Description of Proposed Action and Alternatives

CHAPTER 2 PROJECT DESCRIPTION

This chapter of the Final Environmental Impact Statement (FEIS) describes the Proposed Actions (Alternative 1) for the University of Washington Animal Research and Care Facility (ARCF) Project. A description of Alternative 2 (alternate site) and Alternative 3 (No Action Alternative) is also provided in this chapter. A detailed description of the affected environment, environmental impacts, mitigation measures, and significant unavoidable adverse impacts is provided in **Chapter 3** of the DEIS. Updated information provided subsequent to the issuance of the DEIS is indicated by shaded text.

2.1 **PROJECT SUMMARY**

The fundamental mission of the University of Washington is to provide education, research and public service at a nationally competitive level for the citizens of Washington State. To support the research being conducted by the University of Washington Health Sciences Department, including the Department of Comparative Medicine (DCM) and the Washington National Primate Research Center (WaNPRC), the University has proposed the new ARCF to meet the specialized building and research requirements of these departments. Currently, existing research and animal housing functions are situated in various locations throughout the campus and Health Sciences Complex. In addition, the DCM and WaNPRC have experienced animal housing capacity issues due to a lack of adequate space which has hampered their ability to function and meet demand.

Existing decentralized facilities generally account for approximately two-thirds of the identified regulatory¹ deficiencies (non-compliance) at the University's animal care and use program, even though they house only three percent of the animal population; these facilities have also been difficult and costly to maintain at the same high standards of animal care provided in centralized facilities. In order to upgrade currently non-compliant facilities, increase holding and procedure space, and provide a new centralized resource for the DCM and the WaNPRC, the University of Washington proposes to construct a modernized and centralized facility to provide a productive and healthy working environment for staff, researchers, and animals, while providing adequate space and flexibility for housing animals.

Under the Proposed Action, the two-level ARCF would be constructed below-grade on the proposed site (which includes the Portage Bay Vista) and would contain approximately

¹ Regulatory agencies that reviewed the University's facilities included the Association for the Assessment and Accreditation of Laboratory Animal Care, International (AAALAC) and the National Institute of Health (NIH).

90,000 square feet of below-grade building space (approximately 43,000 square feet on each level, plus an additional 4,000 square feet for the expanded loading dock area). Minor above-grade development would total 5,700 square feet outside of the Portage Bay Vista boundaries and would consist of an approximately 66-foot high, 4,200-square foot utility/exhaust tower² for air intake and exhaust in the northeast corner of the proposed building (adjacent to Hitchcock Hall), as well as an approximately 1,500-square foot above-grade entrance pavilion to provide access to the ARCF via the below-grade access corridor. In total, approximately 95,700 square feet of building is complete, the Portage Bay Vista would be replaced and include pedestrian access and replacement landscaping. The existing view corridor created by the Portage Bay Vista would remain as part of this project.

2.2 BACKGROUND

University of Washington Campus Master Plan

The University of Washington (UW) was founded in 1861 as a public research and education institution and currently has campuses in Seattle, Tacoma, and Bothell. The University conducts master planning to guide future development on all campuses. In January 2003, the University of Washington adopted the *Campus Master Plan-Seattle Campus (CMP-Seattle 2003)*, a conceptual plan that establishes guidelines and policies for up to three million square feet of building area housing academic, research, education, and support uses. This plan was approved by the University of Washington – Seattle Campus development considers the guidelines and requirements of the *CMP-Seattle 2003*.

For planning purposes, the *CMP-Seattle 2003* divided the Seattle Campus into five different areas including the Central, West, South, Southwest, and East campus sectors. Each area is characterized by their varying structures and uses and each area follows a list of objectives that represent ideas for future development. The Southwest Campus, which contains the proposed ARCF site, consists of approximately 30 acres and is bordered by Pacific Street to the north, Portage Bay to the south, the connection with the South Campus at the Portage Bay Vista to the east, and 6th Avenue NE to the west. The *CMP-Seattle 2003* indicates that the Southwest Campus includes a significant public resource, the Portage Bay shoreline and vista.

The *CMP-Seattle 2003* also indicates the amount of new development allowed in each sector during the 10-year planning period covered in the document. The *CMP-Seattle 2003* indicates that approximately 390,000 gross square feet (GSF) of new development would be

² The proposed utility/exhaust tower would be approximately 66 feet in height (equal to the adjacent Hitchcock Hall). Exhaust stacks would extend an additional 16 feet to the approximate height of the Hitchcock Hall mechanical penthouse.

allocated between the Southwest and South Campus. However, the *CMP-Seattle 2003* also indicates that "gross square footages do not include potential new construction belowgrade³" and as part of the Development Standards, the *CMP-Seattle 2003* includes an adjustment and exception to the Post-Secondary Facilities Inventory and Classification Manual (FICM)-GSF for the Campus Master Plan that states "The Campus Master Plan GSF will not include the gross floor areas/portions of areas of the building that are entirely below the existing grade."⁴ The Alternative 1 site (which includes the Portage Bay Vista) is not identified as a development site and the proposed development of the ARCF below-grade under the Proposed Action would not count towards the development that was allocated to the Southwest Campus in the *CMP-Seattle 2003*.

Primary goals of the CMP-Seattle 2003 for the Southwest Campus include:

- Maintaining the current uses along the waterfront (the Portage Bay shoreline and vista, University facilities leased for private houseboats, private boat moorages, and the Jensen Motor Boat Company);
- Maintaining the maritime character of the area; and,
- Meeting the University of Washington's needs for the area.

Other specific objectives identified for the Southwest Campus include the following:

- Take advantage of the shoreline and reopen views to the water where possible;
- Develop a coherent assemblage of buildings and open spaces, both as a long range vision and at intermediate stages of development;
- Improve pedestrian routes along the water;
- Create additional open spaces;
- Complete the Car Top Boat Launch and Portage Bay Vista; and,
- Protect views from the Portage Bay Vista.

The proposed ACRF (Alternative 1 – Proposed Action) site is also located immediately adjacent to the South Campus area which is generally characterized by the University of Washington Medical Center, Magnuson Health Sciences Center and the Oceanography and Fisheries Buildings.

As indicated above, the *CMP-Seattle 2003* identifies approximately 70 potential development sites throughout the campus, and includes guidelines and policies for

³ *CMP-Seattle* 2003, page 86.

⁴ *CMP-Seattle 2003*, page 128.

development on these sites. The *CMP-Seattle 2003* does not specifically identify the proposed ARCF site (including the Portage Bay Vista) as a potential development site; however, the development of below-grade structures is not counted toward the overall development totals for the campus and is not required to be located on identified potential development sites. Development on the proposed ARCF site would be consistent with the objectives for the Southwest Campus in that it would protect and maintains views across the Portage Bay Vista and create enhanced open space areas and improved pedestrian routes.

The Alternative 2 site is identified in the *CMP-Seattle 2003* as Development Site 45S, which is intended to accommodate approximately 110,800 square feet of academic or transportation uses and could allow a building of up to 50 feet in height. Specific recommendations for Development Site 45S as identified in the *CMP-Seattle 2003* include:

- Developing a pedestrian extension to Skamania Lane;
- Integrate Skamania Lane extension with a potential Sound Transit Plaza; and,
- Develop open space as a connection to the Brooklyn Avenue NE street end, an extension to the waterfront and as part of the open space along NE Boat Street.

University of Washington Research Departments

The University of Washington DCM provides education and research opportunities in the use of animals in biomedical research, testing and education, while also offering training for veterinarians in the diagnosis, treatment and prevention of the disease of laboratory animals. Comparative medicine encompasses the various disciplines that are involved in the development, maintenance and use of animal models of human and animal physiology and disease conditions. Areas of current research interests include enteric disease, lymphocyte biology, biology of aging, mouse genomics, generation and characterizations of transgenic animal models, somatic cell gene transfer, and animal models of gene therapy. The DCM is primarily housed within the T-wing of the Health Sciences Complex, with additional laboratories in the K-wing and I-court.

The WaNPRC is a research unit of the University of Washington Health Sciences Department and conducts biomedical research that is directed towards significant human health issues and nonhuman primate health biology. Research conducted by the WaNPRC supports translational and pre-clinical biomedical research utilizing nonhuman primates with an emphasis in the areas of AIDS-related research, developmental biology, functional genomics, immunology, reproductive biology, neurophysiology, international studies, transplantation and stem cell biology, virology, and development of primate disease models. The WaNPRC is headquartered in the Warren G. Magnuson Health Sciences Center, with additional leased facilities in South Lake Union and Belltown.

The disposal of animal remains is a necessary part of the research process and is handled as part of the University of Washington Infectious Waste Management Plan (April 2014), which

is consistent with applicable state and local regulations and addresses federal guidelines for research as defined by the National Institute of Health (NIH) and the Center for Disease Control. Pursuant to this Plan, all animal remains will continue to be collected by a University contracted vendor and no incineration will occur on campus.

Environmental Review

A programmatic Environmental Impact Statement (EIS) completed for the *CMP-Seattle 2003* analyzed potential impacts for general development (not specific projects) and development potential for the entire campus. The *CMP-Seattle 2003* EIS is incorporated by reference in this EIS per WAC 197-11-635. This previous EIS is available for public review at the University's Capital Projects Office.

The University of Washington determined that this proposal may have potential significant adverse impacts to the environment. On April 24, 2014, the University of Washington issued a combined Determination of Significance and Request for Scoping Comments on the proposal. In response to the Request for Scoping Comments, approximately 110 public comments were received during the scoping period.

Public Outreach

The University of Washington, including the DCM and the WaNPRC, strives to provide transparency regarding program missions and objectives. For the ARCF Project, the University of Washington conducted public outreach forums to describe anticipated range of medical research methods and receive public comments; presented the project to the Faculty Council on University Facilities and Services in November 2012; briefed the City-University Community Advisory Committee in November 2013; sent outreach email broadcast in April 2014; and, held a public open house in June 2014. A second open house was held in September 2014. Additionally, the Health Sciences Administration maintains updated information on the ARCF Project on its publically-accessible website.

2.3 EXISTING SITE CONDITIONS

Alternative 1 – Proposed Action

Existing Site and Surrounding Uses

The Alternative 1 – Proposed Action site is located in the central portion of the University of Washington's Southwest Campus area and includes the Portage Bay Vista. The site is generally bounded by NE Pacific Street to the north, Hitchcock Hall to the east, NE Boat Street to the south, and the William H. Foege Building to the west (see FEIS **Figure 2-1** for a map of the campus and FEIS **Figure 2-2** for an aerial photo of the site and surrounding area).



Source: University of Washington, 2014.



FEIS Figure 2-1 Campus Map



Source: Google Earth and EA Engineering, 2014.



FEIS Figure 2-2 Aerial Photo The Alternative 1 site is located at and below-grade, under the Portage Bay Vista, which provides open space, views and pedestrian circulation. The site is generally comprised of vegetated open space area (primarily grass/lawn) and paved pathways, which provide connections between NE Pacific Street, NE Boat Street, Foege Hall, and Hitchcock Hall. The "Stronghold" sculpture is located in the central portion of the site and serves as a small gathering area with views towards Portage Bay. The Portage Bay Vista provides a visual corridor though the western portion of the site and was a requirement as part of the 15th Avenue Street Vacation Property Use and Development Agreement (PUDA) between the University of Washington and the City of Seattle (August 18, 2000). Per the Agreement, the Portage Bay Vista requires an approximately 110-foot wide by approximately 600-foot long uninterrupted visual corridor between NE Pacific Street and Portage Bay.

Circulation

The Alternative 1 site contains the Portage Bay Vista east/west pedestrian corridor, which is the major east/west connection through the south campus from the University Transportation Center/Portage Bay Parking Facility (to the west of the site) to and through the Health Sciences Complex (to the east of the site), and to the University of Washington Medical Center (UWMC). The east/west pedestrian corridor was also a requirement of the *15th Avenue Street Vacation PUDA*. Multiple pathways traverse through the site and provide connections to the adjacent areas including NE Pacific Street, NE Boat Street, 15th Avenue, Hitchcock Hall, the Health Sciences Complex, Foege Hall and the University Transportation Center/Portage Bay Parking Facility.

A pedestrian/bicycle ramp extends from the northwest corner of the site (adjacent to Hitchcock Hall) to the Hitchcock Bridge, which provides a connection with the Burke Gilman Trail. This ramp provides grade-separated access to the Burke Gilman Trail; however, according to the University's Campus Mobility Map the ramp is only considered "usable" which indicates that the ramp is not fully compliant with ADA accessibility guidelines.

While the site currently provides several circulation options for pedestrians and bicycles, not all of these routes are considered ADA accessible. The west/east connection between the University Transportation Center/Portage Bay Parking Facility and the Health Sciences Complex is fully ADA accessible. However, the north/south connection between NE Pacific Street and NE Boat Street is considered to be too steep to serve as an ADA accessible pathway. In addition, access to the site from the north and south of NE Pacific Street, including the ramp connection to the NE Pacific Street overpass to the northeast of the ARCF site, are not fully compliant with federal ADA accessibility guidelines.

Loading Dock

An existing, underground loading dock is located beneath a portion of the Alternative 1 site and is accessed from NE Boat Street and Columbia Road to the south of the site. The existing loading dock provides loading vehicle access for the William H. Foege Building, Hitchcock Hall, and the H-wing and K-wing of the Health Sciences Complex.

Vehicle Parking

While there is no vehicle parking currently provided on the Alternative 1 site, the existing University Transportation Center/Portage Bay Parking Facility is located to the west of the site, beyond Foege Hall and 15th Avenue NE. The Portage Bay Parking Facility includes approximately 990 parking stalls and provides parking for the South Campus area, including Foege Hall, Hitchcock Hall, the Health Sciences Complex, and the University of Washington Medical Center.

Bicycle Parking

Covered bicycle parking for approximately 24 bicycles is located on the site, adjacent to the west side of Hitchcock Hall. Bicycle lockers and uncovered bicycle racks for approximately 31 bicycles is also located at the northeast corner of Foege Hall, adjacent to the site.

Utilities

Existing civil utilities including stormwater drainage, water, and sanitary sewer are all available at the Alternative 1 site. A description of these existing utilities is provided below.

Stormwater

The University of Washington owns and maintains stormwater drainage facilities on the site; stormwater facilities located in the NE Boat Street right-of-way are owned by Seattle Public Utilities (SPU). There are three existing stormwater drainage systems on the site, all of which eventually discharge to the SPU stormwater drainage system in the NE Boat Street right-of-way.

- The Hitchcock Hall stormwater system collects stormwater runoff from the west side of Hitchcock Hall and routes it around the north edge of the building to a 24-inch storm main to the east of Hitchcock Hall.
- The Ocean Sciences North stormwater system collects subsurface drainage from the loading dock and stormwater runoff from the area between Hitchcock Hall and the Ocean Sciences Building and conveys it to the 16-inch stormwater main running southeast through the vacated 15th Street.
- The Foege Building stormwater system collects stormwater runoff from the remainder of the site and conveys it via a 12-inch stormwater main south through the site. This system crosses over the top of the loading dock.

Groundwater is also anticipated to be present at the site and is located at an elevation of approximately 26 feet at the north side of the proposed building footprint (approximately 42 feet below ground surface) and at an elevation of approximately 25 feet at the south side of the proposed building footprint (approximately 32 feet below ground surface).

Water Service

An existing Campus Master Water Meter is located at the northwest corner of the proposed ARCF site. Water service to the west of this meter (upstream) is owned by SPU; water service to the east of this meter (downstream) is owned by the University of Washington. Downstream of the master water meter, a 12-inch university main runs along the south edge of NE Pacific Street.

Midway through the proposed ARCF site, a 10-inch ductile iron loop-line connects to the south and travels the length of the site before bending and heading east along the south edge of the Ocean Sciences Building. This 10-inch line travels over the existing loading dock in a recess in the loading dock roof structure. In addition, at the northwest corner of the ARCF site, two ductile iron water services (eight-inch and six-inch lines) branch off of the 10-inch loop-line to provide service to the Foege Building.

Sanitary Sewer Service

The University of Washington owns and maintains sanitary sewer facilities on the proposed ARCF site, while SPU owns and maintains the sewer facilities in the NE Boat Street right-of-way and King County Metro owns and maintains the 108-inch sewer trunk main in the NE Pacific Street right-of-way. There are two existing sanitary sewer systems on the Alternative 1 site, both of with are located south of the loading dock. An eight-inch sewer line that serves the Ocean Sciences building runs north and south, midway between the Ocean Sciences Building and the Foege Building. A ten-inch sewer line serves the Foege Building and runs north and south along the eastern edge of the Foege Building. Both of these systems gravity drain towards the SPU sewer system in the NE Boat Street right-of-way which discharges to a sanitary sewer lift station west of the site.

Additional sanitary sewer facilities in the vicinity of the site include a ten-inch force main to the southeast in the vacated 15th Street easement that connects to a gravity system east of Hitchcock Hall, and an eight-inch sewer line on the east side of Hitchcock Hall that connects with the 108-inch sewer main in the NE Pacific Street right-of-way.

Natural Gas Service

Natural gas service in the site vicinity is provided by Puget Sound Energy (PSE) and there are two existing natural gas service lines on the proposed ACRF site. A three-inch stub extends from NE Boat Street on the south side of the Ocean Sciences Building and dead-ends approximately 75 feet south of the loading dock. An additional service line extends from the four-inch PSE main in the NE Boat Street right-of-way to serve the Foege Building (the size of this line is unknown).

Alternative 2 – Alternate Site

Existing Site and Surrounding Uses

The Alternative 2 site is located in the University of Washington's Southwest Campus area and is generally bounded by the Portage Bay Parking Facility and University Transit Center to the north, 15th Avenue NE to the east, NE Boat Street to the south, and Brooklyn Avenue NE to the west (refer to FEIS **Figure 2-1** for a campus map and FEIS **Figure 2-2** for an aerial photo of the Alternative 2 site and surrounding area).

The Alternative 2 site is primarily comprised of existing gravel parking areas (parking area W24 and W28) and includes approximately 90 parking spaces. Three existing buildings are located along the western edge of the site, including two single-story brick buildings and the two-story Oceanography Research Building.

Circulation

Vehicular access to the Alternative 2 site is provided from the south via NE Boat Street. An existing alley connects the site with NE Boat Street and provides vehicular circulation through the site and access to the existing on-site parking areas. A pedestrian pathway is located at the northern edge of the site and serves as a connection to the east/west pedestrian corridor which connects the adjacent Portage Bay Parking Facility with William H. Foege Hall, the Portage Bay Vista, Hitchcock Hall, the UW Health Sciences Center and UWMC to the east, as well as the Fisheries and Marine Sciences Buildings to the west. Existing sidewalks are also located adjacent to the Alternative 2 site along 15th Avenue NE, Brooklyn Avenue NE and NE Boat Street.

Vehicle Parking

As described above, the Alternative 2 site contains two existing University parking areas (W24 and W28) and includes approximately 90 parking spaces. The Portage Bay Parking Facility is also located to the north of the site and includes approximately 990 parking spaces.

Bicycle Parking

Uncovered bicycle parking facilities for approximately 11 bicycles are currently located on the Alternative 2 site, adjacent to the Ocean Research 2 Building. In addition, several bicycle parking areas are provided within the adjacent Portage Bay Parking Facility and the University Transit Center.

Utilities

Stormwater

Existing stormwater on the Alternative 2 site is generally conveyed and discharged to a 48inch stormwater drain that is located to the west of the site in the Brooklyn Avenue NE right-of-way. Typical of most University uses, most stormwater is conveyed separately to Portage Bay, or to the City of Seattle storm drainage system.

Water Service

Water service for the Alternative 2 site is provided by the City of Seattle and is located in several locations surrounding the site, including an existing water main located in the Brooklyn Avenue NE right-of-way, as well as within 15th Avenue NE to the east of the site and NE Pacific Street to the north.

Sanitary Sewer Service

An existing 15-inch sanitary sewer main is located to the west of the Alternative 2 site, within the Brooklyn Avenue NE right-of-way. The University of Washington owns and maintains its own sanitary sewer system, and it contributes to the City of Seattle collection system with treatment and disposal at Metro's West Point sewage treatment facility.

2.4 **PROJECT GOALS AND OBJECTIVES**

The fundamental mission of the University of Washington is to provide education, research, and public service at a nationally competitive level for the citizens of Washington State. The development of the ARCF is intended to further the University's mission and the goals for the project include the following:

- Replace currently non-compliant animal research labs and facilities with new "state of the art" facilities.
- Create a safe and healthy working environment for staff, researchers and animals.
- Provide a new centralized resource for the University of Washington Health Sciences Administration, the DCM and the WaNPRC.
- Provide amenities that assist in retaining and recruiting staff, including adequate offices and teaming spaces, which also instill confidence in the research community that the animals are well cared for.
- Allow flexibility for housing animals to allow the facility to respond to changing animal species population and census projections within the facility.
- Provide sufficient storage space to reduce operational time for staff to locate materials and provide a safer, more ergonomically friendly environment.

2.5 ALTERNATIVES

For the purposes of environmental review, two development alternatives are analyzed in this DEIS, including Alternative 1 – Proposed Action and Alternative 2 – Alternate Site. The Proposed Action would include development of the proposed ARCF within a below-grade structure in the Portage Bay Vista area between the William H. Foege Building and Hitchcock Hall. Alternative 2 (Alternate Site) would include development of the ARCF as part of an above-grade structure on Development Site 45S as listed in the *CMP-Seattle 2003*. The following provides a description of development under Alternatives 1 and 2.

Alternative 1 – Proposed Action

Overview

In order to replace currently non-compliant facilities, and provide new centralized holding and procedure space for the University of Washington Health Sciences Administration, the DCM and the WaNPRC, the University of Washington proposes to construct a modernized and consolidated facility to provide a productive and healthy working environment for staff, researchers, and animals. The two-level, approximately 90,000-square foot ARCF building would be constructed below-grade on the site. Access to the ARCF would be provided from a below-grade access corridor adjacent to the loading dock or from within the William H. Foege Building's secure, existing animal holding and procedure space. Above-grade development on the site would include an approximately 66-foot high, 4,200-square foot utility/exhaust tower for air intake and exhaust in the northeast corner of the proposed building, adjacent to Hitchcock Hall. An above-grade entrance pavilion would also be located above the southeast corner of the building and would connect to the access corridor adjacent to the building. The entrance pavilion would include an approximately 1,500-square foot above-grade structure to provide access to the proposed building via the access corridor. In total, approximately 95,700 square feet of building development would be constructed under the project. Subsequent to construction of the proposed building, replacement landscaping would be planted on the site and pedestrian pathways would be provided. The existing view corridor through the site towards Portage Bay would also be maintained as part of the project. Research uses within the proposed ARCF would continue to follow the University's Infectious Waste Management Plan as it relates to the disposal of animal remains and no onsite incineration would occur. The proposed ARCF would also comply with the applicable Regulations for Shipping Regulated Medical/Biohazardous Waste by Contracted Carrier which is managed by the University's Environmental Health and Safety Department.

Location

The Alternative 1 site is located in the University of Washington's Southwest Campus area within an existing open space area between Hitchcock Hall and the William H. Foege Building. The site is generally bounded by NE Pacific Street to the north, Hitchcock Hall to

the east, NE Boat Street to the south, and the William H. Foege Building to the west (see FEIS **Figures 2-1** and **2-2** for maps of the site location and vicinity).

Design Concept

Under the Proposed Action, the approximately 95,700-square foot UW ARCF building would include two below-grade levels, each of which would contain approximately 43,000 GSF of building space for medical research uses. Modifications and connections to the existing adjacent loading dock area would also be provided, including an east/west connection between the William H. Foege Building, the proposed ARCF building, and Hitchcock Hall. Above-grade development on the site would include an approximately 4,200-square foot utility/exhaust tower, as well as an approximately 1,500-square foot entry pavilion. The design concept for the Proposed Action contains three distinct elements: Level 1 (upper level) – Small Animal Program; Level 2 (lower level) – Large Animal and Non-Human Primate Program; and, the Loading Dock. **Table 2-1** provides a summary of proposed building area (GSF) for the ARCF building (see FEIS **Figure 2-3** for a site plan).

Building Use	Alternative 1 (GSF)
<u>Above-Grade</u>	
Utility/Exhaust Tower	4,200
Entry Pavilion	<u>1,500</u>
Above-Grade Sub-total	5,700
Upper Level	
Office Space	3,000
Research/Research Support Space	40,000
Expanded Loading Dock	<u>4,000</u>
Upper Level Sub-total	47,000
Lower Level	
Office Space	3,000
Research/Research Support Space	<u>40,000</u>
Lower Level Sub-total	43,000
Total	95,700

TABLE 2-1 PROPOSED UW ARCF BUILDING AREA

Source: ZGF, 2014.

Level 1 (upper level) would primarily include building space for the Small Animal Program and would be designed to connect with the William H. Foege Building and the expanded loading dock and access corridor area (see FEIS **Figure 2-4** for an illustration of the upper level floor plan). Research space rooms would be provided throughout the northern and central portion of the upper level and would be paired next to research support space. Storage and laundry facilities would be provided in the southwest corner of the upper level. Offices, locker rooms for male and female staff members, technology area rooms and a copy room area would be located along the southern end. A conference room and break room would be located in the southeast corner, along with the main entry to the ARCF building.





FEIS Figure 2-3 Alternative 1 Site Plan



Source: ZGF LLP, 2014.



FEIS Figure 2-4 Alternative 1 Upper Level Floor Plan The mechanical room would be located along the majority of the eastern portion of the upper level, along with two stairway areas and an elevator to access the lower level. In addition, the upper level would be connected to the existing, adjacent loading dock (located south of the proposed ARCF building) which would be modified to accommodate the increased traffic (deliveries, shipping, etc.), accommodate the proposed east/west connection corridor, and improve pedestrian safety (see additional discussion below on the proposed modifications to the loading dock).

Access to the ARCF would be provided through a secure entrance on the upper level which would connect to the proposed below-grade access corridor (adjacent to the loading dock) that would link the William H. Foege Building and the ARCF with the Health Sciences Complex to the east. Additional access on the upper level would be provided within the William H. Foege Building and procedure spaces.

Level 2 (lower level) would primarily include space for the Large Animal Program and the Non-Human Primate Program (see FEIS **Figure 2-5** for an illustration of the lower level floor plan). Research space rooms would be centrally located within the lower level, as well as along the north and south perimeter of the level. Research space rooms would generally be paired with adjacent research support space rooms. Two cagewash rooms would be located along the western perimeter of this level. A staging room, storage areas, workstations, kitchens and offices would also be located within this portion of the lower level. The eastern portion of the lower level would primarily consist of mechanical space, as well as two stairways to connect with the upper level.

A proposed utility/exhaust tower would be constructed at the northeast corner of the ARCF building, adjacent to Hitchcock Hall. The proposed structure would provide space for utility, mechanical and exhaust equipment to serve the ARCF building. The approximately 4,200-square foot utility/exhaust tower would have a footprint of approximately 30 feet by 50 feet and would be equal in height to the adjacent Hitchcock Hall (approximately 66 feet). Exhaust stacks would extend another 16 feet and would be approximately the same height as the Hitchcock Hall mechanical penthouse. The utility/exhaust tower would be monolithic (opaque) with the exception of two louvered areas that would be approximately 400 square feet with minimal glazing. The tower would be clad in a combination of masonry, metal panel and glass that would be similar to Hitchcock Hall.

An above-grade entrance pavilion would be provided on the eastern portion of the site and would be located outside of the Portage Bay Vista View Corridor to maintain views towards Portage Bay. The entrance pavilion would be located above the southeast corner of the building and would include an approximately 1,500-square foot above-grade structure to provide access to the proposed access corridor adjacent to the ACRF. The entrance pavilion would be approximately 17 feet in height and would be a primarily glass and metal structure.



Source: ZGF LLP, 2014.



FEIS Figure 2-5 Alternative 1 Lower Level Floor Plan Two emergency exit stairwells would be provided to allow direct, emergency egress from the ARCF through the entrance pavilion as well as the proposed utility/exhaust tower adjacent to Hitchcock Hall. These emergency exit stairwells would be discretely located and would have minimal exterior hardware.

Loading Dock

As part of the development of the ARCF, the existing loading dock would be modified to accommodate the increased traffic (deliveries, shipping, etc.) and the proposed east/west below-grade connection corridor. This corridor would provide a connection between William H. Foege Hall, the ARCF, Hitchcock Hall and the Health Sciences Complex, and would provide access to the primary entry to the ARCF (at the southeast corner of the building). All material arriving and leaving the site would move through the connector corridor to and from the loading dock. The loading dock would continue to provide general delivery and loading functions for existing adjacent uses that currently utilize the dock (i.e., William H. Foege Hall, Hitchcock Hall, and the Health Sciences Complex). The loading dock area would also include an enclosed Animal Receiving dock which would provide appropriate security for when animals are brought to the ARCF. The loading dock would include a coiling door that would provide a secure barrier at the entrance. Protocols during animal loading and unloading would require that the door be closed during animal transfers to create a secure, enclosed area. Access to the loading dock would continue to be provided from NE Boat Street.

Landscaping and At-Grade Features

The landscaping and at-grade design under the Proposed Action would be consistent with the University of Washington's landscape design standards and is centered around a winding, pathway for the Portage Bay Vista that connects the site from NE Pacific Street to NE Boat Street and allows for cross connections between the William H. Foege building and Hitchcock Hall (see the Circulation discussion below for further details). The proposed pathway would provide pedestrian/bicycle circulation through the site and the Portage Bay Vista area. The existing lawn area on the site would be removed as part of construction and replaced with landscaped shrubs and a mix of strategically placed gardens, lawn and plaza areas that would be situated adjacent to the winding pathway (see FEIS **Figure 2-3** for an illustration of the proposed landscape plan from the DEIS).

The proposed Portage Bay Vista lawn and plaza areas would enhance the visual appearance of the area and provide new space for informal seating and relaxation areas, as well as new areas for small outdoor department gatherings or other small events. Seating areas would be provided within the plaza area and along the pathway in certain locations. Subsequent to the issuance of the DEIS, the landscaping design for the site was updated to reflect a more open concept with potentially fewer shrubs and trees (see FEIS **Figure 2-6** for an illustration of the updated landscape plan). New trees would be provided along the western edge of the site adjacent to the William H. Foege Building, as well as along a portion of the eastern edge of the site adjacent to the proposed utility tower. Open space areas on the site would be planted with new lawn sod, similar to the existing conditions to provide space for gatherings, relaxation and other activities. Additional landscaping could also be provided on the site in the future similar to the level depicted in the DEIS.

As part of development on the site, approximately 49 existing trees would be removed during the construction activities on the site. None of these trees would qualify as an "Exceptional Tree"⁵, with the possible exception of a Lodgepole Pine that is located on the eastern portion of the site and exceeds the City's six-inch threshold. Subsequent to the development of the Proposed Action, new trees would be planted along the east and west sides of the Portage Bay Vista, adjacent to the William H. Foege building and Hitchcock Hall to soften the architectural edges on the site, while also maintaining the view corridor to Portage Bay. Tree replacement on the site would be anticipated to meet or exceed the City of Seattle tree replacement requirements and would be in accordance with the University's Tree Management Plan.

In addition, to accommodate construction activities on the site, the existing "Stronghold" sculpture would be temporarily decommissioned pursuant to the re-siting protocol outlined in the *ArtsWA Care* manual to ensure that the sculpture is appropriately preserved and protected during the construction process. Subsequent to construction activities on the site, the "Stronghold" sculpture would be relocated approximately 60 feet to the northeast of its current location (see FEIS **Figures 2-3** and **2-6** for the location of the "Stronghold" sculpture).

Pedestrian/Bicycle Circulation

The Portage Bay Vista serves as a significant point of entry for faculty, staff and students traveling from the Portage Bay Parking Facility and William H. Foege Building to the Health Sciences Complex and Medical Center. However, the existing site contains several constraints that limit the accessibility of the site, including steep pathways and pathways that are not compliant with accessibility requirements. The proposed project would enhance the accessibility through the site by providing a winding pathway from NE Pacific Street to NE Boat Street. Several east/west pathways would also provide connections through the site to Hitchcock Hall, the Health Sciences Center, the Medical Center and the Ocean Sciences Building.

⁵ City of Seattle Department of Planning and Development – Director's Rule 16-2008.



Source: ZGF LLP, 2014.



FEIS Figure 2-6 Alternative 1 Updated Landscape Plan The existing ramp that connects NE Pacific Street with the Burke Gilman Trail via the Hitchcock Bridge would be reconstructed as part of the Proposed Action to allow for ADA accessibility. The new ramp would be constructed to the northeast of the ARCF site at a five percent slope to comply with ADA guidelines. A new planter would also be provided between the ramp and NE Pacific Street, as well as new street trees. In addition, the ramp along NE Boat Street would be replaced with a five percent sloped walkway to comply with ADA guidelines. New plantings would also be provided along NE Boat Street (see FEIS **Figure 2-7** for a map of the proposed onsite pedestrian/bicycle circulation).

Vehicle and Bicycle Parking

As under the existing conditions, and as is the case for numerous buildings on the University of Washington campus per the University's Transportation Management Plan (TMP), no onsite vehicle parking would be provided as part of the proposed project. The closest parking to the ARCF building is the Portage Bay Parking Facility which is located to the west of the site (beyond 15th Avenue NE) and includes approximately 990 parking stalls. The Portage Bay Parking Facility primarily serves the West Campus and South Campus area.

Development of the Proposed Action would result in the temporary displacement of existing bicycle parking areas located to the west of Hitchcock Hall. Approximately 24 bicycle parking stalls would be temporarily displaced during the construction process. Existing bicycle parking to the east of the William H. Foege Building (approximately 31 parking stalls) would also be temporarily displaced during construction; these bicycle parking stalls would be replaced in kind in a similar location subsequent to construction of the proposed ARCF building.

Subsequent to construction of the ARCF building, new covered bicycle parking would be provided adjacent to Hitchcock Hall to replace the existing displaced covered bicycle parking, as well as provide additional parking stalls to accommodate the proposed ARCF building. Based on the University of Washington Transportation Services Standards, bicycle parking should be provided to accommodate 10 percent of a building's population. Given that the proposed ARCF building would contain approximately 42 staff members, the project should provide approximately 5 additional bicycle parking stalls, in addition to the 24 existing covered stalls that would be temporarily displaced during construction. Accordingly, the proposed project would provide 30 new covered bicycle parking stalls to the north of Hitchcock Hall and adjacent to the ramp to the Hitchcock Bridge and Burke Gilman Trail; a secondary, potential location for the proposed covered bicycle parking could be in existing plaza space to the south of Hitchcock Hall.



Source: ZGF LLP, 2014.



FEIS Figure 2-7 Alternative 1 Pedestrian/Bicycle Circulation Plan

Utilities

Stormwater

Because the proposed ARCF building would be constructed below-grade, stormwater from the proposed development would generally consist of drainage from paved walkways and plaza areas, as well as landscaping and lawn areas. Stormwater from the site would be collected in a series of catch basins and area drains and would be conveyed via gravity flow to the onsite drainage system which flows to the south towards NE Boat Street. Because no pollution generating surfaces would be created on the site, no water quality facilities would be required or proposed. In addition, existing stormwater facilities disturbed during construction would be replaced in kind, including laterals, mains, catch basins, roof leaders, and subsurface drainage systems.

The proposed ARCF building would be constructed as a waterproof structure and as such, no permanent subsurface drainage system would be installed for the building. A subsurface perimeter drain would be constructed above the groundwater table to collect incidental surface infiltration. This system would consist of a four-inch perforated pipe around the perimeter of the structure surrounded by six inches of free-draining sand and gravel. The drainage system would be tight-lined to the existing on-site drainage system.

Groundwater is present at the site and it is anticipated that construction of the ARCF would result in minor, localized changes to the groundwater elevations adjacent to the building. At most, the groundwater elevations could rise by up to two feet in the immediate vicinity of the building. To minimize the potential for the structure to obstruct groundwater movement and to reduce the risk of water intrusion into the structure, a subsurface drain system would be provided, including a full-coverage wall drainage against the shoring wall which would connect to a groundwater sump/pump located under the loading dock. Groundwater would be discharged to the University-owned 24-inch direct discharge stormwater main. In addition, as part of the construction, the proposed project would replace the existing foundation waterproofing system for Hitchcock Hall to enhance the foundation waterproofing. The William H. Foege Building foundation waterproofing is still relatively new; however, it would be protected during construction and patched as necessary.

Water Service

Under the Proposed Action, domestic water service and fire service would be provided to the proposed ARCF building from the existing 12-inch campus water loop system through the site; the loop would be relocated to accommodate and serve the proposed building. The campus water loop system would remain functional for the duration of the construction period in order to serve adjacent buildings. It is anticipated that the existing water system has adequate pressure and flow to serve the proposed building. An existing fire hydrant is located adjacent to NE Pacific Street, as well as adjacent to NE Boat Street. It is anticipated that at least one new fire hydrant would be provided as part of the proposed project and hydrant spacing would comply with current Fire Code requirements.

Sanitary Sewer Service

Sanitary sewer for the proposed ARCF building would be collected and conveyed to the existing sanitary sewer system in the vicinity of the project. Potential discharge options for sanitary sewer include the following:

- Connect to the existing eight-inch sewer service line located south of the existing loading dock. The upper level of the proposed building could gravity flow to the discharge point; however, the lower floor would require a pump to lift effluent to the sanitary sewer line. In addition, this sewer service line is tributary to an SPU sanitary sewer lift station that is at or near capacity.
- Connect to the existing eight-inch sewer service line located to the east of Hitchcock Hall. Effluent from the proposed building would require pumping to reach the existing line. This connection option would also require routing the new sewer discharge around Hitchcock Hall.
- Create a new direct discharge to Metro's 108-inch trunk sewer main on the north side of NE Pacific Street. Effluent from the lower floor would require a pump to reach the sewer main. Additional considerations would include the condition of the main, the type of effluent that would be discharged to the main and additional utility work in NE Pacific Street.

Separate connections for building waste and acid waste (from laboratory spaces) would be provided for the ARCF building. The exact location of these connections would be coordinated as part of the plumbing design for the proposed building.

Natural Gas Service

Natural gas service for the proposed ARCF building would be provided from the existing service stubs that are located to the south of the loading dock area.

Construction Activities and Schedule

As indicated earlier in this chapter, the majority of the proposed ARCF would be constructed below the existing ground level, with above-ground construction generally limited to an entry pavilion, a utility/exhaust tower and landscaping/walkway improvements. The following describes construction activities as they relate to demolition, grading, vibration/noise/dust, and construction traffic (see Section 3.1, **Construction Impacts**, for further details on construction activities and potential construction impacts associated with the project). It is anticipated that construction of the proposed ARCF would start in October 2014 and that the building would be operational in May 2017.

Demolition

Demolition activities on the Alternative 1 site would include the demolition and removal of all existing landscaping, trees, and paved pathways onsite, as well as the removal of the existing curb and sidewalk to the north of the site, adjacent to NE Pacific Street. The existing Stronghold sculpture would be dismantled during the demolition process pursuant to the re-siting protocol outlined in the *ArtsWA Care* manual to ensure that the sculpture is appropriately dismantled and protected during the construction process. The sculpture would be stored until construction of the ARCF building is complete, upon which time the sculpture would be relocated to the northeast of its existing location.

Grading

Grading activities on the site would require approximately 84,000 cubic yards of excavation and approximately 3,150 cubic yards of fill. Excavated material would be disposed of at an approved site. The source of fill material is unknown at this time, but would be from an approved and suitable source. During excavation and construction activities, it is anticipated that groundwater would be encountered on the site. Existing ground surface on the site ranges from elevation 68 feet at the north of the proposed building footprint to elevation 57 feet at the south end; groundwater on the site is located at approximately elevation 26 feet. Given that the depth of excavation would vary from elevation 9 feet to 12 feet (approximately 14 to 17 feet below the existing groundwater level), the groundwater table would be temporarily lowered to at least two feet below the bottom of the excavation (approximately elevation 7 feet) during the construction process.

Groundwater flow during construction would vary with excavation depth and precipitation and it is anticipated that the average discharge rate would be approximately 5 to 20 gallons per minute (GPM). A temporary dewatering system would be provided to accommodate a discharge rate of at least 50 GPM, which would account for any short-term increases in water discharge rates. A combination of vacuum dewatering points and deep wells would be provided for construction dewatering, and onsite water treatment and storage would likely be required; it is anticipated that water would be discharged to a University-owned stormwater outflow.

As described above, the proposed ARCF would be designed as a waterproof structure and lateral and hydrostatic groundwater pressures would be incorporated into the design and calculations for the waterproof structure (in order to account for seasonal groundwater variations, the design groundwater table for the structure would be elevation 27 feet at the north end of the building and elevation 25 feet at the south end). To minimize the potential for the proposed structure to act as a dam to groundwater movement and reduce the risk of water intrusion into the structure, a subsurface drain system would be provided, including a full-coverage wall drainage against the shoring wall which would connect to a groundwater sump/pump located under the loading dock. Groundwater would be discharged to the University-owned 24-inch direct discharge stormwater main. In addition, as part of the construction, the proposed project would replace the existing foundation

waterproofing system for Hitchcock Hall to enhance the foundation waterproofing. The William H. Foege Building foundation waterproofing is still relatively new; however, it would be protected during construction and patched as necessary.

Vibration, Noise and Dust

During the development of the proposed ARCF it is anticipated that vibration, noise and dust from construction-related activities could potentially impact surrounding University uses. Construction vibration and noise levels would be anticipated to be similar to other oncampus development projects in recent years; however, potential vibration and noise impacts could occur to surrounding uses due to their proximity to the project site. Existing sensitive on-campus uses in the vicinity of the site include the following: the William H. Foege Building (Bioengineering and Genome Sciences Departments), Hitchcock Hall (Biology Department), Ocean Sciences Building, the Health Sciences Complex J-Wing (Biochemistry, Microbiology, and Pharmacology Departments) and K-Wing (Molecular Biotechnology and Pharmacology Departments), the Physics and Astronomy Building (Physics and Astronomy Departments), and Kincaid Hall. Vibration and noise would occur as a result of construction activities and equipment operation, including but not limited to excavation activities (excavators, soil conveyors, etc.), drilling rigs, mobile crane engines, construction truck and trailer operations, forklift operations, air compressors, and concrete pumps. Vibration associated with construction activities would be minimized by the proposed structural systems design that would avoid pile driven approaches and includes precast systems for columns and horizontal structural elements, which would reduce onsite construction activities and construction time. Additional mitigation measures have been identified to minimize potential vibration impacts (see Section 3.1, Construction Impacts, for further details).

Construction activities on the site would generate air pollutants as a result of fugitive dust from earthwork/excavation activities, as well as other construction-related activities. Nearby buildings such as the William H. Foege Building, Hitchcock Hall, the Ocean Sciences Building and the Health Sciences Complex could be sensitive to fugitive dust due to their proximity to the project site; it is likely that the air intakes of adjacent buildings (in particular the William H. Foege Building) would be temporarily ducted and protected to minimize the intake of exhaust fumes during construction activities. Pedestrians and bicyclists in the site vicinity could also be sensitive to fugitive dust from the site. During construction, dust control measures would be implemented to minimize the amount of fugitive dust from the project site. Such measures would include the provision of a temporary asphalt roadway onsite to minimize dust and dirt tracked off-site, keeping soils moist during excavation activities and washing truck tires onsite prior to traveling onto public roadways.

Truck, Vehicle, and Pedestrian/Bicycle Circulation

Construction truck traffic would enter the site at the southwest corner from NE Boat Street via 15th Avenue NE to access the load, unload and laydown area which would be located to

the south of the proposed building footprint area. Construction trucks would exit the site at the southeast corner of the site and travel via NE Boat Street and 15th Avenue NE towards NE Pacific Street.

During construction, sidewalks would remain open for pedestrian use surrounding the site, including along 15th Avenue NE, NE Pacific Street and NE Boat Street. Pedestrian access to the William H. Foege Building would remain available at the southeast corner of the building. The Ocean Sciences Building would remain accessible from the southwest corner of the building as well. Access from the west side of Hitchcock Hall would be closed for the duration of construction; however, the building would be accessible from the east and south sides. Vehicle and bicycle access along NE Boat Street and Columbia Road would continue to be available during the construction process; however, construction vehicles would use NE Boat Street to access the ARCF site.

Alternative 2 – Alternate Site

Location

The Alternative 2 site is identified as Development Site 45S in the *CMP-Seattle 2003* and is located in the University of Washington's Southwest Campus area to the south of the Portage Bay Parking Facility and University Transit Center, and west of 15th Avenue NE (refer FEIS **Figures 2-1** and **2-2** for maps illustrating the Alternative 2 site location). The Alternative 2 site is primarily comprised of existing surface parking areas (parking lot W24 and W28). Three existing buildings are also located along the western edge of the site, including the Oceanography Research Building.

Design Concept

Under Alternative 2, the ARCF would be constructed as an above-ground structure on Development Site 45S. The two-level building would contain approximately 90,000 GSF of above-grade and below-grade building space (approximately 45,000 GSF on each level) and would be approximately 30 to 40 feet tall. The design concept for Alternative 2 would be generally similar to Alternative 1 and would include the Small Animal Program on one level and the Large Animal and Non-Human Primate Program on another level (see FEIS **Figure 2-8** for a generalized site plan of Alternative 2).

The primary entrance to the building would be located in the northeast corner of the site; secondary access would be provided in the southwest corner of the site. Loading areas and service facilities for the ARCF under Alternative 2 would be provided in the northwest corner of the site with access from Brooklyn Avenue NE. However, due to the site location for Alternative 2, there would be no below-grade connection with William H. Foege Building, Hitchcock Hall and the Health Science Complex, or shared loading dock facilities. Loading Dock



Source: ZGF LLP, 2014.



FEIS Figure 2-8 Alternative 2 Site Plan The loading dock under Alternative 2 would be located above-grade at the northwest corner of the building. Access to the loading dock and service entry for the building would be provided off of Brooklyn Avenue NE

Landscaping

Consistent with the recommendations for Development Site 45S in the *CMP-Seattle 2003*, Alternative 2 would include open space areas along the north and south ends of the site. Open space along the north end of the site would be adjacent to Skamania Lane and would enhance the east/west pedestrian connection through the site. Open space on the south end of the site would enhance the Brooklyn Avenue NE street end and could serve as an extension of the waterfront. Landscaping within open space areas under Alternative 2 would be consistent with the University of Washington's landscape design standards and it is anticipated that landscape areas would likely include native plant species or plants that are tolerant to the Pacific Northwest climate.

Circulation

Circulation though the Alternative 2 site would continue to be provided by Skamania Lane which is located along the northern boundary of the site and provides a pedestrian and bicycle connection to the east and west (i.e., William H. Foege Building, Hitchcock Hall, Health Sciences Complex, Fisheries and Marine Sciences Buildings, etc.). As described above, the area adjacent to Skamania Lane would be maintained as open space and landscaped with new plants and shrubs to enhance the area.

Vehicle and Bicycle Parking

Similar to Alternative 1, no onsite vehicle parking would be provided under Alternative 2 and approximately five bicycle parking stalls would be provided on the site to accommodate the ARCF. Vehicle parking for the Alternative 2 site would be provided by the adjacent Portage Bay Parking Facility which is located to the north of the site and includes approximately 990 parking stalls, as well as bicycle parking facilities. The Portage Bay Parking Facility primarily serves the West Campus and South Campus areas.

<u>Utilities</u>

Stormwater

It is anticipated that stormwater from the Alternative 2 site would be conveyed and discharged to a 48-inch stormwater drain that is located to the west of the site in the Brooklyn Avenue NE right-of-way.

Water Service

Water service for the Alternative 2 site would be provided from an existing water main located in the Brooklyn Avenue NE right-of-way. Additional water mains are also located within 15th Avenue NE to the east of the site and NE Pacific Street to the north, and could potentially serve the site.

Sanitary Sewer Service

Sanitary sewer service for the Alternative 2 site would be provided by an existing 15-inch sanitary sewer main located to the west of the site, within the Brooklyn Avenue NE right-of-way.

Construction Activities and Schedule

It is anticipated that construction activities under Alternative 2 would be generally similar to those described under Alternative 1; however, it is assumed that Alternative 2 would require less excavation (approximately 30,000 cubic yards, compared to approximately 84,000 cubic yards under Alternative 1) due to the fact that the building would be constructed above-grade. Similar to Alternative 1, construction of the ARCF building under Alternative 2 could take approximately 2 years, with the building potentially operational by the end of 2016.

Alternative 3 – No Action Alternative

Under Alternative 3 – No Action Alternative, the ARCF would not be constructed and the proposed site would remain in its primarily vegetated condition with existing pathways. The DCM and WaNPRC would remain in their existing locations and would continue to experience capacity and space deficiencies.

2.6 SEPARATE ACTIONS/PROJECTS

In addition to the Proposed Action, there are several separate actions/projects in the site vicinity that are currently under construction or are anticipated to be under construction during the development timeframe for the proposed project. These projects include the University of Washington Police Department Building Project, University of Washington Burke Gilman Trail Project, the University of Washington Southwest Campus Central Utility Plant Project, the Sound Transit University of Washington Station Project, the University of Washington Rainier Vista/Montlake Triangle Project, the University of Washington Medical Center Phase 2 Project, and the Bryant Building Park Project (see FEIS Figure 2-9 for a map of the separate action/project locations).



Source: Google Earth and EA Engineering, 2014.



FEIS Figure 2-9 Separate Actions/Projects Map

- The University of Washington Police Department Building Project would be located south of Gould Hall and would consist of a three-story, approximately 29,241-square foot of building. The proposed building would provide space for approximately 93 staff members and would include offices, a dispatch/communications center, records storage, identification lab, evidence storage, community multi-purpose rooms and fleet parking. The construction period for this project is anticipated to be from April 2015 to September 2016.
- The University of Washington Burke Gilman Trail Project would include improvements to the 1.7-mile University-owned portion of the trail from Pasadena Place NE to NE 47th Street. The improvements would be designed to improve safety and accommodate existing/future traffic flows and include trail widening and consolidated intersections/connections with the trail. The initial phase of the project would occur from 15th Avenue NE to Rainier Vista. Four additional phases would occur in the future, including Pasadena Place NE to University Bridge, University Bridge to Brooklyn Avenue NE, Brooklyn Avenue NE to 15th Avenue NE, and Rainier Vista to NE 47th Street. The initial phase is anticipated to be completed in May 2015; construction of future phases would occur once funding is available.
- The University of Washington Southwest Campus Utility Plant Project would be located to the south of the proposed Police Department Building (near the intersection of University Way NE and NE Pacific Street) and would provide process chilled water and emergency power to portions of the South and West campus. The building would be approximately 20,000 square feet and would include one below-grade level and one above-grade level. The construction period for this project is anticipated to be from March 2015 to July 2016.
- The **Sound Transit University of Washington Station Project** is located adjacent to Husky Stadium and is part of the University Link Light Rail Extension which connects the University of Washington with Capitol Hill and Downtown. The University of Washington Station would consist of a single above ground entrance to connect with the light rail tunnel and would serve approximately 25,000 riders by 2030. Construction of this project is currently underway and is anticipated to be completed by September 2016.
- The University of Washington Rainier Vista/Montlake Triangle Project would modify the pedestrian connection between the Sound Transit University of Washington Station and the University of Washington campus. The modified connection would include a pedestrian/bicycle bridge over Montlake Boulevard that would connect the University Station with the Montlake Triangle, establishment of a Rainier Vista land bridge spanning a lowered NE Pacific Place, and a modified Burke

Gilman Trail. The construction of this project has begun and is anticipated to be completed by September 2016.

- The University of Washington Medical Center Phase 2 Project is located at the southern portion of the Medical Center and would include the buildout of three bed floors and the operating rooms suite within the new Montlake Tower (Phase 1) and would renovate approximately 125,000 square feet within the existing Cascade and Pacific Towers. Construction of this project is currently underway and is anticipated to be completed by June 2017.
- The **Bryant Building Park Project** would include the development of a new park at the current Bryant Building location (adjacent to Portage Bay) to serve as a park replacement for existing park property that was converted to non-park use as part of the WSDOT SR-520 Bridge Project. Construction of this project would occur subsequent to the completion of the proposed Police Department Building Project; however, the specific timeline is unknown at this time.
- The University of Washington Nano-Technology Engineering Sciences Building Project site is located to the north of the existing Molecular Engineering Building (east of Stevens Way and south of Grant Lane). The proposed building was analyzed as part of the University of Washington Molecular Engineering Facility Supplemental EIS (2009) and would include a five-story, approximately 80,000-square foot building with research, laboratory and faculty/staff office uses. It is anticipated that construction would begin in January 2015 and would be completed in September 2016.
- The SR-520 Bridge Replacement Project is currently under construction and is located to the south and southeast of the University of Washington. The project includes the development of a new floating bridge and highway with six lanes (two general purpose lanes and one HOV/transit lane in each direction). Construction activities closest to the University of Washington would be associated with the West Approach Bridge North portion of the project, which would connect the floating bridge to the existing SR 520 roadway. In addition to the bridge connection, the West Approach Bridge North project will provide improvements for local streets (Montlake Boulevard East and 24th Avenue East), Arboretum trail improvements and a new stormwater treatment facility at the former MOHAI site. Construction is anticipated to be completed in the spring of 2016 (*WSDOT 2014*).
- The University of Washington Maple and Terry Halls Project includes the demolition of the existing Terry Hall and 1101 Café building and construction of two new buildings for student housing. The new eight story buildings will include fivestories of housing, two lower stories for student common areas and administrative offices, and below-grade parking. In total, the buildings would contain approximately

440,000 square feet of building area with space for approximately 1,150 beds. Construction is currently underway and scheduled to be completed in July 2015.

Other potential projects in the area include the University of Washington Life Sciences Building Project (potentially located immediately east of Kincaid Hall) and the Computer Sciences and Engineering II Hall Project. The funding status and construction schedule for these potential projects is not known at this time.

Temporary construction activity associated with any of these separate actions/projects would occur in compliance with applicable University of Washington, City of Seattle, and other relevant regulations. Additionally, each project would prepare a Construction Management Plan to control and mitigate potential transportation issues during the construction process.

2.7 BENEFITS AND DISADVANTAGES OF DEFERRING IMPLEMENTATION OF THE PROPOSAL

The benefits of deferring approval of the Proposed Actions and implementation of development of the ARCF include the deferral of:

- Temporary displacement of existing open space and circulation on the site.
- Potential temporary construction impacts associated with vibration, noise, air pollution and traffic.

The disadvantages of deferring approval of the Proposed Actions and development of the ARCF include the deferral of:

- The opportunity to develop a new animal research and care facility and centralize existing research functions that are currently spread throughout the campus.
- The opportunity to enhance the open space and pedestrian circulation through the site, including providing accessible pathways.
- Replacement of currently non-compliant facilities with new "state of the art" facilities.