ARCHAEOLOGICAL ASSESSMENT OF THE UNIVERSITY OF WASHINGTON WEST CAMPUS STUDENT HOUSING PROJECT, SEATTLE, KING COUNTY, WASHINGTON

BY MARGARET BERGER

GLENN D. HARTMANN, PRINCIPAL INVESTIGATOR

PREPARED FOR: Blumen Consulting Group, Inc. 720 Sixth Street S, Suite 100 Kirkland, WA 98033

> TECHNICAL REPORT #374-1 CRC PROJECT #1002E

Cultural Resource Consultants, Inc. 710 Ericksen Avenue NE, Suite 100 Bainbridge Island, WA 98110

April 21, 2010

Cultural Resource Consultants, Inc.

Executive Summary

This report describes an archaeological assessment of Sites 31W, 32W, 33W, and 35W of the University of Washington West Campus Student Housing Project. The University of Washington (UW) proposes to construct three new residence hall facilities and one new student apartment facility on the UW campus in Seattle. Redevelopment is proposed in order to provide new student housing opportunities on the campus. On behalf of UW, Blumen Consulting Group, Inc. (BCG) requested that Cultural Resource Consultants, Inc. (CRC) conduct this assessment to ensure that potential impacts to archaeological resources are considered in development of the project. CRC's investigations to date have included review of relevant background literature and maps, review of records on file at the Washington Department of Archaeology and Historic Preservation (DAHP), and review of available project plans and related information, as well as field reconnaissance.

CRC's background research has not identified any recorded archaeological sites within or adjacent to the project sites. Review of historical maps, photographs, geological reports, and other information indicates that the landscape of the project has been shaped by more than a century of urban development. Prior to UW ownership and use, the project sites were developed for residential and commercial uses. Geotechnical borings on the project sites encountered asphalt pavement, gravel surfaces, and fill of variable thickness overlying glacial deposits. Due to historic-period and recent construction, the project is considered to have a very low potential to contain intact archaeological deposits. Archaeological sites, if present, would be found relatively near the ground surface on this upland glacial terrace where little if any deposition has occurred since the late Pleistocene. Historic-period archaeological materials may be present within the project, but they are not likely to retain depositional integrity or other characteristics that would make them significant (NRHP 1991). Field observations confirmed that the project sites are not likely to contain intact natural deposits due to prior landscape modifications. Additional archaeological investigations are not recommended for the project.

Archaeological Assessment of the University of Washington West Campus Student Housing Project, Seattle, King County, Washington

AUTHOR: Margaret Berger	
LOCATION: Seattle, King County, Washington	
USGS QUAD: Seattle North, WA 7.5'	
T, R, S: NE ¹ / ₄ Section 17, T. 25 N, R. 4 E., Willamette Meridian.	
TABLE OF CONTENTS	
Executive Summary	i
Introduction	
Regulatory Framework and Cultural Resources Terminology	
Project Location and Description	
Existing Conditions	
Preferred Alternative	
Site 31W	5
Site 32W	6
Site 33W	
Site 35W	8
Background Research	9
Geological Context	
Archaeological Context	
Ethnohistoric Context	12
Historic Context	13
Previously Recorded Sites and Surveys	
Archaeological Reconnaissance Survey: Methods and Results	18
Potential Impacts to Archaeological Sites	
Construction Impacts	19
Operation Impacts	19
Secondary Impacts	
Cumulative Impacts	20
Significant Unavoidable Adverse Impacts	20
Recommendations	20
Limitations of this Assessment	21
References Cited	21

FIGURES

Figure 1. Portion of Seattle North, WA (USGS 1983) topographic quadrangle marked with the	;
University of Washington West Campus Student Housing Project area.	.31
Figure 2. Overview map showing locations of Project Sites, provided by BCG.	.32
Figure 3. Aerial imagery showing existing conditions in the Project area.	.33
Figure 4. Site plan for Site 31W provided by BCG.	.34
Figure 5. Site plan for Site 32W provided by BCG.	.35

Archaeological Assessment of the University of Washington West Campus Student Housing Project, Seattle, King County Washington CRC Report #374 - ii -

Figure 6. Site plan for Site 33W provided by BCG
located approximately 0.25 miles to the southeast
Figure 10. Portion of historical coast chart (USC&GS 1899; adapted from Fox 2009) marked with the location of the Project
40 Figure 12. Detail of Project area on historical map (Sanborn Map Company 1905). Eight residential strucutres and associated outbuildings were present in the Project
41 Figure 14. Detail of Project area on historical map (Kroll Map Company 1920). About half of the lots in the Project appear to have been developed by this time. Structures are almost exclusively single-family residences. 42
Figure 15. Historical aerial imagery (King County 2010) of the Project area in 1936. Lots in the Project are mostly developed. Open spaces appear limited to courtyards and parking areas.
Figure 16. Detail of Project area on historical map from 1951 (Sanborn Map Company 1905- 1951). Apartment and dormitory buildings, single-family residential structures, stores, and garages were present in the Project. Only the lot at the northeast corner of 11th Ave NE and NE 41st St appears vacant
Figure 17. Typical conditions at Site 31W as observed in archaeological reconnaissance survey. Photograph faces southwest from thte northwestern corner of teh Site
Figure 19. Typical conditions in Site 32W. Photograph faces north from the south side of the Site
Figure 20. Conditions in the western half of Site 32W, where yards have been filled and graded above street elevation. Photograph faces east
Figure 21. Typical conditions in Site 33W. Photograph faces southwest from northeast corner of Site
Figure 22. Typical conditions in Site 35W. Photograph faces north from south side of Site50
TABLES

Table 1. Lushootseed lace names recorded by ethnographers J. P. Harrington (ca. 1909) and T. T.
Waterman (1922:189, Figure 1; 2001:77-78, Map 5.6, Table 5.6) within approximately 1
mile of the Project
Table 2. Cultural resource investigations on file at DAHP within approximately 1 mile of the
Project
Table 3. Archaeological sites recorded at DAHP within approximately 1 mile of the Project.

Archaeological Assessment of the University of Washington West Campus Student Housing Project, Seattle, King County Washington CRC Report #374 - III -

ATTACHMENTS

numbed as introductive to be addeduced as on a decrimentation in

동생은 가슴 가슴은 그렇게 못 걸었다. 것들이 비싸지 못하면 못 했다.

ומלוכה (מתוחל החלארת). משלה לכי המירה המשוא – להיי להיי להיי להיי באלה לל בלי 20 לא מלא להיי להיי אל היי לי הי הסיר מדיו מצועהי עיקה איי – להיי 70 אל להי להי להי להיי להיי היה היה היה האלארת – היי לא האלא לא היי האלי היי ה לא ארוי היי

> ה את המכוח המלוחיות המשלחה הלה לשינה שני להיות של המשור בלום! בעל איים נעיים הנוכר מייד במכושה לכסיי הכלא היה לא לא האת הייד "לפריד הלארי לקורלה לכלה לחוקל א להם 150 בנוסה 11 למצ בד-הלאות הלה לההיל לאריק.

Archaeological Assessment of the University of Washington West Campus Student Housing Project, Seattle, King County Washington CRC Report #374 - iv -

Introduction

Cultural Resource Consultants, Inc. (CRC) was retained by Blumen Consulting Group, Inc. (BCG) on behalf of the University of Washington (UW) to conduct an archaeological assessment of Sites 31W, 32W, 33W, and 35W of the University of Washington West Campus Student Housing Project (hereafter, "the Project") in Seattle, King County, Washington. This report describes the results of background research and field reconnaissance. The University of Washington proposes construction of new housing facilities in the West Sector of campus. The Project location currently contains residential and commercial buildings, parking lots, and alleys. Construction of the Project would involve demolition of structures and construction of new buildings on four *Campus Master Plan-Seattle 2003* Sites (31W, 32W, 33W, and 35W). The Project is subject to review for potential impacts to cultural resources in accordance with Washington's State Environmental Policy Act (SEPA). The University of Washington serves as lead agency for the Project under SEPA. A Draft Supplemental Environmental Impact Statement (Draft SEIS) and Final SEIS were prepared for the Project in 2009 (University of Washington 2009).

The goal of CRC's assessment was to identify any previously recorded archaeological resources within the project, determine the potential for any as-yet unrecorded archaeological resources within the project area, and evaluate potential impacts of the University of Washington West Campus Student Housing Project to archaeological resources. Assessment methods included a review of previous ethnographic and archaeological investigations in the local area, a records search at the Washington Department of Archaeology and Historic Preservation (DAHP) for known sites in the immediate area, a review of relevant background literature and maps (including General Land Office (GLO), Sanborn, and Kroll maps), reconnaissance survey, and the preparation of this report. CRC also reviewed a geotechnical report (Shannon & Wilson, Inc. 2009) prepared for the Project with the goal of learning about subsurface conditions in the Project location. CRC contacted cultural resources staff at the Duwamish, Muckleshoot, and Suquamish tribes and inquired regarding cultural resource concerns or sites in the vicinity of the property not addressed in published ethnographic, historic, and archaeological literature (Attachment A). This assessment utilized research design that considered previous studies, the magnitude and nature of the undertaking, the nature and extent of potential effects on historic properties, and the likely nature and location of historic properties within the Projects, as well as other applicable laws, standards, and guidelines (per 36 CFR 800.4 (b)(1)).

Regulatory Framework and Cultural Resources Terminology

The language used to describe cultural resources in this assessment is consistent with professional cultural resource management terminology in the State of Washington, based upon relevant regulations (e.g., 36 CFR 800; RCW 27.53)) and guidelines (DAHP 2009; NRHP 1991; OAHP n.d.).

The term "cultural resources" is used to refer to a broad range of resources including archaeological or historic sites, structures, buildings, places, and objects reflecting human use or modification of the environment (DAHP 2009:6).

For the purposes of this assessment, components of the built environment that are 50 years old are older are referred to as "historic" or "historic sites." Historic sites are buildings, structures, objects, places, or sites dating to the historic period. DAHP requires that all such sites 50 years old or older be recorded for the State of Washington Historic Property Inventory (DAHP 2009:39).

"Archaeological sites" are considered to be geographic locations that contain artifacts, features, structures, or other physical evidence of past human behavior (RCW 27.53.030). Ruins of buildings, structures, objects, places, or sites 50 years old or older are recorded as archaeological sites (DAHP 2009:37).

The term "historic property" is used to denote historically significant properties, which are included on or eligible for inclusion on the NRHP (36 CFR 800.16(1)(1)). Resources are typically defined as significant or potentially significant if they are identified as of special importance to an ethnic group or Indian tribe or if the resource is considered to meet certain eligibility criteria for local, state, or national historic registers, such as the NRHP. Based on NRHP assessment criteria developed by the National Park Service, historical significance is conveyed by properties:

- A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. That are associated with the lives of persons significant in our past; or
- C. That embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. That have yielded, or may be likely to yield, information important in prehistory or history [NRHP 1991:2].

According to the NRHP guidelines, the "essential physical features" of a property must be intact for it to convey its significance, and the resource must retain its integrity, or "the ability of a property to convey its significance." The seven aspects of integrity are:

- Location (the place where the historic property was constructed or the place where the historic event occurred);
- Design (the combination of elements that create the form, plan, space, structure, and style of a property);
- Setting (the physical environment of a historic property);
- Materials (the physical elements that were combined or deposited during a particular . period of time and in a particular pattern or configuration to form a historic property);
- Workmanship (the physical evidence of the crafts of a particular culture or people during any given period of history or prehistory);
- Feeling (a property's expression of the aesthetic or historic sense of a particular period of time); and

• Association (the direct link between an important historic event or person and a historic property) [NRHP 1991:44].

Archaeological sites are most commonly determined eligible for inclusion in the National Register based on Criterion D because they "have yielded or may be likely to yield information important in prehistory or history" (NRHP 1991). In some cases, other National Register criteria may apply to archaeological sites as well. However, in order to be eligible under these other criteria, a property must also retain integrity. For historical archaeological sites, eligibility under Criteria A, B, or C is rare. To meet National Register Criterion D, information derived from a historical archaeological site must be significant. The information must be able to add to our understanding of the historic context or theme it represents, and it must not be available in existing sources, including oral history, or from more intact examples of the resource type.

Criteria used for assessment of potential eligibility for the Washington Heritage Register (WHR) are similar to NRHP criteria (OAHP n.d.). Criteria to qualify include:

- Age of at least 50 years, or if newer, documented exceptional significance.
- The resource should have a high to medium level of integrity.
- The resource should have documented historical significance at the local or state level.

Potential eligibility for historic registers is related to a site or structure's integrity and historical significance, as well as its age. Integrity is defined as the "ability of a property to accurately represent the past through original design qualities, materials, landscape, setting, etc." (OAHP n.d.). Impacts to archaeological historic properties can often result from activities that occur in the vicinity of the resource. Ground disturbing, excavation, earthmoving, and construction activities typically have the potential to cause adverse impacts to buried archaeological deposits.

Project Location and Description

BCG provided project information presented here in March 2010. The Project is located on Sites 31W, 32W, 33W, and 35W of the University of Washington's *Campus Master Plan-Seattle 2003*. These four sites are located in the West Sector of campus in subarea S/W-1, which is generally bounded by Eastlake Avenue NE to the west, Lincoln Way to the south, 15th Ave NE to the east, and NE 42nd St to the north. This area is in the City of Seattle, in King County, Washington (Figures 1, 2, and 3). Sites 31W, 32W, 33W, and 35W are on the following King County tax parcels: 1142001680, 1142002135, 1142002285, 1142002325, and 1142002345 (King County 2010). The four Sites have a combined area of 2.83 acres. The Project is in an urban residential setting on an upland terrace 0.3 miles north of Portage Bay on northeastern Lake Union. All lands involved in the project are located in NE¹/₄ Section 17, T. 25 N., R. 4 E., W.M. (see Figure 1).

The Project intends to provide new student housing opportunities on the campus, the University of Washington proposes that new housing facilities be constructed in the West Sector of campus to create a vibrant student residential community. The Project would entail the development of three new residence hall facilities and a new student apartment facility. The three new residence hall facilities would be developed on CMP-Seattle 2003 Sites 32W, 33W and 35W and would accommodate 1,299 new residence hall beds. Each of the three residence hall facilities would

include residence hall program space, retail (café or quick service market), and academic or office space on the ground level with residence hall bedrooms on the levels above. Site 31W would be developed with single-student apartments and would accommodate 346 beds. The Project would provide a total of 1,645 new beds.

Existing Conditions

Existing conditions at Sites 31W, 32W, 33W, and 35W are as follows:

- Site 31W is comprised of 37,082 square feet and bounded by 11th Avenue NE/Eastlake Avenue NE to the west, NE 41st Street and Condon Hall to the south, 12th Avenue NE and multi-family residential buildings to the east and single family residences and the Clifton apartment building to the north. A 14-foot wide north/south midblock alley bisects the site from NE 41st Street north to NE 42nd Street. Site 31W consists of a gravel University of Washington parking lot (Lot W2) with 143 parking spaces.
- Site 32W is a full block site comprised of 35,216 square feet including 2,237 square feet held in public right of way associated with an onsite alley. Site 32W is bounded by 12th Avenue NE and Condon Hall to the west, NE Campus Parkway to the South, Brooklyn Avenue NE and a 43-space paved parking lot to the east (Site 33W), and NE 41st Street and multi-family residential buildings to the north. The western portion of Site 32W consists of five small former single-family residences that are either vacant or currently used as offices for University of Washington organizations/staff. The northeastern portion of Site 32W contains the 3-story Brooklyn Building, which is currently vacant. MUP Application #3009692 has previously been submitted for the demolition of the Brooklyn Apartment building and one small structure located at 1209 NE 41st Street. An American elm tree is located in the southern portion of Site 32W and to the south of the Brooklyn Building. A small gravel parking lot (Lot W3) is located in the southeast corner of the site, which is comprised of 30 parking spaces. A 14-foot wide north/south midblock alley bisects the site from NE 41st Street to NE Campus Parkway. At the south boundary of the site along NE Campus Parkway, a 5-foot wide strip on the western half of the site and a small triangular parcel on southeastern edge of the east half of the site comprising approximately 0.13 acres is currently owned by the City of Seattle.
- Site 33W is a half-block site comprised of 17,604 square feet and is bounded by Brooklyn Avenue NE and Site 32W to the west, NE Campus Parkway to the south, the University of Washington Staff Human Resources Center and the University of Washington Playhouse Theater to the east (a north/south service drive between NE 41st Street and NE Campus Parkway is located between the site and the Human Resources and Playhouse Buildings) and NE 41st Street and a privately-owned parking lot to the north. Site 33W consists of paved parking lot (University Lot W4) which is comprised of 42 parking spaces.
- Site 35W is a full-block site comprised of 35,261 square feet including 2,245 square feet currently held in public right of way associated with an onsite alley. Site 35W is bounded by Brooklyn Avenue NE and Terry-Lander Residence Hall to the west, NE 40th Street

Archaeological Assessment of the University of Washington West Campus Student Housing Project, Seattle, King County Washington CRC Report #374 - 4 - and University of Washington academic and office buildings to the south, University Way NE and the College Inn to the east and NE Campus Parkway to the north. The western portion of Site 35W consists of the 5-story Cavalier Apartment Building, which is comprised of 48 apartment units. The University recently purchased this building. The eastern portion of Site 35W consists of the University of Washington Arts Ticket Office, the 1,500 sq. ft. Drama Studio and 1,300 square feet of office space. Approximately eight employees work at this site. A University-owned parking lot (Lot W6) is located onsite and includes 56 parking spaces. A 14-foot wide north/south midblock alley bisects the site from NE Campus Parkway to NE 40th Street.

Preferred Alternative

The environmental analysis of the EIS Alternatives presented in the Draft SEIS served as an information tool for the University of Washington to use in the determination of the most appropriate density of development on the sites. These Draft SEIS Alternatives represented a full range of student housing densities that the sites could accommodate in light of the University of Washington's objectives as applicant and existing/proposed provisions of the *CMP-Seattle 2003*. A Preferred Alternative has now been selected. Under the Preferred Alternative, a total of approximately 619,015 square feet of new uses associated with housing, academic, office, residence hall support, retail, and parking space would be developed.

Approximately 542,501 square feet of the development would be dedicated to housing providing approximately 1,021 new bedrooms comprised of 1,299 residential hall beds and 346 apartment beds; for a total of 1,645 new beds. Approximately 35,539 square feet of development would be designated for support uses such as a cafe, office space, an exercise area, classrooms, an auditorium, a banquet hall, a retail market or other uses that could accommodate approximately 47 employees. Approximately 131 parking spaces would be provided on the four sites to support the Preferred Alternative, with the majority located at Site 31W. Bicycle parking would be provided at each site with a total of 215 bicycle parking spaces provided at the four sites. Building heights would range from 6 to 7 stories; building heights are assumed to range from 65 to 70 feet.

Under the Preferred Alternative, existing alleys would be vacated on Sites 32W and 35W to accommodate student housing development. The alley vacations would be intended to: allow for the development of integrated full block design that provides cohesive student development programming for freshmen and sophomores and fewer points of entry for increased security with one building rather than two; and, allow for design that best accommodates the retention of the existing American elm tree on Site 32W.

Each of the Project Sites would be developed as follows under the Preferred Alternative.

<u>Site 31W</u>

Site 31W would be developed with two, six-story, 65-foot tall apartment buildings comprising 196,043 square feet of building area that would accommodate 346 beds. It is anticipated that the student beds would be available to the undergraduate student population. Approximately 125 parking spaces would be provided in two floors of below grade and semi-below grade levels

Archaeological Assessment of the University of Washington West Campus Student Housing Project, Seattle, King County Washington CRC Report #374 - 5 - beneath each building. The Preferred Alternative assumes the existing 14 foot-wide north/south mid-block alley that bisects the site from NE 41st Street north to NE 42nd Street would remain and would be improved to a 16-foot width (Figure 4).

Site preparation activities would involve demolition of the existing 143-stall UW parking lot and grading including 5,800 cubic yards of excavation. The new proposed buildings on Site 31W would be developed to the maximum allowed height of 65 feet. One parking garage would be built beneath each of the two proposed buildings. Each parking garage would include two below grade and semi-below grade levels beneath each building. Street trees and landscaping would be provided along the street frontage consistent with City of Seattle requirements.

In general, adequate utility capacity exists to serve the Preferred Alternative on this site. Utility work would generally consist of relocations and connections to existing utilities. Design considerations will need to be made for the existing underground lines serving the pole and vault NE, including considerations for grading and utilities to reduce conflicts. An existing sanitary side sewer line serving offsite adjacent buildings on 12th Avenue NE would require rerouting to accommodate development. Currently, side sewer lines run south crossing the northeast corner of Site 31W. Each of the two proposed buildings on Site 31W would require a separate sanitary sewer connection. The east building would be fed from the existing 12-inch mainline in 12th Avenue NE, while the west building would be served from the existing 12-inch mainline in 11th Avenue NE. Existing 8-inch water mains run north/south along 11th Avenue NE and 12th Avenue NE. Each proposed housing building would require dedicated fire and water service connections. Each of the two proposed buildings on Site 31W would require separate water line connections. The east building would be served off of 12th Avenue NE. The west building would be served from the north edge of the parcel off of 11th Avenue NE. An existing 18-inch line is located at the south frontage of the site, along NE 41st Street and ties into a 42-inch line downstream. This existing line would serve as the main line point of connection for both the east and west buildings. Stormwater from the alley would be collected by a catch basin, ultimately discharging to the 18-inch line along NE 41st. Existing telephone cabinets located within the Site 31W at the southeast corner of the site. The existing cabinets would need to be relocated to accommodate development. Additional coordination between the service provider and the University would be required.

Site 32W

Under the Preferred Alternative, Site 32W would be developed with a six-story, 70-foot tall residence hall with one basement level below grade comprising 135,465 square feet of building area accommodating approximately 442 residence hall beds. The ground floor would accommodate commons and services areas for residents, which could include a café, a wellness center, classrooms, a drama studio, support services or other uses which could accommodate up to 13 employees. Residences would be provided on floors 3 through 9. Building heights on Site 32W would be developed to 70 feet. The Preferred Alternative assumes the existing 14-foot wide north/south mid-block alley that bisects the Site 32W from NE 41st Street to NE Campus Parkway would be vacated and demolished to maximize the accommodation of housing development on the site. Service access would be provided by a privately owned and maintained through-block connection in the same general location as the existing alley. A short-term loading

Archaeological Assessment of the University of Washington West Campus Student Housing Project, Seattle, King County Washington CRC Report #374 - 6 - and unloading area would be provided on NE 41st Street adjacent to the building. Two parking stalls would be provided on site to meet accessible parking requirements. No other parking would be provided on Site 32W (Figure 5).

Development under the Preferred Alternative on Site 32W would provide a significant open space area for the West Campus. For example, as a public benefit associated with the proposed alley vacation, the University would improve the area surrounding the existing elm tree for use and enjoyment for the general public year round as a public open space. This area would be developed so that the treatment of the ground plan allows for flexible use.

Site preparation activities would involve demolition of four existing smaller structures along 12th Avenue NE; the existing 14 foot-wide mid-block alley that bisects the Site 32W from NE 41st Street to NE Campus Parkway; the 30-stall gravel parking lot (Lot W8) to the south of the Brooklyn Apartment building; and the bus shelter adjacent to the site on NE Campus Parkway, which would be replaced. The vacant 3-story Brooklyn Building and one smaller building (1209 NE 41st Street) are assumed to have been demolished under a separate permit. Grading onsite would involve approximately 7,919 cubic yards of excavation to accommodate the assumed development.

In general, adequate utility capacity exists to serve the Preferred Alternative on Site 32W. Utility work would generally consist of relocations and connections to existing utilities. The following subsurface utility improvements would be necessary. An existing 4-inch sanitary side sewer line is located along 12th Avenue NE and services offsite adjacent buildings would need to be demolished. A new side sewer service at the southwest corner of the site would connect directly to the existing 12-inch line in 12th Avenue NE. An existing 8-inch water main, located along 12th Avenue NE, would service the new residence hall on Site 32W. An existing 12-inch storm drain line, located adjacent to the southwest corner of the Site in 12th Avenue NE, would provide service to the proposed development on Site 32W.

Site 33W

Under the Preferred Alternative, Site 33W would be developed with a 6-story residence hall with one basement level below grade comprising 94,665 square feet which would accommodate approximately 273 residence hall beds. The building height would be approximately 70 feet. The ground floor would accommodate commons and services areas for residents, possibly including a resource center, classrooms, offices, or other uses which could accommodate up to 15 employees. Residences would be provided on floors 2 through 9. Street trees would be planted along the north, west and south sides of the residence hall. A minimum of two existing trees at the north side of the block along NE 41st Street would be retained. A previously vacated alley is located mid-block east of Site 33W and would continue to be utilized as a service drive with access to support the adjacent Playhouse Theater. The width of the service drive would be increased from 14 feet to 16 feet. A short-term loading and unloading area would be provided on NE 41st Street adjacent to the building, and two parking stalls would be provided onsite to meet accessible parking requirements. No other parking would be provided on Site 33W (Figure 6).

Archaeological Assessment of the University of Washington West Campus Student Housing Project, Seattle, King County Washington CRC Report #374 Site preparation activities at Site 33W would be anticipated to involve demolition of the existing 42-stall parking lot and grading, including excavation of approximately 5,568 cubic yards to accommodate development onsite.

In general, adequate utility capacity exists to serve the Preferred Alternative on Site 33W. Utility work would generally consist of relocations and connections to existing utilities. No electrical utility work to provide service to the site would be anticipated. An existing side sewer stub is located at the southwest corner of Site 33W in Brooklyn Avenue NE, which connects to a 10-inch line that runs north/south along Brooklyn Avenue NE. The existing stub and line would provide service to the proposed residence hall on Site 33W. The existing 8-inch water main running north/south along Brooklyn Avenue NE would serve as the mainline point of connection for the building domestic/fire. The building's mechanical room, located at the northeast quadrant, would require a service routing at the north side of the structure along NE 41st Street. Storm drainage service at Site 33W would connect to existing catch basin service line located at the southwest corner of the site. Reuse of this line to serve the new building will depend on the line condition, size and elevation. An existing telephone conduit runs within the Site 33W property line and serves the existing Playhouse Theater building east of the alley. The telephone duct bank may require rerouting down the alley. Additional coordination with the service provider would be required prior to relocation.

Site 35W

The Preferred Alternative assumes the construction of approximately 192,842 square feet of building space providing 584 residential beds built around a central, open courtyard and terrace area on Site 35W. The development would be comprised of a 6-story, 65-foot tall residence hall with one basement level partially below grade. The first two floors of the building would accommodate commons and services areas for residents which could include: a banquet hall, a 200-seat auditorium, meeting rooms, classrooms, the Arts Ticket office, administrative office space or other uses that could accommodate up to 18 employees. The east side of the second level would include an approximately 8,500 square foot retail market and a 3,330 square foot courtyard accessible to both students and the general public. Residences would be provided on the upper floors (Figure 7). Two parking stalls would be provided on Site 35W.

At Site 35W, site preparation activities would involve demolition of existing structures and grading. The Preferred Alternative would demolish the Cavalier Apartment Building; relocation of existing tenants of the Cavalier Apartment Building prior to demolition would occur in compliance with the provisions of the Tenant Relocation Assistance Ordinance (SMC 22.210). The Arts Ticket Office and the Drama Studio would also be demolished. Existing onsite uses, including the Ticket office and Drama Studio, would be relocated at street level within one of the new residence halls after the completion of the University of Washington West Campus Student Housing Project, potentially on Site 32W or this site (Site 35W). During construction, these uses would temporarily be accommodated at an interim on-campus location until construction of the new facilities is complete. The existing custodial services clock station would be relocated to an appropriate on-campus location. The existing 14 foot-wide north/south mid-block alley that bisects the Site 35W from NE 41st Street north to NE 42nd Street, two bus shelters adjacent to

the Cavalier Apartment Building along NE Campus Parkway, and the onsite parking lot (Lot W6) would also be demolished. Grading would involve approximately 9,215 cubic yards to accommodate development of Site 35W.

In general, adequate utility capacity exists to serve the Preferred Alternative on Site 35W. Utility work would generally consist of relocations and connections to existing utilities. Existing underground electrical and overhead power lines provide the security light within the right-ofway at the northeast corner of Site 35W. This electrical conduit would be rerouted to accommodate development. An existing electrical vault is located at the southeast corner of Site 35W adjacent to the property line. An existing side sewer stub is located at the southwest corner of Site 35W in Brooklyn Avenue NE. The stub connects to the 10-inch line that runs north/south along Brooklyn Avenue NE. The existing stub and 10-inch line would provide service to the proposed residence hall on Site 35W. The existing 8-inch water main running north/south along Brooklyn Avenue NE would serve as the mainline point of connection for the Site 35W building domestic water/fire service. Storm drainage service at Site 35W would connect at the existing catch basin service line located at the southwest corner of the site. Reuse of this line to serve the new building will depend on the line condition, size and elevation. An existing cellular phone antenna located on the roof of the Cavalier Apartment Building would need to be relocated prior to demolition of the building. Relocation of the antenna would be coordinated with the service provider.

Background Research

Determining the potential for the property to contain archaeological resources was largely based upon review and analysis of previously collected environmental and cultural information for the local area. Sources reviewed for this assessment included a report of geotechnical investigations for the Project (Shannon & Wilson, Inc. 2009); archaeological, historic, and ethnographic records on file at DAHP; selected local historical, environmental, and ethnographic data; historic photographs on file at Seattle Municipal Archives and University of Washington Libraries; and historic maps and newspaper articles on file at the Seattle Public Library's Seattle Room. Primary sources included plat maps and cadastral surveys of the late nineteenth and early twentieth centuries produced by the United States Coast and Geodetic Survey [USC&GS] (1899), Kroll Map Company (1920), Mackintosh (1874), Chapman (1909), and Sanborn Map Company. CRC also sent an informal letter to cultural resources staff of the Duwamish Tribe, Muckleshoot Tribe, and Suquamish Tribe to inquire about project-related cultural information or concerns (Attachment A).

Geological Context

Archaeological evidence suggests human occupation in the Puget Sound region began following the last glacial retreat at the end of the Pleistocene, approximately 14,000-10,000 years ago. The environmental changes produced by deglaciation, including alterations to landscapes, climate, and vegetation significantly influenced the spatial distribution of human activities, based on the availability of resources and the suitability of certain landforms for occupation. The potential distribution of archaeological resources in the vicinity of the property, and the identification of conditions that may have affected contemporaneous preservation of these resources, are informed by understanding changes to the local environment over time.

> Archaeological Assessment of the University of Washington West Campus Student Housing Project, Seattle, King County Washington CRC Report #374

The project area is geographically situated in the Puget Lowland on an upland terrace north of Portage Bay, an embayment of Lake Union. The topography and geology of the area were formed during the Late Pleistocene, following the advance of several glaciations that originated from Canada and extended between the Cascade and Olympic mountain ranges into the Puget Lowland (Kruckeberg 1991:12). The most recent glacial event in the Puget Sound, termed the Vashon Stade, is largely responsible for the region's contemporary landscape; glacial advance and retreat scoured and compacted underlying geology while meltwaters carved drainage channels into glacial outwash deposits (Downing 1983; Booth, et al. 2003). Following rising temperatures, the glacier retreated rapidly to the north and left the regional landscape ice-free and suitable for inhabitants by approximately 11,000 years ago (Kruckeberg 1991:22).

Land surfaces that had been covered by ice uplifted. This isostatic rebound varied locally and was much more subtle in the southern Puget Lowland than in the north (Thorson 1989). Marine waters began to fill Puget Sound once the Strait of Juan de Fuca and Admiralty Inlet were no longer blocked by ice. In southern and central Puget Sound, sea levels began to rise rapidly after 8,000 years ago (Eronen, et al. 1987) and then rates of increase slowed around 5,000 years ago (Booth, et al. 2003:26). Eustatic sea levels were within one meter of present-day levels by about 1000 years ago (Eronen, et al. 1987). Prior to construction of Lake Washington Ship Canal, the elevation of Lake Union was 21 feet (6.4 meters) above sea level (Troost and Booth 2008:29). However, the mean level of Lake Union and Lake Washington previously fluctuated by as much as seven feet over time due to changes in hydrology and tectonic events that affected the lakes' outflow near Renton. Earthquakes throughout the past 7,000 years triggered underwater slumping, landslides, ground elevation changes, and tsunami. A massive earthquake on the Seattle Fault 1,100 years ago caused slides and subsidence (Bucknam, et al. 1992; Jacoby, et al. 1992; Karlin and Abella 1992; Nelson, et al. 2002).

While sedimentation during glacial times was widespread and voluminous, active deposition in nonglacial periods including the present day has been more restricted, occurring in river valleys and at the base of steep slopes (Booth, et al. 2003:20-21). At the elevation of the Project (ranging from approximately 90 to 110 feet above sea level), bedrock was eroded by the advancing and retreating late Pleistocene glaciers and was capped by glacial till. Surface geologic deposits mapped in the Project are composed of till deposited during the Vashon stade of the Fraser glaciation (Booth, et al. 2009; Troost, et al. 2005). The Vashon till is a "compact diamict of silt, sand, and sub-rounded to well-rounded gravel, glacially transported and deposited under ice" (Booth, et al. 2009). The surface of the till is generally undulating and fluted, and it tends to drape over underlying topography. The till typically ranges in thickness from 1 to 10 meters and is generally very dense except for the uppermost meter, which is usually weathered and moderately dense (Booth, et al. 2009).

According to a geotechnical report prepared for the Project, deposits in the Project include fill, glacial outwash, and glacial till. The thickness of fill deposits, composed of medium dense to dense, dark brown and brown gravelly, silty fine, and fine to medium sand with various amounts of wood, brick, red ceramic tile, and charcoal, generally ranges from 5.5 to 12 feet. On Site 31W, recessional outwash underlies the fill at 5.5 to 6 feet below ground surface. Glacial till underlies

fill on the other three Sites. Borings B-3 and B-4 were advanced in Site 32W, where topsoil and sod are thought to be approximately 1 foot thick in yards surrounding the residential structures. Construction of the residential structures, which have basements, would have involved excavations for the basements and foundations and subsequent filling, which raised the level of the yards above street elevation. Boring B-3 encountered 12 feet of fill and glacial till was present beneath the fill. In boring B-4 till was encountered immediately below the crushed gravel parking lot surface. Similar conditions were encountered in Site 33W, where boring B-5 found till from immediately below asphalt pavement and base coarse gravelly sand at the ground surface down to the bottom of the boring, 20.2 feet deep. Borings B-6 and B-7 on Site 35 each found fill deposits 5.5 feet thick over glacial till (Shannon & Wilson, Inc. 2009). The presence of graded paved surfaces directly overlying till and thick fill deposits with historic-period and/or recent debris items directly overlying glacial deposits suggests that the ground surface of the Project has been substantially altered, and intact natural landforms with the potential to contain archaeological sites have most likely been compromised by prior excavation, grading, and filling activities.

The current local soil survey does not map soil units in the Project (USDA NRCS 2010). In general, soil formation on uplands in the Seattle area has been slow, and undisturbed surfaces typically cap a poorly- to well-developed A horizon underlain by silty weathered Vashon till parent material within a meter of ground surface (Troost and Booth 2008:28). Although sedimentary profiles specific to conditions immediately preceding European settlement and logging of this location by the 1890s (USGS 1897) are not available, forested terraces were likely to have been composed of soils having a relatively limited potential for soil development, with steeper slopes subject to occasional, perhaps seasonal colluvial action. Archaeological deposits in such soils would be subjected to the same geophysical forces; preservation of the depositional integrity of archaeological deposits or anthropogenic sediments would vary based upon their specific physical characteristics. Intact native soils are not expected to be present in the project area due to the long record of historic-period disturbance beginning with logging, and the absence of depositional environments.

Archaeological Context

Regional and local studies have provided an archaeological and historical synthesis of approximately the last 10,000 years of human occupation in Puget Sound (Nelson 1990). Upland terraces and ridges would have been available for occupation earlier than lower-elevation areas due to the effects of deglaciation described above; archaeological materials in the Project and similar settings could range in age from the early Holocene to the historic-period. The Project is located on what were formerly gently rolling forested uplands above northeastern Lake Union. Native American villages in this region were typically located very near or adjacent to water bodies (Suttles and Lane 1990). It is probable that the main pre-contact human activity areas were located on more level ground, rather than on the slope and terrace riser above that constitute the Project, although activities such as hunting and plant gathering might have occurred here. Over the last approximately 120 years, development on the property and vicinity has included construction an demolition of residential and commercial structures, construction and regrading of roadways, and construction of buried water lines and other utilities. This suggests that evidence of earlier human occupation is unlikely to be present in the Project. Any archaeological materials that could potentially be found in the University of Washington West Campus Student Housing area would most likely date to the historic period.

Several previous cultural resource studies and overviews provide background information applicable to the project area (e.g., Blukis Onat 2009; Courtois, et al. 1999; Larson and Lewarch 1995; Nelson 1990). Characteristic of the ethnographic pattern in Puget Sound, seasonal residence and logistical mobility occurred from about 3000 BP. Organic materials, including basketry, wood and food stuffs, are more likely to be preserved in sites of this late pre-contact period, both in submerged, anaerobic sites and in sealed storage pits. Sites dating from this period represent specialized seasonal spring and summer fishing and root-gathering campsites and winter village locations. These kinds of sites have been identified in the Puget Sound lowlands, typically located adjacent to, or near, rivers or marine transportation routes. Fish weirs and other permanent constructions are often associated with large occupation sites. Common artifact assemblages consist of a range of hunting, fishing and food processing tools, bone and shell implements and midden deposits. Similar economic and occupational trends persisted throughout the Puget Sound region until the arrival of European explorers.

Ethnohistoric Context

Ethnohistoric economies of people in the southern Puget Sound were structured upon a variable rotation of seasonally available resources. Permanent villages provided a central hub from which seasonal activities radiated. During the spring, summer and fall, temporary camps were utilized while traveling to obtain resources that included foodstuffs such as fish, shellfish, waterfowl, deer, roots and berries. Salmon was the single most important food source and was caught in weirs, traps, nets and other fashioned implements (Smith 1940). Local Indian people shared many broadly defined traditions with their inland Puget Sound neighbors, including subsistence emphasis on salmon and other fish, land game, and a wide variety of abundant vegetable foods, and household and village communities linked by family and exchange relations (Suttles and Lane 1990).

The University of Washington West Campus Student Housing Project is within the traditional territory of the Duwamish Tribe of Southern Lushootseed speakers; historically, members of the Suquamish and Muckleshoot Tribes also utilized this vicinity (Suttles and Lane 1990; Waterman 2001). The Muckleshoot Indian Tribe are recognized as successors to the Duwamish for fishing and certain other treaty rights. The Suquamish Tribe also considers the project area vicinity as a usual and accustomed place, but was denied recognition as successor of the Duwamish by District Court (Tulalip Tribes, et al. 1990). The Duwamish tribal organization does not currently have federal recognition.

The Suquamish occupied Kitsap Peninsula (Spier 1936:34), as well as Bainbridge and Whidbey Islands prior to implementation of the Point Elliot Treaty of 1855 (Ruby and Brown 1992:226). Pre-contact Suquamish settlements were often located on major waterways, and heads of bays or inlets. In the winter, the Suquamish lived at large permanent village settlements and they spent the summer hunting, fishing, and gathering at specialized, temporary camps. The Muckleshoot Tribe comprises groups who traditionally lived and used resources in the Green and White River valleys and adjacent plateaus (Suttles and Lane 1990:Figure 1, Table 1). A network of trails and

waterways connected Muckleshoot villages on inland river valleys to the Puget Sound shoreline (Noel 1980:29).

Major Duwamish winter villages were formerly located on the Cedar, Duwamish, Sammamish, and Black Rivers, Lake Sammamish, Lake Washington, Lake Union, Elliott Bay, and Salmon Bay (Miller 1999; Smith 1941:207; Waterman ca. 1920, 1922), outside the current Project area. Duwamish people who lived around Lake Union, Lake Washington, and Lake Sammamish were known as xa'tcoabc, "Lakes Duwamish." The Lakes Duwamish were more reliant on resources in the area's freshwater lakes, basins, and drainages, as well as wetlands and forests. Local streams and lakes provided habitat for anadromous fish. Travel by canoe and overland trails connected Lakes Duwamish groups to each other and to people throughout the Puget Sound region. The isthmus between Portage Bay and Union Bay was used as a portage, and early maps of the area depict trails north of Lake Union, including one within 0.25 miles southeast of the Project (Figure 8). The Suquamish, Snohomish, and other groups followed this route to fish in Lake Washington and the Black River (Harrington 1910:36-6, in Miller and Blukis Onat 2004:70), and members of the Skagit tribe remembered traveling this way en route to hop fields in the White River valley in the mid-1880s (Miller and Blukis Onat 2004:72).

The Lakes people had several permanent and temporary settlements on all of the lakes and at the portage between Portage Bay and Union Bay. Ethnographic sources reviewed in this assessment (e.g., Smith 1940; U.S Court of Claims 1927; Waterman ca. 1920, 1922, 2001) do not indicate the location of any villages in the Project or vicinity. However, multiple place names are recorded on the north side of Lake Union (Table 1). None of these names appear to refer to the Project location but the number of place names suggests that people were familiar with the area and may have used the Project area in the course of travel, subsistence, or other activities. The village located nearest to the project is Sxwa'tsugwlL, a Lakes Duwamish village on the pre-1916 northern margins of Union Bay (Waterman 1922, 2001). There are reported to have been five longhouses in this area, including one "near the present UW steam plant, and one near the former Battelle Institute campus" (Buerge 1984).

Historic Context

The first exploration and mapping of the Puget Sound is credited to Captain George Vancouver in 1792, under the auspices of the British Royal Navy. Vancouver surveyed much of the Sound, but the exploration did not extend inland and failed to recognize several waterways including the Puyallup, Nisqually and Fraser rivers (Morgan 1979:16). Decades later, in 1841, the Wilkes Expedition traveled to chart what was then called Oregon Territory. The territory was jointly occupied by the United States and Britain, particularly the British Hudson Bay Company, which established Fort Nisqually in 1834. In an attempt to increase American presence in Oregon Territory, the Wilkes Expedition produced the first detailed map of the area and promoted the region's potential for economic development (Morgan 1979). Four years after the arrival of the Wilkes party, more Americans began to settle in the Territory.

Euro-American settlement in Oregon Territory was further encouraged by the passage of the Donation Land Claims Act in 1850. In 1851, David Denny, John Low, and Lee Terry arrived at the mouth of the Duwamish River; Low and Terry soon filed land claims at Alki Point in West

Seattle (Crowley 2003). Within a few years, more Euro-Americans had arrived in Seattle and filed Donation Land Claims (DLCs) on the east side of Elliott Bay. The GLO maps (United States Surveyor General [USSG] 1856, 1863) do not show any Euro-American residences, Indian villages, or other cultural features in the Project location.

By the mid-1850s, British and American settlement on Puget Sound and the entire Northwest had drastically impacted local Native American groups and their traditions. In 1853, the United States organized Washington Territory and appointed Isaac I. Stevens as its governor. In 1855, the Duwamish and other Puget Sound tribes signed the Point Elliot Treaty, which forced local tribes onto reservations. The treaty called for cession of lands to the United States and the maintenance of fishing rights and annuities, as well as the concentration of Indian people living in western Washington upon reservation lands (Marino 1990). Individuals considered of the Suquamish Tribe were relocated to the Port Madison Indian Reservation, and the Muckleshoot reservation was established for people living in the White River valley and surrounding areas (Ruby and Brown 1992). The Duwamish were not assigned their own reservation, but rather were required to live on either the Port Madison Indian Reservation on the Kitsap Peninsula or the Muckleshoot Indian Reservation between Auburn and Enumclaw. Some Duwamish moved to the reservations but others remained in their homeland.

The treaty period was marked by heightened tension and violence between tribes and white settlers throughout Puget Sound. By 1855-1856, the federal government was using military force to contain Indian people dissatisfied with the poor quality of reservation lands. Many Indian groups in the Puget Sound area were relocated and interned during this period. Raids, attacks, and violent conflict occurred during this time throughout the Puget Sound region as Indian people attempted to discourage Euro-American settlement. The U.S. Marine Corps and U.S. Navy provided military support during attacks on Seattle (Phelps ca. 1856).

As Seattle expanded northward in the late 1800s, lands in the Lakes Duwamish territory were developed. The newly incorporated town of Seattle banned native urban residence in 1865, though Indians continued to live and work in the city. The Indian Homestead Act of 1875 allowed Indians to own land, provided they renounced tribal allegiance and lived like whites (Blukis Onat, et al. 2005:25; Miller and Blukis Onat 2004: Table 1). However, some Lakes Duwamish people continued to live in the area and maintain aspects of traditional lifeways into the twentieth century. Two Lakes Duwamish families were particularly prominent in the history of the Lake Union area. The Zakuse family lived within 0.25 miles south of the Project, on the north shore of Portage Bay near what is now the southwestern portion of the University of Washington campus (Miller and Blukis Onat 2004: Figure 16). Cheshiahud (known by a variety of names including Old John, Indian John, Lake John, Denny John, Chodups John, and Lake Union John) was a well-known figure on the shores of Portage Bay. He owned 5 acres of land across from the university, on the southwest side of Portage Bay, at or near the east end of Shelby Street (CH2M Hill 2009:30). Manmade changes to the Portage Bay area, including residential and commercial development, development of the University of Washington campus, and construction of the Lake Washington Ship Canal, have obscured the landscape of prairies, marshes, shorelines, and portages that was familiar to the Lakes Duwamish (Miller and Blukis Onat 2004).

The Territorial University, which would later become the University of Washington, was established in 1861 with a campus in downtown Seattle. In 1894 the present-day site was chosen for the campus. Early buildings on campus include Denny Hall built in 1895, and the University's first dormitories, Lewis Hall and Clark Hall, built in 1896 (Dorpat 1981; University of Washington 2010).

The Project is located within 174 acres claimed by Christian Brownfield in 1873 (Homestead Entry patent Accession/Serial No. WAOAA 071897) (BLM 2010). This was part of a larger parcel of land for which the Brownfields obtained title that extended from present-day NE 45th Street south to Portage Bay and from the approximate location of I-5 to 15th Avenue NE. These lands were also under ownership of "C. Brownfield" in 1886 (Miller and Blukis Onat 2004:Figure 16). The area containing the Project was annexed to the City of Seattle on May 3, 1891 (Annexation Ordinance 1695) and platted as the Brooklyn Addition. The area is shown on an 1890 map as the Kensington plat (Anderson 1890). The Brooklyn Addition was originally platted with street names mostly different from those used today (Sanborn Map Company 1893; U.S. Coast and Geodetic Survey [USC&GS] 1899). Present-day street names appear to have been in use by 1900 (Seattle Engineering Department 1900). The vicinity of the Project was served by water lines by 1899. Pipes had been laid in north-south running avenues including Brooklyn, 12th, 11th, and in NE 41st Street) (Seattle Engineering Department 1899).

Prior to about 1895, the Brooklyn area, now known as a part of the University District, was still quite rural. Fields filled with logged-off stumps were commonly used as cattle pasture (W. Chapman, M.D., August 17, 1893 letter "To the Committee appointed by the Council to investigate the cattle nuisance of Brooklyn and Latona," on file at Seattle Municipal Archives, General Files document 992804). Construction of the Seattle Lake Shore and Eastern Railroad, which passes within 0.1 miles south of the Project, was begun in 1887 (Dorpat 1981:Feature 41). Further transportation improvements were made in the early 1890s. Construction of streetcar routes connected the neighborhood to downtown Seattle, stimulating commercial and residential development of the neighborhood. Starting in 1891, the Third Street & Suburban Railway extended from downtown Seattle north to Lake Union, along Eastlake, and across the Latona Bridge and up Brooklyn, ending near Ravenna Park's original entrance at present-day 20th Avenue NE (University of Washington Libraries 2008). This line was originally operated by the Rainier Power and Railway Co. and later run by Seattle Electric Co. (Long 2001). Brooklyn Avenue served as the main north-south road between the Cowan Park/Ravenna area and present-day NE 40th Street (Figures 9 and 10).

David Denny of Rainier Power and Railway Co. built the first Latona Bridge in 1891. In 1902, the bridge was rebuilt and widened to accommodate vehicle, pedestrian, and streetcar traffic. Although the bridge was in disrepair, it was modified to open for traffic in the newly completed Lake Washington Ship Canal in 1917. By 1916, another streetcar route approached the vicinity of the Project from the west on 40th Street (Puget Sound Traction, Light & Power Co. 1916). In 1919, the University Bridge was built and the Latona Bridge was demolished (Long 2001).

Archaeological Assessment of the University of Washington West Campus Student Housing Project, Seattle, King County Washington CRC Report #374 - 15 - Modifications to waterways south and east of the Project area have their roots in the establishment of the Seattle and Lake Washington Waterways Company in 1894. This organization sought to reclaim tideflats of Elliott Bay, dredge harbor waterways to accommodate large draft vessels, and construct a canal to Lake Washington (Bagley 1916:357-358). The first location considered for this canal was between First Hill and Beacon Hill near Dearborn Street (Bagley 1916; Dimock 1928), but Hiram M. Chittenden, commander of the Seattle District of the U.S. Army Corps of Engineers, championed construction of the canal between Shilshole and Lake Washington via Lake Union. Construction began on the Lake Washington Ship Canal and Ballard Locks (later renamed the Hiram M. Chittenden Locks) in 1911 (CH2M Hill 2009). Construction of the canal and locks completely changed the hydrology of the Lake Washington watershed. The project began with the excavation of the Ship Canal, which followed the route of a creek between the west end of Lake Union and Puget Sound at Shilshole, and the Montlake Cut, replacing a small sluiceway that had originally been dug in 1883 to move logs between Lake Washington and Lake Union (Miller and Blukis Onat 2004:Table 1). Widening and deepening these waterways entailed the replacement and modification of existing fixed bridges. Four new drawbridges (Fremont, Ballard, University, and Montlake) were built (CH2M Hill 2009). The Ballard Locks allowed ships to negotiate the difference in elevation between Puget Sound and the inland lakes. In 1916, workers breached a temporary dam at Portage Bay, allowing water to spill from Lake Washington into the Montlake Cut, and the Ship Canal was officially opened in 1917 (Miller and Blukis Onat 2004: Table 1).

Following the turn of the century, maps and photographs show that the vicinity of the Project was characterized by low-density residential development (Dorpat 1981; Kroll Map Company 1920; Sanborn Map Company 1904-1905). Between 1900 and 1920, single-family domestic structures were built on many lots (Figures 11, 12, 13, 14, and 15). Buildings on Site 32W date to this period, as did the buildings formerly on Site 33W. Between 1920 and 1951, apartment buildings, garages and parking lots, dormitories, and a few commercial buildings were added to the area, replacing some earlier single-family homes. Buildings on Site 35 were constructed 1925-1926. Construction of Campus Parkway appears to have begun in 1950, with the goal of improving motor vehicle connections between University Bridge and the UW campus (Sanborn Map Company 1905-1950, 1905-1951; see Figure 16). By 1951, only one lot in the Project (the western portion of Site 31W) appears to have been undeveloped. A photograph taken facing north from an upper floor of Terry Hall shows that Site 31W was being used as a parking lot in 1958 (Seattle Municipal Archives Photograph Collection 1958).

Previously Recorded Sites and Surveys

Numerous cultural resource investigations have previously been conducted within a one-mile radius of the Project (Table 2). These have included archaeological and historic resource surveys in advance of proposed transportation and other public works projects (e.g., Courtois, et al. 1999; Trudel 2004; Walker Gray 2008), private developments (e.g., Kelly, et al. 1987), and proposed development on other portions of the UW campus (e.g., BOLA Architecture + Planning 2010); plans for archaeological monitoring of construction excavations (e.g., Blukis Onat 2009); and evaluations of historic buildings (e.g., Emerson 2009). One cultural resource assessment has previously been conducted within the current Project. Rooke (2002) conducted background research and a reconnaissance survey for a proposed cell tower on top of the Cavalier Apartment

Building. Subsurface testing was not included in the assessment, but the project was not considered likely to affect potentially significant (e.g., NRHP-eligible) cultural resources (Rooke 2002:4). The archaeological subsurface observations reported nearest to the Project consist of monitoring of five geotechnical borings approximately 0.3 miles to the southwest (Trudel 2004). Sediments encountered included a variety of sands, silts, and gravels, and indicated that the ground surface in the boring locations had been graded to the elevation of the glacial till and then capped with fill (Trudel 2004:5). As a result, that project was considered to have a low potential to affect significant cultural resources.

As a result of these investigations, only one archaeological site has been recorded at DAHP within approximately one mile of the Project (Table 3). This site (45K1760) is a historic-period refuse scatter/dump (Kiers 2007). No pre-contact archaeological sites have been recorded at DAHP within one mile of the Project (DAHP 2010). The pre-contact archaeological sites recorded nearest to the Project are over three miles away in the Belltown area of Seattle (Lewarch 1998; Lewarch, et al. 1999). Pre-contact sites on landforms analogous to the Project appear to be rare. Review of DAHP site files identified only one pre-contact archaeological site recorded in Seattle located away from shorelines of major waterways. Site 45K11 was recorded on Magnolia east of Fort Lawton; very little is known about this site. Charcoal and stone artifacts were reported (Burroughs 1950) but archaeologists were later unable to relocate the site (Greengo 1958).

CRC also contacted the King County Historic Preservation Program (KCHPP) and the Burke Museum of Natural History and Culture Archaeology Collections to inquire about any cultural resources that may have been reported in or near the Project. The King County Historic Resources Inventory (KCHRI) maintained by KCHPP, contains records of archaeological finds not recorded at DAHP. Materials reported include artifacts found on the UW campus and private property and reported to the Archaeology Department at the Burke Museum of Natural History and Culture in Seattle. The KCHRI also includes a geographic information systems (GIS) map layer showing locations of ethnographic place names recorded by Waterman (ca. 1920, 1922) and others, and a layer displaying locations of archaeological finds when possible. Provenance data for the archaeological materials reported to the Burke and KCHPP varies and, depending on when and how the artifacts were found, may not be available at all.

Charlie Sundberg, KCHPP (electronic transmittal to M. Berger, March 17, 2010) and Laura Phillips, Burke Museum Archaeology Collections Manager (electronic transmittal to M. Berger, March 17, 2010) responded with information about cultural resources reported within approximately one mile from the Project (Tables 4 and 5). No ethnographic place names were identified in the Project location, and no archaeological materials are reported to have been found in the Project or within a 0.25-mile radius. In all, eight artifacts have been found on the University of Washington campus (Schwartz 2009). They are held in the Archaeology collections at the Burke Museum of Culture and Natural History. Most of these items were found prior to the regulation and formalization of archaeology as a profession, some as early as 1896. Little is known about the provenance or depositional context of these early isolated finds, or whether other cultural materials (e.g., fire-cracked rock, shell midden matrix) were present.

> Archaeological Assessment of the University of Washington West Campus Student Housing Project, Seattle, King County Washington CRC Report #374 - 17 -

In October 2009 a projectile point was found next to the UW Botany Greenhouse (Perry 2009; Schwarz 2009) near the "Indian trail" shown on the GLO map (USSG 1856; see Figure 8). Three shovel probes were excavated in the area where the point was found. Two stone tool fragments were found in the probes mixed with historic and recent refuse materials (e.g., gardening tags, nails), but no features, anthropogenic surfaces, activity or occupation areas, or other evidence of intact cultural deposits were identified. Sediments in two of the three probes appeared to have been disturbed by prior construction in the area. Documentation of the archaeological site and investigations, including a State of Washington Archaeological Site Inventory form (Phillips, et al. 2009), is on file at the Burke Museum. No previously recorded archaeological sites would be affected by the Project.

Archaeological Reconnaissance Survey: Methods and Results

CRC Archaeologist Margaret Berger performed archaeological reconnaissance of the Project on March 29, 2010. Field methods consisted of pedestrian survey of the Project from public rightof-ways; notes and photographs are on file at CRC. Weather conditions were overcast and cool. The goal of the survey was to identify any aboveground evidence of cultural resources, such as archaeological features or artifacts on the ground surface, and to identify any locations undisturbed by prior construction with a high potential to contain buried archaeological deposits. Subsurface testing was not included due to the extent of impervious surfaces, buried utilities, buildings, and maintained yards and streetscapes in the Project, as well as ongoing site preparation work at Site 31W (Figures 17, 18, 19, 20, 21, and 22).

Visibility of mineral soils was poor throughout the Project due to the aforementioned developments. Soils readily visible at the ground surface were confined to planter strips and other disturbed areas, and consisted of brown gravelly sands consistent with the fill material described in the geotechnical report (Shannon & Wilson, Inc. 2009). Exposures of natural sedimentary deposits were not available in the Project. No artifacts, archaeological features, or other evidence of potentially significant archaeological materials were identified in the Project. Based on the results of field reconnaissance, the depositional context of the project area, and previous impacts in the Project location, the probability that buried intact cultural resources exist in the project area is considered to be low. No archaeological resources were identified in the Project.

Potential Impacts to Archaeological Sites

The potential for the University of Washington West Campus Student Housing Project to contain potentially significant archaeological resources is generally considered to be low. This is due to a combination of the project's environmental setting and the long history of disturbance including construction and demolition of buildings, transportation developments, and buried utilities. Based on existing archaeological data for this area, the types of pre-contact archaeological materials that might potentially have been present in the general vicinity prior to twentieth century urbanization could have included the remains of habitation sites, lithic scatters, trails, or similar features, which could represent a range of domestic, subsistence, and ceremonial activities. Additionally, pre-contact sites may potentially have significance as Traditional Cultural Properties to one or more tribal and/or ethnic groups (Parker and King 1990). Nineteenth century maps reviewed in this assessment (e.g., General Land Office maps) do not depict Indian villages or sites near the Project; however negative "evidence" should not be construed as a measure of the lack of archaeological potential, as it is possible that cartographers failed to record Indian settlements. Although no trail is mapped in the Project location, proximity to the trail connecting Lake Union and Lake Washington (USSG 1856) suggests that Lakes Duwamish or other Indians may have passed through the Project. Physical evidence such a path is not likely to be preserved. Historic-period and recent subsurface disturbances have most likely destroyed the integrity of any pre-contact archaeological deposits that may have been present, seriously compromising their potential significance.

Historic-period archaeological deposits could provide data such as pre-structural remains that could suggest early settlers' domestic, social, and commercial activities (Weaver 1989), and could arguably be significant if they retained depositional integrity and could produce data that would inform research questions regarding facets of historical life relevant to the social, economic, or cultural development of Seattle (Weaver 1989). Structures may provide data on occupational specialization, construction styles, and agricultural/subsistence practices. Frequencies of materials found at domestic artifact scatters may provide economic data relevant to larger historical trends, and potentially may be suggestive of relative economic status and possibly ethnicity. Historic uses of the Project have included logging, transportation, and residential and commercial activities. However, such activities are unlikely to leave a distinctive archaeological signature, particularly one that would be recognizable following past landscape modifications and building episodes within the current Project.

Construction Impacts

There are no recorded archaeological sites or ethnographic places in or adjacent to the Project and none were identified in this study. As a result, there are no anticipated construction impacts to archaeological sites. The paucity of archaeological sites identified by previous investigations in the Seattle area is likely an artifact of local ground disturbance due to previous road construction, residential, commercial, and industrial development rather than an accurate reflection of past human land use patterns. To minimize the potential for impacts associated with an inadvertent discovery of resources during excavation an inadvertent discovery plan is identified as a mitigation measure. If resources of potential archaeological significance are encountered during construction, or excavation, the responsible Project director should stop work immediately and notify the City of Seattle Department of Planning and Development, the Department of Archaeology and Historic Preservation, and applicable departments of the University of Washington so that appropriate evaluation and consultation can take place before construction resumes. Any as-yet unknown potentially eligible archaeological sites, if discovered in construction and avoidance is impossible, would be subject to mitigation.

Operation Impacts

Operation of the Project is not expected to generate any long-term operational impacts affecting archaeological sites. There are no recorded archaeological sites or ethnographic places within the Project and none were discovered in this study. As a result, there are no anticipated operational impacts to archaeological sites and once constructed, the Project would not generate any operational impacts to archaeological sites.

Archaeological Assessment of the University of Washington West Campus Student Housing Project, Seattle, King County Washington CRC Report #374 - 19-

Secondary Impacts

Secondary impacts of the project may include subsequent development and redevelopment in the area, which may have the potential to affect as-yet unknown archaeological sites. However, the nearest previously recorded archaeological sites are approximately one mile away and no archaeological sites were identified in this study. There are no foreseeable secondary impacts to archaeological sites.

Cumulative Impacts

The cumulative impacts of this and future projects consist of the potential to disturb cultural resources such as archaeological sites over a broader area. Continual higher density or infilling, residential and commercial development, and road modifications and expansions in the UW campus and University District could potentially affect archaeological sites. However, the nearest previously recorded archaeological sites are approximately one mile away and no archaeological sites were identified in this study. There are no foreseeable cumulative impacts to archaeological sites.

Significant Unavoidable Adverse Impacts

Because archaeological sites have not been identified within the Project and the Project is considered to have a low potential to contain intact archaeological deposits, no significant unavoidable adverse impacts to archaeological sites are anticipated. Should potential cultural resources be identified during construction, it is anticipated that the proposed mitigation measure, an inadvertent discovery plan, would address potential impacts. Should potentially significant archaeological sites be discovered in construction and it is not possible to avoid them, significant unavoidable adverse impacts would be generated. These impacts could potentially be minimized through development and implementation of mitigation measures appropriate to the nature and extent of discovered sites.

Recommendations

Background research did not locate any indications of pre-contact or historic-period archaeological sites within the vicinity of the Project. While the area could have potentially been the location of repeated or regular pre-contact activities, prior construction and landform modifications have likely destroyed the integrity of any such sites within the vicinity. Fill deposits in the Project contain historic-period and/or recent debris such as wood and brick, but intact potentially significant historic-period archaeological sites are also considered unlikely to be present. There appears to be a low probability for intact pre-contact or historic-period archaeological deposits to be present within the Project.

In the event that any ground-disturbing or other construction activities result in the inadvertent discovery of archaeological resources, work should be halted in the immediate area, and contact made with City of Seattle officials, the Department of Archaeology and Historic Preservation (DAHP), applicable University of Washington departments, and tribal representatives. Work should be stopped until further investigation and appropriate consultation have concluded. In the unlikely event of the inadvertent discovery of human remains, work should immediately be halted in the discovery area, the remains covered and secured against further disturbance, and

communication established with municipal administrative and law enforcement personnel, DAHP, and authorized tribal representatives.

The University of Washington should submit this document to appropriate personnel at the Duwamish Tribe, the Muckleshoot Tribe, the Suquamish Tribe, and DAHP, or other interested parties, for their information and files.

Limitations of this Assessment

No cultural resources study can wholly eliminate uncertainty regarding the potential for prehistoric sites, historic properties or traditional cultural properties (TCPs) to be associated with a project. The information presented in this report is based on professional opinions derived from our analysis and interpretation of available documents, records, literature, and information identified in this report, and on our field investigation and observations as described herein. Conclusions and recommendations presented apply to project conditions existing at the time of our study and those reasonably foreseeable. The data, conclusions, and interpretations in this report should not be construed as a warranty of subsurface conditions described in this report. They cannot necessarily apply to site changes of which CRC is not aware and has not had the opportunity to evaluate.

It should be recognized that this assessment was not intended to be a definitive investigation of potential cultural resources concerns within the Project area. Within the limitations of scope, schedule and budget, our analyses, conclusions and recommendations were prepared in accordance with generally accepted cultural resources management principles and practice in this area at the time the report was prepared. We make no other warranty, either express or implied. These conditions and recommendations were based on our understanding of the project as described in this report and the site conditions as observed at the time of our site visit.

This report was prepared by CRC for the sole use of the University of Washington. Our conclusions and recommendations are intended exclusively for the purpose outlined herein and the project indicated. The scope of services performed in execution of this investigation may not be appropriate to satisfy the needs of other users, and any use or re-use of this document, including findings, conclusions, and/or recommendations, is at the sole risk of said user. If there is a substantial lapse of time between the submission of this report and the start of construction, or if conditions have changed due to project (re)design, or appear to be different from those described in this report, CRC should be notified so that we can review our report to determine the applicability of the conclusions and recommendations considering the changed conditions.

References Cited

Anderson, O. P. 1890 City Of Seattle And Environs. 1:34,500. L. H. Everts, Philadelphia.

Bagley, Clarence B.

1916 History of Seattle, from the Earliest Settlement to the Present Time. Vol. I. S. J. Clarke Publishing Company, Chicago.

Archaeological Assessment of the University of Washington West Campus Student Housing Project, Seattle, King County Washington CRC Report #374 - 21 - Blukis Onat, A. R., R. A. Kiers, and P. D. LeTourneau

2005 Preliminary Ethnographic and Geoarchaeological Study of the SR 520 Bridge Replacement and HOV Project. Report on file, Washington State Department of Transportation, Seattle.

BOLA Architecture + Planning

2010 Husky Union Building Historic Resources Addendum. On file at Washington Department of Archaeology and Historic Preservation, Olympia.

Booth, Derek B., Ralph A. Haugerud, and Kathy Goetz Troost

2003 The Geology of Puget Lowland Rivers. In *Restoration of Puget Sound Rivers*, Chapter 2, edited by David R. Montgomery, Susan Bolton, Derek B. Booth, and Leslie Wall, pp. 14-45. University of Washington Press, Seattle.

Booth, Derek B., Kathy Goetz Troost, and Scott A. Schimel

2009 Geologic map of northeastern Seattle (part of the Seattle North 7.5' x 15' quadrangle), King County, Washington. 1:12,000 scale. U.S. Geological Survey Scientific Investigations Map 3065. Prepared in cooperation with the City of Seattle and the Pacific Northwest Center for Geologic Mapping Studies at the Department of Earth and Space Sciences, University of Washington.

Bucknam, Robert C., Elizabeth Hemphill-Haley, and Estella B. Leopold

1992 Abrupt Uplift Within the Past 1700 Years at Southern Puget Sound, Washington. *Science* 258:1611-1614.

Buerge, David

1984 Indian Lake Washington. The [Seattle] Weekly, August 1-August 7, 1984.

Bureau of Land Management (BLM)

2010 Land Patent Search – BLM GLO Records. Electronic resource, http://www.glorecords.blm.gov/PatentSearch, accessed 24 March 2010.

Burroughs

1950 State of Washington Archaeological Site Inventory Form, 45KI1. On file at Washington Department of Archaeology and Historic Preservation, Olympia.

CH2M Hill

2009 Supplemental Draft EIS and Section 4(f) Evaluation, SR 520 Bridge Replacement and HOV Program, SR 520: I-5 to Medina Bridge Replacement and HOV Project Cultural Resources Discipline Report. Prepared for Washington State Department of Transportation and Federal Highway Administration.

Chapman, H. D.

1909 City of Seattle drawn from official records in the city engineer's office by H. D. Chapman. Ellis E. Davis, Berkeley, California.

City of Seattle

1874 City of Seattle, Washington Territory: A. Mackintosh, Seattle.

Courtois, Shirley L., Katherine Krafft, and Catherine Wickwire

1998 Sound Transit Central Link Light Rail Draft Environmental Impact Statement: Historic and Archaeological Technical Report. Courtois & Associates, Seattle, and CH2M Hill, Inc., Bellevue. Prepared for Central Puget Sound Regional Transit Authority, Seattle. On file at Washington Department of Archaeology and Historic Preservation, Olympia.

Courtois, Shirley L., Katherine Krafft, Catherine Wickwire, James C. Bard, and Robin McClintock

1999 Sound Transit Central Link Light Rail Final Environmental Impact Statement Final Technical Report: Historic and Prehistoric Archaeological Sites, Historic Resources, Native American Traditional Cultural Properties, Paleontological Sites. Courtois & Associates, Seattle, and CH2M Hill, Inc., Bellevue. Prepared for Central Puget Sound Regional Transit Authority, Seattle. On file at Washington Department of Archaeology and Historic Preservation, Olympia.

Crowley, Walt

2003 Denny Party scouts arrive at mouth of Duwamish River in future King County on September 25, 1851. HistoryLink.org Essay 5391. Electronic document, http://www.historylink.org/index.cfm?DisplayPage=output.cfm&file_id=5391, accessed 23 December 2009.

Dimock, Arthur H.

1928 Preparing the Groundwork for a City: The Regrading of Seattle, Washington. *Transactions of the American Society of Civil Engineers* Paper No. 1669.

Dorpat, Paul

1981 294 Glimpses of Historic Seattle. Mayor's Small Business Task Force, Seattle. 1984 Seattle Now and Then. Tartu Publications, Seattle.

2001 Seattle Neighborhoods: First Hill—Thumbnail History. HistoryLink.org Essay 3095. Electronic document,

http://www.historylink.org/index.cfm?DisplayPage=output.cfm&File_Id=3095, accessed 23 December 2009.

Downing, John

1983 The Coast of Puget Sound. University of Washington Press, Seattle.

Emerson, Stephen

2009 Letter to Adam Escalona Re: SE01124A Suzzallo Library. Prepared for Adapt Engineering, Inc., Seattle. On file at Washington Department of Archaeology and Historic Preservation, Olympia.

> Archaeological Assessment of the University of Washington West Campus Student Housing Project, Seattle, King County Washington CRC Report #374 - 23 -

Eronen, M., T. Kankainen, and M. Tsukuda

1987 Late Holocene sea-level record in a core from the Puget Lowland, Washington. *Quaternary Research* 27:147-159.

Fox, Matt

2009 Historical T-Sheets. Electronic resource, http://www.gelib.com/maps/_NL/tsheets.kml, accessed 24 March 2010.

Greengo, Robert E.

1958 State of Washington Archaeological Site Inventory Form Update, 45KI1. On file at Washington Department of Archaeology and Historic Preservation, Olympia.

Harrington, John P.

ca. 1909 John P. Harrington Papers. National Anthropological Archives, Smithsonian Institution. Reel 15, 1907-1957, on microfilm held by Suzzallo Library, University Washington, Seattle.

Jacoby, Gordon C., Patrick L. Williams, and Brendan M. Buckley

1992 Tree Ring Correlation Between Prehistoric Landslides and Abrupt Tectonic Events in Seattle, Washington. *Science* 258:1621-1623.

Karlin, Robert E., and Sally E. B. Abella

1992 Paleoearthquakes in the Puget Sound Region Recorded in Sediments of Lake Washington, U.S.A. *Science* 258:1617-1620.

Kiers, Roger

2007 State of Washington Archaeological Site Inventory Form Update, 45KI760. On file at Washington Department of Archaeology and Historic Preservation, Olympia.

King County

2008 iMAP – Property Information. Electronic resource, http://www5.kingcounty.gov/iMAP/viewer.htm, accessed 24 March 2010.

Kroll Map Company

1920 Kroll's Atlas of Seattle, Washington. Kroll Map Company, Seattle.

Kruckeberg, Arthur R.

1991 The Natural History of Puget Sound County. University of Washington Press. Seattle.

Larson, Lynn L., and Dennis E. Lewarch (eds.)

1995 The Archaeology of West Point, Seattle, Washington: 4,000 Years of Hunter-Fisher-Gatherer Land Use in Southern Puget Sound. Larson Anthropological/Archaeological Services, Gig Harbor, Washington.

> Archaeological Assessment of the University of Washington West Campus Student Housing Project, Seattle, King County Washington CRC Report #374 - 24 -

Lewarch, Dennis E.

1998 State of Washington Archaeological Site Inventory Form, 45KI456. On file at Washington Department of Archaeology and Historic Preservation, Olympia.

Lewarch, Dennis E., Leonard A. Forsman, and Lynn L. Larson

1999 Denny/Lake Union Combined Sewer Overflow Control Project, Seattle, King County, Archaeological Resources Treatment and Monitoring Plans. Prepared for King County Department of Natural Resources, Wastewater Treatment Division. On file at Washington Department of Archaeology and Historic Preservation, Olympia.

Long, Priscilla

2001 Latona Bridge spanning Seattle's Lake Union is dedicated on July 1, 1891. HistoryLink.org Essay 3328. Electronic document.

http://www.historylink.org/index.cfm?DisplayPage=output.cfm&file_id=3328, accessed 24 March 2010.

McKee, Bates

1972 Cascadia: The Geologic Evolution of the Pacific Northwest. McGraw Hill Book Company, New York.

Miller, Jay, and Astrida R. Blukis Onat

2004 Winds, Waterways, and Weirs: Ethnographic Study of the Central Link Light Rail Corridor. Prepared for Sound Transit. On file at Washington Department of Archaeology and Historic Preservation.

Morgan, Roland

1979 Seattle Then & Now. Bodima Press, Orinda, California.

National Register of Historic Places (NRHP)

1991 *How to Apply the National Register Criteria for Evaluation*. National Register Bulletin 15, National Park Service, Washington, D.C.

Nelson, Alan R., Samuel Y. Johnson, Ray E. Wells, Silvio K. Pezzopane, Harvey M. Kelsey, Brian L. Sherrod, Lee-Ann Bradley, Rich D. Koehler III, Robert C. Bucknam, Ralph Haugerud, and William T. Laprade

2002 Field and Laboratory Data from an Earthquake History Study of the Toe Jam Hill Fault, Bainbridge Island, Washington. U.S. Geological Survey Open-File Report 02-0060.

Nelson, Charles M.

1990 Prehistory of the Puget Sound Region. In Handbook of North American Indians, Volume 7: Northwest Coast, pp. 481-484. Smithsonian Institution Press, Washington, D.C.

Noel, Patricia Slettvet

1980 Muckleshoot Indian History. Revised edition, 1985. Auburn School District No. 408, Auburn, Washington.

Office of Archaeology and Historic Preservation (OAHP)

n.d. Washington Heritage Register. Publication on file at Washington Department of Archaeology and Historic Preservation, Olympia.

Parker, P. L., and T. F. King

1999 Guidelines for Evaluating and Documenting Traditional Cultural Properties. National Register Bulletin 38, National Register of Historic Places, National Park Service, Washington, D.C.

Phelps, Thomas Stowell

ca. 1856 Plan of Seattle, 1855-6: showing the position occupied by the Decatur's crew, Jany 26, together with the line of barricades erected and roads constructed. Photograph of map on file at University of Washington Libraries. Special Collections Division, Seattle Collection.

Phillips, Laura, Lisbeth Louderback, and Stephanie Jolivette

1998 State of Washington Archaeological Site Inventory Form, UW Greenhouse Site. On file at Burke Museum of Natural History and Culture Archaeology Collections, University of Washington, Seattle.

Puget Sound Traction, Light & Power Co.

1916 Municipal street railway power distribution system, Sec 17 254-68. Scale 1:2,400. On file at Seattle Municipal Archives. Electronic document, http://clerk.ci.seattle.wa.us/~scripts/nphbrs.exe?s1=1226.ID.&Sect6=HITOFF&Sect5=MAPS6&Sect4=AND&d=MAPS&l=1&p=1 &u=/~public/MAPS1.htm&r=1&f=G, accessed 24 March 2010.

Rooke, Lara M.

2002 Letter to Jay Grenfell Re: WA-539 (Cavalier Apartments). Prepared for Vertex Engineering Services, Inc., Burlingame, California. On file at Washington Department of Archaeology and Historic Preservation, Olympia.

Ruby, Robert H., and John A. Brown

1992 A Guide to the Indian Tribes of the Pacific Northwest. University of Oklahoma Press, Norman and London.

Sanborn Map Company

1888 Insurance Maps of Seattle, Washington. Sanborn Map Company, New York.

1893 Insurance Maps of Seattle, Washington. Sanborn Map Company, New York.

1905 Insurance Maps of Seattle, Washington, Vol. 2. Revised 1951. Sanborn Map Company, New York.

1916 Insurance Maps of Seattle, Washington, Vol. 1. Revised 1950. Sanborn Map Company, New York.

Seattle Engineering Department

1899 Map of a portion of City of Seattle showing location of water supply pipes, Denny to N. 45th St. 1:4,800 scale. On file at Seattle Municipal Archives. Electronic document, http://clerk.ci.seattle.wa.us/~scripts/nph-

brs.exe?s1=1554.ID.&Sect6=HITOFF&Sect5=MAPS6&Sect4=AND&d=MAPS&l=1&p=1 &u=/~public/MAPS1.htm&r=1&f=G, accessed 24 March 2010.

1900 Base map of City of Seattle from 45th St. to Denny Way. 1:4,800 scale. On file at Seattle Municipal Archives. Electronic document, http://clerk.ci.seattle.wa.us/~scripts/nph-brs.exe?s1=1563.ID.&Sect6=HITOFF&Sect5=MAPS6&Sect4=AND&d=MAPS&l=1&p=1&u=/~public/MAPS1.htm&r=1&f=G, accessed 24 March 2010.

Seattle Municipal Archives Photograph Collection

1958 "11th Ave NE. Widening from 40th and 11th NE north to 12th NE and Bothell Way. At beginning of operation. Curbs broken out. Looking north from Terry Hall." Orig No: 19550-1, Engineering Department Photographic Negatives. Electronic resource,

http://clerk.ci.seattle.wa.us/~archives/photos/58/400/58085.gif, accessed 24 March 2010.

Shannon & Wilson, Inc.

2009 Draft Geotechnical Report, UW Student Housing Project No. 202707, Seattle, Washington. Submitted to John Lebo, University of Washington Capital Projects Office, Seattle. Copy on file at Cultural Resource Consultants, Inc., Bainbridge Island, Washington.

Smith, Marian W.

1940 The Puyallup-Nisqually. Columbia University Press, New York.

Spier, Leslie

1936 Tribal Distribution in Washington. General Series in Anthropology, Number 3. George Banta Publishing Company, Menasha, Wisconsin.

Suttles, Wayne, and Barbara Lane

1990 Southern Coast Salish. In Handbook of North American Indians, Volume 7: Northwest Coast, pp. 485-502. Smithsonian Institution Press, Washington, D.C.

Thorson, Robert M.

1989 Glacio-isostatic response of the Puget Sound area, Washington. *Geological Society of America Bulletin* 101(9):1163-1174.

Troost, Kathy Goetz, and Derek B. Booth

2008 Landslides and Engineering Geology of the Seattle, Washington, Area. In *Reviews in Engineering Geology* Volume 20, pp. 1-36, edited by Rex. L. Baum, Jonathan W. Godt, and Lynn Highland. Geological Society of America, Boulder, Colorado.

Troost, K. G., D. B. Booth, A. P. Wisher, and S. A. Shimel

2005 The geologic map of Seattle - A progress report, 2005. 1:24,000. Open-File Report 2005-1252. U. S. Geological Survey, Washington, D.C. Tulalip Tribes of Washington, Lummi Indian Tribe, Muckleshoot Indian Tribe, and Upper Skagit Tribe vs. The Suquamish Indian Tribe

1990 Testimony before the District Court of the United States. Proceedings at the District Court of Claims, No 901 F.2d 772. Case on file at

http://www.msaj.com/cases/901F2d772.htm, accessed 30 October 2006.

U.S. Court of Claims

1927 Duwamish et al. vs. United States of America, F-275. U.S. Court of Claims, Washington, D.C.

United States Coast and Geodetic Survey (USC&GS)

1899 T-2421; United States Coast & Geodetic Survey Topographic Sheet, Seattle Bay and City, City from and head of bay, Wash. Ter. 1899. Scale: 1:10,000; Surveyor: J.J. Gilbert

United States Department of Agriculture, Natural Resource Conservation Service (USDA NRCS)

2010 Soil Survey of King County, Washington. Electronic resource,

http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx, accessed 24 March 2010.

United States Geological Survey (USGS)

1895 *Snohomish*. Washington 1:125,000 topographic quadrangles. United States Geological Survey, Washington, D.C. On file at Washington State University Early Washington Maps Digital Collection.

1897 Land classification sheet, Washington, Seattle quadrangle. 1:125,000. United States Geological Survey, Washington, D.C. On file at Washington State University Early Washington Maps Digital Collection.

1983 Seattle North Quadrangle, Washington. 1:24,000. 7.5-Minute Series. United States Geological Survey, Washington, D.C.

United States Surveyor General (USSG)

1856 General Land Office Map, Township 25 North, Range 4 East, Willamette Meridian. Washington State Department of Natural Resources.

1863 General Land Office Map, Township 25 North, Range 4 East, Willamette Meridian. Washington State Department of Natural Resources.

University of Washington

2009 University of Washington West Campus Student Housing Project Phase IA and IB, Final Supplemental Environmental Impact Statement. University of Washington Capital Projects Office, Seattle.

University of Washington Libraries

2008 No Finer Site: The University of Washington's Early Years On Union Bay—VIII. The University District. Electronic resource,

http://www.lib.washington.edu/exhibits/site/udistrict.html, accessed 29 March 2010.

Archaeological Assessment of the University of Washington West Campus Student Housing Project, Seattle, King County Washington CRC Report #374 - 28 - Washington Department of Archaeology and Historic Preservation (DAHP)

2009 Survey and Inventory Standards: Washington State Standards for Cultural Resource Reporting. Electronic document,

http://www.dahp.wa.gov/pages/Documents/documents/ExternalFINAL_008.pdf, accessed 23 December 2009.

2010 Washington Information System for Architectural and Archaeological Records Data (WISAARD). Electronic resource, https://secureaccess.wa.gov/dahp/wisaard/, accessed 12 March 2010.

Waterman, T. T.

ca. 1920 Puget Sound Geography. Unpublished manuscript, Allen Library, University of Washington, Seattle.

1922 The Geographic Names Used by the Indians of the Pacific Coast. *Geographical Review* 12:175-194.

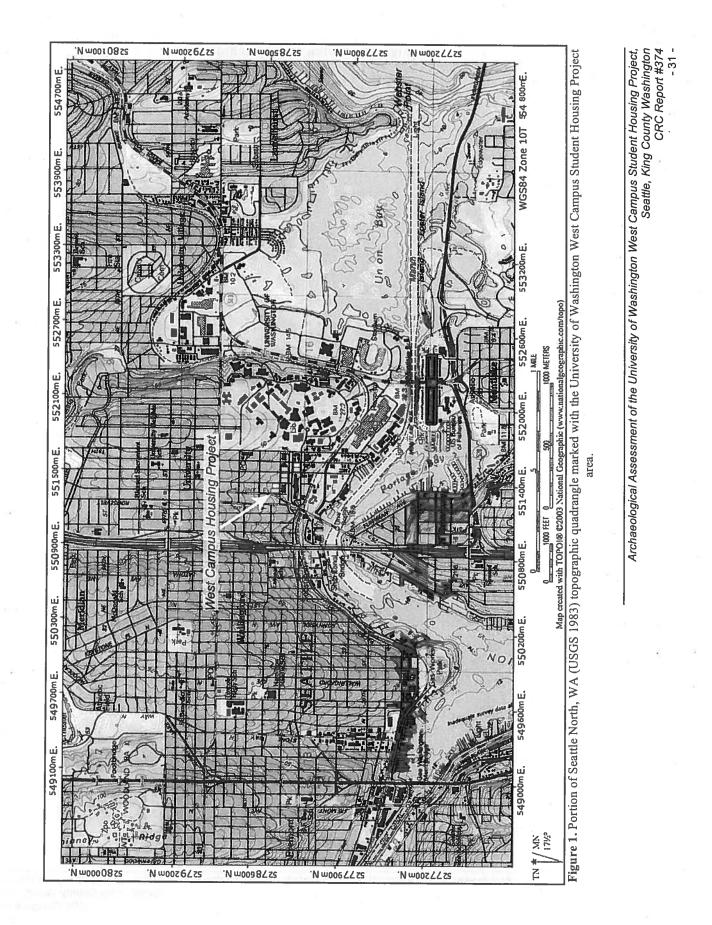
2001 Puget Sound Geography. Vi Hilbert, Jay Miller, and Zalmai Zahir, contributing editors. Lushootseed Press, Federal Way, Washington.

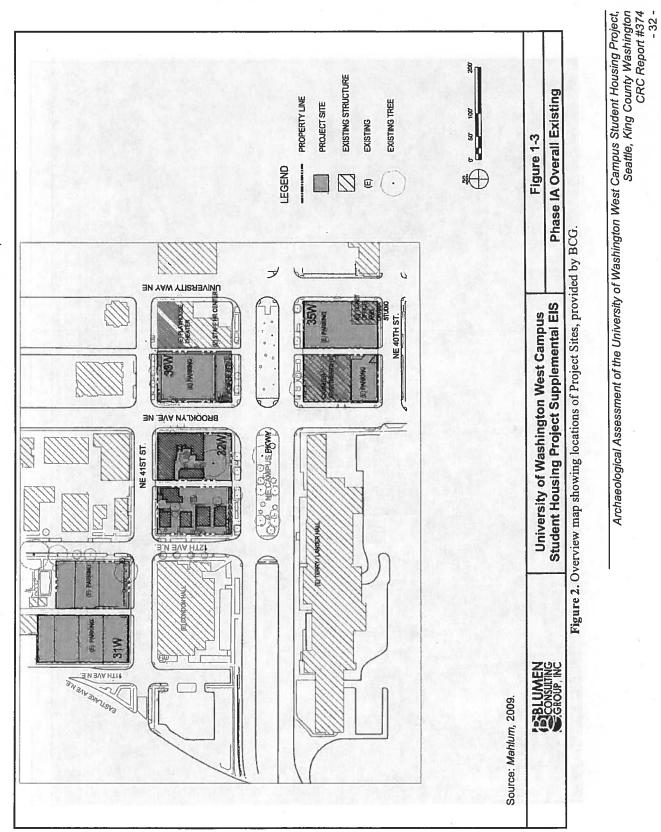
Weaver, Robert M.

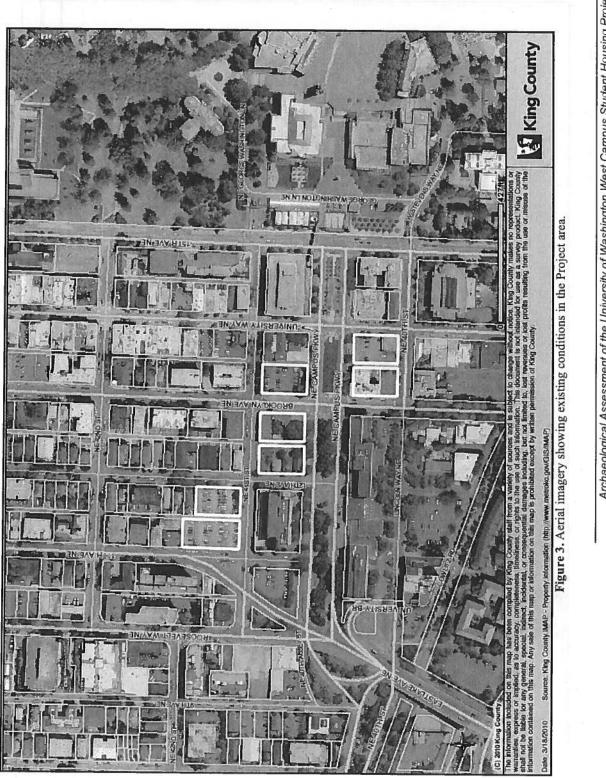
1989 Archaeological and Historical Research Issues: Urban Archaeology in Seattle. *Archaeology in Washington* I:21-29.

Figures, Tables, and Attachments

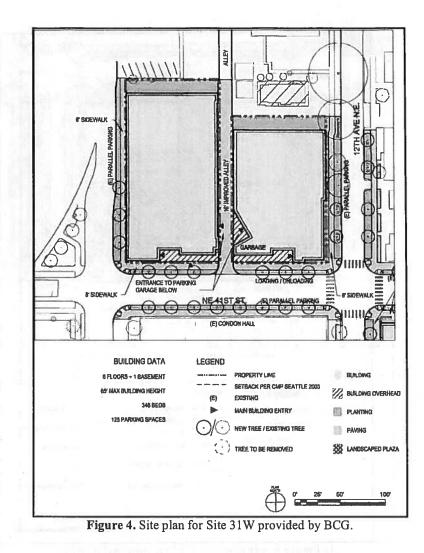
Archaeological Assessment of the University of Washington West Campus Student Housing Project, Seattle, King County Washington CRC Report #374 - 30 -







Archaeological Assessment of the University of Washington West Campus Student Housing Project, Seattle, King County Washington CRC Report #374 - 33 -



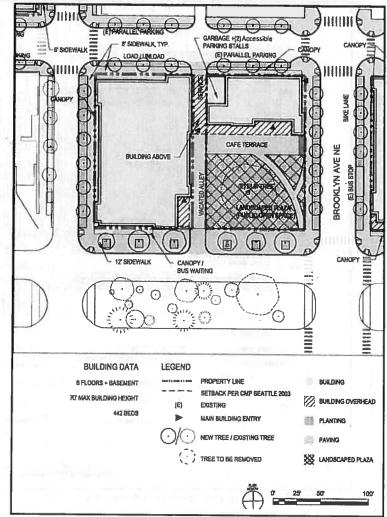


Figure 5. Site plan for Site 32W provided by BCG.

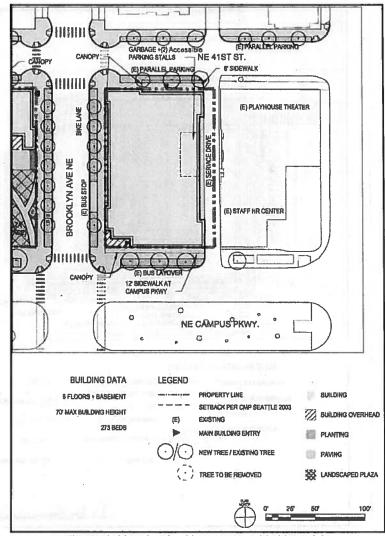
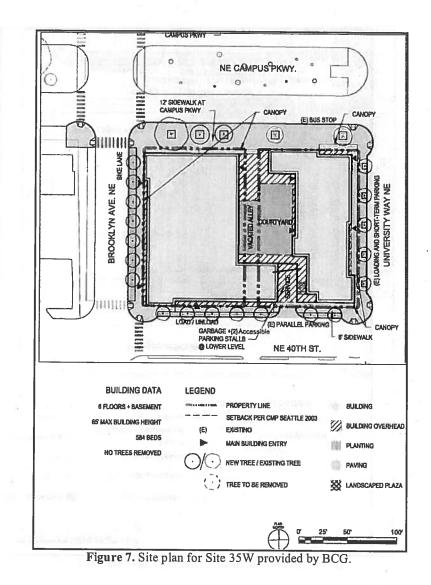


Figure 6. Site plan for Site 33W provided by BCG.



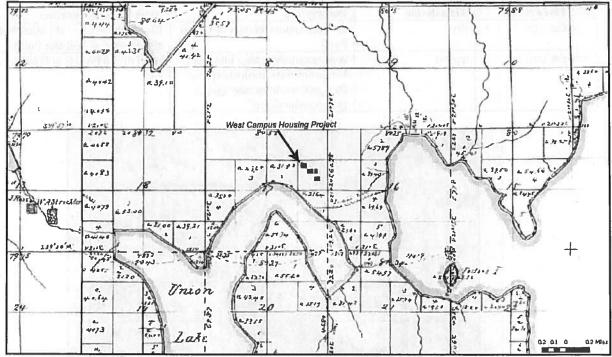


Figure 8. Location of the Project on portion of GLO map (USSG 1856). An "Indian trail" was located approximately 0.25 miles to the southeast.

Table 1. Lushootseed lace names recorded by ethnographers J. P. Harrington (ca. 1909) and T. T. Waterma	1
(1922:189, Figure 1; 2001:77-78, Map 5.6, Table 5.6) within approximately 1 mile of the Project.	

Place Name	Translation	Description	Approximate Location
Waq ³ e'q ³ ab	frog	a small creek entering Lake Union just east of Latona Bridge	West of Project, east of former Latona Bridge (near present-day Lake Washington Ship Canal Bridge)
Baqwob	prairie	"Lake Union, an open space near by"	West of Project at north abutment of former Latona Bridge (just west of present-day Lake Washington Ship Canal Bridge)
Sqwitsqs	little promontory	a tiny promontory jutting into Lake Union	Southeast of Project in location of former University Boat Club boat house (near UW Medical Center)
sLuwi'L	perforation for a canoe	the marsh between Laurel Point and the University of Washington	East of the Project, north of Union Bay (vicinity of Union Bay Natural Area)
Sxwa'tsugwlL	stem means "to lift up"	village location; a place where there was formerly a portage between Lake Washington and Lake Union	Southeast of the Project, south of present-day Montlake Cut
A'did	dear me	a little cove on the west side of Laurel Point, formerly the property of Joe Somers and previously "set aside as a camping place for Indians"	East of the Project, on east side of Union Bay west of Laurel Point

Archaeological Assessment of the University of Washington West Campus Student Housing Project, Seattle, King County Washington CRC Report #374 - 38 -

Place Name	Translation	Description	Approximate Location
Cebûltu	dry	the promontory known as Laurel Point	East of the Project at Laurel Point, also known as Webster Point
Ste'tciL	a prop	A promontory jutting into Lake Union from its north shore, "as though it were leaning against the opposite shore"	West of the Project at Gasworks Park

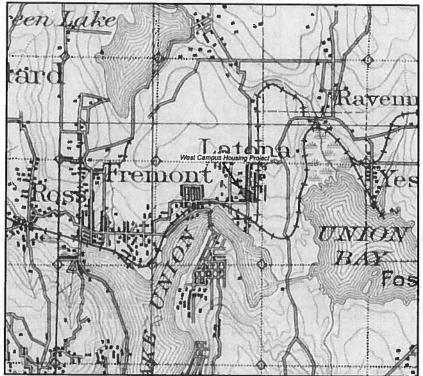


Figure 9. Approximate location of Project on portion of historical topographic quadrangle (USGS 1895). Brooklyn Avenue extends north towards what is now Cowan Park, where a stream flowed from Green Lake to Union Bay on Lake Washington.

Archaeological Assessment of the University of Washington West Campus Student Housing Project, Seattle, King County Washington CRC Report #374 - 39 -

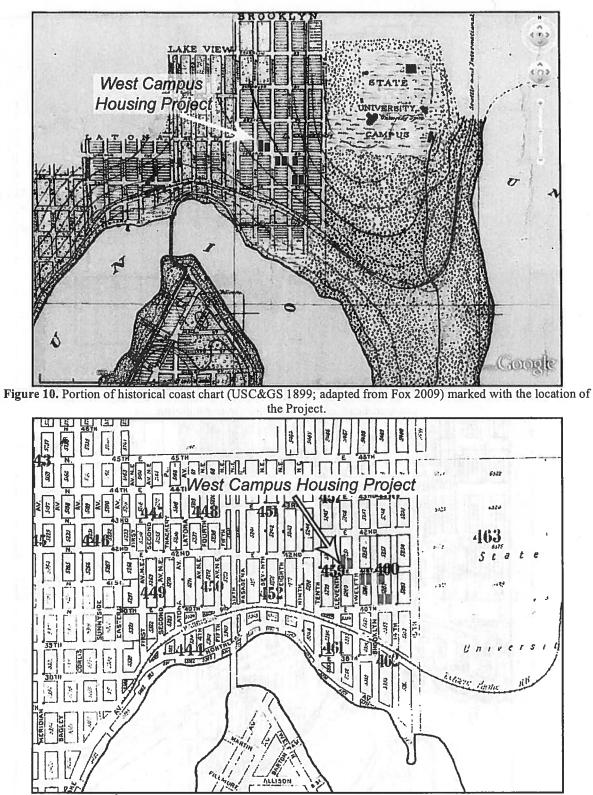
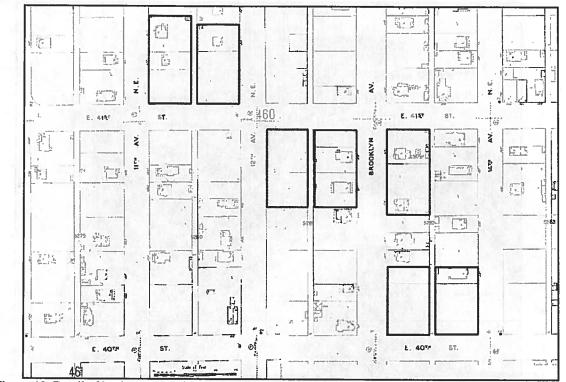
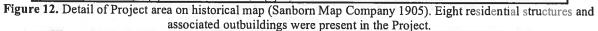


Figure 11. Project location marked on historical map index sheet (Sanborn Map Company 1905).

Archaeological Assessment of the University of Washington West Campus Student Housing Project, Seattle, King County Washington CRC Report #374 - 40 -





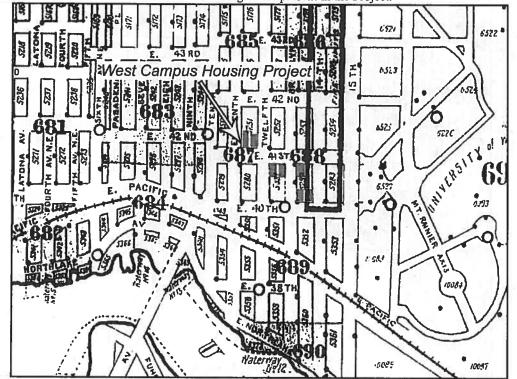


Figure 13. Project location marked on historical map index sheet (Sanborn Map Company 1919).

Archaeological Assessment of the University of Washington West Campus Student Housing Project, Seattle, King County Washington CRC Report #374 - 41 -

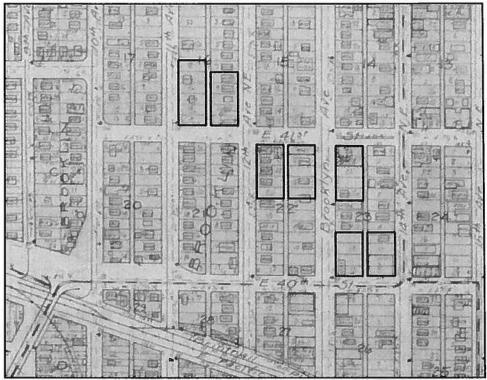


Figure 14. Detail of Project area on historical map (Kroll Map Company 1920). About half of the lots in the Project appear to have been developed by this time. Structures are almost exclusively single-family residences.



Figure 15. Historical aerial imagery (King County 2010) of the Project area in 1936. Lots in the Project are mostly developed. Open spaces appear limited to courtyards and parking areas.

Archaeological Assessment of the University of Washington West Campus Student Housing Project, Seattle, King County Washington CRC Report #374 - 42 -



Figure 16. Detail of Project area on historical map from 1951 (Sanborn Map Company 1905-1951). Apartment and dormitory buildings, single-family residential structures, stores, and garages were present in the Project. Only the lot at the northeast corner of 11th Ave NE and NE 41st St appears vacant.

Table 2. Cultural resource investigations on file at DAHP within approximately 1 mile of the Project.

Author	Date	Title	Results and Recommendations
Kelly	1987	Cultural Resources Survey for the U.S. Sprint Fiber Optic Cable Project Seattle, Washington to Spokane, Washington	Found four historic sites and one archaeological site in proposed cable route. Recommended additional historical research to assess potential impacts to one site. Recommended monitoring at select locations along proposed route. Did not identify any cultural resources in vicinity of current Project.
Nelson, et al.	1996	Report on the Cultural Resources Inventory Completed for the Proposed WorldCom Seattle to Salt Lake City Fiber Optic Line, Part 4, Washington	Identified six historic sites and 19 historic- period archaeological sites in proposed cable route. Recommended confining construction to previously disturbed sediments or routing cable around sites potentially eligible for NRHP to avoid effects. Recommended monitoring in vicinity of recorded sites. No cultural resources identified in vicinity of current Project.

Author	Date	Title	Results and Recommendations	
Courtois, et al.	1998	Sound Transit Central Link Light Rail Draft Environmental Impact Statement: Historic and Archaeological Technical Report	Assessed potential impacts to cultural resources for light rail route, station, and maintenance alternatives. No archaeological sites identified near current Project, but Portage Bay shorelines identified as high-sensitivity areas for archaeology. Recommended review of preferred alternative plans, when available, to identify locations for additional subsurface testing and/or monitoring.	
Courtois, et al.	1999	Sound Transit Central Link Light Rail Final Environmental Impact Statement Final Technical Report: Historic and Prehistoric Archaeological Sites, Historic Resources, Native American Traditional Cultural Properties, Paleontological Sites	Identified potential impacts to cultural resource including historic buildings and archaeological sites. Identified high probability for archaeolo on margins of Portage Bay southwest of curre Project, buried beneath fill. Recommended archaeological monitoring of construction.	
Juell, et al.	2000	Cultural Resources Inventory of the Proposed Washington Light Lanes Project, Route 2 Backbone: Downtown Seattle to Interstate-5 (MP 164), Interstate-5 Seattle to Blaine (MP 164 to MP 276), and Blaine to the Canadian Border	Background research did not locate any previously recorded cultural resources in proposed cable route. Survey did not identify any historic or archaeological sites in vicinity of current Project. Because route avoided cultural resources and construction would occur predominantly in the interstate and previously disturbed urban areas, no further investigations (e.g., monitoring) recommended.	
Rooke	2002	Letter to Jay Grenfell Re: WA- 539 (Cavalier Apartments)	Cultural resources survey for proposed cell tower atop one building within the current Project (Cavalier Apartments on Site 35W). Survey did not find any archaeological sites in vicinity of Project.	
Miller and Blukis Onat	2004	Winds, Waterways, and Weirs: Ethnographic Study of the Central Link Light Rail Corridor	Reviewed historical and ethnographic reports and archival materials, and conducted interviews to provide ethnographic background and cultural landscape model for area that includes the Project vicinity. Included information about Zakuse and Chehsiahud families in vicinity of Project. Documented one TCP on the Duwamish River	
Trudel	2004	Letter to Meredith Redmon, King County Department of Natural Resources and Parks Wastewater Treatment Division Re: Final Archaeological Monitoring of Geotechnical Borings for the Proposed University/Densmore CSO Control System Improvements Project	Conducted archaeological monitoring of geotechnical borings and described stratigraphy. No archaeological sites identified. Sediments observed, combined with results of background research, indicated a low probability for archaeological resources. No additional work recommended.	

Archaeological Assessment of the University of Washington West Campus Student Housing Project, Seattle, King County Washington CRC Report #374 - 44 -

Author	Date	Title	Results and Recommendations
Gillespie, et al.	2008	Cultural Resources Assessment of the University District Post Office, Seattle, King County, Washington	Assessed potential effects to historic and archaeological sites by USPS divestiture of building. No archaeological sites identified, and location considered to have low potential for archaeological sites. Inventoried one historic site (University District Post Office) and recommended it not eligible for NRHP. Recommended finding of "no effects to historic properties." No further investigations recommended.
Walker Gray	2008	Ship Canal Bridge Survey Office-Lease to Lincoln Towing Company	Assessed potential effects to historic and archaeological resources by proposed lease. No archaeological sites identified. Inventoried one historic site (Survey Office) and recommended it not eligible for NRHP. Recommended finding of "no effects to historic properties." No further investigations recommended.
Blukis Onat	2009	University Link Archaeological Resources Monitoring and Treatment Plan	Described archaeological monitoring methods for high-probability areas and provided protocol for actions in event of discovery of archaeological resources and human remains.
CH2M Hill	2009	Supplemental Draft EIS and Section 4(f) Evaluation, SR 520 Bridge Replacement and HOV Program, SR 520: I-5 to Medina Bridge Replacement and HOV Project Cultural Resources Discipline Report.	Identified one recorded archaeological site (45KI760), one TCP (Foster Island), and over 200 historic sites. Made NRHP eligibility recommendations and evaluated potential effects of design alternatives to archaeological sites, traditional cultural properties, and historic properties. Provided options for mitigating, minimizing, and avoiding effects.
Emerson .	2009	Letter to Adam Escalona Re: SE01124A Suzzallo Library	Assessed potential impacts of cell phone antennae installation to cultural resources. No archaeological sites identified. Inventoried one historic site (Suzzallo Library) and recommended it eligible for NRHP. Finding of "no adverse effect" recommended. No further investigations recommended.
Emerson	2009	Letter to Adam Escalona Re: SE01123A Haggett Hall	Assessed potential impacts of cell phone antennae installation to cultural resources. No archaeological sites identified. Inventoried one historic site (Haggett Hall). Recommended finding of "no effects to historic properties." No further investigations recommended.
Emerson	2009	Letter to Adam Escalona Re: SE01126A UW Medical BB Tower	Assessed potential impacts of cell phone antennae installation to cultural resources. No archaeological sites identified. Inventoried one historic site (UW Medical BB Tower). Recommended finding of "no effects to historic properties." No further investigations recommended.

Archaeological Assessment of the University of Washington West Campus Student Housing Project, Seattle, King County Washington CRC Report #374 - 45 -

Table 3. Archaeological sites recorded at DAHP within approximately 1 mile of the Project. DAHP records do not	
include any archaeological sites in or adjacent to the Project.	

Site Number	Site Name	DAHP Site Type	WHR/NRHP Status	Distance . from Project	Potential Project Impacts	Recommended Mitigation
45KI760	Miller Street Dump	Historic debris scatter/concentration	Has not been evaluated for WHR or NRHP.	1 mi SE	None.	N/A

Table 4. Ethnographic place names mapped within approximately 1 mile of the Project by King County HistoricPreservation Program (C. Sundberg, King County Preservation Planner, electronic transmittal to M. Berger, CRCArchaeologist).

King County Inventory No.	Location	Description		
7260	½ mi SE	"Indian Trail" on GLO map (USSG 1856)		
7264	1 mi SW	Waterman (1922:189) recorded "a promontory jutting into Lake Union from its northern shore." Polygon based on Waterman (1922:179, 189) description and map. Place name means "a prop" (Waterman 1922:189). Denny (1909:100) described a "black raspberry patch" in this area. Location is currently called Gas Works Park.		
7265	½ mi W	Waterman (1922:189) described "a 'prairie' or open space." Polygon based of Waterman (1922:179,189) description and map. Place name means "prairie" (Waterman 1922:189). Prairie may have been smaller or larger than polygon which encircles place indicated in Waterman (1922:179) map.		
7266	1/3 mi W	Waterman (1922:179,189) described "a small creek entering Lake Union." Polygon based on Waterman (1922:179,189) description and map. Place name means "frog" (Waterman 1922:189).		
7267	½ mi S	Waterman (1922:189) described "a tiny promontory jutting into Lake Union." Polygon based on Waterman (1922:179,189) description and map. Identification of location of 1917 boathouse would help pinpoint place. Place name means "little promontory" (Waterman 1922:189).		
7268	¾ mi W	Waterman (1922:189) described "the marsh lying between Laurel Point and the buildings of the University of Washington." Polygon based on Waterman (1922:179,189) description and map, U.S. Surveyor General (1856b) map, and McKee and Reynolds (1894). Place name means "perforation for a canoe" (Waterman 1922:189).		
7342	1 mi SSE	A village site - Waterman (1922:192 described "a place where there was formerly 'portage' from Lake Washington to Lake Union." Polygon based on Waterman (1922:179, 192) and U.S. Surveyor General (1856) map. Petite (1954) reported a winter village at this place. Place name means "where one lifts his canoe" (Waterman 1922:192).		
7343	1 mi S	Waterman (1922:192) described "the flats at the southern end of the bight in Lake Union, facing the University of Washington campus." Polygon based on Waterman (1922:179) map and U.S. Surveyor General (1856b). Place name means "marsh" or "wet flats" (Waterman 1922:192).		
7452	¾ mi S	Waterman (ca. 1920:161) recorded "a large stream entering Sammamish River from the north, North Creek." Polygon based on Waterman (ca. 1920) Site Map of Puget Sound. Place name not translated by Waterman (ca. 1920:161) or Hilbert, et al. (2001:113).		

Archaeological Assessment of the University of Washington West Campus Student Housing Project, Seattle, King County Washington CRC Report #374

^{- 46 -}

 Table 5. Archaeological materials and sites approximately 1 mile of the Project reported to Burke Museum

 Archaeology Section and King County Historic Preservation Program but not recorded at DAHP. These records do not include any archaeological sites in or adjacent to the Project.

Record Number	Description	Distance from Project	Potential Project Impacts	Recommended Mitigation	
(UW Greenhouse)	Found in 2009, consists of "two chipped stones and a projectile point near the Botany Greenhouse on the south portion of University of Washington campus. No <i>in situ</i> artifacts were observed – most likely the artifacts were redeposited during the construction of the railroad (where Burke Gilman trail currently lies)" (Phillips, et al. 2009)		None.	N/A	
1156	Burial "found in excavating in gravel pit about 4 ft. underground on 3200 Blk. Union Bay Place, near end of trestle to Laurelhurst, Seattle, Wash." No additional information is available.	1+ mi ENE	None.	N/A	
1158	Burial; steam shovel crew and Deputy Coroner Frank Koepfli uncovered a Native American burial at East 43rd Street and 36th Avenue Northeast, Seattle, on November 16, 1920. No funerary objects were reportedly found. No additional information is available.	1+ mi ENE	None.	N/A	
1169	Erde Sun reported finding several "large" obsidian cores in the garden of her rented home. No additional information is available.	¾ mi WSW	None.	N/A	
1-792	Stone adze blade found 1898 in "a blackberry patch on Stone Way near Lake Union."	1¼+ mi WSW	None.	N/A	
1-976	Triangular gray chert point with slightly concave base found on UW campus in 1908 "when they were clearing for the Alaska-Yukon-Pacific Exposition."	¼+ mi SE	None.	N/A	
1-977	Red chert basal-notched stemmed point found on UW campus in 1908 "when they were clearing for the Alaska-Yukon-Pacific Exposition."	¼+ mi SE	None.	N/A	
2008-24/1	Side-notched gray chert projectile point found ca. 1975 at north end of Fairview Ave.	½ mi SW	None.	N/A	
4647	Net weight or other groundstone tool found in 1919.	Location not reported.	None.	N/A	
4648	Small stone hammer found in 1919. "May not be an artifact (no apparent modifications)."	Location not reported.	None.	N/A	
4702	Bifacially flaked side-notched chert point with convex base. Found in 1896 "a short distance from the portage of Union Bay."	³ ⁄ ₄ + mi SE	None.	N/A	

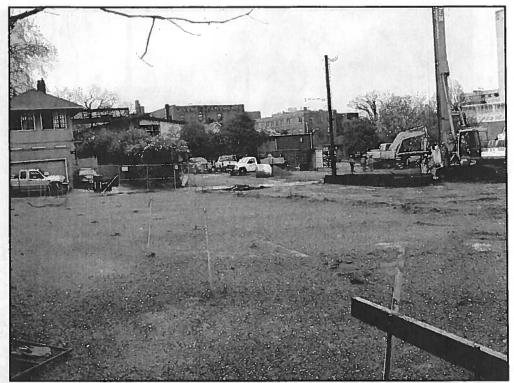


Figure 17. Typical conditions at Site 31W as observed in archaeological reconnaissance survey. Photograph faces southwest from the northwestern corner of the Site.



Figure 18. Site preparation work at Site 31W. Photograph faces north.

Archaeological Assessment of the University of Washington West Campus Student Housing Project, Seattle, King County Washington CRC Report #374 - 48 -



Figure 19. Typical conditions in Site 32W. Photograph faces north from the south side of the Site.



Figure 20. Conditions in the western half of Site 32W, where yards have been filled and graded above street elevation. Photograph faces east.

Archaeological Assessment of the University of Washington West Campus Student Housing Project, Seattle, King County Washington CRC Report #374 - 49 -



Figure 21. Typical conditions in Site 33W. Photograph faces southwest from northeast corner of Site.



Figure 22. Typical conditions in Site 35W. Photograph faces north from south side of Site.

Archaeological Assessment of the University of Washington West Campus Student Housing Project, Seattle, King County Washington CRC Report #374 - 50 - Attachment A. Copies of technical correspondence between CRC and the Duwamish Tribe, Muckleshoot Tribe, and Suquamish Tribe.

> Archaeological Assessment of the University of Washington West Campus Student Housing Project, Seattle, King County Washington CRC Report #374 - 51 -



Cultural Resource Consultants, Inc.

March 12, 2010

Muckleshoot Tribe Laura Murphy 39015 172nd Ave SE Auburn, WA 98092

Re: Cultural Resources Assessment for the UW Campus Housing Project, Seattle, King County, WA

Dear Laura:

I am writing to inform you of a cultural resources assessment for the above referenced project. Cultural Resource Consultants, Inc. (CRC) is conducting this assessment at the request of Blumen Consulting Group. Blumen is requesting this assessment of the University of Washington (UW) West Campus Student Housing Project. Four locations need archaeological review: Locations 31W, 32W, 33W and 35W.

Location 31W is comprised of 37,082 square feet and bounded by 11th Ave NE/Eastlake Ave NE to the west, NE 41st St and Condon Hall to the south, 12th Ave NE and multi-family residential buildings to the east and single family residences and the Clifton apartment building to the north. A 14-foot wide north/south mid-block alley bisects the location from NE 41st St north to NE 42nd St. Location 31W consists of a gravel UW parking lot (Lot W2) with 143 parking spaces.

Location 32W is a full block location comprised of 35,216 square feet including 2,237 square feet held in public right of way associated with an onsite alley. Location 32W is bounded by 12th Ave NE and Condon Hall to the west, NE Campus Parkway to the South, Brooklyn Ave NE and a 43-space paved parking lot to the east (Location 33W), and NE 41st St and multi-family residential buildings to the north. The western portion of Location 32W consists of five small structures (former single-family residences) that are either vacant or currently used as offices for UW organizations/staff. The northeastern portion of Location 32W contains the 3-story Brooklyn Building, which is currently vacant. MUP Application #3009692 has previously been submitted for the demolition of the Brooklyn Apartment building and one small structure located at 1209 NE 41st Street.

Location 33W is a half-block location comprised of 17,604 square feet and is bounded by Brooklyn Ave NE and Location 32W to the west, NE Campus Parkway to the south, the UW Staff Human Resources Center and the UW Playhouse Theater to the east (a north/south service drive between NE 41st St and NE Campus Parkway is located between the location and the Human Resources and

Playhouse Buildings) and NE 41st St and a privately-owned parking lot to the north. Location 33W consists of paved parking lot (University Lot W4), which is comprised of 42 parking spaces.

Location 35W is a full-block location comprised of 35,261 square feet including 2,245 square feet currently held in public right of way associated with an onsite alley. Location 35W is bounded by Brooklyn Ave NE and Terry-Lander Residence Hall to the west, NE 40th St and UW academic and office buildings to the south, University Way NE and the College Inn to the east and NE Campus Parkway to the north. The western portion of Location 35W consists of the 5-story Cavalier Apartment Building, which is comprised of 48 apartment units. The eastern portion of Location 35W consists of the UW Arts Ticket Office, the 1,500 sq. ft. Drama Studio and 1,300 square feet of office space. A University-owned parking lot (Lot W6) is located onsite and includes 56 parking spaces. 14-foot wide north/south mid-block alley bisects the location from NE Campus Parkway to NE 40th St.

CRC is in the process of reviewing available information. Background research will include a site files search at the Washington State Department of Archaeology and Historic Preservation (DAHP), review of previously recorded cultural resource reports, and review of pertinent published literature and ethnographies. Results of our investigations will be presented in a technical memo.

We are aware that not all information is contained within published sources. Should the Tribe have additional information to support our assessment, we would very much like to include it in our study. Please contact me should you wish to provide any comments. I appreciate your assistance in this matter and look forward to hearing from you.

Sincerely,

Dem Startmon

Glenn D. Hartmann President/Principal Investigator



Cultural Resource Consultants, Inc.

March 12, 2010

Suquamish Tribe Dennis Lewarch 15838 Sandy Hook Rd PO Box 498 Suquamish, WA 98392-0498

Re: Cultural Resources Assessment for the UW Campus Housing Project, Seattle, King County, WA

Dear Dennis:

I am writing to inform you of a cultural resources assessment for the above referenced project. Cultural Resource Consultants, Inc. (CRC) is conducting this assessment at the request of Blumen Consulting Group. Blumen is requesting this assessment of the University of Washington (UW) West Campus Student Housing Project. Four locations need archaeological review: Locations 31W, 32W, 33W and 35W.

Location 31W is comprised of 37,082 square feet and bounded by 11th Ave NE/Eastlake Ave NE to the west, NE 41st St and Condon Hall to the south, 12th Ave NE and multi-family residential buildings to the east and single family residences and the Clifton apartment building to the north. A 14-foot wide north/south mid-block alley bisects the location from NE 41st St north to NE 42nd St. Location 31W consists of a gravel UW parking lot (Lot W2) with 143 parking spaces.

Location 32W is a full block location comprised of 35,216 square feet including 2,237 square feet held in public right of way associated with an onsite alley. Location 32W is bounded by 12th Ave NE and Condon Hall to the west, NE Campus Parkway to the South, Brooklyn Ave NE and a 43-space paved parking lot to the east (Location 33W), and NE 41st St and multi-family residential buildings to the north. The western portion of Location 32W consists of five small structures (former single-family residences) that are either vacant or currently used as offices for UW organizations/staff. The northeastern portion of Location 32W contains the 3-story Brooklyn Building, which is currently vacant. MUP Application #3009692 has previously been submitted for the demolition of the Brooklyn Apartment building and one small structure located at 1209 NE 41st Street.

Location 33W is a half-block location comprised of 17,604 square feet and is bounded by Brooklyn Ave NE and Location 32W to the west, NE Campus Parkway to the south, the UW Staff Human Resources Center and the UW Playhouse Theater to the east (a north/south service drive between NE 41st St and NE Campus Parkway is located between the location and the Human Resources and

Playhouse Buildings) and NE 41st St and a privately-owned parking lot to the north. Location 33W consists of paved parking lot (University Lot W4), which is comprised of 42 parking spaces.

Location 35W is a full-block location comprised of 35,261 square feet including 2,245 square feet currently held in public right of way associated with an onsite alley. Location 35W is bounded by Brooklyn Ave NE and Terry-Lander Residence Hall to the west, NE 40th St and UW academic and office buildings to the south, University Way NE and the College Inn to the east and NE Campus Parkway to the north. The western portion of Location 35W consists of the 5-story Cavalier Apartment Building, which is comprised of 48 apartment units. The eastern portion of Location 35W consists of the UW Arts Ticket Office, the 1,500 sq. ft. Drama Studio and 1,300 square feet of office space. A University-owned parking lot (Lot W6) is located onsite and includes 56 parking spaces. 14-foot wide north/south mid-block alley bisects the location from NE Campus Parkway to NE 40th St.

CRC is in the process of reviewing available information. Background research will include a site files search at the Washington State Department of Archaeology and Historic Preservation (DAHP), review of previously recorded cultural resource reports, and review of pertinent published literature and ethnographies. Results of our investigations will be presented in a technical memo.

We are aware that not all information is contained within published sources. Should the Tribe have additional information to support our assessment, we would very much like to include it in our study. Please contact me should you wish to provide any comments. I appreciate your assistance in this matter and look forward to hearing from you.

Sincerely,

Dem Startmon

Glenn D. Hartmann • President/Principal Investigator



Cultural Resource Consultants, Inc.

March 12, 2010

Duwamish Tribe James Rasmussen 4717 West Marginal Way SW Seattle, WA 98106

Re: Cultural Resources Assessment for the UW Campus Housing Project, Seattle, King County, WA

Dear James:

I am writing to inform you of a cultural resources assessment for the above referenced project. Cultural Resource Consultants, Inc. (CRC) is conducting this assessment at the request of Blumen Consulting Group. Blumen is requesting this assessment of the University of Washington (UW) West Campus Student Housing Project. Four locations need archaeological review: Locations 31W, 32W, 33W and 35W.

Location 31W is comprised of 37,082 square feet and bounded by 11th Ave NE/Eastlake Ave NE to the west, NE 41st St and Condon Hall to the south, 12th Ave NE and multi-family residential buildings to the east and single family residences and the Clifton apartment building to the north. A 14-foot wide north/south mid-block alley bisects the location from NE 41st St north to NE 42nd St. Location 31W consists of a gravel UW parking lot (Lot W2) with 143 parking spaces.

Location 32W is a full block location comprised of 35,216 square feet including 2,237 square feet held in public right of way associated with an onsite alley. Location 32W is bounded by 12th Ave NE and Condon Hall to the west, NE Campus Parkway to the South, Brooklyn Ave NE and a 43-space paved parking lot to the east (Location 33W), and NE 41st St and multi-family residential buildings to the north. The western portion of Location 32W consists of five small structures (former single-family residences) that are either vacant or currently used as offices for UW organizations/staff. The northeastern portion of Location 32W contains the 3-story Brooklyn Building, which is currently vacant. MUP Application #3009692 has previously been submitted for the demolition of the Brooklyn Apartment building and one small structure located at 1209 NE 41st Street.

Location 33W is a half-block location comprised of 17,604 square feet and is bounded by Brooklyn Ave NE and Location 32W to the west, NE Campus Parkway to the south, the UW Staff Human Resources Center and the UW Playhouse Theater to the east (a north/south service drive between NE 41st St and NE Campus Parkway is located between the location and the Human Resources and

Playhouse Buildings) and NE 41st St and a privately-owned parking lot to the north. Location 33W consists of paved parking lot (University Lot W4), which is comprised of 42 parking spaces.

Location 35W is a full-block location comprised of 35,261 square feet including 2,245 square feet currently held in public right of way associated with an onsite alley. Location 35W is bounded by Brooklyn Ave NE and Terry-Lander Residence Hall to the west, NE 40th St and UW academic and office buildings to the south, University Way NE and the College Inn to the east and NE Campus Parkway to the north. The western portion of Location 35W consists of the 5-story Cavalier Apartment Building, which is comprised of 48 apartment units. The eastern portion of Location 35W consists of the UW Arts Ticket Office, the 1,500 sq. ft. Drama Studio and 1,300 square feet of office space. A University-owned parking lot (Lot W6) is located onsite and includes 56 parking spaces. 14-foot wide north/south mid-block alley bisects the location from NE Campus Parkway to NE 40th St.

CRC is in the process of reviewing available information. Background research will include a site files search at the Washington State Department of Archaeology and Historic Preservation (DAHP), review of previously recorded cultural resource reports, and review of pertinent published literature and ethnographies. Results of our investigations will be presented in a technical memo.

We are aware that not all information is contained within published sources. Should the Tribe have additional information to support our assessment, we would very much like to include it in our study. Please contact me should you wish to provide any comments. I appreciate your assistance in this matter and look forward to hearing from you.

Linder and the failing half of heath an official

a first for a single fifth of the first for all seven to the Soft Size Billion and

DI HER IN BR

Sincerely,

when the second product of the second states of the second states and the second states of th Dem Startenon

Glenn D. Hartmann President/Principal Investigator