the academic and student life experience.
III. Improve access to and circulation within the campus.
IV. Preserve and highlight the unique natural and cultural aspects of UAF's northern location.
V. Enhance space quality and maximize effective utilization.
VI. Employ best practices in sustainability for northern environments.

I	II	III	IV	V	VI	UAF PLANNING ACTIONS: SHORT-TERM
						OPEN SPACE
	■		■			O1. Complete the landscaping, signage and hardscape of West Ridge Plaza
	■		■			O2. Finalize and implement plans for Troth Yeddha' Park
	■		■			O3. Determine campus greenway route and specific features
	■	■	■			O4. Begin to establish formal trail connections between core campus and the North Campus trail system
	■	■				O5. Start integration of primary pedestrian routes with outdoor gathering areas
	■					O6. Establish a new sports field on the south side of Tanana Loop opposite the Patty Center and west of the Nenana parking lot
		■				O7. Enhance the Alumni Drive corridor
			■		■	O8. Establish sustainability standards for managed landscapes
	■	■				O9. Design safe and effective trail crossings on Tanana Loop
						CIRCULATION AND PARKING
	■	■				C1. Design the campus gateway to bring together Alumni Drive, Tanana Loop and South Chandalar Drive
	■	■			■	C2. Conduct a feasibility study of rapid transit on campus
		■				C3. Complete final design for Tanana Loop, including impact study of affected North Campus land
	■	■				C4. Construct Tanana Loop to Sheenjek Drive as first step toward completion of Tanana Loop,
						including north entrance to the Reichardt Building and parking area
	■	■				C5. Design parking structures for the east Bunnell and Taku sites
		■				C6. Identify below grade parking opportunities within future buildings at Student Recreation Center (SRC) and along Yukon Drive
	■	■				C7. Develop a campus boulevard concept to enhance the pedestrian environment along Yukon Drive
	■	■				C8. Strengthen campus entry and perimeter through consistent streetscapes along Thompson Drive,
						Alumni Drive, Tanana Loop, and West Tanana Drive, including themed visual nodes
		■				C9. Continue to balance the number of parking spaces to meet demand and remove excess lots
		■			■	C10. Implement recommendations for standardized lighting and fixtures

Mid-term Goals and Actions Matrix

UAF CAMPUS MASTER PLAN GOALS

I. Support the integration of teaching and research through building location and use, circulation and open space.
II. Ensure the campus environment enhances both the academic and student life experience.
III. Improve access to and circulation within the campus.
IV. Preserve and highlight the unique natural and cultural aspects of UAF's northern location.
V. Enhance space quality and maximize effective utilization.
VI. Employ best practices in sustainability for northern environments.

I	II	III	IV	V	VI	UAF PLANNING ACTIONS: MID-TERM
						BUILDINGS
						Construct and Occupy
■	■					B1. Research building, J, on the site at the corner of Kuskokwim and Yukon Drive
	■			■		B2. Wood Center Expansion, including the creation of multi-purpose spaces and general gathering areas
	■			■		B3. Rasmuson Library Expansion, including student gathering area
		■				B4. Eielson Building Addition as part of gateway entrance
	■					B5. Student residence halls (including demolition of Copper Lane houses)
	■					B6. Private-public partnership high density housing on Chandalar Drive for faculty and graduate students
	■			■		B7. SRC Addition to provide both recreational and student gathering space
		■				B8. Fine Arts lobby and drop-off area
						Renovate, Repurpose and Reassign
■	■			■		B9. Repurpose Moore and Bartlett Halls for academic, research, administrative and student life functions
■	■			■		B10. Renovate the O'Neill, Irving I and II Buildings on West Ridge
	■			■		B11. Implement the Gruening backfill plan
	■			■		B12. Relocate the bookstore from Constitution Hall to a more accessible location
	■			■		B13. Repurpose Lola Tilly Commons for multipurpose spaces
	■			■		B14. Repurpose the Whitaker Building for art studio space
	■			■		B15. Plan for renovation of Great Hall and Theater
	■			■		B16. Reassign space in Constitution Hall to better serve the Alumni Office and student organizations
	■			■		B17. Fine Arts Building infill and addition for studio art space
						OPEN SPACE
	■		■			O1. Begin construction and landscaping of Cornerstone Plaza
	■		■			O2. Plan upgrades to Constitution Plaza
	■	■	■			O3. Continue to establish formal trail connections between core campus and the North Campus trail system
	■	■				O4. Continue to integrate primary pedestrian routes with outdoor gathering areas as new areas are established
	■					O5. Clear land south of the ARR tracks for a sports field, west of Fairbanks St.
■	■	■	■			O6. Establish greenway connection from Reichardt Building to West Ridge Plaza
	■	■	■			O7. Establish greenway connection along Fairbanks Street from Geist Road to Lola Tilly Commons
	■					O8. Include landscaped squares adjacent to new residence halls along Yukon Drive
	■					O9. Construct and landscape entrance gateway on Lower Campus
	■					O10. Establish a sports field along Chandalar Drive
						CIRCULATION AND PARKING
	■	■				C1. Implement the campus boulevard concept by limiting vehicular access along Yukon Drive between the Reichardt Building and Wood Center
■	■	■				C2. Design the rapid transit system for campus
■	■	■				C3. Complete a continuous pedestrian walkway along Yukon Drive from the east to the west
	■	■				C4. Construct Tanana Loop from Sheenjek Drive to Yukon Drive including streetscape features
	■	■				C5. Construct Lower Campus gateway
	■	■		■		C6. Construct a multi-level parking garage on the west Bunnell site

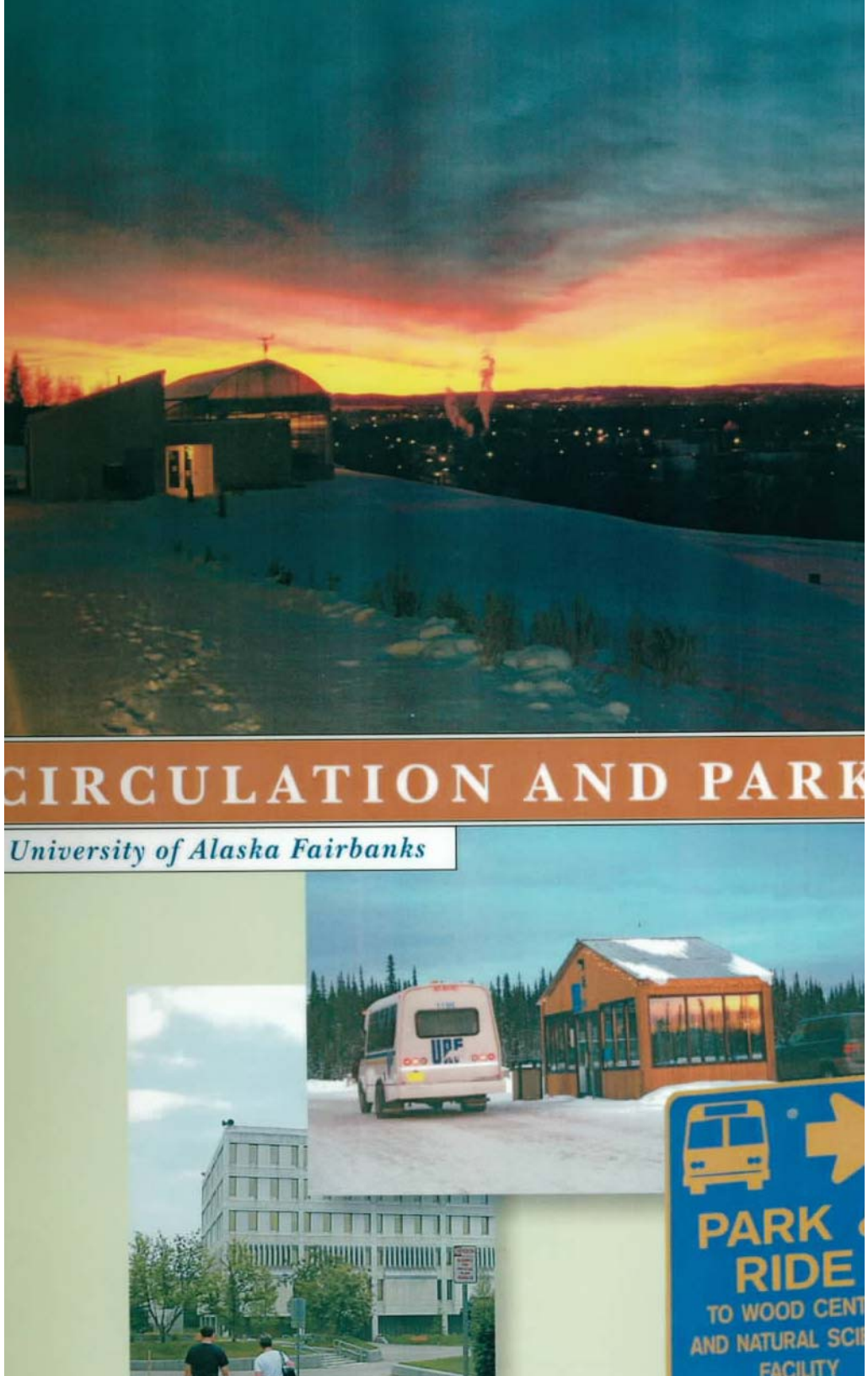
Long-term Goals and Actions Matrix

UAF CAMPUS MASTER PLAN GOALS

I. Support the integration of teaching and research through building location and use, circulation and open space.
II. Ensure the campus environment enhances both the academic and student life experience.
III. Improve access to and circulation within the campus.
IV. Preserve and highlight the unique natural and cultural aspects of UAF's northern location.
V. Enhance space quality and maximize effective utilization.
VI. Employ best practices in sustainability for northern environments.

I	II	III	IV	V	VI	UAF PLANNING ACTIONS: LONG-TERM
						BUILDINGS
						Construct and Occupy:
						B1. Additional student residence halls, if enrollments demand
						B2. Additional research buildings on West Ridge (east and west ends of AHRB)
						B3. Additional research space at both ends of the Reichardt Building
						B4. Additional mixed academic space at the UA Museum of the North
						B5. Top floor to accommodate administrative functions (as part of a parking garage - see Circulation and Parking below)
						Renovate, Repurpose and Reassign:
						B6. Renovate Stuart and Walsh Halls
						B7. Repurpose Wickersham Hall for potential Welcome Center
						B8. Relocate and expand production greenhouses
						Plan and Design:
						B9. Continue to pursue public/private partnerships
						Miscellaneous:
						B10. Demolish student housing on North Chandalar Drive and replace with open space
						B11. Demolish ATCO trailers
						B12. Demolish remainder of University Park Building
						OPEN SPACE
						O1. Complete construction and landscaping of Cornerstone Plaza
						O2. Construct landscaped squares adjacent to student residence halls, as demanded by new construction
						O4. Construct campus greenway that connects Yukon Drive, Patty Center and Constitution Plaza
						O5. Formalize connections between West Ridge Plaza and Georgeson Botanical Garden
						CIRCULATION AND PARKING
						C1. Ensure access to new residence halls west of Wood Center for move-in/move-out, emergency vehicles, and delivery
						C2. Build the rapid transit system
						C3. Construct a multi-level parking garage on the Taku site
						C4. Build new parking south of the railroad along Fairbanks St.

Bibliography 5



Cover of the Circulation and Parking Plan - 2004

Bibliography

The following documents, referenced within the 2010 CMP, can be accessed on the UAF website:

http://www.uaf.edu/fs/uaf2010masterplan/

- Campus Landscape Plan - 2004
- Campus Life Master Plan - 2005
- Capital Improvement Plan - Yearly
- Circulation and Parking Plan - 2004
- Design Standards - 2005
- Exterior Lighting Guidelines - 2010
- North Campus Plan - 2003
- Sign Standards - 2009
- UAF Campus Master Plan - 2002
- Utilities Development Plan - 2006

Appendix A: Compliance with UA Board of Regents' Master Planning Policy

Chapter 05.12 – Capital Planning and Facilities Management; P05.12.030 Campus Master Plans

The University of Alaska Fairbanks Campus Master Plan addresses all 12 content points outlined by the Board of Regents. The points encompass community and environmental context, enrollment planning and subsequent facility needs, and future project recommendations. These projects include potential demolition, upgrades and new construction for facilities, infrastructure and open space. The points are addressed in the planning document as follows:

One:

Projected enrollment and other factors affecting the need for facilities and infrastructure.

- *Section 2: Current Challenges* includes discussion of issues that drive recommendations for future facilities and infrastructure.
  - Existing space needs were analyzed and outlined in a summary graphic to illustrate space deficits and surpluses. The majority of space variance occurred in three space use categories: research, offices, study/library
    - Research: The space needs analysis found a research space deficit on campus. The calculated deficit, analyzed on a variety of levels including ASF/principal investigator and ASF/dollar of research income, was consistent with research administrators' feedback. The limited facilities prevent UAF from increasing its level of research.
    - Offices: UAF's unique ratio of research to FTE contributes to the abnormally high office guideline of ASF/FTE. The high percentage of research increases research office needs.
    - Study/library: UAF has study/library space exceeding that normally seen in a school of 3,100 FTE. The reasons for this increased need include the high level of research and need for supporting materials; the library's position as repository for federal documents; the library's position as repository for Senator Ted Stevens' manuscripts and papers; and the library's position as the largest library in the state, housing more than two million items.
  - A detailed study of existing research space needs was prepared and illustrated in a summary graphic that benchmarked UAF research needs against peer research institutions. Research dollars per student FTE, and subsequent assignable square footage per student FTE, is higher than the average of UAF's research peer institutions.
- *Section 3: The Future Campus* presents enrollment projections for the next decade

- Student expectations for housing and dining: The 2005 Campus Life Master Plan recommended that suites or apartments be added to the campus to provide a variety of housing options. Similarly, the Campus Life Master Plan indicated that improvements to the dining options and facilities were a high priority.
- Student expectations for gathering spaces: The 2005 Campus Life Master Plan recommended improvements to and expansion of existing student life spaces at the Wood Center. The plan also recommended the provision of gathering space in or near the library and other academic buildings for academic-related activities. This need was reinforced by a 2009 survey of commuter students.

➢ Energy conservation and ecological sustainability: A desire exists to address ecological sustainability as a new major physical plant renovation or replacement of the existing, aging facility is expected within the next five to seven years.

Two:

General areas for land acquisition and disposal.

➢ *Section 1: Existing Conditions*, speaks to land acquisition and disposal, which are not required to implement the actions of this plan.

➢ The focus of changes to land use was on potential partnership opportunities. The Land and Building Use diagram , contained in *Section 3: The Future Plan*, illustrates four recommended partnership development areas:

- Potential high density residential development area along North Chandalar Road.
- Potential research development area on West Ridge.
- Potential playing field development area south of the Alaska Railroad near Cold Climate Housing Research Center.
- Potential academic and outreach development area near University Park Building.

Three:

The general location of new or upgraded infrastructure, including roads, parking, pedestrian circulation, transit circulation, and utilities.

➢ *Section 1: Existing Conditions*, and *Section 4: Implementation*, address issues regarding utility/infrastructure improvements, most specifically, the need for a new combined heat and power plant.

➢ The Parking and Circulation diagram, contained in *Section 3: The Future Plan*, illustrates primary public vehicular access drives, limited vehicular access drives, campus shuttle routes, a rapid transit route and borough bus system connections. The diagram also illustrates surface and structured parking facilities, bus stops, transit hub and shuttle stations.

- Primary vehicular routes are located to the perimeter of the campus core.
- A potential rapid transit system is indicated along Yukon Drive and south to a shuttle station along Tanana Loop.
- Limited vehicular access drives, for emergency vehicles, are located within the campus core interior.
- A parking deck is located near the entry gateway plaza along Tanana Loop Road.

➢ Pedestrian open space connections are discussed in *Section 3: The Future Plan*.

➢ The Land and Building Use diagram, contained in *Section 3: The Future Plan*, illustrates primary campus vehicular routes, limited access vehicular routes and expansion and new facility sites for campus facility services.

Four:
Demolition of buildings, structures, and facilities.

- *Section 1: Existing Campus Conditions* contains a building conditions diagram that indicates facilities to be demolished.
- Demolition of buildings, structure and facilities includes the following:
  - Cooperative Extension Building is demolished and the new Engineering Building is designated at this site.
  - Single family residences along North Chandalar Road are demolished and the area is designated for future private partnership development and open space.
  - University Park is demolished and the area designated for potential private partnership development.

Five:
General location, size and purpose of new buildings, structures and facilities.

- The phasing diagrams in *Section 4: Implementation* identify the gross square footage for capital improvement projects and proposed facilities.
- General location and purpose of new development includes the following:
  - Research facility space is expanded on West Ridge and located east along Yukon Drive, closer to the residential and student life areas of campus.
  - Instructional and gathering spaces are expanded on West Ridge and Yukon Drive.
  - Gathering and student life space are expanded on lower campus.
  - High-density residential space is expanded on the lower campus near existing housing and student life facilities.
- The Land and Building Use diagram, contained in *Section 3: The Future Plan*, illustrates the existing and proposed facilities according to primary space use. The legend indicates gross square feet for capital improvement projects and proposed facilities.

Six:
Guidelines for landscaping.

- Landscape guidelines are located in *Section 4: Implementation*.

Seven:
General location and intent for open spaces, plazas, etc.

- The Open Space diagram, contained in *Section 3: The Future Plan*, illustrates the location and type of campus open space.
  - Campus streetscapes are proposed at the primary vehicular access routes through campus.
  - The majority of ecosystem research, instruction and recreation open space is located on the North Campus. Smaller zones are located within the campus core.
  - Boulevards, consisting of pedestrian scale outdoor spaces that include paved and landscaped areas, are located along Yukon Drive, the campus main street. Squares are located at main gathering spaces on campus such as the campus gateway near Lola Tilly Commons, the residence halls on the lower campus, the central area at Cutler Apartments and adjacent to the new student gathering space on West Ridge.
  - Sports and fields are located near the existing sports and recreation complex. Additional recreation areas are located along North Chandalar Road and south of the Alaska Railroad.
  - The campus greenway — including the use of native plantings and interpretive elements such as sculptural design of pavement or furnishings — expresses the natural and cultural history of Alaska and is connected across all areas of the campus.

Eight:
Guidelines for signage, both freestanding and on buildings and structures.

- Signage guidelines are included in *Section 1: Existing Conditions*.

Nine:
Architectural guidelines for all buildings, structures, and facilities.

- Architectural guidelines are located in *Section 4: Implementation*.

Ten:
Environmental and cultural issues, ADA access, and energy conservation.

- *Section 1: Existing Campus Conditions* includes discussion of past master planning goals and current issues, such as ecological sustainability and energy conservation, that are driving development of the master plan and subsequent planning actions.
  - A desire exists to address ecological sustainability as a new major physical plant renovation or replacement of the existing, aging facility is expected within the next five to seven years.
- *Section 2: Current Challenges* includes a peer evaluation for sustainability issues.
- ADA access is addressed in terms of campus connectivity. *Section 3: The Future Plan* illustrates improved connections between campus facilities that ultimately improve access for all students across the campus.

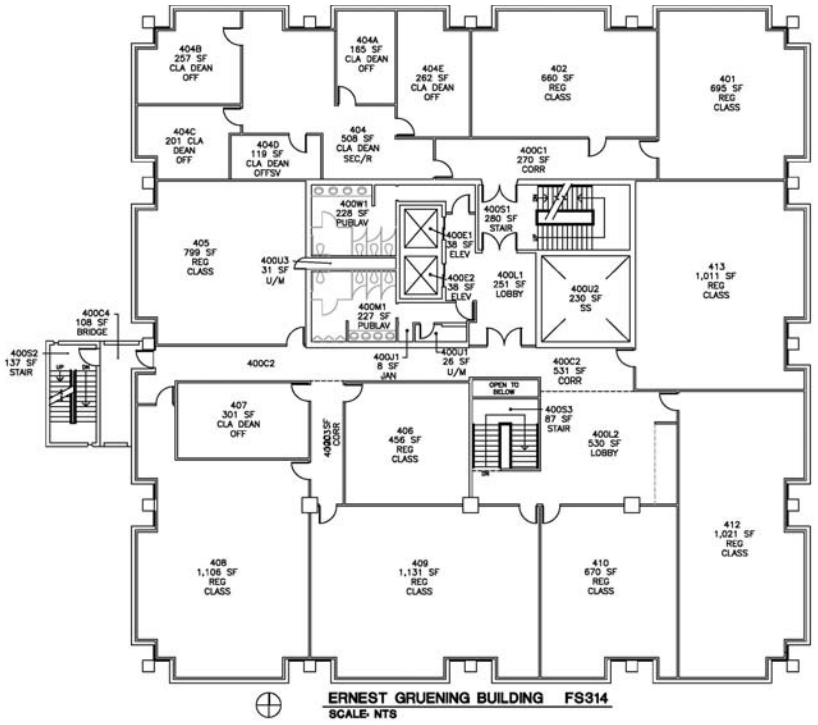
Eleven:
The relationship of the campus to its surroundings and coordination with local government land use plans and ordinances.

- The Land Use map in *Section 1: Existing Conditions* illustrates the UAF campus and surrounding community. Potential development issues with local agencies are noted on the map. Those issues include the following:
  - Widening of Geist Road along the southern boundary of the campus.
  - Zoning changes by the Fairbanks North Star Borough.

Twelve:
General priorities for capital projects.

- The phasing diagrams in *Section 4: Implementation*, illustrate the general priorities for capital projects. The short-term phase includes current capital improvement projects and those in the planning stage. The subsequent phases illustrate future facility development priorities.

Appendix B:
Space Needs Analysis



Key Categories

The majority of the space variances between UAF and other universities occurs in Category 250/255: Research, Category 300: Offices and Category 400: Library/Study.

Space Deficits

Category 250/255: Research Lab
Existing = 238,715 ASF
Guideline = 385,125 ASF
Deficit = 146,410

Category 400: Study (Library)
Existing = 116,339 ASF
Guideline = 175,998 ASF
Deficit = 59,659 ASF

Category 560: Field Building
Existing = 2,704 ASF
Guideline = 25,311 ASF
Deficit = 22,607 ASF
Note: With such a large variance, additional detailed study is necessary to discern actual functional and operational differences. Some of the difference is potentially the difference between agricultural operations in Alaska versus the Lower 48 States (which is where the standard was likely derived from).

Category 520: Physical Education
Existing = 73,316 ASF
Guideline = 92,717 ASF
Deficit = 19,401 ASF

Category 760: Hazardous Materials
Existing = 3,595 ASF
Guideline = 17,215 ASF
Deficit = 13,260 ASF
Note: Obviously, this category has a significant deficit; however, this anomaly should be looked at in more detailed analysis. Some of the discrepancy likely occurs due to UAF's high level of research that does not work with hazardous material.

Category 300: Office/Service
Existing = 387,169 ASF
Guideline = 398,139 ASF
Deficit = 10,970 ASF

Category 650: Lounge
Existing = 11,942 ASF
Guideline = 16,907 ASF
Deficit = 4,965 ASF
Note: Instead of using the lounge space type designation, the 2010 CMP uses the term gathering spaces.

Category 620: Exhibition
Existing = 1,291 ASF
Guideline = 4,661 ASF
Deficit = 3,370 ASF

Category 220/225: Open Lab
Existing = 15,926 ASF
Guideline = 18,642 ASF
Deficit = 2,716

Category 570: Animal Quarters
Existing = 5,058 ASF
Guideline = 7,768 ASF
Deficit = 2,710 ASF

Category 580: Greenhouse
Existing = 11,196 ASF
Guideline = 13,714 ASF
Deficit = 2,518 ASF

Category 680: Meeting Rooms
Existing = 8,014 ASF
Guideline = 10,161 ASF
Deficit = 2,147 ASF

Category 750: Central Service
Existing = 25,954 ASF
Guideline = 27,963 ASF
Deficit = 2,009 ASF
Note: Method: Modify CEFPI to 9.0 ASF per FTE due to UAF running its own power plant.

Category 670: Recreation
Existing = 11,943 ASF
Guideline = 12,942 ASF
Deficit = 999 ASF

Category 800: Health Care
Existing = 1,625 ASF
Guideline = 2,332 ASF
Deficit = 706 ASF

Space Surpluses

Category 210/215: Instructional Lab
Existing = 114,580 ASF
Guideline = 74,568 ASF
Surplus = 40,012 ASF

Category 100: Classrooms
Existing = 63,278 ASF
Guideline = 49,712 ASF
Surplus = 13,566 ASF

Category 530 Media
Existing = 19,289 ASF
Guideline = 8,107 ASF
Surplus = 11,182 ASF
Note: This appears to be attributable to UAF providing regional public broadcasting services, including KUAC FM, and AlaskaOne TV (affiliations with NPR, Public Radio International, ARCS and Public TV). In addition, as more and more classes are delivered digitally, there will likely be a need to provide more production capabilities and assistance for instructors.

Category 720/730/740 Work/Storage
Existing = 87,921 ASF
Guideline = 79,255 ASF
Surplus = 8,667 ASF
Note: There is a slight surplus indicated, but some factors will skew this guideline. UAF has its own power plant and extreme weather forces many "outside" activities indoors.

Category 660 Merchandising
Existing = 19,724 ASF
Guideline = 12,428 ASF
Surplus = 7,296 ASF

Category 610 Assembly
Existing = 24,834 ASF
Guideline = 21,500 ASF
Surplus = 3,334 ASF
Note: Factors for surplus include Alaska regional outreach functions and public events.

Category 710 Data
Existing = 14,897 ASF
Guideline = 12,428 ASF
Surplus = 2,419 ASF

Category 630 Food Service
Existing = 33,112 ASF
Guideline = 30,749 ASF
Surplus = 2,363 ASF

Category 550 Demonstration
Existing = 1,247 ASF
Guideline = 311 ASF
Surplus = 936 ASF

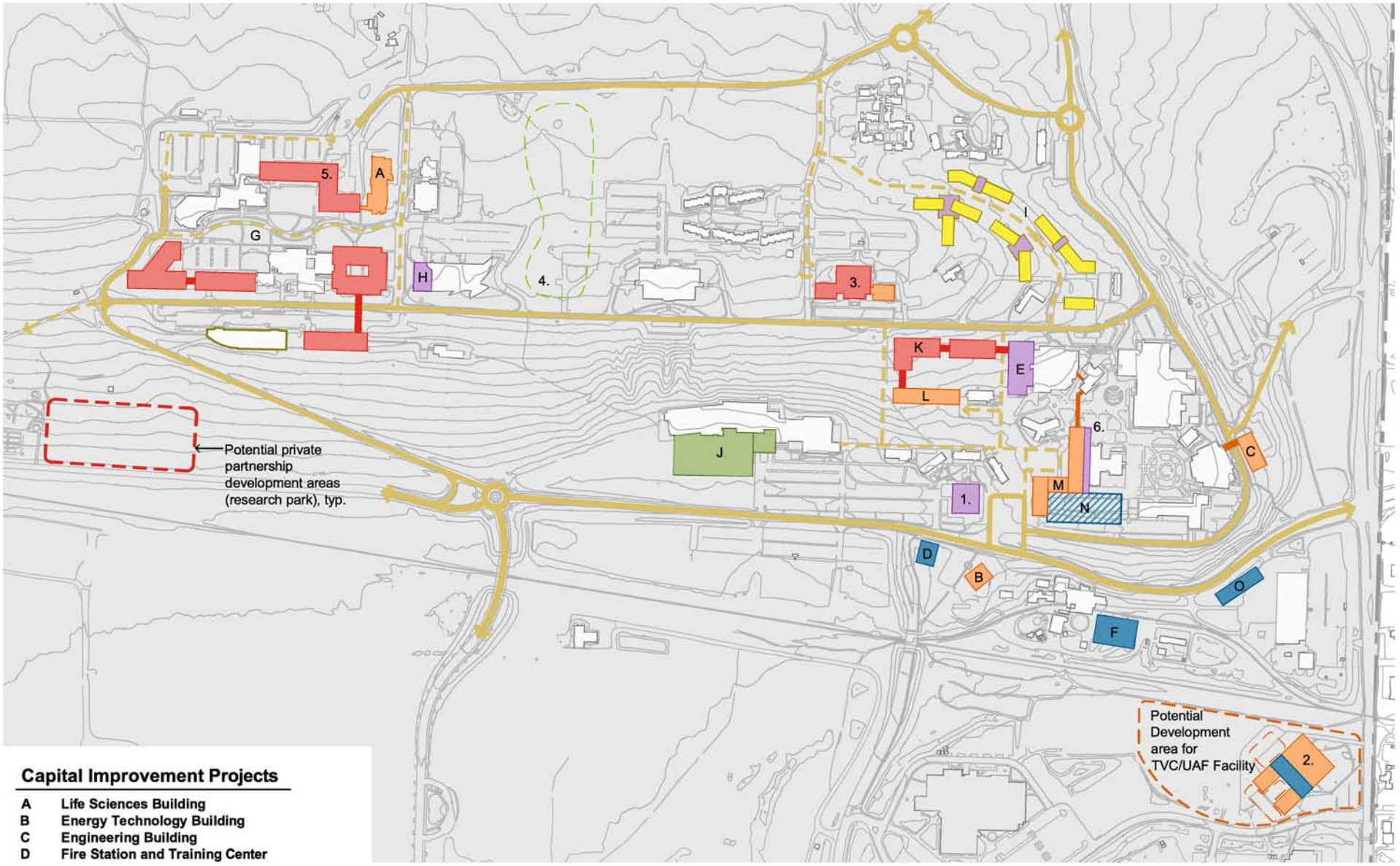
GRAND TOTAL of all ASF
Existing = 1,317,185 ASF
Guideline = 1,522,216 ASF
Deficit = 205,031 ASF

Appendix C: Planning Concepts

November 2009 campus master plan open house
Photos:Perkins+Will

The following diagrams illustrate three planning concepts that respond to UAF's evolving space needs. The concepts tested three alternative approaches to campus infill, each outlining building, open space and circulation development. Site sections further illustrate the concepts relative to UAF's unique topography.

The planning concepts were presented and discussed at a campus master plan open house in November 2009. Participant feedback gathered at this open house contributed to refinement of the campus planning options and the resulting formulation of the final campus plan.



Capital Improvement Projects

- A Life Sciences Building
- B Energy Technology Building
- C Engineering Building
- D Fire Station and Training Center

Proposed Building Site Areas

- E Addition to Wood Center (2 floors)
- F Power Plant Expansion (1 floor)
- G West Ridge Research (4 floors, parking below)
- H Addition to Museum (3 floors)
- I Residential (1,000 beds total, 4 floors)
- J Recreation and Athletics Expansion (1 floor)
- K Research (4 floors)
- L Mixed Academics (4 floors)
- M Mixed Academics (4 floors)
- N Parking deck (2 levels)
- O Administration and Support (2 levels)

Notes

1. Proposed renovation Welcome Center/One Stop
2. Proposed demolition and reconstruction - Integrated TVC/UAF Facility (4 floors and 1 floor -- a portion of development area may eventually be located on land leased to the school district).
3. Proposed renovation of MBS to Research and Mixed Academic use
4. Approximate site limits of proposed Troth Yeddha Park
5. Proposed demolition and reconstruction of O'Neill and Irving, total area to remain approximately the same.
6. Proposed demolition of Gruening Building, area to be incorporated into new facilities.

- Mixed Academic
- Research
- Gathering & Student Life
- Recreation & Athletics
- Residential
- Administrative & Support

UAF Campus Master Plan
Redevelop Existing Clusters

UNIVERSITY OF ALASKA FAIRBANKS

0 350 700 1,400

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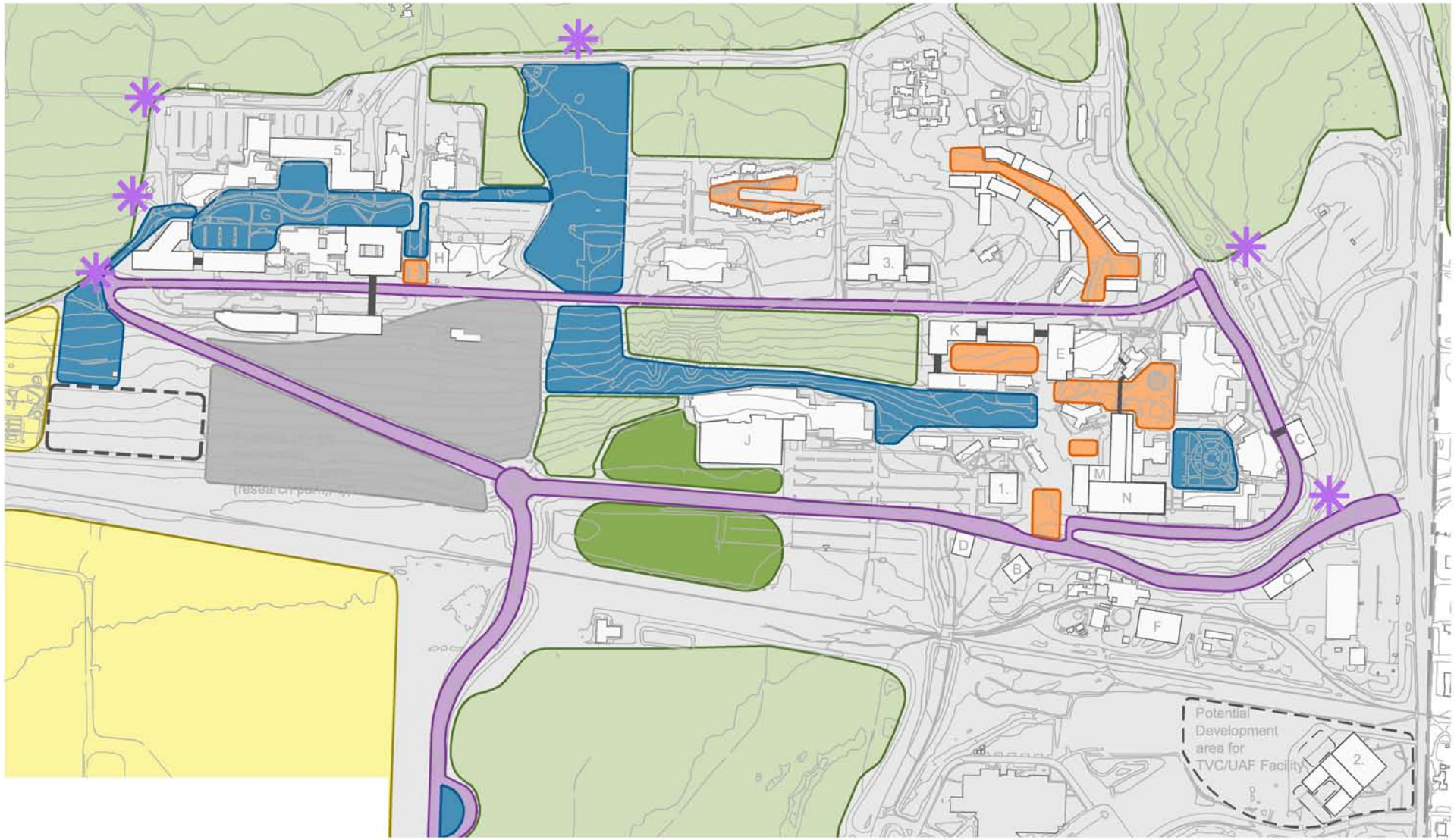


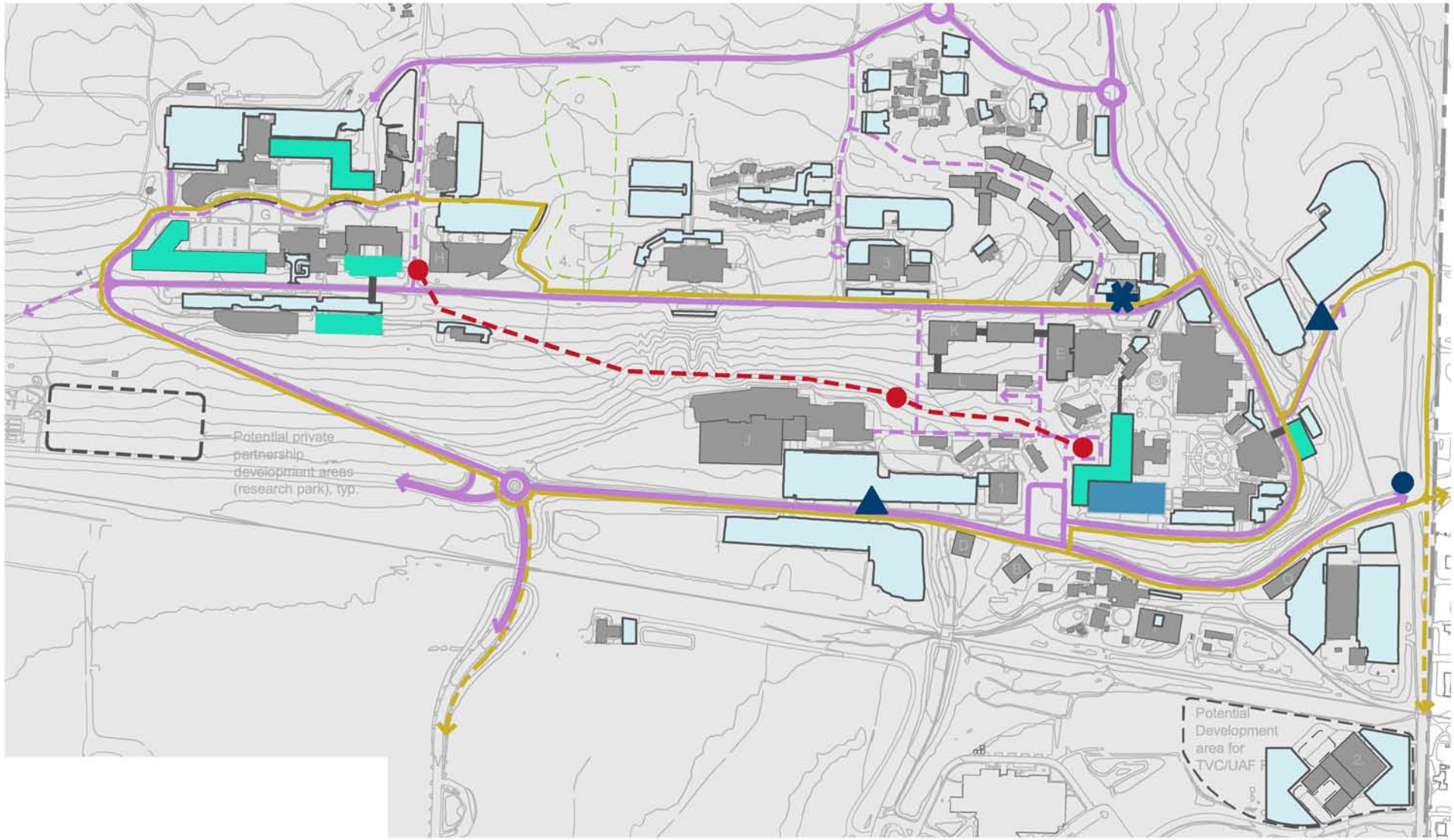
Building Areas
Campus Streetscape
Forest Research & Recreation
Gathering Areas
Pedestrian Connections
Sports & Fields
Interpretive Landscape
Experimental Farm
Viewshed Preserve

UAF Campus Master Plan
Redevelop Existing Clusters
Open Space

UNIVERSITY OF ALASKA FAIRBANKS

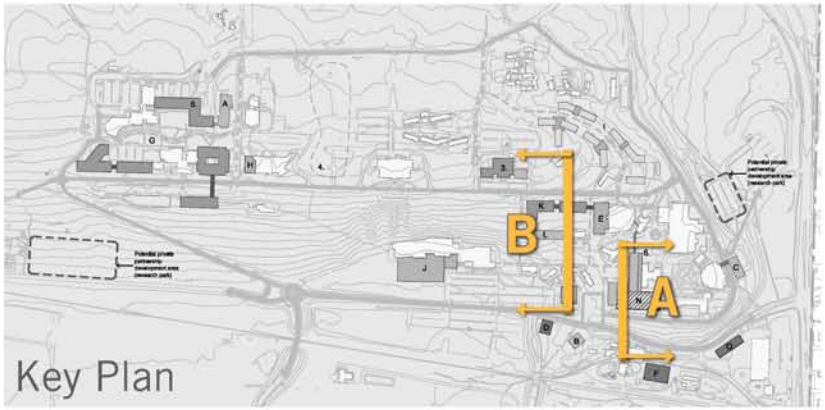
0 350 700 1,400

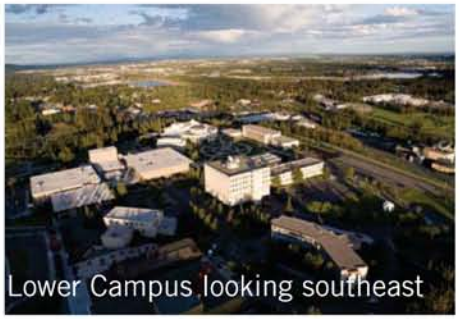
PERKINS + WILL

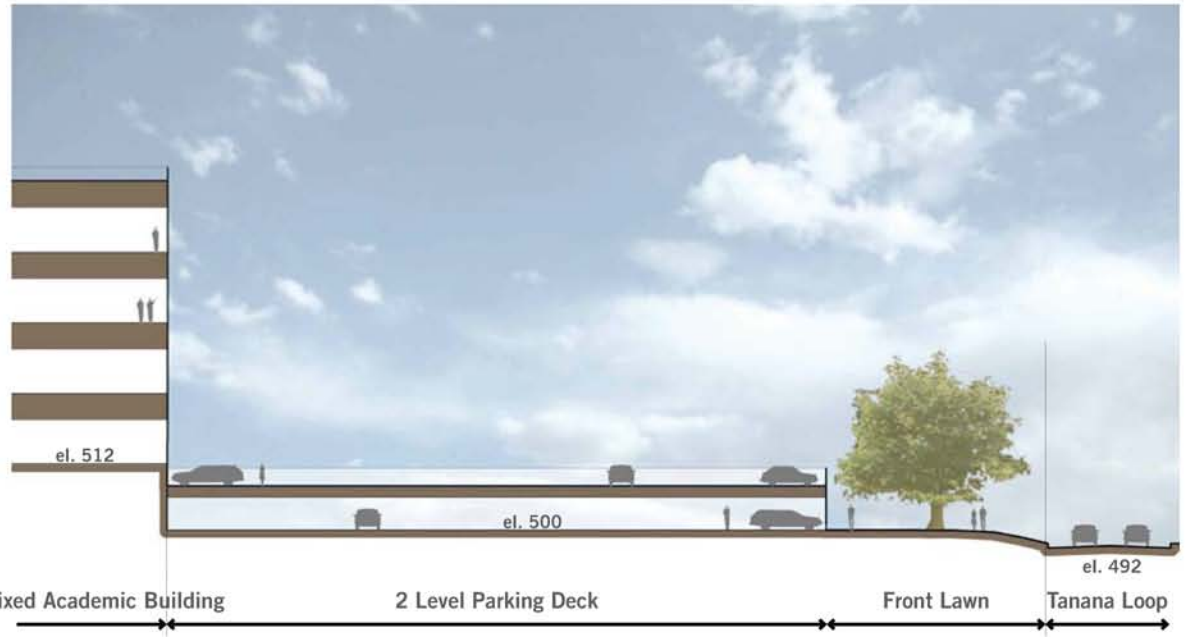

Potential private partnership development areas (research park), typ.
Potential Development area for TVC/UAF
Surface Parking
Parking Deck
Potential Parking Under Building
City Bus
Transit Hub
Campus Shuttle
Rapid Transit
Limited Access Drive
Public Access Drive
Bus Stop
Shuttle Station
UAF Campus Master Plan
Redevelop Existing Clusters
Parking and Circulation
UNIVERSITY OF ALASKA FAIRBANKS
PERKINS + WILL
0
350
700
1,400

Redevelop Existing Clusters

Concept Plan

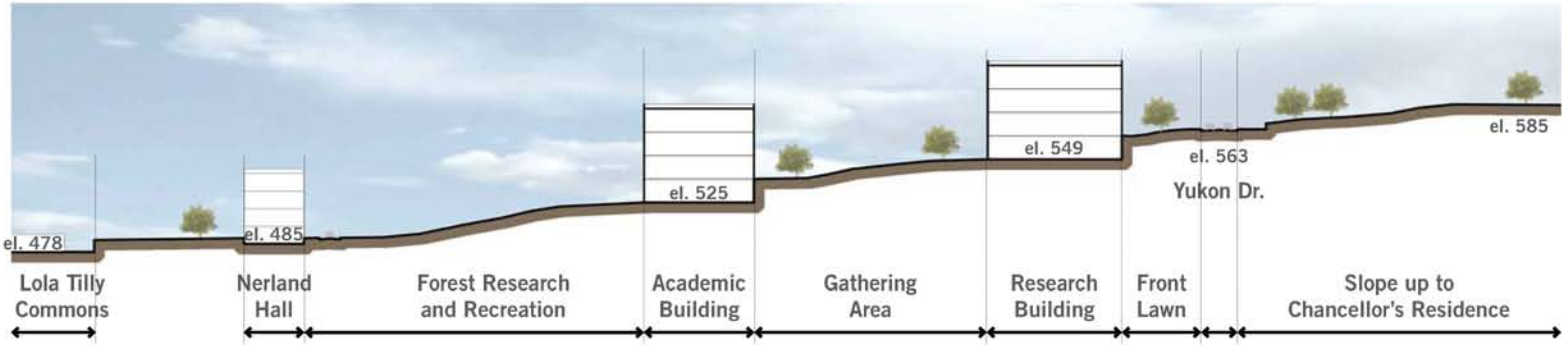






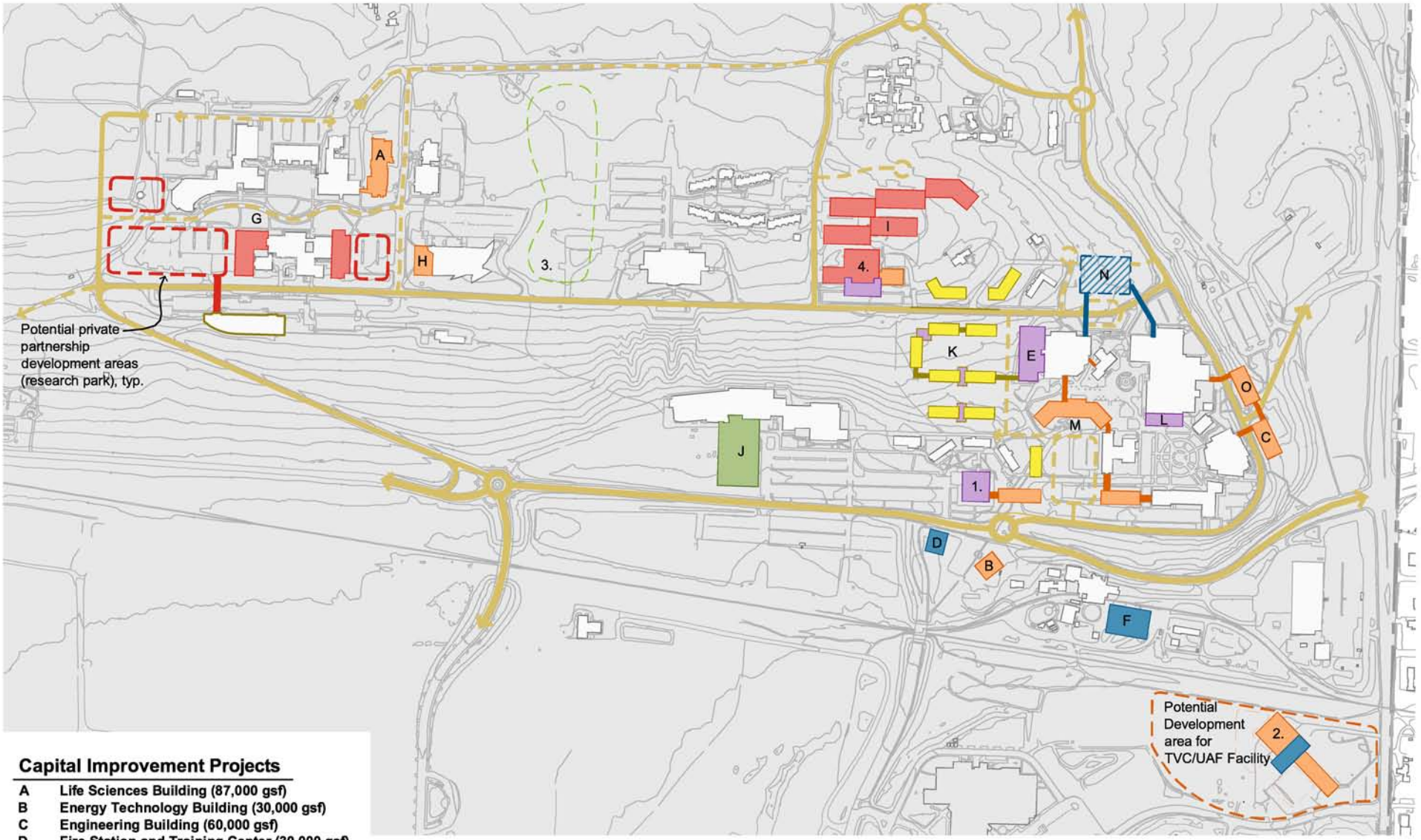
A Enlarged Section at Campus Entry

1"=10'



B Site Section through Hillside

1"=30'



Capital Improvement Projects

- A Life Sciences Building (87,000 gsf)
- B Energy Technology Building (30,000 gsf)
- C Engineering Building (60,000 gsf)
- D Fire Station and Training Center (30,000 gsf)

Proposed Building Site Areas

- E Addition to Wood Center (2 floors)
- F Power plant expansion (1 floor)
- G West Ridge Research (4 floors)
- H Addition to Museum (2 floors)
- I Research (4 floors, parking below)
- J Recreation and Athletics (1 floors)
- K Residential (1,000 beds total, 4 floors)
- L Gathering & Community Life (2 floors)
- M Mixed Academics (3 floors)
- N Parking Deck (4 levels)
- O Mixed Academics (5 floors)

Notes

1. Proposed renovation Welcome Center/One Stop
2. Proposed demolition and reconstruction - Integrated TVC/UAF Facility (4 floors and 1 floor -- a portion of development area may eventually be located on land leased to the school district).
3. Approximate site limits of proposed Troth Yeddha Park
4. Proposed renovation of MBS to Research and Mixed Academic use.

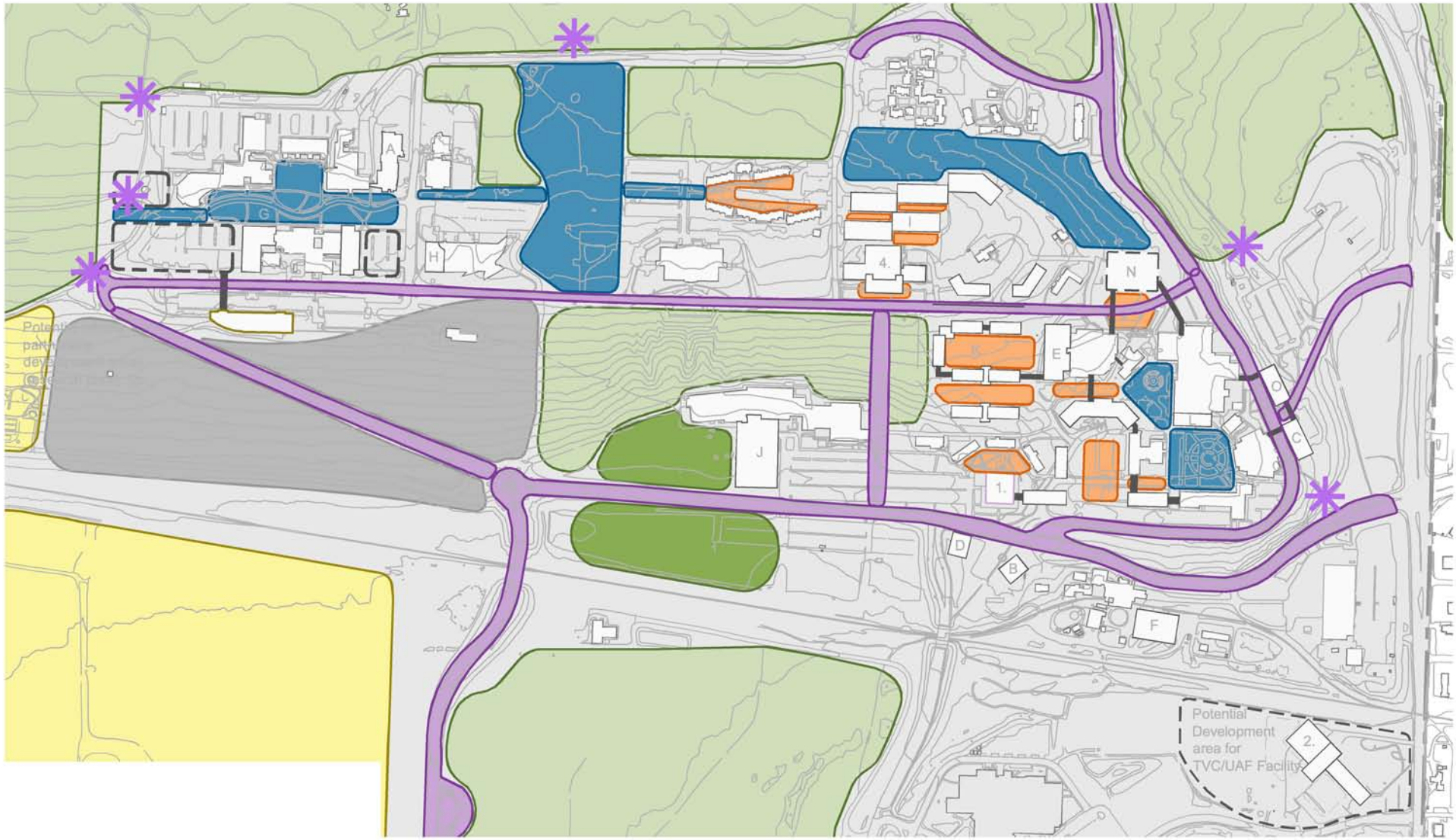
- Mixed Academic
- Recreation & Athletics
- Research
- Residential
- Gathering & Student Life
- Administrative & Support

UAF Campus Master Plan
Emphasize Main Campus

UNIVERSITY OF ALASKA FAIRBANKS

0 350 700 1,400

PERKINS + WILL



Existing & Proposed Building Areas

Campus Streetscape

Forest Research & Recreation

Gathering Areas

Pedestrian Connections

Sports & Fields

Interpretive Landscape

Experimental Farm

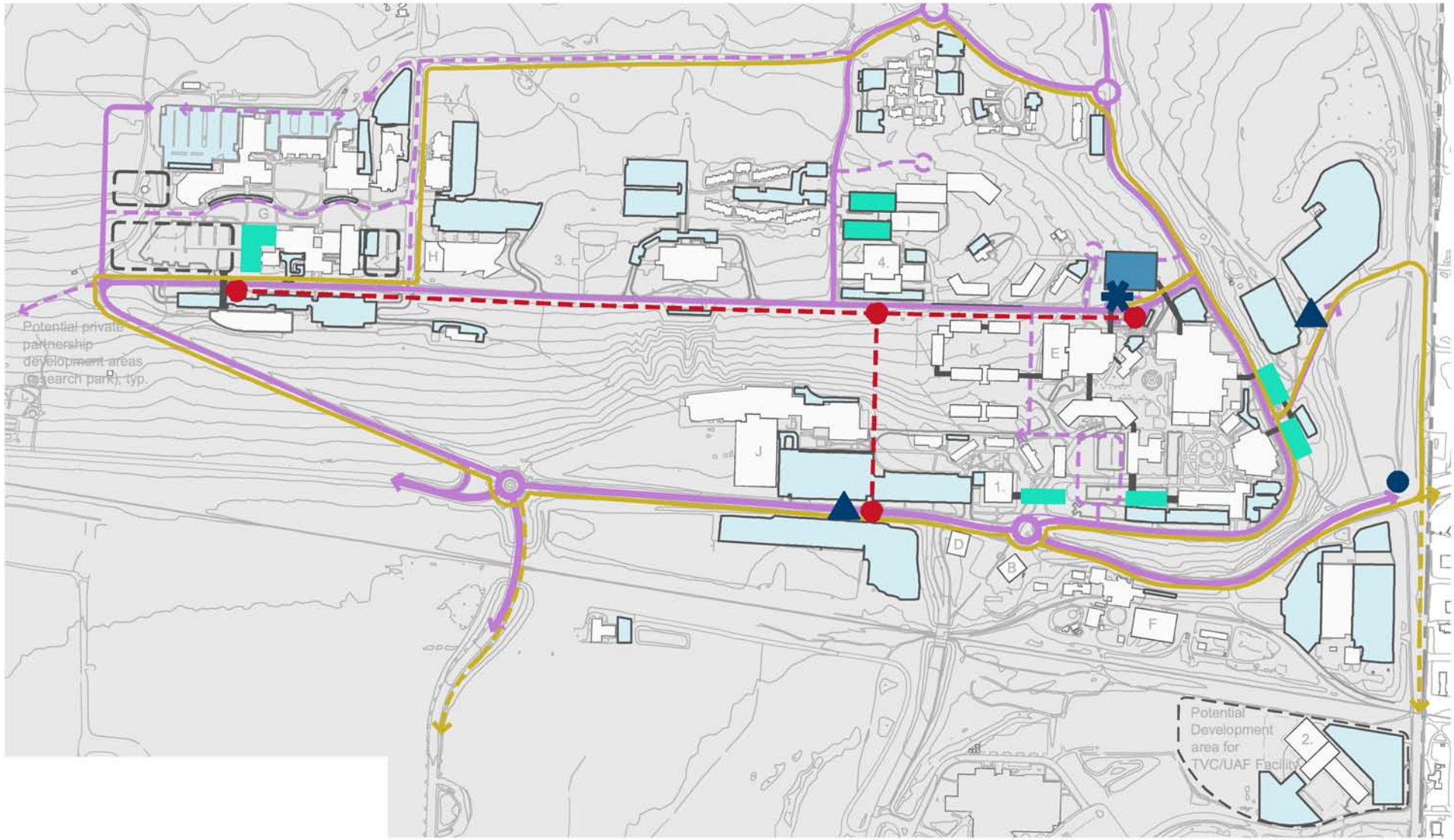
Viewshed Preserve

UAF Campus Master Plan
Emphasize Main Campus Open Space

UNIVERSITY OF ALASKA FAIRBANKS

0 350 700 1,400

PERKINS + WILL



Surface Parking
Parking Deck
Potential Parking Under Building
City Bus
Transit Hub
Campus Shuttle
Rapid Transit
Limited Access Drive
Public Access Drive
Bus Stop
Shuttle Station

UAF Campus Master Plan
Emphasize Main Campus Parking and Circulation

UNIVERSITY OF ALASKA FAIRBANKS

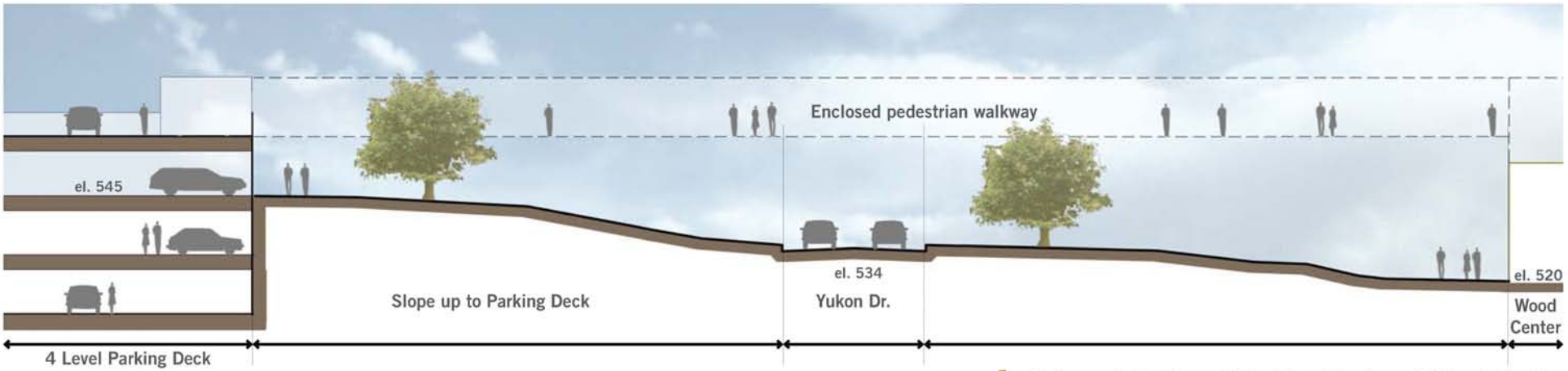
0 350 700 1,400

PERKINS + WILL

Emphasize Main Campus

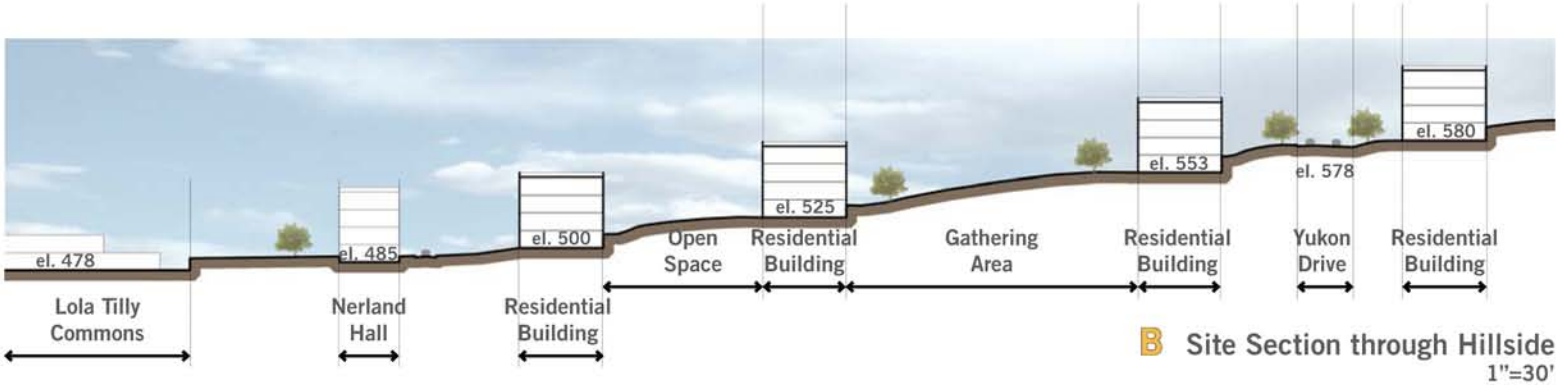
Concept Plan


View towards Fine Arts & Wood Center Shuttle Station



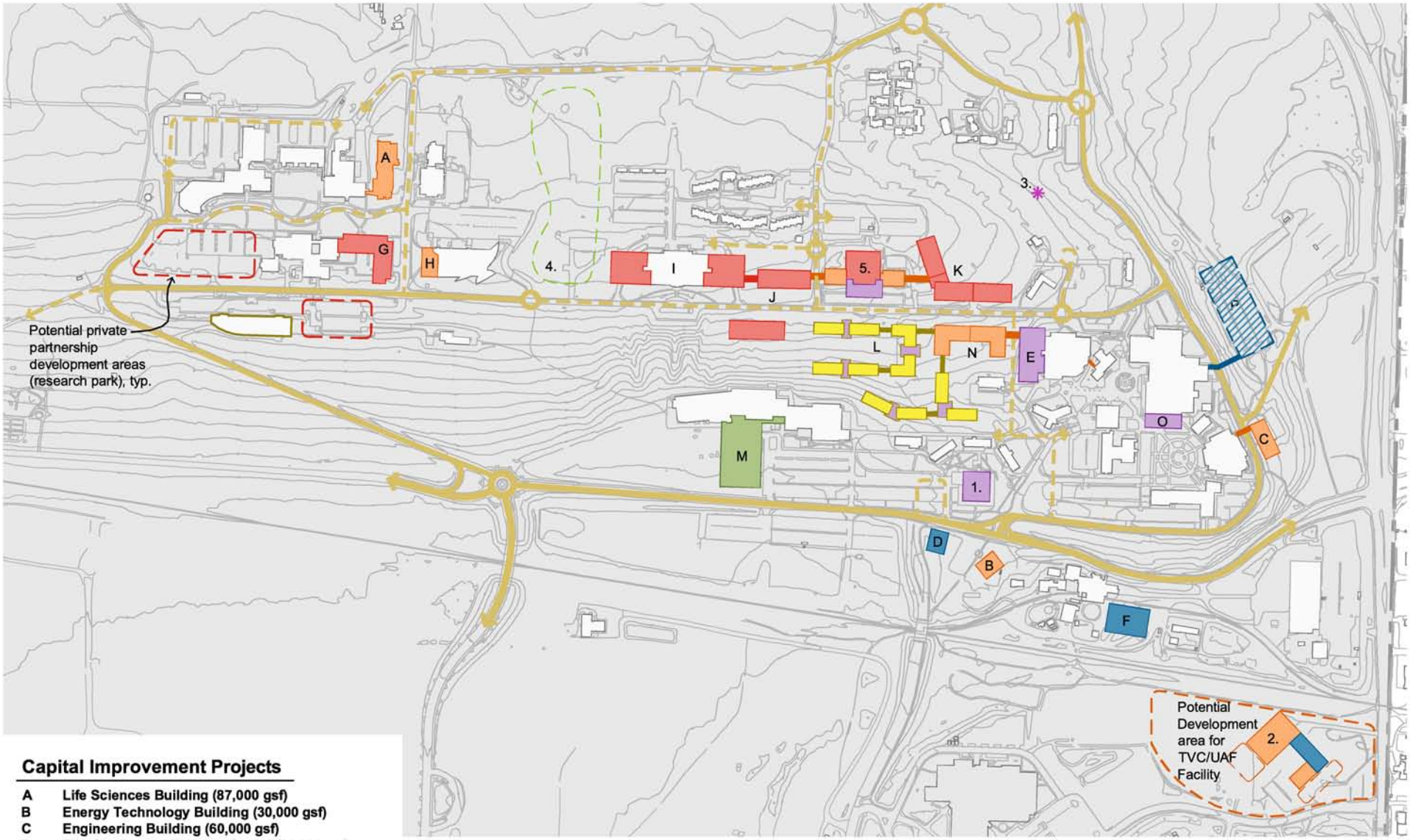
A Enlarged Section at Parking Deck and Wood Center

1"=10'



B Site Section through Hillside

1"=30'



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- I Additions to Reichert (3 floors)
- J Research (4 floors)
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- L Residential (1,000 beds total, 4 floors)
- M Recreation and Athletics (1 floor)
- N Mixed Academics (4 floors)
- O Gathering & Community Life (2 floors)
- P Parking deck (5 floors)

Notes

1. Proposed renovation Welcome Center/One Stop
2. Proposed demolition and reconstruction - Integrated TVC/UAF Facility (4 floors and 1 floor -- a portion of development area may eventually be located on land leased to the school district).
3. Potential relocation of Chancellor's residence.
4. Approximate site limits of proposed Troth Yeddha Park
5. Proposed renovation of MBS to Research and Mixed Academic use.

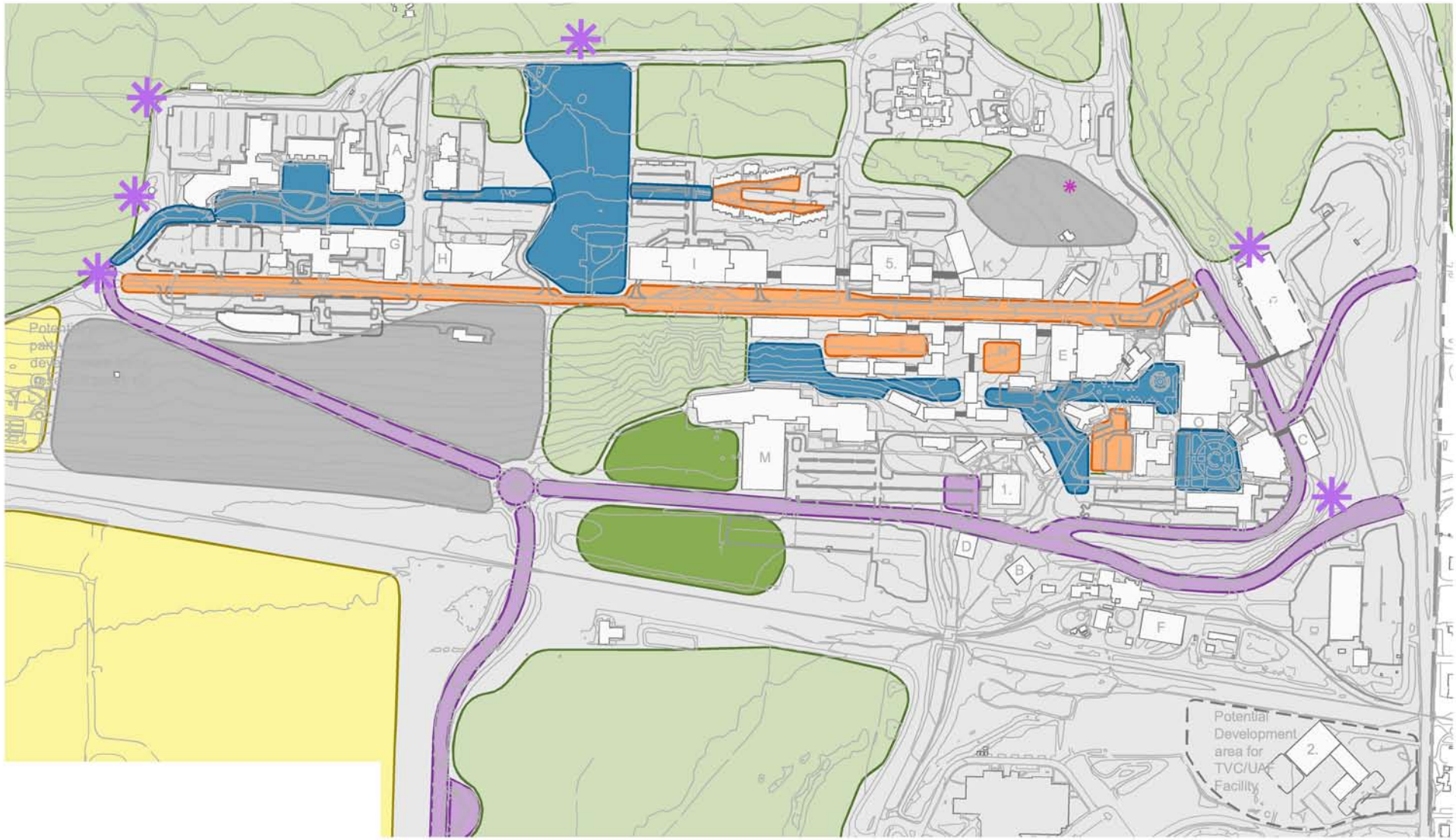
- Mixed Academic
- Research
- Gathering & Student Life
- Recreation & Athletics
- Residential
- Administrative & Support

UAF Campus Master Plan
Strengthen Campus Spine

UNIVERSITY OF ALASKA FAIRBANKS

0 350 700 1,400

PERKINS + WILL



Existing & Proposed Building Areas

Campus Streetscape

Forest Research & Recreation

Gathering Areas

Pedestrian Connections

Sports & Fields

Interpretive Landscape

Experimental Farm

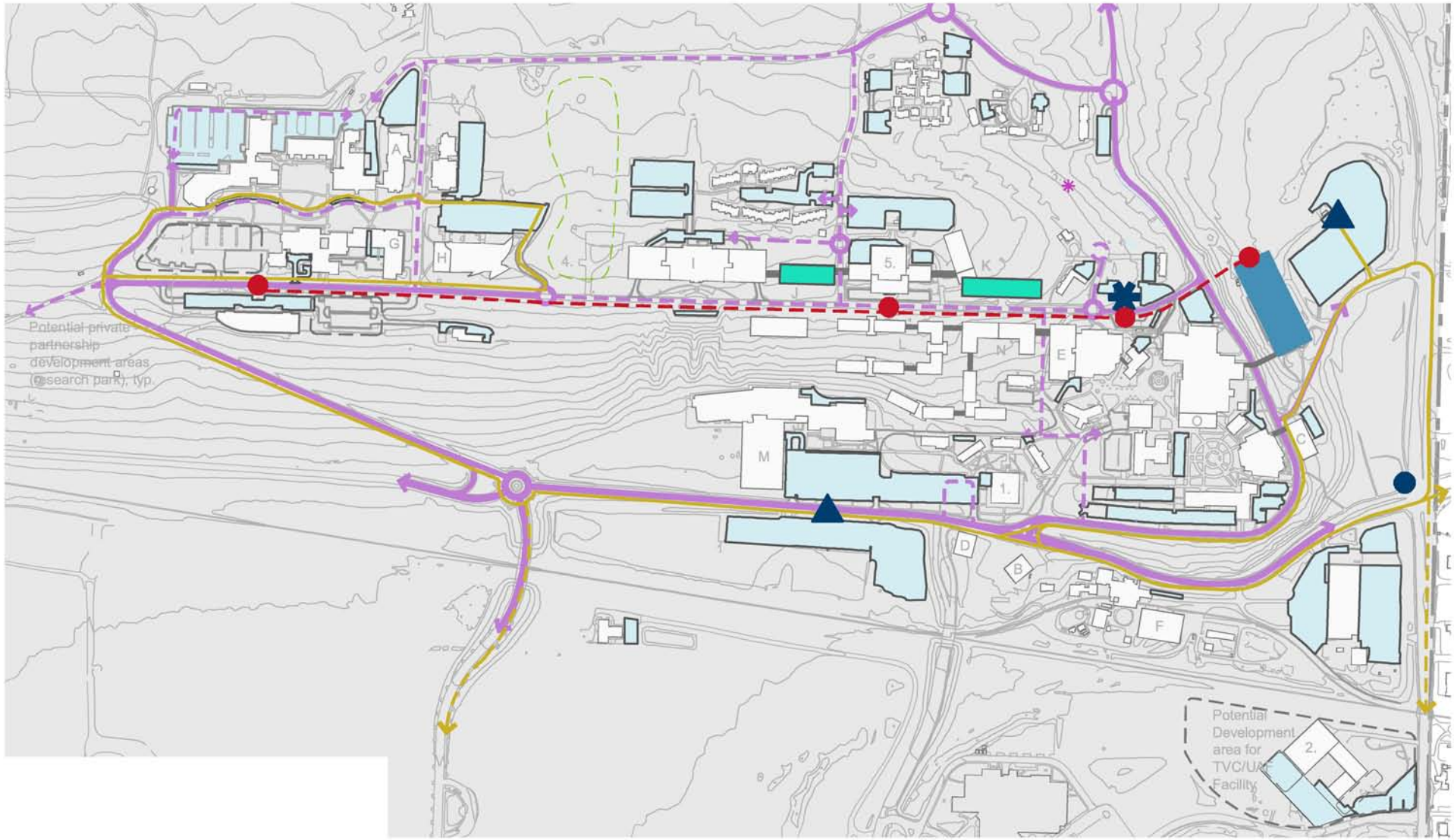
Viewshed Preserve

UAF Campus Master Plan
Strengthen Campus Spine
Open Space

UNIVERSITY OF ALASKA FAIRBANKS

0 350 700 1,400

PERKINS + WILL



Surface Parking
Parking Deck
Potential Parking Under Building
City Bus
Transit Hub
Campus Shuttle
Rapid Transit
Limited Access Drive
Public Access Drive
Bus Stop
Shuttle Station

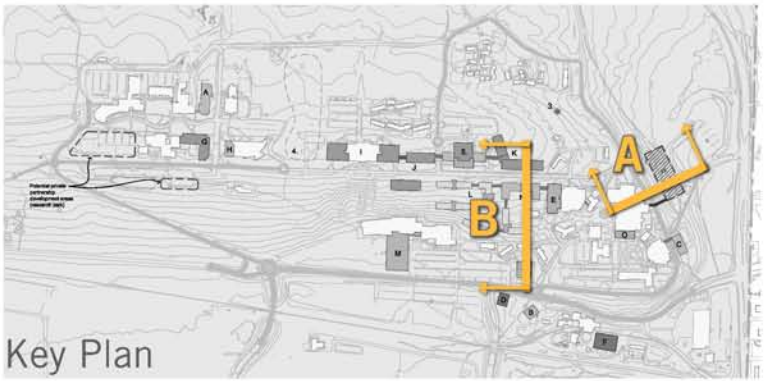
UAF Campus Master Plan
Strengthen Campus Spine
Parking and Circulation

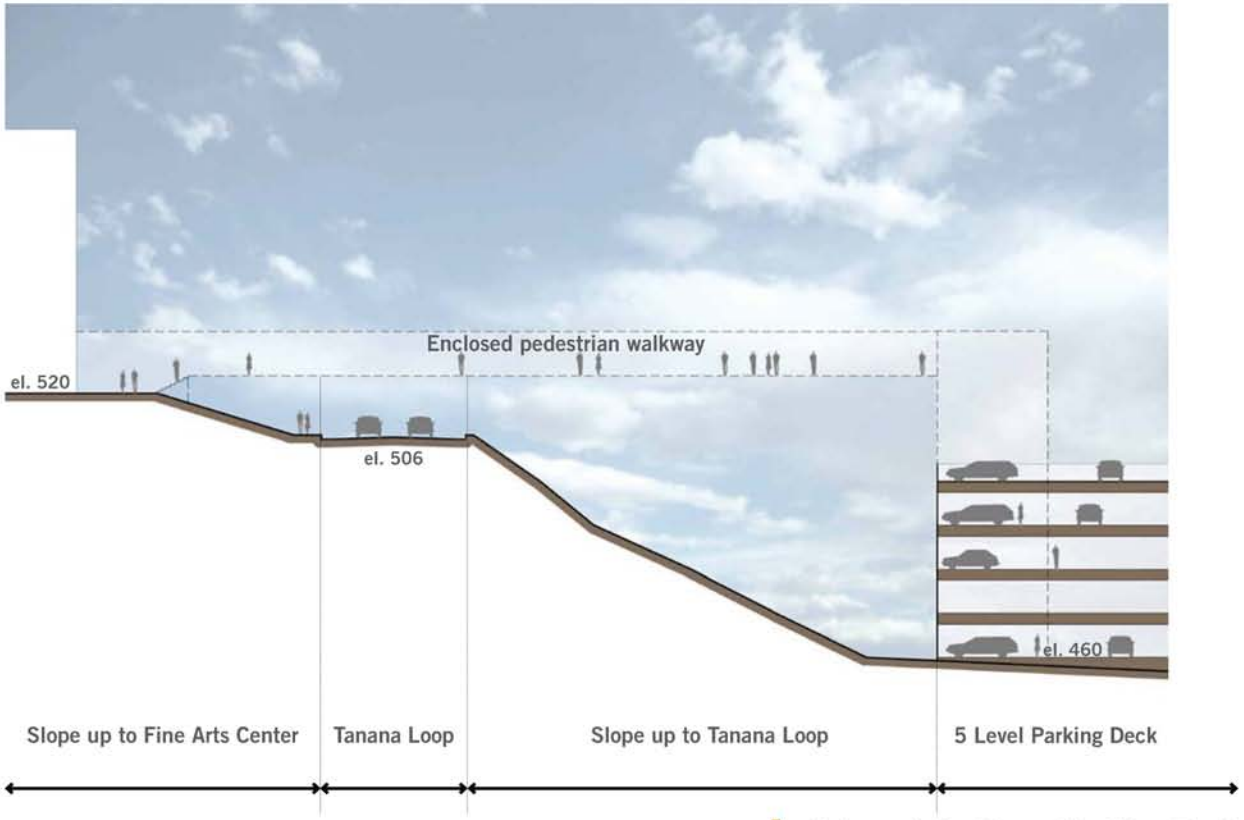
UNIVERSITY OF ALASKA FAIRBANKS

0 350 700 1,400

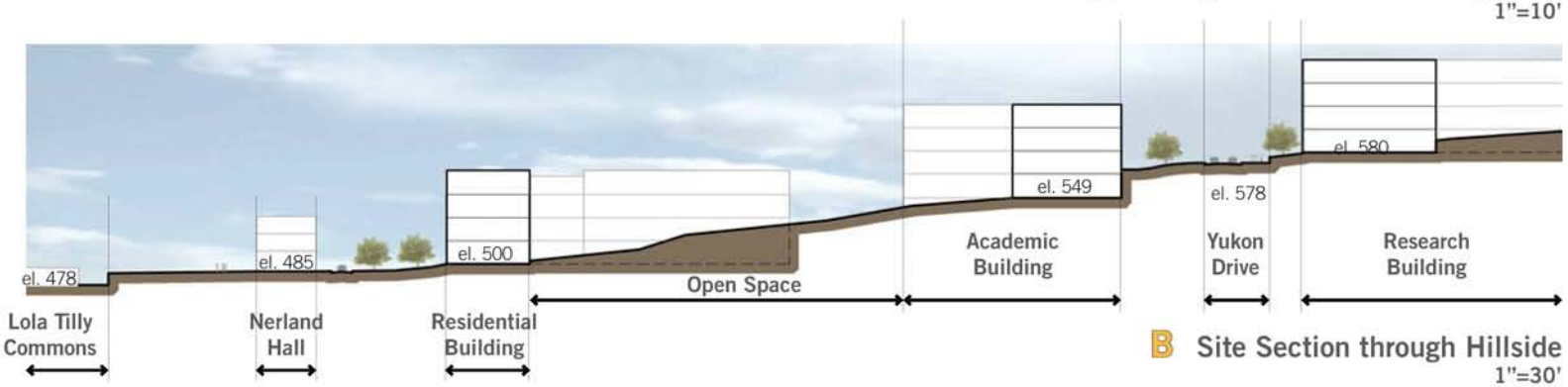
PERKINS + WILL

Strengthen Campus Spine
Concept Plan



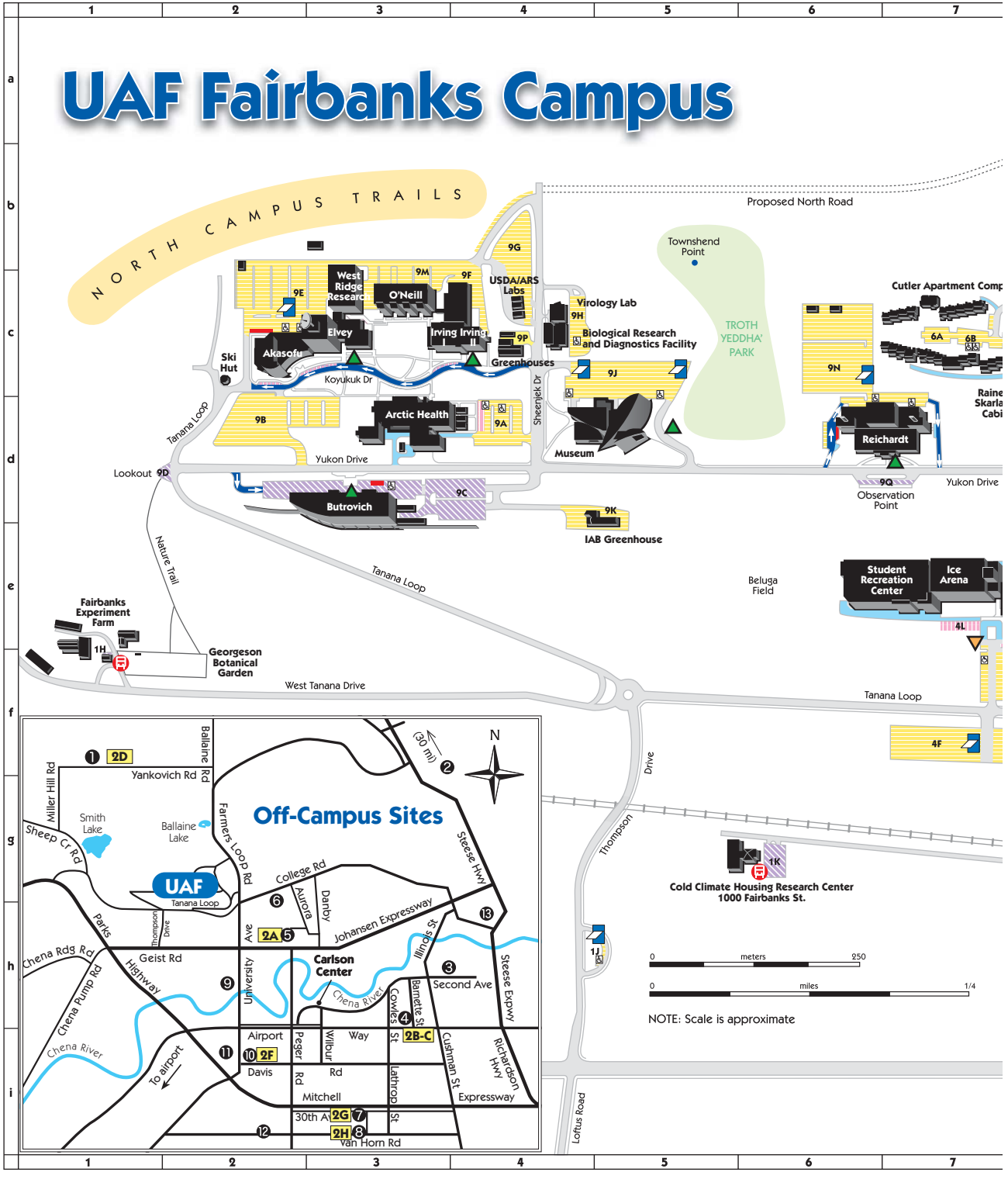


A Enlarged Section at Parking Deck
1"=10'



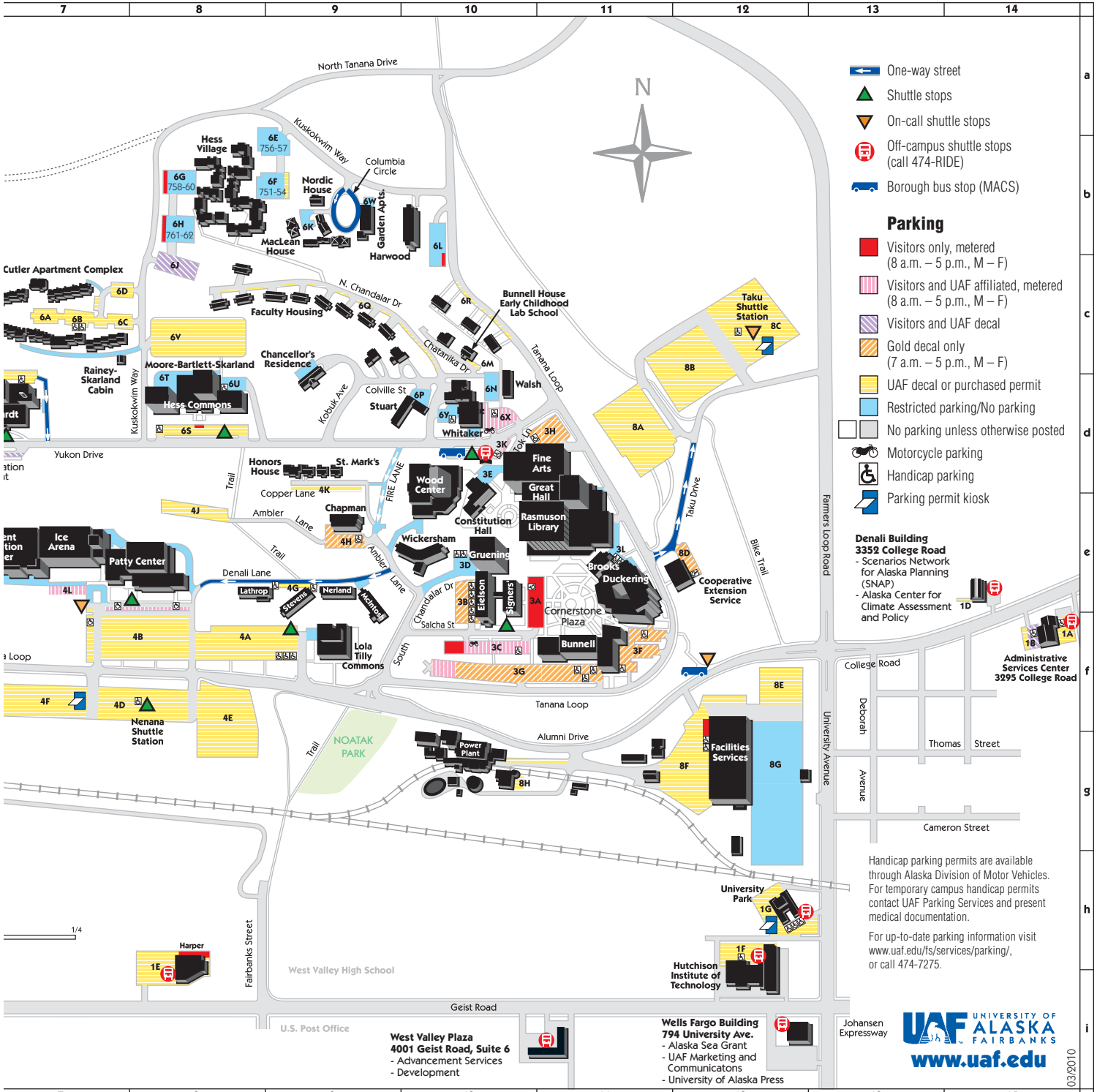
B Site Section through Hillside
1"=30'

UAF Fairbanks Campus



Off-campus Sites

- Robert G. White Large Animal Research Station, Yankovich Road ❶
- Poker Flat Research Range, 30 mile Steese Highway ❷
- Downtown Center, TVC, 510 Second Ave. ❸
- Tanana Valley Campus Center, 604 Barnette St. ❹
- Central Receiving, Campus Mail Services, 1855 Marika Road ❺
- Statewide Risk Management, 1760 Westwood Way ❻
- TVC Automotive Technology Center, 3202 Industrial Ave. ❼
- Office of Electronic Miniaturization, 3300 Industrial Ave. ❽
- Facilities Services Division of Design and Construction, 590 University Ave. ❾
- Center for Distance Education, College of Rural and Community Development Bookstore, Statewide Office of Academic Affairs, Alaska Teacher Placement, Early Childhood Education, Math in a Cultural Context, 2175 University Ave. South ❿
- Fire Station 2, 1950 University Ave. South ⓫
- Fairbanks Pipeline Training Center, 3600 Cartwright Court ⓬
- TVC Cosmetology Program, 607 Old Steese Hwy (Cornerstone Mall North), Suite C ⓭


North Tanana Drive
Kuskokwim Way
Columbia Circle
Hess Village
6E 756-57
6G 758-60
6F 751-54
6H 761-62
Nordic House
6W
Garden Apts.
6K
MacLean House
Harwood
6L
6J
Cutler Apartment Complex
6D
6A
6B
6C
N. Chandalar Dr
Faculty Housing
6Q
6R
Bunnell House Early Childhood Lab School
Chatanika Dr
Tanana Loop
6V
Chancellor's Residence
Moore-Bartlett-Skarland
6T
6U
Hess Commons
Rainey-Skarland Cabin
Kobuk Ave
Colville St
Stuart
6P
6M
Walsh
6Y
6X
Whitaker
6S
Yukon Drive
3K
Tok Loop
3H
Honors House
St. Mark's
Trail
FIRE LANE
Wood Center
3E
Fine Arts
Great Hall
Copper Lane
4K
Chapman
Ambler Lane
4J
Constitution Hall
Rasmuson Library
Wickersham
Gruening
3D
Brooks
Duckering
3L
Ice Arena
Patty Center
4H
Denali Lane
Lathrop
4G
Stevens
Nerland
McIntosh
4L
Eielson
Bigners
3B
3A
Cornerstone Plaza
Salcha St
Chandalar Dr
Lola Tilly Commons
South
4B
4A
3C
Bunnell
3F
3G
Tanana Loop
4F
4D
Nenana Shuttle Station
4E
Alumni Drive
NOATAK PARK
Power Plant
8H
8E
Facilities Services
8F
8G
Taku Shuttle Station
8C
8B
8A
Taku Drive
8D
Cooperative Extension Service
Bike Trail
Farmers Loop Road
University Avenue
College Road
Deborah
Thomas
Street
Avenue
Cameron Street
Administrative Services Center 3295 College Road
1B
1A
Denali Building 3352 College Road
- Scenarios Network for Alaska Planning (SNAP)
- Alaska Center for Climate Assessment and Policy
1D
University Park
1G
1F
Hutchison Institute of Technology
Harper
1E
Fairbanks Street
West Valley High School
Geist Road
U.S. Post Office
West Valley Plaza
4001 Geist Road, Suite 6
- Advancement Services
- Development
Wells Fargo Building
794 University Ave.
- Alaska Sea Grant
- UAF Marketing and Communicatons
- University of Alaska Press
Johansen Expressway
1/4
N
One-way street
Shuttle stops
On-call shuttle stops
Off-campus shuttle stops (call 474-RIDE)
Borough bus stop (MACS)
Parking
Visitors only, metered (8 a.m. – 5 p.m., M – F)
Visitors and UAF affiliated, metered (8 a.m. – 5 p.m., M – F)
Visitors and UAF decal
Gold decal only (7 a.m. – 5 p.m., M – F)
UAF decal or purchased permit
Restricted parking/No parking
No parking unless otherwise posted
Motorcycle parking
Handicap parking
Parking permit kiosk
Handicap parking permits are available through Alaska Division of Motor Vehicles. For temporary campus handicap permits contact UAF Parking Services and present medical documentation.
For up-to-date parking information visit www.uaf.edu/fs/services/parking/, or call 474-7275.
UAF UNIVERSITY OF ALASKA FAIRBANKS
www.uaf.edu
03/2010
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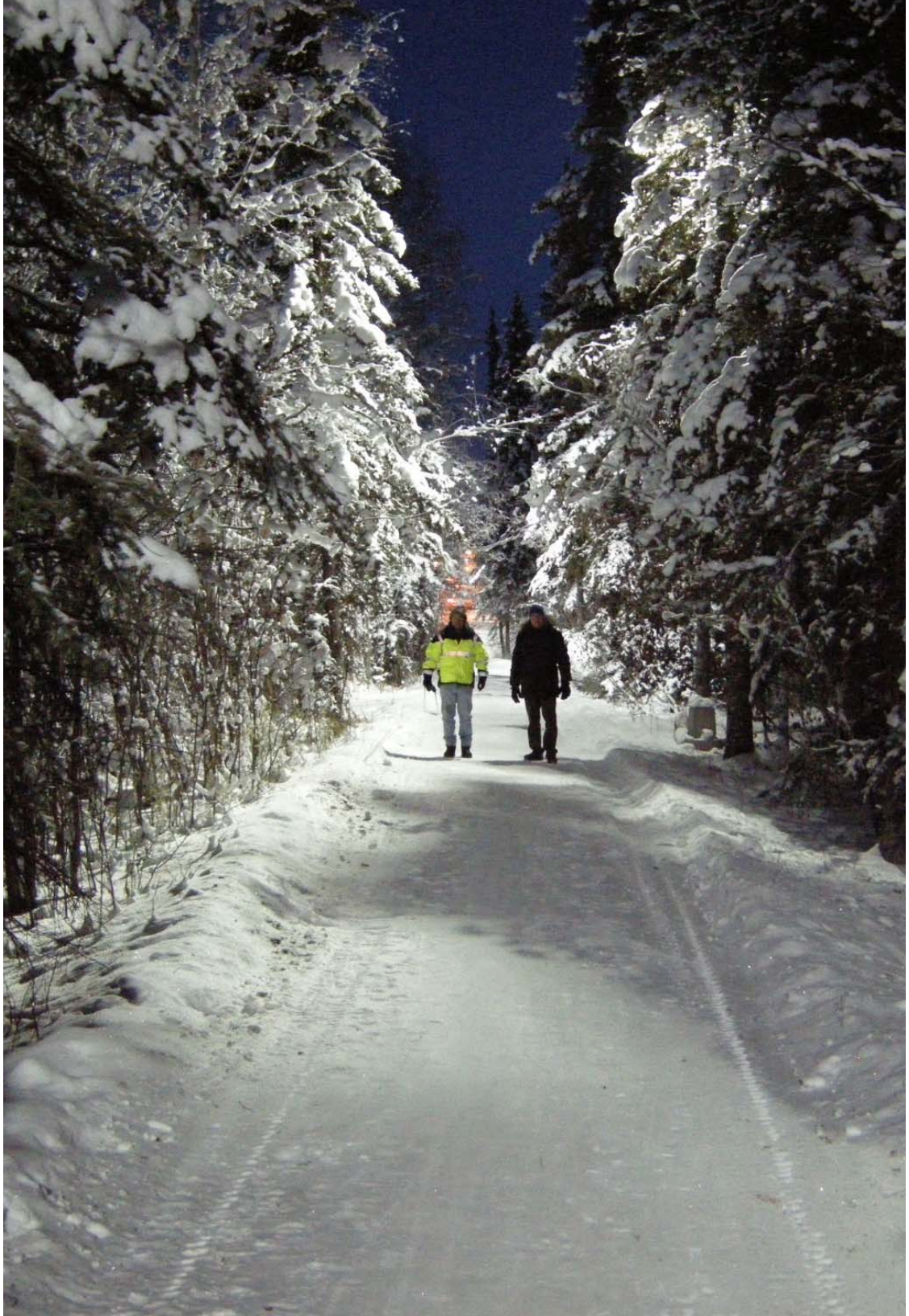

An evening walk on campus.
Photo: Nancy Clanton, Clanton and Associates, Inc.