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Naval Facilities Engineering Command
November 1996

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Draft Environmental Impact Statement Reuse of Naval Station Puget Sound, Sand Point

Seattle, Washington

Volume 2
(Appendixes A through M)

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Appendix B

SCOPING COMMENTS SUMMARY

SCOPING COMMENTS
SUMMARY

METHOD OF RESPONSIVENESS

The purpose of the EIS is to evaluate the effects that may result from the plans and alternative analyzed and to propose mitigating measures to minimize those impacts on the built and natural environments. The EIS also identifies irretrievable and irreversible resource commitments and unavoidable adverse impacts. A substantial number of comments received proposed mitigating measures and stated personal preferences for the reuse of Sand Point. Because the EIS evaluates the effects of the proposed alternatives, comments received expressing preferences for the reuse of Sand Point are considered outside of the scope of this EIS. Comments proposing mitigating measures will be considered, based on EIS criteria for evaluating mitigating measures.

Comment summaries are listed in the subsections below and are organized according to the format of the EIS.

LAND USE

Relevant Policies, Plans, and Regulations

The EIS should analyze the regulatory framework under which the new users and owners of the base will be governed and determine the impact on the neighborhood. Comment letters requested analysis of what impact compliance to City of Seattle building and zoning codes and other applicable regulations would have on the two reuse plans.

Historic and Cultural Resources

The EIS should determine the impact of each plan on the existing cultural and historical resources in the Sand Point area, specifically historical uses of Sand Point. Historic buildings at Sand Point should be retained.

SOCIOECONOMICS

Demographics

Concern was raised regarding effects related to increased student populations from the University of Washington student multifamily housing and the Native American College. The homeless housing proposal raised concerns regarding impacts that may be associated with an increase in homeless individuals. These concerns included the effect of

providing for additional homeless children residing in the neighborhood and the resulting effect on neighborhood schools. The changing demographics in the neighborhood, including the effects of xenophobia and racism, should also be considered in the EIS.

Property Values

Significant concerns were raised regarding the effect of each plan on area property values.

Social

Social concerns centered around the effects of providing for the homeless population, including employment, health care, security, and available staffing resources and about the possible impact of homeless housing becoming a "project" on housing residents and the neighborhood. Treatment programs raised concerns regarding resident supervision and security. The positive benefits of providing education programs for the Native American population and the long-term benefits to the Native American population should also be discussed in the EIS.

RECREATION

The effect of both plans on current users of Magnuson Park and Matthews Beach should be assessed. The analysis should compare existing, available recreation opportunities with those provided in each plan. Level of use and the ability of individuals to access Magnuson Park and the Burke-Gilman Trail were specifically requested. The analysis should also include the impacts of shoreline access for recreation.

TRANSPORTATION

The analyses of transportation impacts that were requested were specific to the Sand Point neighborhood and roads on base. Most requests included direct and indirect and cumulative impact analysis of each plan and suggested potential mitigation measures. The following list identifies areas of concern:

- Marina traffic through the Ballard Locks
- Regional transit and the proposed light rail system
- Vehicles types including light and heavy delivery trucks, busses, commuter vehicles, and bike traffic and their effect on the existing roadbed on Sand Point and on the Sand Point neighborhood

- N.E. 65th Street speeds
- Access to Magnuson Park and access to Parkpoint Condominiums from Sand Point way near N.E. 65th Street
- Mass transit
- Bike traffic on the Burke-Gilman Trail and bike access to Magnuson Park
- Emergency access to hospitals
- Congestion on N.E. 75th Street, Sand Point Way to Montlake Blvd, Montlake Bridge, and N.E. 95th Street
- Pedestrian safety crossing Sand Point Way from arterial streets and the Sand Point neighborhoods
- Traffic circulation patterns through existing residential areas and on base
- Through street at N.E. 70th Street
- Availability of parking for existing residents and visitors to the Sand Point neighborhood

The following mitigation measures are proposed:

- Keep existing neighborhood overflow parking area along the fence on Sand Point Way.
- Do not make N.E. 70th Street a through street to Sand Point.
- Provide a safe pedestrian walkway along N.E. 65th Street to Magnuson Park.
- Reduce speeds on N.E. 65th Street.
- Create a one-way turn lane to N.E. 65th Street.

CLEANUP ACTIONS

EIS inclusion of cleanup activities related to hazardous wastes were requested, specifically, underground fuel tanks and aviation fuel line, lead paint, asbestos, and potential, on-base soil contamination. Future use and subsequent potential risk of

contamination should be addressed. Analysis of continued and long-term use of the steam plant and the conditions in Buildings 5, 6, 9, 26N, 224, 330, 331, and 332 was requested.

NOISE

Areas of concern included direct and cumulative effects of noise levels created by the two reuse plans, specifically, levels from boat and marina activities, fishing vessel traffic, commercial activities, traffic, and proposed housing.

PUBLIC SERVICES AND UTILITIES

Utilities

The cost of renovating the existing utility systems and analysis of the existing services was requested, including light, sewer, and garbage services.

Public Services

Impact of both plans on existing public services, identification of new services required, and the cost of increased services to the area should be discussed in the EIS.

PUBLIC HEALTH AND SAFETY

Public Safety

Analysis was requested to determine the effect of each plan on area crime rates, including vandalism, robbery, theft, violent crime, and drug sale and use. Requests included the analysis of the level of crime associated with the homeless population when housing is/is not provided and the analysis and comparison of the crime rate in the Sand Point area with other areas in Seattle located next to Seattle Housing Authority sites. An analysis of leaving any buildings under utilized or not used, including the chances of vandalism, fire, and threats to personal safety and security of the residents in the area was raised.

Issues raised associated with an increased student population included student behavior, vandalism, drug dealing, drug use, and litter.

The cost of security for the area after Naval security forces leave the base should be determined and should include a discussion of the City's ability to replace existing Navy security.

Mitigations proposed were entrant screening for homeless and low-income housing, small-scale treatment programs, on-site services and treatment centers, limit on families with adolescents, immediate families only, enforcement of occupancy limits, 50 percent mix of market rate housing included in the types of housing provided, one or two controlled-access points to the base, surveillance cameras, additional police protection and metal detectors, street lighting for Sand Point Way and other arterials, and lighting for the Burke-Gilman Trail.

ENERGY AND CONSERVATION

Analysis of resource consumption levels for each plan should include the effect of converting the steam plant to another heating system.

SOILS, GEOLOGY, TOPOGRAPHY, AND SEISMICITY

Both proposals plan to use the marina area in the north end of the base. Dredging and dredging spoil disposal plans for both plans were concerns. Existing soil contamination was also mentioned. Seismicity is a concern with regard to the structural integrity of existing buildings and safety of potential users.

BIOLOGICAL RESOURCES

Habitat

Concerns were raised regarding the potential cumulative effects of both reuse plans on the existing habitat at Magnuson Park, Lake Washington, and the Thornton Creek project. Concerns included the effect of boat wakes on the shoreline of Lake Washington and natural islands created by the Thornton Creek project. The proposed fish hatchery and biological experiment area raised concerns about the effect on existing native species and water quality. The effects on current wildlife inventories and an analysis of the impact of the sailing center, different types of marina moorage and ships on Pontiac Bay to salmon, steelhead, duck, geese, terns, and grebes populations, including nesting and feeding habitat, were concerns.

Wetlands

Analysis of the effects of the re-creation of Mud Lake, including impacts on Lake Washington, was a concern.

WATER QUALITY

Analysis of the following concerns was requested: surface drainage and runoff into Lake Washington, impacts of the proposed re-creation of Mud Lake, fishing vessel discharge and spillage into Lake Washington, and impacts from the proposed fish hatchery and experiment area; water flow and waves in the marina area/sailing center; impact analysis of the alternatives on the underground water table; and water quality impacts from increased traffic, parking, and commercial and light industrial activities.

AIR QUALITY

Concerns included the cumulative and individual effects of industry and traffic associated with both plans and the levels at Montlake, SR 520, and within the Sand Point area neighborhoods during peak and off-peak hours.

VISUAL RESOURCES

Concern was raised regarding visual impacts from the residential area overlooking Sand Point. Areas specifically mentioned were the marina area, commercial areas, homeless and student housing area, and light industry/manufacturing area. Additional lighting and night glare associated with commercial activities, the sporting complexes and street lighting were also concerns raised. Views of the park between NOAA campus areas and Sand Point Way were mentioned.

No high-rise buildings should be constructed on Sand Point. Nonreflective lighting should be required.

ALTERNATIVES

A majority of letters requested that the EIS address specific alternatives that represented their preference for use of the base. Most alternatives were preferences for different segments of each proposed plan. Suggested alternatives that are part of the two reuse plans are evaluated in the EIS as part of the analysis of each plan. Suggested alternative uses that are not included in either proposed reuse plan and that will not be analyzed in the EIS are listed below:

- Convert Sand Point to open space and/or a continuation of Magnuson Park
- Have no homeless or transition housing

- Provide a restricted, small-scale housing program with a treatment center and screen users
- Use Building 11 and mooring space for the Sea Scouts and other youth organizations
- Have no student housing
- Have no vocational college
- Use Sand Point for an upscale mix of commercial, retail, and residential uses
- Set aside a portion of Sand Point for cooperative and family gardens
- Restrict Tribe use of Sand Point by prohibiting development of casino gambling, liquor, or firecracker sales
- Provide a baseline evaluation of Sand Point as a fully functioning base representing historical use levels
- Provide a baseline evaluation of the site as open space only
- Retain the shooting range

Appendix C

CITY OF SEATTLE REUSE PLAN

City of Seattle Community Preferred Reuse Plan for Sand Point

Options to the City Plan

SAND POINT COMMUNITY LIAISON COMMITTEE

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Michael Buchman, Seattle-King County Coalition for the Homeless
Mary Clark, Laurelhurst Community Club
Susan Clark, Inverness Community Association
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Frederick Wilmoth, Inverness Community Association
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City of Seattle

COMMUNITY PREFERRED REUSE PLAN for SAND POINT

Adopted by City Council, November 22, 1993

City of Seattle
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INTRODUCTION

By Fall 1995, the United States Navy will vacate the Naval Station Puget Sound at Sand Point, a 151-acre parcel of property located along Sand Point Way NE and adjacent to Lake Washington. The closure of the Base presents a unique opportunity to convert to broader public use military property and facilities, with great potential benefit to the people of Seattle and the Puget Sound region. The Preferred Reuse Plan for Sand Point — the product of two years of joint effort by Mayor Norm Rice, City Councilmembers, City staff, and the community — reflects our recognition of the opportunity to meet a variety of needs: open space, recreation, housing, education, and community, arts and cultural activities.

This document provides: (Section I) an explanation of the vision, goals, and key considerations for reuse of the Navy Base; (Section II) a description of the six Activity Areas identified for future development; (Section III) discussion of the Base's infrastructure and issues which must be addressed when the property is converted to civilian use; (Section IV) anticipated impacts surrounding conversion of the Base, including costs to the City; and (Section V) discussion of ownership, acquisition and management strategies that would result in effective implementation of the preferred uses.

BACKGROUND

In 1922, the United States Navy established the Puget Sound Air Station on 366 acres along the shores of Lake Washington, at what is now 7500 Sand Point Way NE. The facilities were expanded during World War II and served as an airport until 1970. Three years later, the Navy surplused 215 acres of the property, which were divided between the City of Seattle and the federal government. The surplused area is now home to the National Oceanic and Atmospheric Administration (NOAA) and the City of Seattle's Warren G. Magnuson Park. The remaining 151 acres of the Naval Air Station were renamed Naval Station Puget Sound, which has served as an administrative facility, and includes a small research facility for the U.S. Fish and Wildlife Service.

In the mid-1980s, the Navy announced plans to consolidate and relocate many of its West Coast operations — including programs housed at Sand Point — to the Everett Homeport. In addition, in 1990 the United States Congress passed the Defense Base Closure and Realignment Act (DBCRA), which legislated the closure of several military facilities across the nation. The Naval Station Puget Sound was among the facilities closed as a result of the Act, and the Sand Point Command began the lengthy and complex process of preparing the Base for closure. At the same time — at the Navy's request — the City of Seattle began to plan for conversion of the Base to other uses. Listed below is a summary of the activities that have taken place since the Navy announced the closure of Sand Point.

October 1991	The Navy asked the City of Seattle to take the lead in developing a local plan for reuse of Base property and facilities.
November 1991	Mayor Rice directed the Planning Department to coordinate, and asked the Sand Point Community Liaison Committee to assist in, the development of reuse concepts.
March 1992	Community meetings were conducted to solicit input from citizens and organizations on potential reuses.
June 1992	The preliminary report on reuse alternatives was published and additional community input solicited.
October 1992	The Seattle City Council adopted ***Recommended Reuse Concepts for the Naval Station Puget Sound, Sand Point,*** describing alternatives for reuse of the Base.
April 1993	The City accelerated planning for Sand Point reuse in order to submit a preferred reuse plan by late Fall 1993.
June 1993	Community Liaison Committee prepared its own draft ***Citizens' Preferred Sand Point Reuse Plan*** and solicited community input.
July 1993	The City conducted three community planning workshops to gather further

public input on proposed reuses and criteria for establishing preferred uses.

September 1993 The City published the ***Mayor's Preferred Reuse Plan for Sand Point.***

October 1993 The City Council reviewed, and conducted a public hearing on, the Mayor's Preferred Reuse Plan for Sand Point.

November 1993 The ***City of Seattle's Preferred Reuse Plan for Sand Point*** is adopted by City Council and submitted to the U. S. Navy.

TIMELINE OF FUTURE REUSE PLANNING ACTIVITIES FOR SAND POINT

1994

- Public Benefit Discount and McKinney Applications to be submitted to Navy and administering federal agencies;
- City to develop reuse implementation, zoning, and finance plans;
- Navy to prepare Environmental Impact Statement and issue statement of record on disposition of property.

1995

- Navy to complete Base Realignment and Closure (BRAC) Cleanup Plan;
- Naval Station Puget Sound to close at Sand Point and complete property disposal process;
- City and partners to begin reuse of Sand Point.

The Clinton Administration has indicated that for communities experiencing Base closure, the decisions regarding disposal of military property should be guided by locally-developed reuse plans. Under federal law, the Secretary of the Navy has the power to make the final decisions regarding the disposal and transfer of Navy Base property. The Navy, however, must follow other federal requirements.

Under federal law, the first decisions regarding disposal of the Base to be made by the Navy will focus on proposals by two federal agencies — NOAA, and the U. S. Fish and Wildlife Service.

The Navy must then consider reuse proposals made by state and local agencies while the U.S. Departments of Health and Human Services and Housing and Urban Development screen proposals made under the McKinney Act. This legislation requires that all surplus federal land must be screened for suitability and, if certain criteria are met, property must be made available to provide housing and services to homeless persons. These two processes — State and Local Screening and McKinney Screening — will be carried out simultaneously during 1994, with McKinney uses taking priority.

I

VISION, KEY CONSIDERATIONS, AND GOALS

In developing this Reuse Plan, the City envisions the Naval Base properties becoming part of a multi-purpose regional center that provides benefit to the public through:

Expanded opportunities for recreation, education, arts, cultural and community activities;

Increased public access to the shoreline and enhanced open space and natural areas;

Opportunities for affordable housing and community and social services — with a special priority for addressing the needs of homeless families; and

Expanded opportunities for low-impact economic development uses (for example a film studio and/or small retail store) which could provide employment and services for residents of the site and for the broader community.

KEY CONSIDERATIONS

The City also has followed fourKey Considerations in developing the Preferred Reuse Plan:

Maximize and balance public benefits and accommodate as broad a range of uses in as cohesive a way as possible;

Ensure compatibility between reuses and the surrounding residential community;

Seek cost-effective and financially feasible outcomes that keep the tax burden to the public in mind; and

Encourage maximum continued community involvement in the future planning, development, and management of Sand Point land and facilities.

GOALS FOR SAND POINT

During the development of the Sand Point Reuse Plan, the City was also guided by Goals in the following areas: environmental stewardship, accessibility, social equity, security, cultural diversity, and historic preservation. A description of each of these goals follows.

ENVIRONMENTAL STEWARDSHIP: enhance the environment, preserve existing and create additional open space, and demonstrate sensitivity to ecological concerns.

ACCESSIBILITY: ensure physical accessibility to facilities, maximize safe pedestrian and bicycle use of the park and surrounding area, minimize automobile traffic, and promote adequate public transit.

SOCIAL EQUITY: provide opportunities for those in need of assistance, encourage self-sufficiency and empowerment while seeking integration of all residents within the broader community.

SECURITY: ensure the safety of person and property for residents, neighbors, and visitors.

CULTURAL DIVERSITY: reflect and support a diversity of cultures in the reuse of the Base.

HISTORIC PRESERVATION: respect, preserve, and enhance the historic character of the property.

By remaining mindful of the above Goals and Key Considerations, the City — with much assistance from the community — has been able to develop and refine a realistic, well-integrated, and feasible Reuse Plan that reflects our vision for the future of Sand Point.

POLICY CONTEXT

Since Sand Point is considered a regional facility, planning for the reuse of the Base has taken place in the much larger context of the City's long-term goals for Seattle and the Puget Sound region. The Department of Parks and Recreation's COMPLAN, as well as existing housing and human services policy, have played an important role in shaping the City's goals for Sand Point.

In addition, long-term planning goals for the City are embodied in Seattle's Draft Comprehensive Plan, released by Mayor Rice in April 1993. The public is currently reviewing the Draft, and the Planning Department is revising it for submittal to the City Council in early 1994. Included in the Draft Comprehensive Plan are Framework Policies, which, when adopted with the Plan in 1994, will set priorities in a number of areas of City policy. Although the Framework Policies have only been provisionally adopted, a number of them have given general guidance to this Preferred Reuse Plan for Sand Point. Such proposed policies include:

- **OPEN SPACE:** The City's open space network will be expanded and improved to increase the availability of public parks and open space resources throughout the city, preserve the city's natural qualities and views, and provide a public focus and identity for existing and evolving neighborhoods. The Parks COMPLAN also notes a particular need for public open space in northeast Seattle, and the importance of public access to shorelines.

- **FAMILIES:** Through both neighborhood preservation and new development, the City shall support increased opportunities for households with young children to secure suitable housing with yards and play areas immediately adjacent to their homes, whether families seek to buy or rent.

- **HOMELESSNESS:** The City shall help to meet the housing needs of homeless persons and other people with special needs. The City shall strive to promote stability of people at risk of homelessness, alleviate immediate hardship of homeless families and individuals, and restore homeless people to their highest and best participation in the life of the community.

- **COMMUNITY:** In order to attract and retain households with children, neighborhoods need a range of commercial, cultural, educational, and recreational services. City policies must recognize and support the relationship between housing and other neighborhood facilities and services.

- **TRANSPORTATION:** Transportation-related planning activities shall reduce reliance on the automobile through offering alternatives and disincentives to the automobile, in order to improve air and water quality in the city. Accelerating development of bicycle and pedestrian facilities and improving transit within the city and to regional destinations will help us create urban neighborhoods that protect the natural environment, increase safety, and, at the same time, foster a sense of community and neighborhood identity.

- **ARTS:** Seattle shall maintain its strong commitment to the arts, including visual arts, performance, crafts, humanities, literature, and other forms of expression.

- **HISTORIC PRESERVATION:** Designated historic landmark structures and areas shall be protected.

- **CULTURAL DIVERSITY:** Diversity and density create a critical mass for a wide variety of cultural activities, including specific ethnic traditions, avant-garde performance and music, political art that challenges its audience, community arts education facilities, and others that might find it difficult to survive in smaller, more homogeneous places. Maintaining an environment in which this variety of activity flourishes is important for education and fosters a sense of place and community.

- **CHARACTER:** Special measures, including, for example, design review, special overlay provisions, or development incentives and requirements, shall be employed to ensure that new development contributes to high-quality urban environments. In doing so the City will strive to preserve and strengthen existing neighborhoods.

- **SECURITY:** As Seattle grows, its human services and law enforcement capabilities shall keep pace, in order that it continue to be a city where all people are cared for and safe. Safety from harm at each others' hands depends primarily on community, not law.

- **CONSISTENCY:** Sub-area and neighborhood planning shall be accomplished within the context of the City's Comprehensive Plan.

These pending Framework Policies, the Goals and Key Considerations listed above, and the specific opportunities and constraints of the Sand Point site, have guided the development of the Reuse Plan's Activity Areas, which are described on the following pages.

II

ACTIVITY AREAS

This Preferred Reuse Plan would divide the Base property into six Activity Areas, including (1) the North Shore Recreation Area, (2) the Education and Community Activities Area, (3) the Magnuson Park Arts, Culture, and Community Center, (4) the Magnuson Park Open Space/Recreation Expansion, (5) the Residential Area, and (6) Federal Institutional Uses. The map on page 20 shows the location and size of these Activity Areas.

1. NORTH SHORE RECREATION AREA

Summary:

The northern part of the Navy Base would become a public park, and would afford public access to the Pontiac Bay shoreline. It would also become the site of the new Sailing Center for small boats, and potentially for other water-related recreation uses. The Department of Parks and Recreation would own and operate the property as part of an expanded Magnuson Park, and would contract with a non-profit organization for the operation of the Sailing Center.

Principal Considerations:

- **Ensure public shoreline access**
- **Expand waterfront recreational opportunities**
- **Connect Sand Point to the Burke-Gilman Trail**
- **Demonstrate environmental stewardship**
- **Reuse historic resources**
- **Minimize negative impacts**

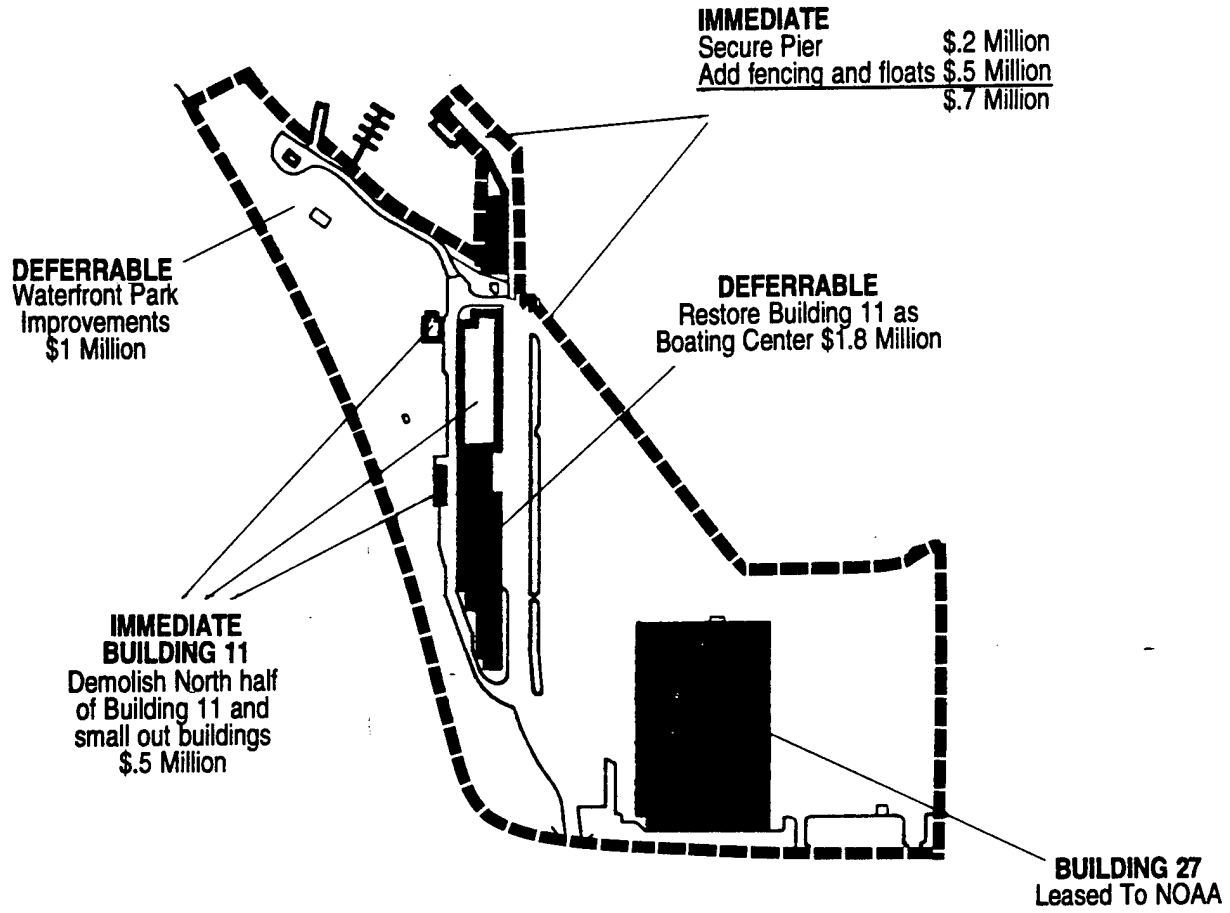
The Pontiac Bay shoreline at the north end of the Navy Base totals approximately 1650 feet in length and includes a boathouse and other moorage facilities. Inland from the shoreline are the existing public works offices and shops in Building 11 and related structures, a vast amount of paved area formerly used as parking for seaplanes, the former hangar space in Building 27, and open lawn areas that slope from Sand Point Way NE to the shoreline. This 21-acre area is intrinsically well-suited for recreation use as a waterfront park with boating facilities. The City will seek the entire North Shore Recreation Area under a public benefit discount for Parks and Recreation.

Sailing Center

A new Sailing Center would be the focus of the North Shore Recreation Area. Long advocated by sailing enthusiasts in Seattle and recommended in the Department of Parks and Recreation's May 1993 COMPLAN, the new Sailing Center would be a place where small, hand-launched sailboats could be stored on shore with easy access to the waters of Lake Washington. The site is well-protected from prevailing southerly winds, yet is well-situated to take advantage of gentle summer northerly winds, ideal for sailing. The Sailing Center would provide low-cost, dry land moorage of privately-owned small craft, and be the home of organizations that promote sailing through instructional classes, safety programs, club activities and regattas. While it is assumed that the Department of Parks and Recreation would incur initial costs of establishing the Sailing Center, it is envisioned that it would ultimately be operated under license from the Department of Parks and Recreation by a public, non-profit board, similar to the very successful Jericho Beach Sailing Center in Vancouver, British Columbia.

Much of the development necessary to create the Sailing Center is already in place. Building 11 would be remodeled to provide office, classroom, changing room and sail locker areas. Only the southern portion of the building, amounting to approximately 19,000 square feet, would be needed for such spaces and the northern, two-story portion of the building would be removed. Structural strengthening for seismic stability, abatement of hazardous materials, accessibility improvements, heating and mechanical system replacements, and other improvements would be undertaken in the portion of the building to be remodeled. The large paved area east of Building 11 would be used for a fenced boat yard, automobile parking, and for a waterfront promenade. Launching floats would be added to the existing timber bulkhead along the shoreline, and additional floats added to the existing pier.

1. NORTH SHORE RECREATION AREA
(Approximately 15 Acres)



Initial Annual Operating Costs:
$80,000 per year small boat center
Ongoing Annual Operating Costs:
$30,000 per year

LEGEND
- Buildings to be Reused
- Buildings to be Demolished

Building 31, the large boathouse alongside the pier, would receive various structural repairs, and Building 402, the floating moorage shed, would be removed.

Waterfront Park

The City shall seek ownership of the entire North Shore Recreation Area, including the land underlying Building 27, through a public benefit discount for Parks and Recreation. If the terms of the public benefit discount transfer permit, the City will then negotiate with NOAA a possible lease option of Building 27 whereby NOAA may utilize Building 27 over a period of ten (10) to twenty (20) years, but the land would remain in City ownership. When the lease ends, the City would look at the feasibility and determine the best course of action: to continue use of the building for recreation-related uses, or to demolish it to expand the open space area of the waterfront park. The City's ultimate intent is to restore the entire area to water-related parks uses, provided the property can be transferred without consideration, or provided all or a substantial portion of the purchase price (for the building or the property) can be recovered from lease payments from NOAA.

The sloping hillside to the west of Building 11, and extending from Sand Point Way NE to the Pontiac Bay shoreline, would be maintained largely in its present form, although various park improvements would be made to afford better public use of the area. In particular, Buildings 40, 98 and 115 would be removed, landscaping improvements such as tree plantings and lawn restoration would be undertaken, and a pathway connection would link the new park space to the existing Burke-Gilman Trail above Sand Point Way NE. Some degree of shoreline restoration would be necessary in the area west of the boathouse. Shoreline and landscape improvements in the area formerly occupied by the northern portion of Building 11 would also be made. The passive park space that would be created by such improvements would complement the Sailing Center described above.

This new waterfront park would be owned and operated by the Seattle Department of Parks and Recreation. The property to create the park would be acquired from the Navy through a public benefit transfer in which the City could acquire the surplus federal property for recreational purposes at no cost.

Traffic and Parking

While the availability of additional waterfront picnic areas should attract some additional users, the main trip generator in this Activity Area is likely to be the Sailing Center. The average number of trips per day is estimated to be approximately 100. Noise and traffic impacts may be higher during peak use times on certain summer weekends, causing minor increases in traffic volumes on Sand Point Way NE. Such increases probably would not affect level of service. Parking would be located just north of the overpass at NE 80th Street (the current NOAA access road) in order to minimize vehicular incursion at the waterfront.

2. EDUCATION AND COMMUNITY ACTIVITIES AREA

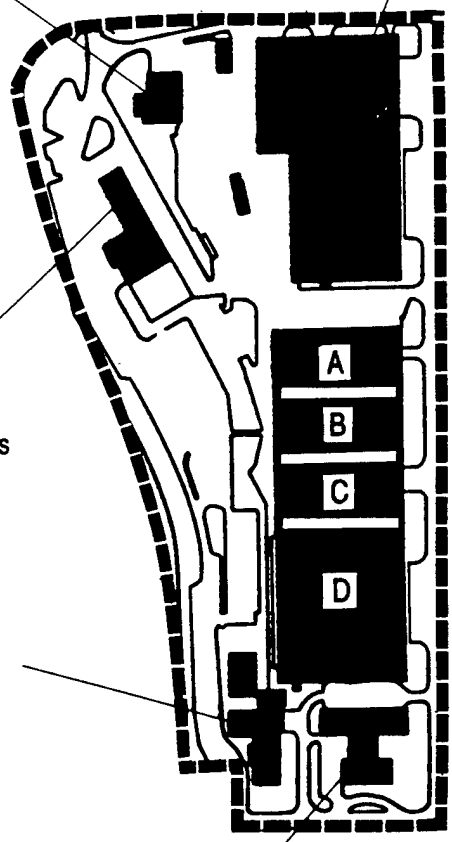
Summary:

The City's priority for the use of this area is to promote the development of education, community activities, the arts, and public open space, and to allow for the development of a film studio in Building 2. These activities should maximize public use and benefit, help achieve City goals for social equity and cultural diversity, and be compatible with the surrounding residential community. The City will seek ownership of all or most of this area, but will also work as a partner with other potential owners/ users to ensure uses which are compatible with City goals and comply with City zoning codes and regulations. The City will seek the flexibility to operate some buildings in the area under concession agreements, and to lease or pass through buildings to agencies which can provide public services that meet the City's goals for the area.

Principal Considerations:

- **Maximize public benefits and provide a range of uses and activities**
- **Minimize taxpayer burden**
- **Place priority on educational uses — including consideration for the needs of Native American students**

2. EDUCATION AND COMMUNITY ACTIVITIES AREA (Approximately 18 Acres)



BUILDING 2
Possible film studio

BUILDING 12
Central steam plant

BUILDING 5
Other possible uses for portions of Building 5 include potential educational and related uses, social services, community activities, and additional arts and culture expansion.

BUILDING 67
Possible training uses by public agencies

BUILDING 29
Possible education or health uses

BUILDING 25
Possible education and community service uses

The organizations listed below have expressed interest in locating in the Education and Community Activities Area:

Jewish Community Center
Muckleshoot Indian Tribe
North Seattle Community College
Northwest Montessori School
Other Arts organizations
Pacific Medical
Salvation Army
Seattle Conservation Corps
Seattle Fire Department
The Sharehouse
State Archives
United Indians of All Tribes Foundation
University of Washington
Washington Motion Picture Council

- **Maintain public access and promote uses open to the public**

- **Promote social equity and address community needs**

- **Promote cultural diversity and activities and services for families, youth, seniors, and other diverse populations**

- **Minimize negative impacts, such as traffic, noise, and pollution**

The Education and Community Activities area includes about 18 acres located south of the North Shore Recreation Area and north of the Residential Area, along Sand Point Way NE. This area is dominated by a large warehouse, Building 5, and a large hangar, Building 2. These and several other of the brick buildings in the area are being considered part of a potential historic district. Other structures in the area include Buildings 29, 25, 67, and 12.

The City will design the uses and environment in the Education and Community Services Area in such a way as to create a linkage between the North Shore Recreation Area and the Arts, Culture and Community Center Area. This will permit an integration of the public uses of the entire base. An extension of the Burke-Gilman ~~bicycle/~~ pedestrian trail would be brought through this area to connect the trail to the existing portions of Magnuson Park. Where consistent with federal law, the City will apply for property in this activity area under a public benefit discount process or similar conveyance mechanism.

The City expects to work collaboratively with potential users as various proposals are developed for acquisition, ownership, and use. While remaining flexible, the City believes that the following potential uses for buildings and land in the Education and Community Activities Area are compatible with the goals of this Plan and should be given careful consideration:

- ***Educational programs*** such as Native American primary, secondary and vocational schools; North Seattle Community College classrooms; University of Washington support services; a Northwest Montessori School campus; classes in the arts; or a training center run by the Seattle Fire Department and other City departments.

- ***Limited administrative, training, or storage uses*** by public or private non-profit agencies — with priority for agencies providing community or social services in other parts of the Sand Point site (such as agencies serving homeless persons).

- ***Community and social services***, such as a senior center, a non-profit community center, or other organizations which support residents of Sand Point and the surrounding neighborhoods.

- ***Development of a film studio***/sound stage (in Building 2).

The City considers the following activities incompatible and undesirable:

- ***Manufacturing activities***

- ***Intensive commercial or industrial uses.***

In developing the uses anticipated for this activity area, the City is open to a partnership with an educational institution or the State which may wish to apply for buildings in this Activity Area through the public benefit discount process for education. Any such educational institution must agree to participate in the management structure established for the site.

The City is supportive of the development of a film studio in Building 2, either under City or State ownership. A film studio is a non-polluting industry which can provide significant economic development opportunities for the community with minimal negative impact.

If a public benefit discount or similar conveyance mechanism for economic development is created, as anticipated, by pending federal legislation, the City will take advantage of whatever opportunities exist in federal law to aggressively pursue obtaining Building 2 for City or State ownership.

The City will work with the Navy prior to property transfer to impose appropriate deed restrictions requiring adherence to City zoning and master planning by parties acquiring surplus Naval property at Sand Point. The City will also work to ensure an overall management plan and oversight structure which includes participation by community members.

After ten years from the date of acquisition the buildings within this activity area which are found unfeasible to renovate and use would be considered for demolition, and the area landscaped as usable open space or used for other buildings compatible with the goals defined for this Activity Area.

Traffic and Parking

Since specific uses for this area are not yet known, it is difficult to estimate the traffic impacts with any degree of precision. A film studio would be expected to generate approximately 500 trips per day, but would be utilized only a portion of the time. A medical clinic could produce an average of as many as 800 trips per day. The impact of educational uses would vary according to the number and age of students. Children might be dropped off and picked up, while adults might drive themselves and make additional trips, especially if no commercial services are available within easy walking distance. In general, activities which involve extensive public use on a daily basis would be expected to generate more traffic than storage, administrative, or other intermittent uses.

Parking requirements would also vary, as some uses might be able to share parking, or lease spaces from the Arts, Culture and Community Center which would only be necessary for evening or weekend events. The parcel to the west of Building 5, along Sand Point Way NE, should be divided between uses in Building 5 and Building 29, according to requirements of each for parking.

3. MAGNUSON PARK ARTS, CULTURE AND COMMUNITY CENTER

Summary:

At the center of the Navy Base will be the Arts, Culture and Community Center in Buildings 18, 30, 41, and 406 and adjacent outdoor spaces. Buildings 18, 30, and 41, as well as an amphitheater on the site of Building 222, would be owned by the Department of Parks and Recreation and operated by a private, non-profit organization. Building 406—the former Brig—would be owned and operated by the State Archives.

Principal Considerations:

- **Maximize arts, culture and community opportunities**
- **Ensure compatibility of uses**
- **Encourage and celebrate cultural diversity**
- **Reuse historic resources**

The complex of existing buildings and outdoor adjacent spaces at the center of the Navy Base are appropriate for reuse as an Arts, Culture and Community Center that would complement an expanded Magnuson Park. This area totals approximately 17 acres in size and includes Building 30, administration and hangar; Buildings 18 and 41, fire station and former service station; Building 406, brig; and the sites of Buildings 222 and 223, offices.

Arts, Culture, and Community Center

Earlier this year the Sand Point Community Liaison Committee and the Sand Point Arts and Culture Coalition, a project of Allied Arts of Seattle, recommended the creation of a multi-purpose arts, cultural, and community facility at Sand Point that would provide for community meetings, public exhibitions, performances, and educational activities. A review of recent studies of the arts in Seattle and King County, plus a survey of local arts organizations that might be interested in facilities at Sand Point, indicated that many arts organizations were operating in substandard spaces and that there was a need for additional and improved spaces for the arts. Discussions between the Liaison Committee, the Arts Coalition, and the Department of Parks and Recreation led to evaluation of Buildings 30, 18, 41 and others to accommodate such needs.

The City will request the buildings and property in this activity area from the Navy via a public benefit transfer for recreational use at no cost. The City will retain ownership of the land and buildings and will explore potential community funding and management models, such as San Francisco's Fort Mason Foundation.

Management of the Center would include fund raising for capital improvements and setting rental rates for facilities that will cover the operating and maintenance costs.

The City will, at the same time, explore the appropriateness of such a management model for the entire site. The management model ultimately adopted for Sand Point should emphasize a high degree of community oversight and participation, leveraging non-City resources for capital improvements, and emphasizing effective management for facilities and operations which would limit City involvement in managing day-to-day operations.

The proposed Arts, Culture, and Community Center at Sand Point would include facilities where community events and theatrical and dance performances could be held, art exhibitions mounted, and instruction given in performing and fine arts. Existing buildings at Sand Point would be used to create a mix of large and small spaces for performance, exhibition, studio, workshop, and classroom needs. Both short-term and permanent uses would provide a variety of opportunities for citizens of Seattle and the region. Many of the spaces would be designed for multipurpose use to allow for flexibility in programming. Following is a description of the buildings proposed for the Arts, Culture, and Community Center.

Building 30 consists of east and west office wings of two and three stories, respectively, separated by a large open area that was formerly an airplane hangar. The large open area would be used for performing arts as well as community gatherings and other events, while spaces in the office wings would be used for offices, classrooms, rehearsal, and art studio spaces. Structural strengthening to provide for seismic stability, accessibility improvements (including elevators and exterior ramps), toilet facility upgrades, abatement of hazardous materials, and electrical and mechanical system replacement would be necessary to reuse the building. Eventually, a 1500-seat theater could be temporarily or permanently constructed in the central hangar space.

Building 18, the existing fire station, is a two-story structure, which could be remodeled to provide exhibition gallery space on the main floor and office and classroom spaces upstairs. The building would need insulation and many of the same improvements noted above for Building 30.

Building 41 is a small structure that formerly served as a gas station. It is proposed for office use for management of the Arts, Culture, and Community Center and would also need various minor improvements and repairs.

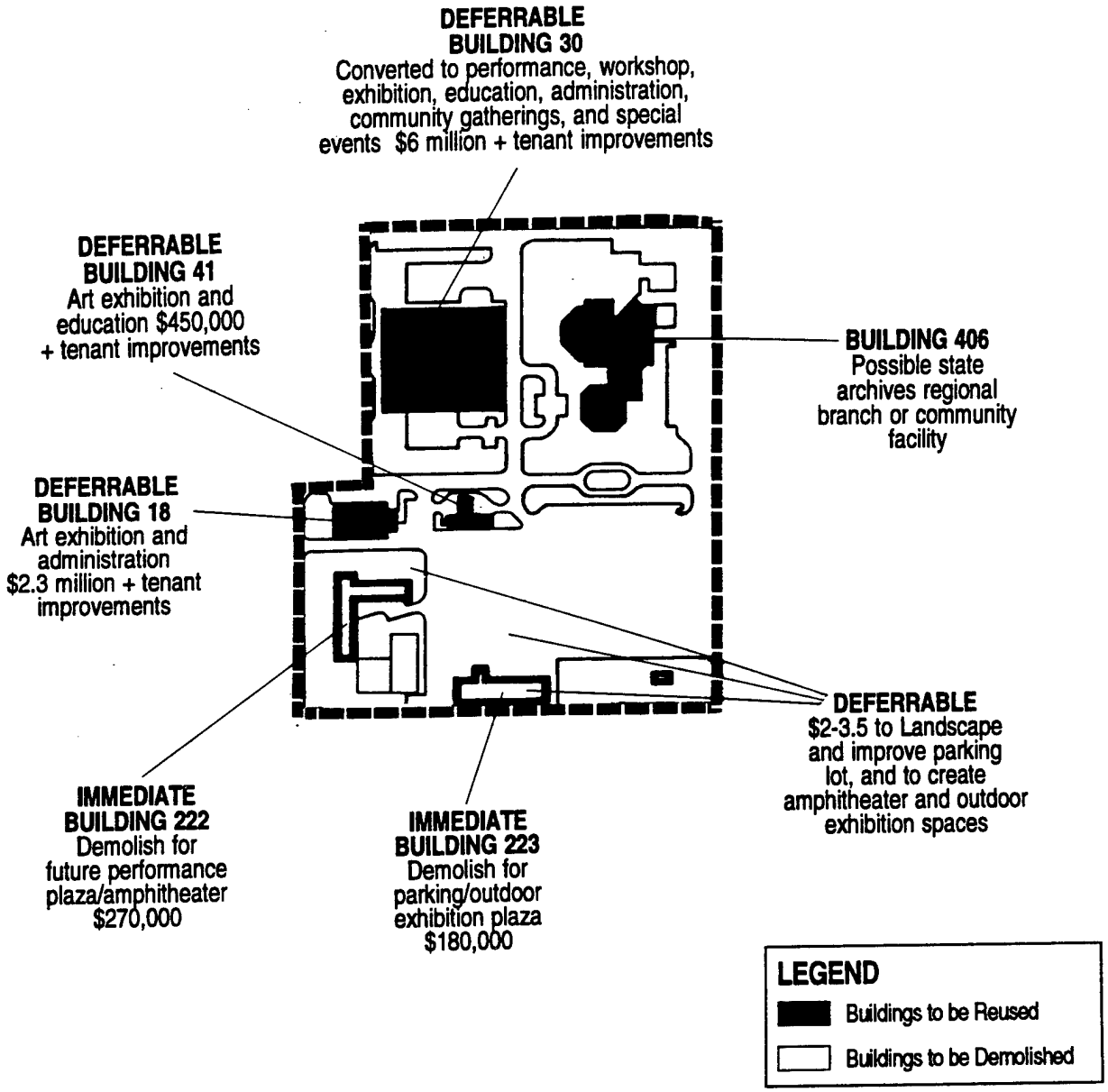
Buildings 18, 30, and 41 are of attractive and comparable architectural style with red brick exteriors, and can serve the proposed Arts, Culture, and Community Center reuse well. Buildings 222 and 223 are rather nondescript, wood-frame office structures of limited utility. They are proposed for removal, with their sites used for outdoor components of the Arts, Culture, and Community Center. At the site of Building 222, an outdoor amphitheater of terraced lawn would provide for outdoor performance space, while the Building 223 site would be integrated with parking and other outdoor spaces to the east. A large, well-landscaped parking lot for 200 to 300 vehicles would occupy the former hardstand storage/parking area to the south and east of Building 41. This lot would serve not only the Arts, Culture, and Community Center activities, but other activities in Magnuson Park. The entire Arts, Culture, and Community Center area would be landscaped consistent with the historic character at the core of the Navy Base.

Public benefits of the Arts, Culture, and Community Center would be many. Public arts and cultural facilities would be provided, increasing exposure to the arts for the citizens of Seattle and King County. Reuse of existing facilities would provide for preservation of historic structures while other unnecessary structures could be removed to create additional open space on the site. Traffic impacts of the arts and culture facilities would typically not be expected to be any greater than those realized during Navy uses at the site in recent years. The exception, however, might occur during certain special events staged at the Center.

State Archives

Building 406, a one-story structure built in 1988, would be converted from its current use as a Navy brig into an important cultural adjunct to the Arts and Culture Center — a branch of the State Archives. In this capacity, the facility would house, preserve, and provide public research access to historically valuable records from local government and state field agencies in King, Kitsap, and Pierce Counties. Its mission would be to make these archival collections available for public use near where they were created.

3. MAGNUSON PARK ARTS, CULTURE, AND COMMUNITY CENTER (Approximately 17 Acres)



ESTIMATED TOTAL COSTS

IMMEDIATE: "MOTHBALLING" Bldgs. 41, 18 & 30 (includes: boarding, ventilation security system and demolition of Bldgs. 222 & 223.)	$950,000 initial capital plus $100,000 annual O & M
DEFERRABLE: REHABILITATION OF BLDGS. 41, 18 & 30 (includes: seismic upgrades ADA compliance new HVAC system and demolition of Bldgs. 222 & 223 and outdoor improvements to arts and culture center).	Up to $10.25 million capital plus $500,000 annual 0 & M and program costs

This use would further expand the diversity of other components of the Arts and Culture Center by attracting local historians, genealogists, research scholars, students, teachers, architects, historic preservationists, lawyers, environmental researchers, government employees, and many other residents of the Puget Sound region. In addition, historical exhibits could be made available for visitors to Magnuson Park.

The State's long-term goal would be to house up to 40,000 cubic feet of collections along with a public research room and an archival processing area. In addition, this facility could eventually house archival collections belonging to the City, King County, and Seattle School District. Despite being a site of permanent employment, the archives would have minimum negative impacts on other activities at Sand Point or on the surrounding neighborhoods.

Traffic and Parking

The Arts and Culture Center is expected to have relatively low daily traffic impact, but could generate as many as 3500 trips on the day of a sold-out performance in a 1500-seat theater. Shared parking with Magnuson Park, and perhaps NOAA, as well as promotion of transit and other shuttle parking arrangements, would help alleviate potential traffic and parking problems. Use of the archives in the former Brig would be much less intensive, generating an average of 50 trips per day. Parking for the Arts and Culture Center would be provided on existing pavement to the south and east of Buildings 30 and 41. Since much of this parking would be for evening or weekend special events, joint use agreements with the State or other nearby daytime users should be encouraged.

4. MAGNUSON PARK OPEN SPACE/RECREATION EXPANSION AREA

Summary:

Much of the south end of the Navy Base would be added to Magnuson Park to create an improved park entrance at the intersection of NE 65th and Sand Point Way NE, as well as additional sportsfields and unstructured open space. In addition, the existing Navy recreation center would be acquired as a new community center with gymnasium, theater, indoor swimming pool, and meeting spaces. The 50-acre expansion of Magnuson Park would be owned and operated by the Seattle Department of Parks and Recreation. A public benefit transfer could allow the City to acquire this property from the Navy for recreational use at no cost.

Principal Considerations:

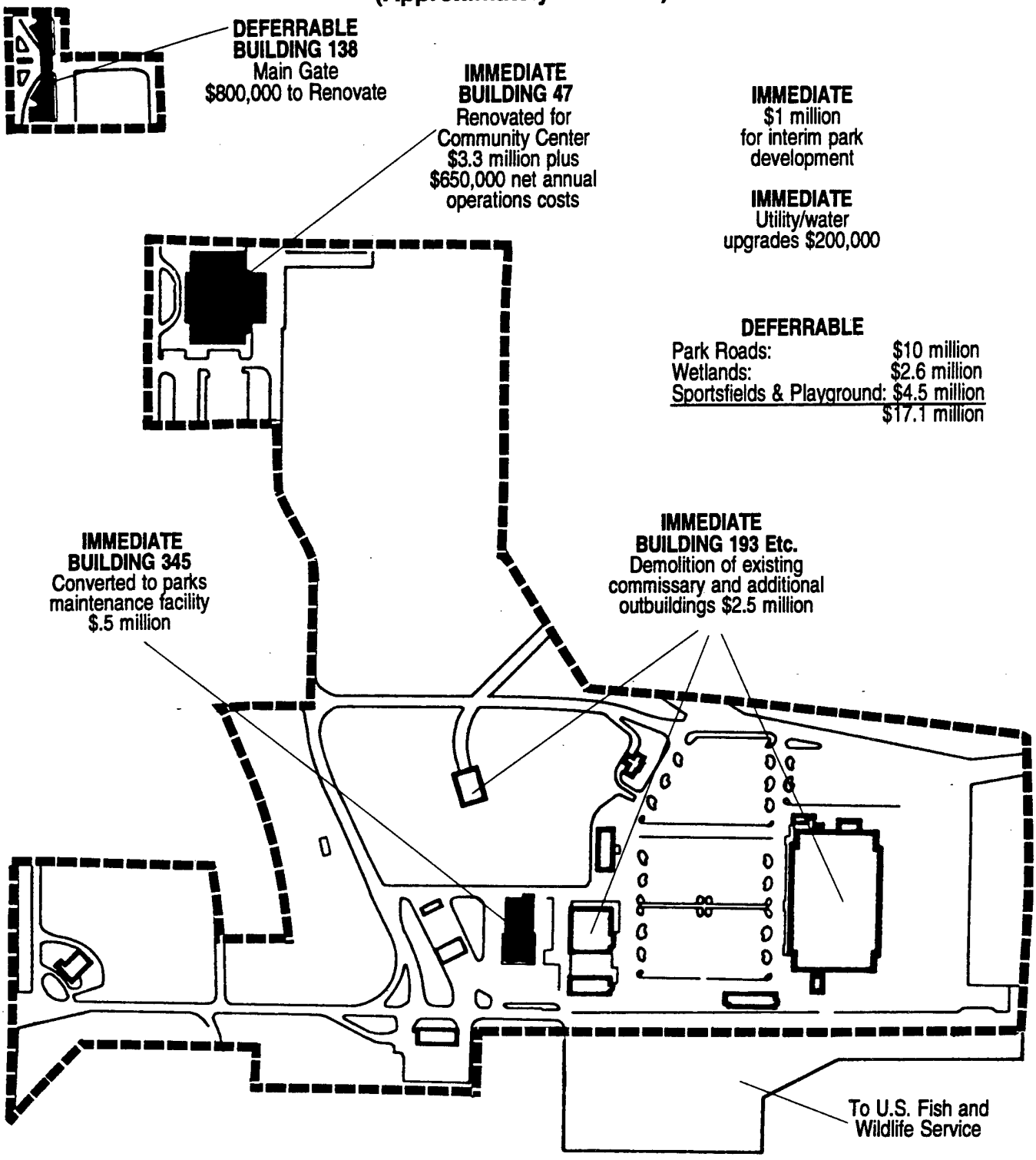
- **Expand recreational opportunities**
- **Enhance open space and natural areas**
- **Demonstrate environmental sensitivity**
- **Improve accessibility**
- **Reuse historic resources**

Approximately 50 acres at the south end of the Navy Base, immediately adjacent the existing Magnuson Park can be readily added to the park. This area includes land in the existing entrance corridor to the park from the intersection of NE 65th and Sand Point Way NE, the existing Navy Commissary and Exchange area, the existing Navy sportsfields, and the existing Navy recreation center in Building 47. Use of much of this area has been contemplated since the original "Sand Point Park" plan for Magnuson Park was prepared in 1975. Acquisition of the Commissary area and removal of the buildings in that area will allow for a better roadway and separate bicycle/pedestrian access to the park, as well as allow the restoration of the former "Mud Lake" wetlands that existed until the Navy airfield was built in the 1930s. Acquisition and reuse of Building 345 in this area will also allow for a park maintenance facility to be developed consistent with the original park plan and as recommended in the Department of Parks and Recreation's 1993 COMPLAN.

Park Entrance/Circulation

At present, the entrance to Magnuson Park is via a narrow, half-mile long corridor through the southern part of the Navy Base. While there is some tree planting alongside the road in the westerly end of the corridor, there is none in the easterly end along the edge of

4. MAGNUSON PARK OPEN SPACE/RECREATION EXPANSION AREA (Approximately 49 Acres)



ESTIMATED TOTAL COSTS:

IMMEDIATE: $7.5 MILLION plus $150,000 annual O&M costs
DEFERRABLE: $17.9 MILLION plus $650,000 net annual O&M costs
Note: Does not include utility change over.

LEGEND

- Buildings to be Reused
- Buildings to be Demolished

the Navy commissary facilities. There is also no sidewalk. Thus, the entrance to one of Seattle's major urban parks provides little accommodation for pedestrian access. There is also insufficient accommodation of bicycle access, despite the proximity of the park to the very popular Burke-Gilman Trail.

The proposed acquisition of land along the entrance corridor would allow the roadway to be slightly widened, a separate bicycle and pedestrian pathway to be developed alongside the roadway (with some greater degree of horizontal separation from the roadway where desirable to follow the contours of the steep hillside into the park), and appropriate tree plantings and other landscaping improvements consistent with the character of Magnuson Park. Buildings 15, 333 and 334 and 310, all situated along the entry corridor, would be removed to make way for these roadway, pathway and landscaping improvements. Existing fencing in the access corridor would be removed and new fencing installed only where necessary to separate park areas from adjacent private uses. Additional pedestrian connections from Sand Point Way NE to Magnuson Park would encourage foot traffic and help to integrate the Park with nearby neighborhoods.

At the Base of the hillside, midway in the access corridor, a roadway intersection would be created. The main, landscaped park roadway and parallel bicycle and pedestrian pathway would swing to the north to enter the existing Magnuson Park and provide access to the existing swimming beach and sports meadow areas, while the existing roadway that extends due east would be retained as a secondary route to provide for access to the U.S. Fish and Wildlife laboratories and the existing Magnuson Park boat launching ramp. This improved park roadway scheme is intended to enhance user safety and reduce user conflicts as well as improve access to the park and provide for an appropriate entrance.

Open Space and Wetlands

Removal of the Commissary area facilities will allow former wetlands to be restored. Prior to the Navy's creation of the airfield, an extensive wetland known as Mud Lake existed at Sand Point. Following the removal of structures and pavements, extensive grading and planting would be undertaken to create a complex ecosystem of wet meadows, scrub thickets, emergent vegetation and open water similar to that which previously existed. The wetlands would be charged from the outflow of water withdrawn from Lake Washington and used by the U.S. Fish and Wildlife Service laboratories. This outflow, presently discharged to Lake Washington by a storm drain, could be intercepted to discharge to the wetlands. Runoff from portions of the Navy Base to the west are also routed to Lake Washington via this storm drain, providing a secondary and seasonal source of water. The new wetlands would greatly improve Magnuson Park's value as a wildlife habitat. These wetlands, coupled with perimeter pedestrian pathways and several well-placed viewpoints, will also increase the utility of the site for environmental education and recreational pursuits such as bird watching.

The only building in the commissary area proposed for retention is Building 345, a one-story utilitarian structure built in 1976 for use as a service station. With minimal remodeling the structure can serve as a park maintenance facility that would include office, lunch room and changing room spaces as well as storage for tractors and other maintenance equipment. An adjacent service yard would be well-screened and appropriately landscaped to fit the park setting. Buildings 193, 228, 244, 301, 308, 340, 341, 342, and 344 would be demolished and surrounding pavements removed to create the wetlands and open space noted above. Existing fencing would be removed in order to integrate this area with the remainder of Magnuson Park.

Sportsfields and Playgrounds

The Navy's existing sportsfield area includes two softball diamonds, an open field sport area for soccer and related sports, and nearby picnic and playground areas. Initially these facilities would be added to Magnuson Park in their present form, with little modification or repair. Outfield fences on one or both of the softball fields may be relocated to allow for their use for Baseball. Areas adjacent to Building 244 — a small storage structure that would be removed — could be improved to serve as additional sportsfield space, most likely for softball. Eventually, however, further improvements would be needed to meet the burgeoning demand for sportsfield facilities. A "cloverleaf" of four softball diamonds is recommended to be developed near the western edge of the Park.

Additional soccer fields are also recommended between the existing Navy sportsfields and the existing sports

meadow at Magnuson Park. Such soccer fields may extend onto property which is currently owned by NOAA, but which NOAA has indicated may be declared surplus to their needs as early as 1994-95.

Other development recommended in the sportsfield vicinity to blend the existing Magnuson Park with lands proposed for acquisition from the Navy includes a large unstructured open space, additional park restroom facilities, and a substantial play area for young children. A parking lot for up to 200 cars is recommended to meet parking demands associated with the sportsfields and play area. Reuse of the existing roadway is proposed to provide access from the main park roadway to the new parking and related facilities. Fencing that separates the Navy sportsfields from the existing park would be removed.

Tennis Center

The Department of Parks and Recreation has noted in its COMPLAN the need for a tennis center in the north end of Seattle. Rather than renovate an existing building, the City would consider a location for the North Seattle Tennis Center to the east of Building 47, the Community Recreation Center. This would allow the Tennis Center to make joint use of the locker and restroom facilities in Building 47. To replace the ballfields that would be lost by building the Tennis Center in this location, the existing outdoor tennis courts in Magnuson Park would be converted to ballfields. A final decision on siting will need to consider issues of access, compatibility, and complementarity with other facilities.

Community Recreation Center

Building 47 is the Navy's existing recreation center. A large structure of over 50,000 square feet, it includes a double gymnasium, a five-lane swimming pool, a 600-seat theater, exercise rooms, locker rooms, a library, and a game room. The facility could be readily converted to serve as a community center with remodelling to provide for improved meeting rooms and to meet current accessibility requirements. This would include installation of an elevator to provide access between the two main levels of the building, new toilet facilities for the theater, and other work. Structural strengthening for seismic stability, removal of hazardous materials, and new electrical and mechanical systems would also be needed. The theater would potentially be operated in concert with the arts and culture facilities previously described in order to maximize utility of the theater space, but the facility would otherwise operate like other community centers in Seattle and provide for a wide range of recreational programming.

Outside the Community Recreation Center, the existing 80-car parking lot to the south would be retained for the parking demands generated by the Center. Some minimal site work at the entry would be undertaken to improve accessibility to the building, but the historic landscape character at the core of the Navy Base would be retained. To the north, the site of Building 222 would be used for an outdoor amphitheater of terraced lawn, and a large paved area to the northeast would be retained for parking, as described in the preceding section concerning the Arts, Cultural, and Community Center.

Security

As noted previously, the existing park entrance would be improved to provide better access to the expanded Magnuson Park. Access would also be afforded to the park via the existing main entrance to the Navy Base. This secondary access would provide direct access to the proposed Arts and Culture Center and a connection to the main park roadway in the vicinity of the new sportsfields and playground area. Gates to restrict auto access to the interior areas of the park can be placed at the park entrance corridor and at the secondary access roadway for security purposes. Such gates would probably be closed nightly to provide greater security in the Park.

Impacts of the proposed expansion of Magnuson Park would be largely beneficial. The buildings in the existing Commissary area can be removed to allow for restoration of a large naturalistic open space and the existing Navy sportsfields transferred to public use. Reuse of the existing Navy recreation center for a new community center is a cost-effective means of providing for indoor recreation and community meeting facilities, while also providing for preservation of a historic structure.

Traffic and Parking

Expansion of the park entry corridor allows for better and safer traffic control by separating conflicting forms

of traffic, as well as creating an appropriate entrance to the larger park. The baseline number of trips generated by Magnuson Park is expected to remain steady, and gradually increase as new facilities are provided. A new Tennis Center with eight courts is expected to generate approximately 270 trips per day. The Community Recreation Center in Building 47 would produce about 800 trips per day. Additional ballfields and play areas could increase the average number of daily trips. Parking will be needed near specific facilities, and are included in the plan for the expanded Magnuson Park.

5. RESIDENTIAL AREA

Summary:

The Residential Area, located in the western portion of the Base, would include 18 acres with a number of existing residential buildings, to be used to develop up to 250 units of housing with appropriate services for homeless and low-income (up to 80% of median) persons and families. The City would work in partnership with the Coalition for the Homeless to secure property under the provisions of the McKinney Act. In addition, the City would support the University of Washington's acquisition of about 3 acres at the southwestern corner of the Base for future expansion of the student family housing currently situated south of NE 64th Street. The City shall explore the possibility of locating a small-scale neighborhood retail convenience facility in the Residential Area, which would support balance and integration of residential uses with other uses at Sand Point and the surrounding neighborhood. This would also provide job training opportunities for Sand Point residents.

Principal Considerations:

- **Provide housing for homeless and low-income persons and families**
- **Ensure cost-effectiveness and programmatic effectiveness of housing strategy**
- **Integrate residential area with existing neighborhood**
- **Maintain stability, security, and sense of community**
- **Promote social equity and cultural diversity**
- **Reuse historic buildings**

The proposed residential area is about 18 acres in the western area of the Base, and 3 acres to the south. Existing buildings in the residential area are numbers: 9, 224, 6, 26N, 26S, 330, 331, 332, 333, and 334. With the exception of Building 6 and the northern portion of Building 9, these buildings are currently used by the Navy for residential purposes. The City would seek to acquire property, in partnership with the Seattle-King County Coalition for the Homeless (and possibly Seattle Housing Authority), under the provisions of the McKinney Act. The University of Washington would purchase land in the south residential area.

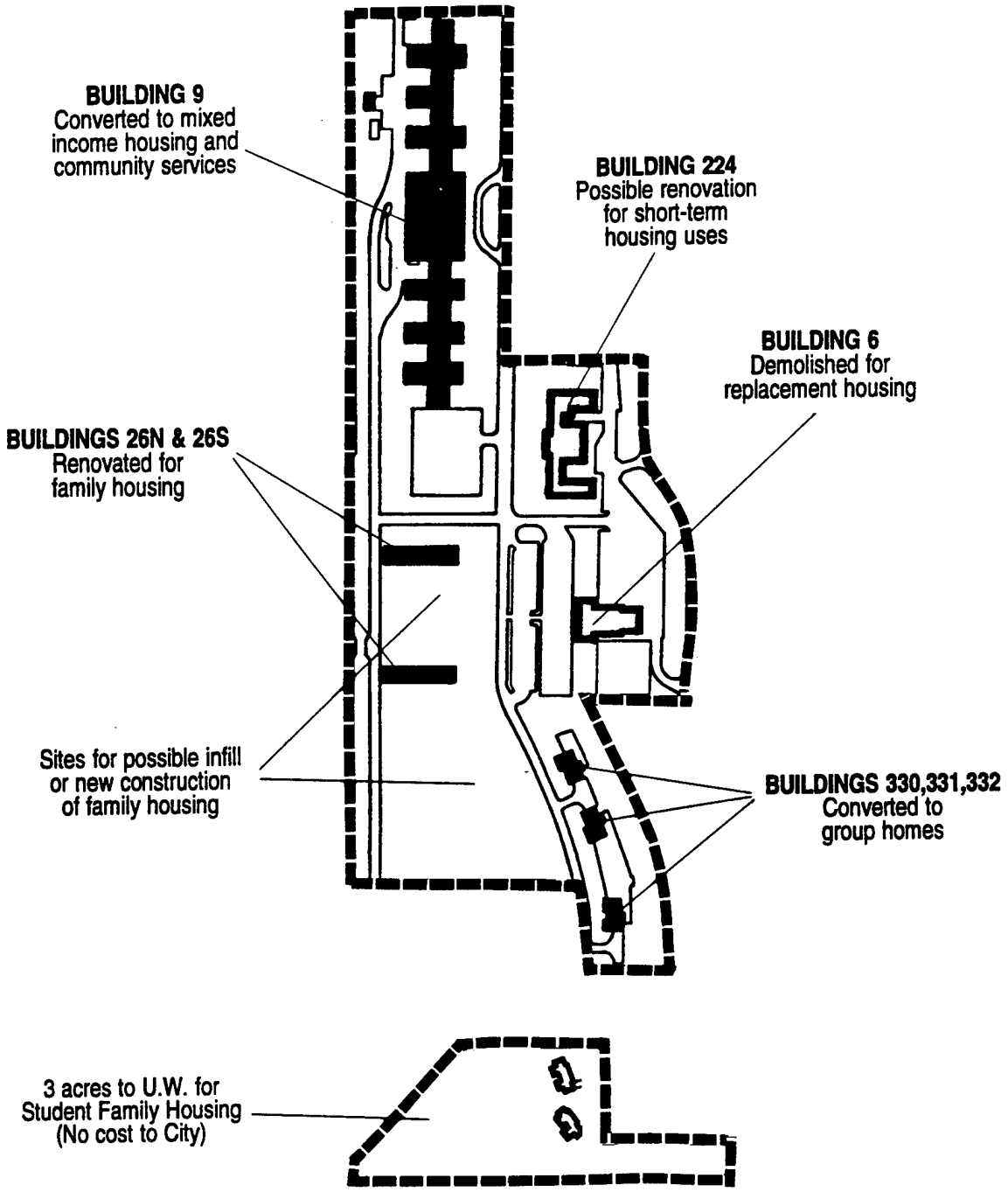
City housing funds at Sand Point will be used in a manner consistent with City housing policy. Under current policy, rental units which are subsidized by City funds must be affordable to households at or below 50% of median income, and home ownership opportunities must be affordable to households at or below 80% of median income. The 1994 Comprehensive Housing Assistance Strategy includes a 1994 action plan which states "the intent to review current affordability policies and explore with the Mayor and Council a potential change to allow serving households up to 80% of median income (the maximum allowed by HUD and CDBG regulations) in limited and specific circumstances."

As flexibility in new HUD regulations is clarified, the City will explore opportunities to include mixed-income housing, (low-income and non-low-income, subject to a cap of 250 units), which are consistent with federal law. In the future, innovative housing options such as co-housing and community land trusts may be possible within approved City housing policy.

Housing Under the McKinney Act

The City, in partnership with the Seattle-King County Coalition for the Homeless, would apply for property under McKinney Act preference and would serve as the underlying owner of most of the residential area. Under the provisions of the McKinney Act, the City and the Homeless Coalition would work with the U.S. Department of Health and Human Services (HHS) and the

5. RESIDENTIAL AREA
(Approximately 21 Acres)



ESTIMATED TOTAL COST (CITY'S SHARE)

$12 Million Capital

Maximum $.5 Million Annual Operations/Services Cost

U.S. Department of Housing and Urban Development (HUD) to acquire this portion of the Base and develop and operate up to 250 units of transitional and permanent housing in a cost-effective and programmatically effective manner.

The City will seek cost-effective and financially feasible outcomes by: 1) leveraging other possible fund sources to maximize available housing resources; and, 2) setting limits on total funds available to support capital development and operating costs of housing created at Sand Point. The City will rehabilitate existing historic structures where it can be shown to be cost-effective and appropriate. When rehabilitation is not appropriate, buildings will be razed and housing will be created through infill or new construction on the site in order to achieve the housing goals of up to 250 units for a cost to the City of no more than $12 million. The City will seek flexibility in the types of housing created in order to increase the effectiveness of serving homeless persons by providing a mix of permanent and transitional housing on the site. The City will also seek to develop units for households up to 80% of median income to encourage a diverse and stable residential community.

The City will promote the development of low-income housing which enhances safety, reduces social isolation, and creates a sense of community among residents. The City will strive to preserve the historic and neighborhood character in the housing created at Sand Point. In order to achieve these objectives the City may convene a site design team comprised of City staff, designers, providers, and community representatives to develop a site plan and promote creative housing design solutions.

At this time, specific unit goals for individual buildings cannot be realistically set in light of many "unknowns" such as: condition of buildings, hazardous materials abatement, funding availability, and alternative design solutions. The City will promote family housing development and will work with the Homeless Coalition and other partners regarding the most appropriate design and configuration of units.

Determining specific uses and reuse priorities of various buildings will be a collaborative effort between the City, Homeless Coalition, housing and service providers, and the community throughout the development process. Initial priorities for building reuses follow.

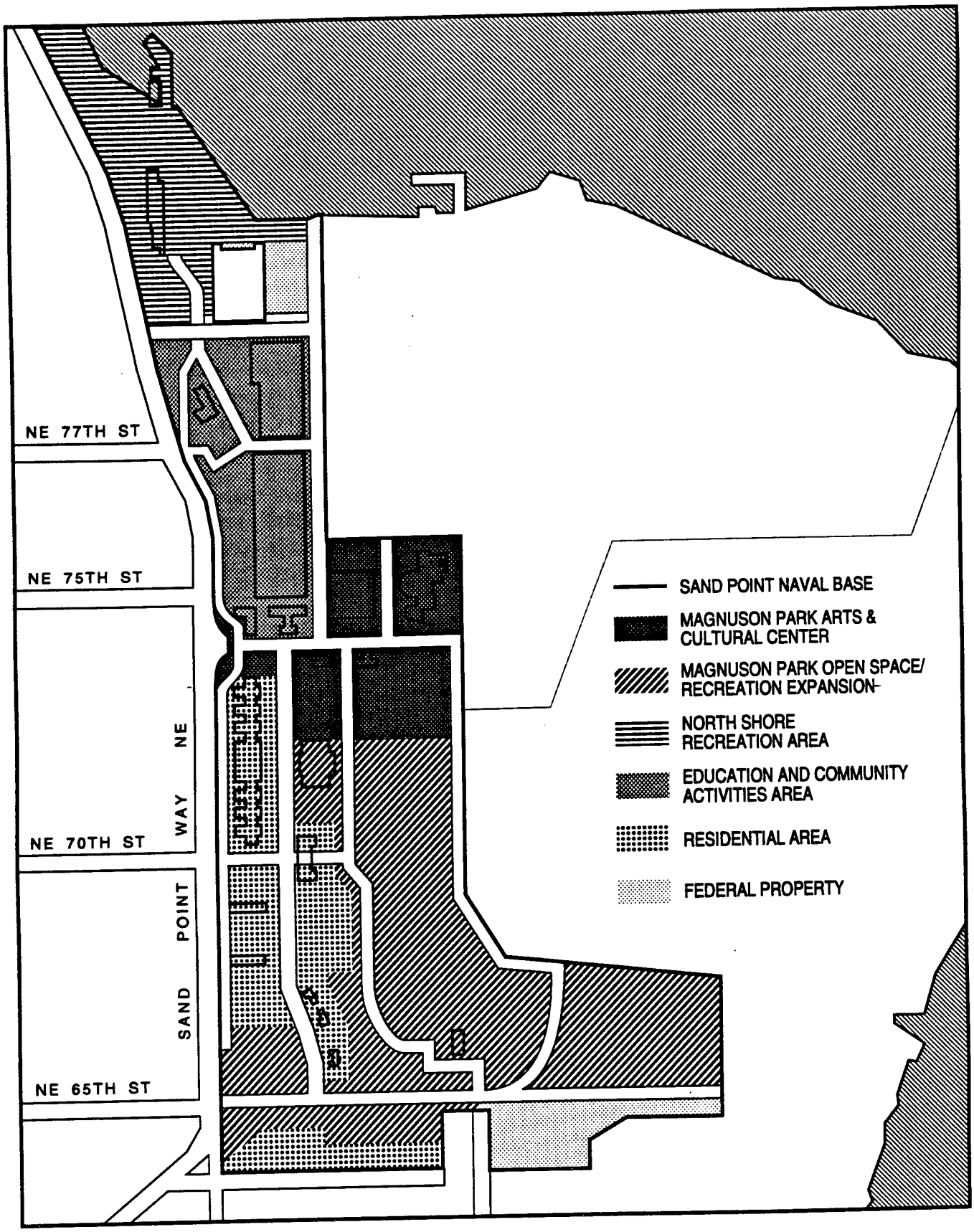
Buildings 330, 331 and 332, the Commanding Officer's quarters, will be secured through the McKinney Act for use as group homes for homeless and at-risk youth, as well as teen mothers with infants. These buildings will require only minor renovation under current proposals.

Buildings 26-N and 26-S will be used for homeless or low-income family housing and services if remodeling can be accomplished at a reasonable cost. The open parcel between the two buildings is a possible site for infill construction of additional housing or service facilities if needed to achieve goals.

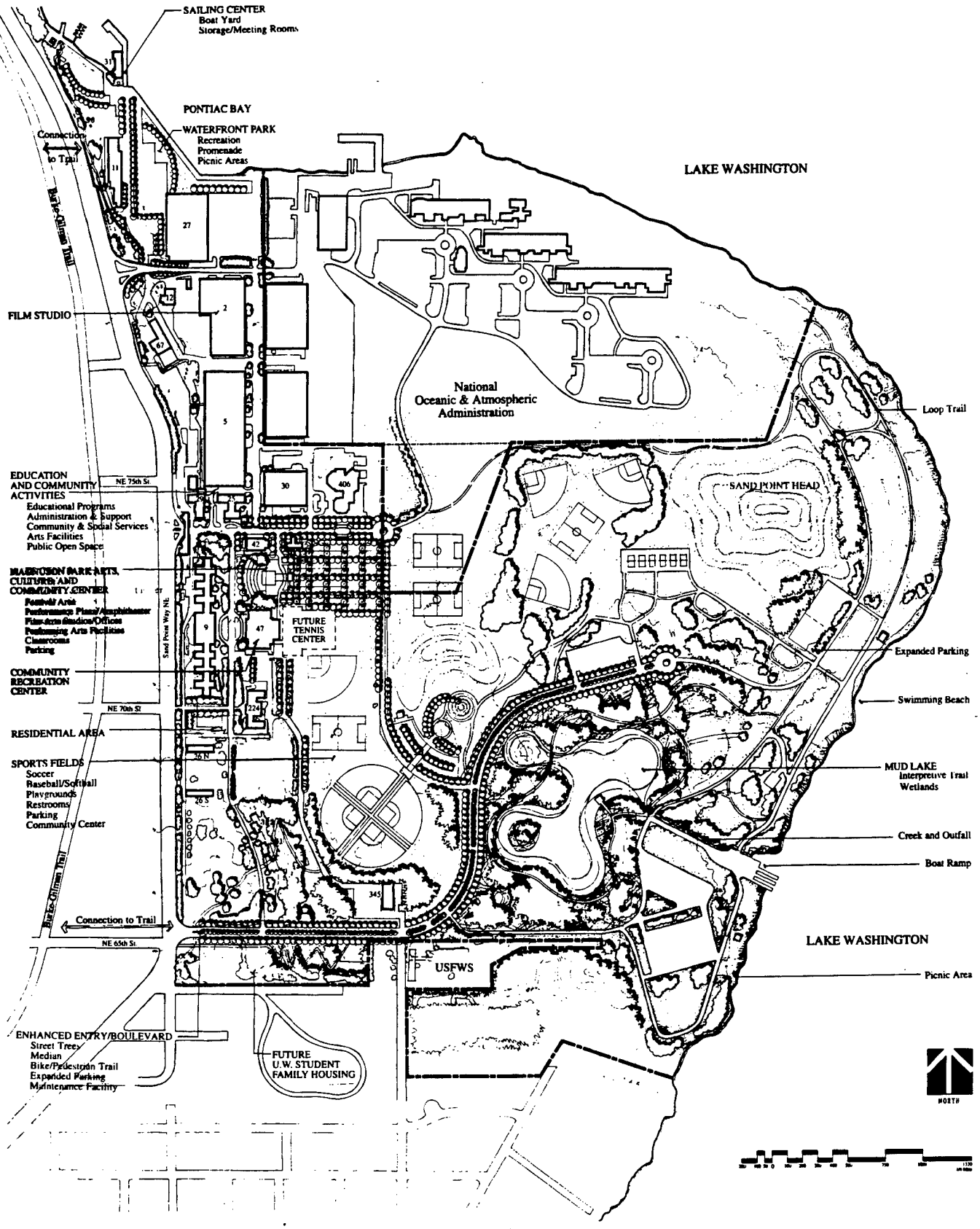
Building 6 will be demolished and the site used for developing new cost-effective family housing which promotes a sense of safety and community. Building 224 may be used for housing, at least for the first phase of housing development. It is newer than the historic buildings and has been well-maintained. Its long-term suitability for housing should be explored during and after Phase I.

Building 9 will be used for services for homeless households, compatible with the goals of community integration and safety. If cost-effective, low-income housing units will be included in Building 9. As the largest residential building on the Base, it contains both significant opportunities as well as design challenges. There are many constraints to maximizing the use of Building 9 for use as family housing, especially as primarily transitional housing for homeless families: overall cost to rehabilitate the building for families; potential significant health concerns and financial barriers related to presence of hazardous materials; concerns about concentrations of high numbers of homeless families in a single residential building; and the need to consider other potential compatible uses. The City intends to work with providers and developers to design the best use of this building for homeless and low-income persons and families. While the number of units for family housing may be limited, there is significant potential for additional mixed-income housing and siting of social and community services needed by residents of this area.

A portion of the lawn area south of Building 26-S may be used for new housing construction if the Sand Point housing goal cannot be met through reuse of existing buildings and the new construction on the sites of Buildings 6 and 224.



COMMUNITY PREFERRED REUSE PLAN FOR SAND POINT



SITE PLAN - SAND POINT PENINSULA

EDAW and Seattle Planning Department

November 1993

Community members have emphasized that a number of issues must be addressed in order for homeless/low-income housing to be effective at Sand Point. These issues include improved access to public transportation, appropriate supervision and management of housing, careful screening of potential residents, the provision of necessary services and amenities, and improved security in the immediate area. The City will work to see that these issues are addressed appropriately and will facilitate and support the development of an oversight group, including City, provider, and community representatives to review site design, development, and management of housing within the Residential Area. The City would also establish provisions to ensure that management and oversight of the Residential Area is coordinated and integrated with overall management and oversight across all activity areas at Sand Point.

In order to be accountable for the effective management of City resources and keep resources available to pursue other city-wide housing goals over the period from 1995 to 2000, the City will use the following guidelines for the upper limits of local resources dedicated to the Sand Point Residential Project:

- The City would provide no more than $12 million dollars (1993 dollars) in capital costs for development in the Sand Point Residential Zone. The City would follow the per unit guidelines applied under the current Seattle Housing Levy programs.

- Although future operating funds cannot be allocated in advance, the City would seek to provide a share of the total support for operations and housing services to homeless and low-income housing residents at Sand Point at a level not to exceed $500,000 per year.

University of Washington Student Family Housing

In addition to the Residential Area acquired under the McKinney Act, the City will support acquisition by the University of Washington of about 3 acres in the extreme southwestern area of the Base to allow for future expansion of the student family housing currently situated south of N.E. 64th Street. The University has indicated that although it has no immediate plans to redevelop the site, the long-term use for the property would be similar to the existing student family housing at Sand Point. The City will work with the University to ensure that any new construction is compatible in size and character with the adjacent neighborhood and proposed improvements to the entrance to Magnuson Park.

Traffic and Parking

Ordinarily, 250 units of low-rise housing would be expected to generate approximately 6.5 trips per unit, or an average of 1625 trips per day. However, since many occupants will not own vehicles, and others will work or study on site, the actual number of trips to be generated by this housing is expected to be lower. For the University of Washington housing, similar assumptions result in a projection of 520 trips for 80 units. However, the unique nature of student families and the availability of direct transit to the University may reduce this number. Parking for the housing would reflect the lower level of need, as well as the pedestrian-oriented environment of Sand Point, while student family parking would be required on site.

6. FEDERAL INSTITUTIONAL USES

Summary:

The two existing federal neighbors at Sand Point can be accommodated and better integrated into the peninsula from a physical, social, and aesthetic perspective.

Principal Considerations:

- **Ensure compatibility of use**
- **Design for visual integration**
- **Maintain public access to park and waterfront**
- **Ensure safety and security of people and property**

Since federal agencies are not legally required to adhere to City laws concerning land use or other activities impacting public and private property at Sand Point, the City will continue to work with federal neighbors to

ensure the compatibility of activities on the Sand Point peninsula. Compatible activities include research or offices which have no adverse impact on noise levels or environmental quality at Sand Point, as well as storage uses which generate low levels of traffic. Within the limits of agency security, public access should be maintained, especially shoreline and natural areas. The visual and physical coherence of the site should be enhanced by any neighboring federal uses.

National Oceanic and Atmospheric Administration

The National Oceanographic and Atmospheric Administration, or NOAA, has requested Building 27, a hangar at the northern end of the Base, and the ten acres surrounding it, including approximately 700 feet of waterfront. NOAA has stated its intention to use the building for large-scale storage of marine buoys, cable, and other nautical equipment, as well as some laboratory and office uses on a short-term basis. However, there is no indication that waterfront access is necessary for the proposed NOAA use. Since one of the City's highest priorities for Sand Point is public access to the water, this Plan accommodates NOAA use of Building 27 via a lease of approximately six acres, with no water frontage. The City would seek to retain an easement for pedestrian and emergency access and the preservation of a view corridor from the heart of the Base property to the north waterfront during the tenure of the NOAA lease.

In addition, the City would like to discuss with NOAA ways in which integration with Magnuson Park and other portions of the Naval property could be achieved. Considerations might include alternatives to the existing fence, including landscaping or other physical security measures. In addition, some agreement concerning joint use of parking areas for special events or weekends could reduce the overall amount of paved space needed at Sand Point.

United States Fish and Wildlife Service

The U.S. Fish & Wildlife Service has requested approximately 4 acres, on which it currently has a long-term lease with the Navy. The continuing use there would be the National Fisheries Research Center, a laboratory and office facility. This existing activity has not been incompatible with the existing Magnuson Park, although provision could be made to better integrate the site with the surrounding open areas following the disposition of Base property. The facility would require continued use of the roadway leading to the existing boat ramp at Magnuson Park.

Traffic and Parking

Use of the Fish and Wildlife site is not expected to change; therefore, its traffic contribution is expected to remain steady, and parking will continue to be provided on site. NOAA has indicated that its uses of Building 27—storage and research—are largely existing functions and would add a minimal amount of new traffic. If 20 researchers were housed there, approximately 50 trips per day would be generated. More specific analysis should be possible upon publication by NOAA of an overall development plan.

III

INFRASTRUCTURE

AUTO ROADS AND EMERGENCY ACCESS

Existing Conditions

The Navy's existing street network consists of ten principal roadways of differing lengths and widths. The network's main artery (Avenue "B") is a broad central avenue which originally connected the southern edge of the Base with the northern waterfront. The original grid has been disrupted over the years by building placement and development of Magnuson Park and the NOAA campus, leaving a confusing pattern of roadways.

As with other aspects of Sand Point development, the road system was platted independently of the surrounding community. As a result, most streets do not intersect with Sand Point Way NE, and the few that do are not aligned with the city street grid (e.g., NE 70th and 75th Streets). Typical of the challenge of reintegrating Sand Point into the surrounding neighborhoods is Avenue "A", a narrow service road which runs parallel and adjacent to Sand Point Way NE for almost the entire length of the Base. Removal of the Base's fence will make this avenue redundant as a circulation route.

Reuse Plan

All the roadways are adequate for their current use. A lifecycle analysis will have to be performed on the pavement in order to determine actual longevity and pavement thickness for future use.

The road system must provide sufficient public access and be compatible with the surrounding community. Because of the public nature of the intended uses for Sand Point and the City's broader objective of reducing automobile dependence, special emphasis will be placed on access for bicycles, pedestrians, and transit. In addition, special access provisions will comply with the federal Americans with Disabilities Act.

To facilitate reintegration of Sand Point into the surrounding urban context and to maintain emergency access, a hierarchy has been developed for roadway designation consisting of public streets, public access/utility rights of way, and easements. (Please refer to the map on page 27.)

Public streets at Sand Point would consist of 62nd Avenue NE and 63rd Avenue NE (formerly Avenue "B") along with the western portion of the current NOAA entrance road (renamed NE 80th Street), the Navy's main entrance road (renamed NE 74th Street), and a connection to the North Shore Recreation Area along a new NE 77th Street and the NOAA underpass road, renamed 61st Avenue NE. Ownership will be assumed by the City in order to provide pedestrian and vehicular access for the public as well as utility access to property at Sand Point. As with other City streets, maintenance will be performed by Seattle Engineering Department. In addition, an emergency access easement would be required from the new NE 80th Street and 63nd Avenue NE to the waterfront. This access would also preserve the visual connection across the proposed NOAA use to Lake Washington.

This configuration of rights-of-way and easements would provide sufficient service and emergency access to all of the former Base property. Additional safety considerations include provision of sufficient fire hydrants and building sprinkler systems.

VIEWS/PEDESTRIAN IMPROVEMENTS/BICYCLE PATHS

Views

The view toward the Base along the corridor of Sand Point Way NE as one approaches the site from the southwest should be retained as a green open space extension from Magnuson Park to Sand Point Way NE and NE 65th Street. A bicycle/pedestrian trail between Officer Houses 331 and 332 could continue this alignment and better integrate the Park with Sand Point Way.

Expansive views of Lake Washington, the Eastside, and the Cascades are one of Sand Point's most outstanding features. This vista is critical to the desirability of property on both sides of Sand Point Way, both

in terms of land values and character; thus, the view impacts of any physical developments on the site must be carefully considered. Currently, a 30' to 40' grade change allows impressive views to the east over Magnuson Park from most of the Base except where obstructed by existing buildings and trees.

Equally significant is the view north toward Lake Washington along the proposed 63rd Avenue NE, the broad road bounded by Buildings 2 and 5 on the west and NOAA on the east. This view is particularly important since it provides the only visual connection to the waterfront from the rest of the site and must be maintained, regardless of who acquires the parcel between NOAA and Building 27. At a minimum, an easement for emergency access should require that this corridor in the northeast corner of the Base remain visually open.

In renewing Sand Point's open character, as much of the site as possible should be publicly accessible. The site's relatively small scale, gentle topography, and proximity to Magnuson Park and the Burke-Gilman Trail make walking or bicycling ideal modes of transportation in and around Sand Point.

Pedestrian Improvements

Sidewalks and separate pedestrian entrances to Magnuson Park could encourage nearby residents and visitors to walk instead of drive. In general, a finer-grained circulation network is required for pedestrians than for automobiles. Parking lots on or near 62nd Avenue NE or Sand Point Way NE should be discouraged. Improved transit frequency and facilities would also encourage pedestrian use. A logical location for new bus shelters would be the southwest and northeast corners of NE 70th Street and Sand Point Way NE. In addition, the intersection of Sand Point Way NE and NE 74th Street, at the Main Gate, should be made perpendicular, in order to improve safety. Crosswalks should be added across Sand Point Way NE at NE 68th Street, NE 70th Street, NE 77th Street, and the northern connection to the Burke-Gilman Trail. Finally, signs oriented to pedestrians as well as automobiles could help facilitate circulation.

Bicycle Paths

Sand Point is situated within easy pedaling distance from the Burke-Gilman Trail, and it has been a long-held desire of many in the community to connect the trail with Magnuson Park. (See map on page 21.) At the south end of the property, an enhanced entrance corridor would include a separate bicycle lane of more moderate grade than the steeply sloping automobile road. Pedestrian improvements at the intersections of Sand Point Way at NE 65th and NE 70th Streets would be necessary to ease access for walkers and cyclists going to and from the trail, located one block west. At the north end, improvements to an old railroad spur owned by the City would allow direct access to the North Shore Recreation Area. Crossing Sand Point Way NE at this point would also require pedestrian improvements. In addition to these main entrances, Sand Point would be easily accessible from Sand Point Way NE through the Navy's existing main gate and the NOAA entrance road (NE 80th Street). Additional entrances would be added for foot and bicycle traffic near Building 67 and NE 77th Street, and at NE 68th Street in the Residential Area.

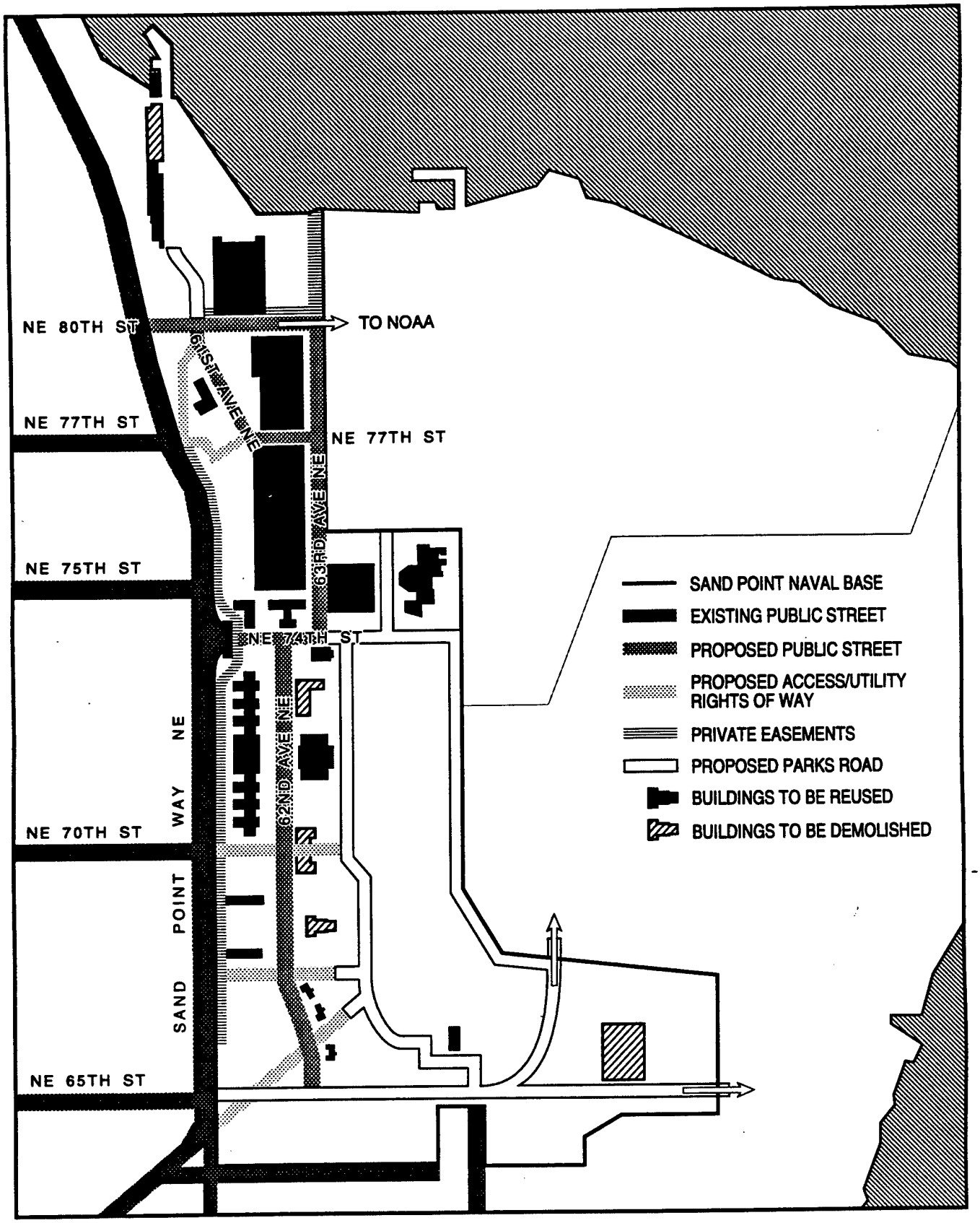
Within the Base itself, bicycle and pedestrian circulation would be facilitated by the Navy's road network, some of which would be closed to automobiles. To ensure a quality pedestrian- and bicycle-friendly environment, installation of bike racks, hand rails, benches, trees, lighting, and other amenities would be necessary.

Of particular importance is access between the lakefront and the rest of the site. Ideally, a publicly accessible trail running along the shore should provide a continuous circuit from the southern connection with Burke-Gilman Trail at NE 65th Street with the northern junction across Sand Point Way NE at Building 11. This outer belt should connect with a network of trails linking future recreation and open space areas with all proposed activity zones.

HEATING SYSTEM

Existing Conditions

Every building on the Naval Base property is currently heated by the Base's central steam plant located in Building 12. This heating plant houses three boilers rated at 27,000, 40,000, and 20,000 pounds of steam per hour (pph) respectively. All three boilers are reported to be in good condition and the oldest should not need replacement until the year 2001.



PROPOSED RIGHTS-OF-WAY -- SAND POINT

Current demand ranges from a winter peak of 40,000 pph to a summer peak of 8,000 pph. These levels of demand are expected to drop significantly due to proposed demolition of some buildings and transfer of others under the Plan.

The system's primary fuel supply is Washington Natural Gas (WNG)'s four-inch underground gas main which provides interruptible service to the Base. During periods of high demand during winter cold spells, the plant switches to a backup supply of Number 2 fuel oil. This heating oil is stored in three tanks — one 100,000 gallon underground tank and two above-ground tanks of 7,500 and 8,500 gallons.

Because of the frequency of curtailment periods (when gas pressure drops below 15 pounds per square inch, or psi) the plant is very dependent on this backup fuel supply and needs at least 50,000 gallons reserve fuel capacity during peak demand periods. Testing is currently underway to determine if soil contamination due to fuel leaks has occurred around the large underground storage tank (UST). If so, the Navy will have to remove the tank by September 1994 in order to decontaminate the site. Should this occur, the Navy and its successors would have to provide alternative fuel storage or arrange firm (non-interruptible) service from Washington Natural Gas.

The existing gas supply system to Sand Point has insufficient capacity to provide firm service to the Base. According to Washington Natural Gas, the current average hourly and daily loads would have to be reduced by 50-75% before firm service could be provided by the existing supply system. However, WNG is planning to reinforce service within five years, and could possibly provide a smaller, diversified load at Sand Point with firm service by late 1995, if this would prove cost-effective in the long run.

Reuse Plan

Eventually, individual heating systems for each building would most likely be more energy-efficient, cost-effective, and administratively practical for independently-managed buildings. Conversion would require major heating, ventilation, and air conditioning (HVAC) renovations which require substantial time and capital investment.

In the interim, several options are available for the City, the selection of which is likely to be influenced by the outcome of the Navy's soil tests and subsequent actions.

The first option would be establishment of a heating cooperative among future building occupants to operate the existing heating plant on its own or through contract with a qualified heating contractor. In this way, all buildings would be able to make an orderly conversion from reliance on the central system to independent systems without temporary loss of service. In addition, costs of plant operation would be shared among all system users. The advantage to this option is that the existing system could be continued without modification or interruption. The disadvantage is temporary continued dependence on a costly, inefficient system.

Another alternative would be installation of temporary heating plants to be leased to building owners during construction of permanent heating systems. This system would result in lower cost, but these plants will require installation time and occupy space within or adjacent to each building.

ELECTRIC SYSTEM

Existing Conditions

All buildings on the Base are currently served by a Seattle City Light transformer near the main gate. Electricity consumption is measured by the City Light meter between the transformer and the Navy's main switchgear. Service was upgraded by the Navy and City light in 1980 and the underground distribution system is adequate to serve existing buildings.

Reuse Plan

After the property is vacated by the Navy: (1) the existing 4,000 volt underground cable/transformer system would transfer to City Light; (2) electric meters would have to be installed at owner/customer expense on each building; (3) Seattle City Light would transfer customer service from the existing transformer and cable system onto new cable and transformers at each load center; (4) as new loads are added or building uses change and loads increase, City Light would apply standard service connection policies to these increases, resulting in extensive additions to the distribution

system at direct cost to the customers; and (5) new distribution lines would be located in dedicated street right-of-way or in easement areas as needed to serve the buildings, regardless of building ownership.

According to City Light's standard policy on new line extensions, all new customers would have to provide their own transformer vault or pad. For underground line extensions, which are more expensive, customers would pay the difference between the cost of overhead lines and underground service.

WATER SYSTEM

Existing Conditions

The Naval Base accesses the City's 16-inch water main with 8- and 10-inch diameter meters at both 6500 and 7600 Sand Point Way NE. There are also necessary direct fire hydrant connections to the City main at the north end of the Base. Water for Magnuson Park is currently supplied through the existing Base system, with the Department of Parks and Recreation retaining its own meter. NOAA has its own direct connections to City Mains, but the U. S. Fish and Wildlife would need to be connected.

The Base distribution system is configured in a loop network. This system is comprised of 28,000 feet of waterlines, of which 99% is cast iron with leaded joints, ranging in size from 1 1/2" to 16" diameter. The Navy's 1986 utilities report listed the condition of the 50 to 65 year-old system as fair. Preliminary investigation by the Seattle Water Department determined that the existing system is constructed of substandard materials and often substandard pipe size. Horizontal separation of water lines from sewer and/or storm sewer lines is also substandard. The City is concerned about the uncertain condition of the system, and particularly about possible leaks.

Reuse Plan

The long-term plan is to replace the existing system with standard water mains of standard materials to be installed within the proposed network of public streets. The advantages of a water delivery loop system at Sand Point would be to provide water to individual institutional users, provide fire protection, enhance system reliability, and ease maintenance and operations. Installation would be conducted during street resurfacing or other major construction activities. All construction would be paid by appropriate property owners, per a special tap charge ordinance.

Property owners would pay for individual mastermeters serving their property. Each owner would use the portion of the Navy's existing system to serve the piping needs of their property, and would be responsible for cutting and capping at their property line. In the interim, the Navy's existing system would continue to be used with minor system changes such as installation of new water meters, additional connections, and cutting and capping where required. In addition, the Fire Department may require installation of a new isolation valve and hydrant modifications.

An expanded Magnuson Park would continue to use the existing main; however, a larger line may be required for fire protection. The Parks Department would abandon its existing meter at the park entrance and perform required cut and cap work.

SANITARY SEWER SYSTEM

Existing Conditions

The Navy Base is currently connected to the City of Seattle gravity sewer main that runs north along Sand Point Way. The sewage collection system within the Naval Station was installed in the 1940s. The system includes five main pump stations located near buildings 11, 27, 5, 228, and 193. Each station has two pumps: the main pump, and one backup used during main pump shutdown and extremely high flows. The pumps are electric and have backup generators with standby fuel capacity to run for up to 8 hours in case of power outages. Operation of these pumps would be a continuing source of operations and maintenance costs.

The system's 16,000 feet of 4- to 18-inch diameter lines are a combination of concrete pipe with rubber joints, vitrified tile pipe with mortar joints, and cast iron pipe with lead joints. The Navy has described the condition of the system as fair with problems resulting from root infiltration, broken tiles and lose joints. In addition, the Navy has stated that infiltration — groundwater entering the sewer system — appears to have been a problem during high water table conditions, especially during extremely intense rainfall.

Reuse Plan

To correct these deficiencies, a rehabilitation program is recommended that includes line replacement, joint grouting, and root removal. The Navy has concluded that with implementation of this rehabilitation program and regular maintenance, the system should have many years of service life.

The City is assuming that it would acquire three of the five pumpstations located near Buildings 11, 27, and 5, which will need to be upgraded for safety. The two remaining pumpstations will probably be abandoned. A certain percentage of sanitary sewer lines would probably have to be relined or replaced within the first five years, but the system would have to be cleaned and studied before the exact quantity can be determined.

The City is currently working with the Navy to ascertain how much of the rehabilitation has been completed and what future rehabilitation needs will be. The outcome of this work will help to determine the magnitude of future costs to the City.

DRAINAGE SYSTEM

Existing Conditions

The drainage system at the Base collects runoff by gravity and directs the flows to Lake Washington through six outflow pipes. The system's trunk lines also provide drainage for portions of the nearby NOAA property and Magnuson Park. The Naval Station's system is not connected to the City of Seattle's storm drainage system. The system serves approximately 33 acres of buildings and 70 additional acres of impervious surface area.

The trunk lines of the Station's four major drainage basins range from 18 to 42 inches in diameter, with capacities ranging from 28 to 93 cubic feet per second. Their combined capacity at the point where they leave the site is approximately 177 cfs, which can comfortably handle the expected 5-year storm flow.

Reuse Plan

The system is in undetermined condition. Because the runoff contains contaminants associated with vehicles and parking areas, storm water should go through oil and water separating devices.

Storm drainage system ownership and maintenance is expected to be the responsibility of property owners. Where a single system serves multiple property owners, each owner would be responsible for the portion of the system serving that property.

The City is working with the Navy to determine the current condition of the drainage system. The City is also in the process of determining how much work will be required to bring the portions of the storm drainage system to be acquired by the Drainage and Wastewater Utility (DWU) in the Engineering Department up to City code.

CONCLUSION

The City will require detailed utilities studies in order to evaluate more accurately existing conditions, to determine the most effective way to meet the needs of future uses at Sand Point for utility services, and to estimate costs for system upgrades. Utilities planning will continue concurrent with development of the implementation strategy and finance plan.

IV
IMPACTS

HISTORIC PRESERVATION

The historic character of the Sand Point Naval Station includes a number of buildings. A historic district of statewide or national significance may be designated on the western portion of the Base.

Buildings which appear to be the most significant include the Officers' Houses, Numbers 330-332; Residential Buildings 26-S, 26-N, and 9; the Main Gate (Building 138) and the Recreation Center (47); and the three buildings in the Proposed Arts, Culture, and Community Center, Numbers 18, 30, and 41. In addition, the Dispensary (Number 29), Administration (25), Supply Warehouse (5), and Reserve Hangar (2) in the Education and Community Activities Zone, and Buildings 11 and 27 near the North Shore, may be significant, and should be evaluated further.

The exterior of those structures which contribute significantly to the character of Sand Point should be maintained. At the same time, buildings which are not significant or which cannot be safely or cost-effectively reused may need to be removed. Any redevelopment should reflect the historic character of the Base, and contribute to the unity of the site. The important history of Naval Station Puget Sound can be preserved while enabling active reuse of the Base and its buildings.

NEIGHBORHOOD CHARACTER

As a military facility, Sand Point developed completely independently of surrounding residential neighborhoods. While future uses of the Base should strive for compatibility with the surrounding community, Sand Point itself should maintain its own distinct, historic flavor. A redeveloped Sand Point will have a positive impact on surrounding neighborhoods despite its non-conforming character, by enriching the diversity of northeast Seattle.

Consistent with the Mayor's vision of maximizing public benefit, Sand Point should have an open, public feel wherever possible. Buildings converted to education, arts, cultural and recreational uses, along with the open spaces between them, should be inviting to visitors and residents alike. Sand Point should be a vital place where outdoor areas complement a diversity of indoor uses in fostering activity on a year-round basis.

The character of the Base itself will reflect the civilian character of reuse and a return to a more natural environment. Many paved spaces will be returned to open, planted areas or wetlands. Most of the existing perimeter fence will be removed. Buildings which contribute to the historic or aesthetic character of the Base will be retained, while less important structures will be removed. Any infill or redevelopment will be sited in a manner which strengthens the integration between the Base and adjacent neighborhoods. Neighboring residents have expressed concern over possible glare from sports field lighting equipment; care should be taken during equipment selection and location to prevent adverse impacts to the surrounding community.

The predominant character of the Sand Point Peninsula will reflect the primary uses — an expanded Magnuson Park, an integrated public Arts, Culture, and Community Center, and a new North Shore Activity Area. Green spaces at each of the north, central, and south entrances to the site will indicate the return of Sand Point to the natural environment, and will invite public use. Built areas will help to define the open space at Sand Point.

COMMUNITY AND SOCIAL IMPACTS

At this stage it is difficult to assess fully the potential community and social impacts of the Mayor's Preferred Reuse Plan. However, we can identify the social concerns and issues which will need to be addressed as we move forward with redevelopment.

The proposed residential area will house up to 250 low-income and homeless households, with a total of up to 375 children living on the former Base property, about half of whom will be school age. Additional households may include some low-income elderly or other special needs populations. Family units and long-term housing are new uses for the Base. In addition, new types of educational, employment, and recreational uses will

attract a more diverse population to Sand Point. As the Reuse Plan moves forward, the City will consider the following social and community impacts.

The diversity of activities and users at Sand Point is expected to have a positive effect on social integration. Citizens from different ethnic, economic, and experiential backgrounds will be able to interact in a positive manner through various activities, programs, and events. Park visitors, residents, students of all ethnic groups — including Native Americans, student families, elderly residents of northeast Seattle, and children and youth will all be able to take advantage of the opportunities at Sand Point.

The families residing on the Base will need access to local schools. In addition to the children living in family housing, up to 24 youth will be living in the three group homes. Homeless children will need extra support — provided either through family support workers employed in neighborhood schools or through special schools for homeless children. The City will remain cognizant of the needs of these children and youth and will work with local schools and service providers to ensure adequate levels of support and access to specialized schools and services.

The Homeless Coalition has identified a range of support services critical to the successful housing of homeless and low-income households. The support services proposed to be provided at the Sand Point site include child care, health care, employment and training services, general support services, and a meals program for residents. Initially these specific services are intended for the residents of Sand Point; services could possibly be expanded to serve the broader community if this is determined to be both desirable and cost-effective. Residents will also have access to other education, recreational, cultural, and community services developed as part of overall Reuse Plan.

In addition to facilities on site, the residents will have access to social services and employment in other parts of the City. It will be critical that transportation services accommodate these needs. The City will work with providers to identify the full range of support services needed and create strategies to ensure their availability. The City will also work to ensure that adequate transit be available for Sand Point residents, workers, and visitors.

It is important that the residents and users of the Sand Point facilities and members of the surrounding community are safe and secure from harm. The City will work closely with developers, operators, and the community to ensure that the programs provided and the physical design of the housing and other buildings developed at Sand Point promote a sense of safety and security.

It will be critical that the City and community work with providers and residents to overcome isolation and potential stigma and alienation. The City will work with providers and the neighborhood to develop the connections necessary to promote a sense of community within the residential area and a sense of belonging in the surrounding neighborhoods. The City is responsible for ensuring that resources are effectively deployed in order to ensure adequate policing and public safety.

TRANSPORTATION AND PARKING

While improvement of Sand Point for pedestrian and bicycle use is a priority, it is important to realize that many community members will drive their cars to activities at Sand Point. Estimates of average weekday trips indicate that auto trips should not be significantly higher than those currently generated by the Base, especially given the existing heavy traffic in the commissary area. Provision of small-scale commercial services on or near Sand Point could reduce the number of daily trips made by residents or workers for basic needs such as food.

Estimates of average weekday trips by Activity Area are as follows:

AREA	TRIPS
North Shore Recreation Area	100
Education and Community Activities	1700-2900
Arts, Culture, and Community Center	550
Magnuson Park Open Space/Recreation	1500
Residential Area	2150
NOAA Expansion (Building 27 only)	50
TOTAL	**6050-7250**
Existing Trips to Base and Park	7600

Transit on Sand Point Way NE currently connects the Naval property with Northgate and the University

District. Headways (the times between buses) during the day and evenings, seven days a week, are 30 minutes. The change in resident population and employment at Sand Point will probably not merit a change in transit service; however, an increased number of children may require new school bus routes. The City will continue to work with the Seattle School District and Metro on this and other issues.

Due to the large areas of pavement existing on the Base, parking is likely to be sufficient. The screening and landscaping of large paved areas will improve the aesthetic environment. The large lot east of the Main Gate/NE 74th Street entrance should provide sufficient spaces for the Arts, Culture, and Community Center, which would have the highest peak need for parking. This lot can be shared with the Community Recreation Center and Magnuson Park, and daytime lease agreements could be made with users in the Education and Community Activity Area. Parking for the North Shore Activity Area, NOAA, and U.S. Fish and Wildlife would be provided on site. Parking on or adjacent to 62nd Avenue NE, in the heart of the former Base, should be minimized, and parking lots or garages should be screened and sited so that they do not detract from the pedestrian environment or park setting.

NATURAL ENVIRONMENT

As a large and relatively open parcel of land partially surrounded by Lake Washington, Sand Point is a unique environmental asset for the central Puget Sound region. For most of this century, the Sand Point Peninsula was occupied by the Naval Air Station, including an airfield and military support facilities. Over the years, the site has undergone significant amounts of dredging, filling, and heavy construction. Until the creation of Magnuson Park in the 1970s, most of the surface was paved or built at the expense of natural habitat and soil hydrologic functions. Other negative impacts included excessive noise, exhaust, use of hazardous materials, and the general lack of natural buffers to mitigate these problems.

The conversion of the remainder of the Navy Base into a mixed-use area serving a variety of civilian uses offers a rare and significant opportunity to improve the natural physical environment of a large parcel of urban land. Consistent with the City's proposed Comprehensive Plan Framework policies, reuse planning at Sand Point should improve air, water, and soil quality, increase open space, lower noise levels, and include more sensitivity to needs of pedestrians.

BRAC Environmental Activities

As mandated by federal government's Defense Base Closure and Realignment Act, the Navy is responsible for the environmental condition of the Base. Under the direction of the Department of Defense's BRAC Environmental Coordinator (BEC), a bottom-up review is being conducted of required cleanup programs. The product of this will be the BRAC Cleanup Plan (BCP), a comprehensive summary of the status of environmental programs, providing a strategy and schedule for selecting and implementing response actions under all applicable regulatory programs. Accordingly, the following major environmental actions have been scheduled by the Navy:

ACTIVITY	START*	COMPLETION*
Environmental Baseline Survey	Oct. 1993	Sept. 1994
Environmental Impact Statement	Aug. 1993	Sept. 1994
Revised Site Inspection	Oct. 1993	Dec. 1993
BRAC Cleanup Plan	Sept.1993	March 1995
Community Relations Plan	Oct. 1993	Feb. 1994
100,000 Gallon Underground Tank (UST)	Sept. 1993	March 1995
Auto Hobby Shop Activities	June 1993	March 1995
Aviation Gas Pipeline Activities	Sept. 1993	Sept. 1995
Asbestos Survey and Abatement	Jan. 1993	Jan. 1994
Lead Paint Survey	Oct. 1993	Jan. 1994
UST Removal	Sept. 1993	May 1994
Hazardous Waste Storage Permitting & Closure	March 1994	Sept. 1994

*approximate dates

All environmental work at Sand Point will be overseen by the BRAC Cleanup Team (BCT) which will include officials from the City, as well as the Navy, state Department of Ecology, and others. Community input to the process will be facilitated by an independent Restoration Advisory Board (RAB) consisting of a broad spectrum of public agencies and community organizations.

The most significant environmental activity performed by the Navy will be the Environmental Impact Statement. The EIS will analyze the impacts of this reuse plan and support Navy decision making in its property disposal process.

Air Quality

The major sources of existing pollution at Sand Point include the central steam plant and automobile exhaust. This plan should improve air quality at and around Sand Point in several ways: conversion to more energy efficient heating, ventilation and air conditioning (HVAC) systems, decreased automobile dependence, and conversion of buildings and pavement to vegetated open space. Increased vegetative cover will filter dust and exhaust gasses and help to moderate temperature by providing summer shade and winter windbreaks. Reduced automobile dependency and conversion to more energy-efficient HVAC systems will minimize exhaust gasses. Any activities which generate air pollution, such as painting, ceramics, or metalwork, should be carefully programmed to minimize nuisance and hazardous effluent.

Soil Quality

Soils comprised of sandy silty loam predominate at Sand Point. Although these soils tend to be well-drained, they are not suitable for heavy structural loads; therefore, new construction should be minimized and restricted to more stable sites whenever possible. Due to the high water conductivity of the soil, and the former use of the site as an aviation facility, soils in the vicinity of former fuel storage and drainage systems — as well as off-shore sediments — are currently being tested for residual contaminants and will be cleaned as necessary by the Navy. Areas underlain by hydric soils should be utilized for wetland redevelopment, where these qualities will benefit rather than be an obstacle to use of the property.

Water Quality

Stormwater runoff from Sand Point either enters Lake Washington through the Navy's drainage system or on the surface through overland flow. Sand Point's porous soils allow infiltration into the water table, which lies about 10.5 feet below the ground surface. Water which originates on paved parking surfaces or lawns transports pollutants and fertilizers directly into these natural water bodies without treatment, as typically occurs with stormwater. Resulting non-point source pollution and eutrophication could be reduced by biofiltration collection systems such as swales and filter strips which also trap silt and other particulates detrimental to adjacent aquatic habitat. Rather than discharge directly into the lake, some of this runoff could flow into the proposed "Mud Lake" wetland system for detention and further treatment.

Noise

Residents of the surrounding neighborhoods have expressed concern over the noise generated by existing and proposed activities. A number of significant precautions can be taken to minimize sources of unnecessary noise pollution, including: restriction of industrial and large-scale commercial activity, limits to automobile circulation, improved pedestrian and bicycle access, restricting motorized water craft from the north shore area, and careful scheduling of large public events. Efforts should be made to mitigate and balance the negative impact and public benefits of activities.

Natural Habitat

The few existing wild areas on the site should be preserved. Additional natural areas should be created to enhance Sand Point's habitat value for fish, animals, and bird species. Emphasis should be on wetlands due to their high productivity, critical hydrologic function, site suitability, and popularity with the community. Native plants will be selected with consideration given to habitat function and ecological compatibility.

Hazardous Materials

Hazardous materials used by the Navy include heating and aviation fuels, oil, cleaning solvents, pesticides, aircraft dope (Cellulose Nitrate), asbestos, lead paint, Polychlorinated biphenyls (PCBs), and polycyclic aromatic hydrocarbons (PAHs). The Navy is continuing to test for and mitigate many of these hazards. Navy environmental activity currently underway or recently completed includes:

- Revised CLEAN Site Inspection;

- Survey of buildings for asbestos-containing materials;
- Survey of buildings for lead-based paint;
- Soil monitoring for petroleum leaks by underground fuel tank;
- Testing for petroleum leaks from the aviation gas line;
- Remediation of the pesticide storage tank and surrounding soils;
- Remediation of the auto hobby shop sump and surrounding soils;

Asbestos-containing materials and some other hazards will remain after the Navy leaves. The City of Seattle and other potential successors to the property are serving on the BRAC Cleanup Team (BCT), which will oversee all environmental activity related to Base closure at Sand Point. By working together with the Navy and appropriate regulatory agencies serving on the BCT, the City will be in a better position to ensure that environmental response actions are responsive to the City's Preferred Reuse Plan. In addition, an independent Restoration Advisory Board (RAB) composed of representatives from the reuse community will oversee the BCT.

Transfer of property by the Navy must be contingent upon a reasonable level of environmental cleanliness as determined by the BCT in accordance with state and federal guidelines. The City and other potential land owners should incur no liability for potential environmental contamination caused by former naval activities at Sand Point. Reuse of the site should avoid recontamination of Sand Point during building demolition and renovation or in any future activities.

Construction and Demolition

Reconfiguration of the Base under this Plan will require substantial demolition and construction activity. Renovations should be planned in ways to minimize impacts to the environment and surrounding neighborhoods with particular attention to limiting excessive noise, dust, construction waste, traffic, release of hazardous materials, and soil erosion.

COSTS OF BASE REUSE TO THE CITY

Under this Plan, the City would be responsible for a substantial portion of the costs of Sand Point reuse. Depending upon the final outcomes of the Navy disposal process, City capital facilities resources may be needed to pay for such things as demolition of buildings, renovation of existing buildings for housing, cultural, recreation, or community uses, infrastructure improvements, new construction of housing, recreational buildings, or other approved community facilities, and restoration of land to a natural state.

In addition, there are significant operating costs for recreation, housing, or community services. The City may be responsible for some operating costs related to maintaining the Base infrastructure, City park and recreation programs, and contributions to cultural activities, community services, and human services provided on the Base. City staff have developed initial estimates of the cost to the City to acquire, renovate, and operate portions of the Base. These estimates are approximate, pending further analysis of structural requirements, hazardous materials assessment, and final determination of use. The estimates are illustrations intended to help policymakers during the development of the overall reuse plan and in establishing Sand Point Goals and Objectives and do not represent a firm financial commitment to specific aspects of Sand Point reuse. City staff will complete a detailed financial plan for Sand Point reuse in 1994. The 1994 financial plan will be more precise and will allow the City to establish firm financial commitments to various aspects of Sand Point reuse. As with many other aspects of Sand Point reuse, City financial commitments will likely be incremental as different possibilities emerge in further implementation planning. The following are estimates by Activity Area.

To accommodate the financial impact to City capital and operations budgets, this reuse plan will be phased in over time. Implementation will require that some expenses are incurred immediately or early on in Sand Point transfer to City and community ownership. Other expenses may be deferred by the City or occur on longer timelines determined by the work and success of different community agencies and funders. The following estimates project expenses as either immediate or deferrable. Although this plan is presented in two

discrete phases, actual implementation is likely to be incremental.

Included in Immediate Costs are all projects determined to be urgent in order to preclude future cost escalation, for reasons of site security and safety, and to expedite usability of facilities. Deferrable Costs include those capital-intensive priority projects which do not require immediate development. Projects categorized as Deferrable may be implemented in the near term if appropriate funding is available.

1. North Shore Recreation Area

Estimated Capital Costs	
Immediate Cost:	
Secure pier and add fencing and floats	$0.7 Million
Demolish half of Building 11 and outbuildings	$0.5Million
SUBTOTAL--Immediate Costs	$1.2 Million
Deferrable Costs:	
Waterfront Park improvements	$1.0 Million
Sailing Center, Building 11	$1.8 Million
SUBTOTAL—Deferrable Costs	$2.8 Million
Subtotal—Capital Costs	**$4.0 Million**
Estimated Operating Costs	
Annual Park Operating Costs	$30,000/year
Sailing Center Operating Costs (3 years only)	$80,000/year

2. Education and Community Activities Area

Estimated Capital Costs[1]	
Immediate Costs:	
Sharehouse/Conservation Corps (Total -- not City share)	$1.4 Million
Subtotal—Capital Costs	**$1.4 Million**
Estimated Operating Costs	
The Sharehouse (Possible City portion)	$40,000/Year

3. Magnuson Park Arts, Culture, and Community Center

Estimated Capital Costs	
Immediate Cost:	
Demolition of Building 222, 223	$0.45 Million
SUBTOTAL—Immediate Costs	$0.45 Million
Deferrable Cost:	
Art Exhibition, Building 41	$0.45 Million
Art Exhibition, Building 18	$2.3 Million
Performance/Exhibition Building 30	$6.0 Million
Landscape and Amphitheater	$2.0 Million
SUBTOTAL—Deferrable Costs	$10.75 Million
Subtotal—Capital Costs	**$11.2 Million**
Estimated Operating Costs	
Aggregate Art and Culture Center (5 years only)	$500,000/year

4. Magnuson Park Open Space/Recreation Expansion

Estimated Capital Costs	
Immediate Costs:	
Community Center, Building 47	$3.3 Million
Parks Maintenance, Building 345	$0.5 Million
Interim Park Development	$1.0 Million
Demolition of Commissary and Vicinity	$2.5 Million
Utility Upgrades	$0.2 Million
SUBTOTAL—Immediate Costs	$7.5 Million
Deferrable Costs:	
Park Roads, Wetlands, Sportsfields, and Playgrounds	$17.1 Million
New Tennis Center (not yet sited)	$9.0 Million
Main Gate Rehab, Building 138	$0.8 Million
SUBTOTAL—Deferrable Costs	$26.9 Million
Subtotal—Capital Costs	**$34.4 Million**

[1] This cost estimate does not include the full range of costs associated with reuse of all buildings and maintenance of grounds in Zone 2. The estimate only includes the total costs associated with renovation of Bay C, building 5 for The Sharehouse. The full range of costs will be identified at a later date.

Estimated Operating Costs	
Park Operating Costs	$150,000/year
Community Recreation Center	$650,000/year

5. Residential Area

Estimated Capital Costs	
Maximum Housing Capital Costs (City share)	$12.0 Million
Subtotal—Capital Costs	**$12.0 Million**
Estimated Operating Costs	
Maximum Operating Costs (City share)	$500,000/Year

In addition to zone-specific costs, the reuse of Sand Point Naval Station will incur costs associated with maintaining and upgrading infrastructure. Preliminary estimates for upgrading the water system are $1.7-2.5 Million. Estimates for the Drainage and Wastewater Utility are being developed by the Engineering Department. Proposed additions to City rights-of-way may incur additional long-term costs, but appear sufficient for immediate use. Electric, telephone, and cable systems will be converted at the expense of individual property owners.

Total Estimated Costs - City Reuse Plan[2]

Immediate Capital Costs:	$22.55 Million
Deferrable Capital Costs:	40.45 Million
Infrastructure:	2.5 Million
TOTAL ESTIMATED CAPITAL COSTS	**$65.5 Million**
Ongoing Annual Operating Costs	**$1.37 Million/year**
Five-year Special Operating Costs (Sailing Center/Arts, Culture, Community Center)	**$2.74 Million**

[2] This estimate does not include potential costs associated with building renovation, operations, demolition, construction, or grounds maintenance associated with desired education, community activities, or arts uses in zone 2. These will be estimated at a later time.

V
NEXT STEPS

CITY PROPOSALS FOR ACQUISITION

The City will pursue federal discount programs for the portions of the Base which it intends to acquire. These programs allow for partial or total discount of the cost of land and buildings, and carry with them particular requirements for use. The City will seek to utilize the public benefit discount for recreation through the National Park Service, public benefit discount for education through the U. S. Department of Education, property for homeless housing under the McKinney Act, and other conveyance mechanisms as opportunities become available.

Public Benefit Discount for Recreation

The City of Seattle will seek to acquire surplus federal real property at Sand Point for expansion of Magnuson Park through the provisions of Public Law 91-485. Originally sponsored in Congress by former U.S. Senator Henry M. Jackson, the legislation was known as the "Fort Lawton Bill" since Fort Lawton in Seattle was the first piece of property eligible for transfer. Large portions of Fort Lawton are now Seattle's Discovery Park, and hundreds of other properties across the nation have since been transferred to local governments under the provisions of the law. In Seattle, the law has been used to effect transfers of land not only for Discovery Park, but also for the existing Magnuson Park, the Seattle Tennis Center, and Martin Luther King, Jr. Memorial Park.

Some of the surplus Naval Station property can be transferred to the City by the Navy at no cost under a public benefit discount. The City of Seattle will apply for the property through the National Park Service to obtain this discount. The application must include a description of the property, a statement as to the need for the property, discussion of the suitability of the property for park and recreation use — including preservation of scenic and historic resources — a discussion of the capability of the City to develop and maintain the property, and a program of utilization. This last item is the actual narrative and conceptual plan for use of the property, the schedule for its development, and a commitment to protecting historic values. The National Park Service reviews the application and, based upon its evaluation, recommends the amount of the public discount of the price of the property. The discount can be as much as 100%, or no cost to the City.

Preparation of the application for portions of the Sand Point property for park and recreation use will occur following adoption of this Plan and before or during the state and local government screening process, in which other public agencies can also officially express interest in the property.

Conveyance of portions of the Sand Point property for park and recreation use will likely be in the form of a deed that will contain reservations, restrictions, and covenants. These include conditions that: 1) preclude the property being resold, leased or assigned for other than park and recreation use; 2) commit the City to the use, development and maintenance of the property; and, 3) require the City to prepare biennial reports regarding the property. Title to the property would revert to the federal government in the event of noncompliance with these and other terms of the conveyance. In any event, the Department of Defense would retain reversionary rights to the property if needed for national defense.

In the event of listing of the property on the National Register of Historic Places or consideration of such listing, additional conditions will be outlined in a memorandum of agreement to stipulate evaluation of any reuse or removal of historic resources. Included in such conditions would be requirements to consult with the State Historic Preservation Officer on plans for reuse or removal and to maintain historic resources until a final decision is made on their disposition.

Public Benefit Discount for Education

Where appropriate, the portions of the Base to be used as educational facilities can be transferred under the public benefit discount for education, as described in Public Law 81-152. This law gives the Secretary of Education the authority to sell or lease surplus federal property at a price which takes into account the public benefit which will accrue from the intended educational use.

Under the Plan, portions of the Education and Community Activities Area could be conveyed under the public benefit discount for education, which ranges from 40% to 100% of the fair market value of the property. The amount of the discount is guided by the intended use of the property. Under federal guidelines, the following uses are eligible for some degree of discount: academic, vocational, professional, or specialized instruction or training programs, school system administration, teacher or student housing, educational radio or television, educational museums, and public libraries. Under federal law, the proposed program must be one of the basic purposes for the applicant agency and for which the applicant is authorized to expend its own funds.

The transfers are subject to use restrictions. For example, on-site transfers — conveyances of land or land with improvements, such as buildings — are in effect for a period of thirty years. That is, the property and facilities obtained under the discount must be used for educational purposes for thirty years, or the land could revert back to the federal government. Many of the restrictions described above under the section entitled "Public Benefit Discount for Recreation" would also apply.

An applicant under the public benefit discount for education must be a state, political subdivision or instrumentality of a state, a tax supported institution, a 501(c)(3) nonprofit organization for educational purposes, or any combination of these entities. The type and amount of property requested under the discount must be reasonably related to the intended use of the facility. Likewise, the need for the facility must be justified and the immediate need for the program demonstrated. The suitability of the property for the intended use must also be shown. Finally, the applicant must be able to demonstrate financial resources sufficient for the proposed program.

The City continues to explore ownership scenarios and acquisition strategies with potential partners in order to take full advantage of the opportunities available under the public benefit discount for education. Possible options include "off-site" transfer to educational entities of buildings sited on land to be acquired by the City. Such an off-site transfer would be valid for the remaining economic life of the building, not to exceed 10 years, at which point the future disposition of the facility would negotiated between the City and the educational entity.

The City will coordinate submission of applications for Public Benefit Discount for Education prepared by potential reuse partners during the state and local screening process.

McKinney Act for Homeless Housing

The City of Seattle, in partnership with the Seattle-King County Coalition for the Homeless, will apply for portions of the Base under the Stuart B. McKinney Act, a federal law mandating that all surplus federal property be screened for use to benefit homeless persons. Benefits include both the development of housing and the siting of services to support homeless persons.

The screening is a two-step process which is administered by the U.S. Department of Housing and Urban Development (HUD) and the U.S. Department of Health and Human Services (HHS). In 1993, HUD screened the Base for suitability to benefit homeless persons. In 1994, as property becomes available, Base facilities deemed suitable to benefit homeless persons will be advertised in the Federal Register to solicit proposals for programs. Proposals will be made to HHS. The agency will then evaluate the proposals it receives. The City has been working with both HUD and HHS to develop the best possible proposal and to ensure the greatest flexibility of use of the property under the McKinney Act.

It is expected that the City and the Seattle-King County Homeless Coalition will submit a joint proposal to HHS for the property located in the Residential Zone as described in this document. The proposal could include transfer of the property to the City of Seattle, since City ownership would provide for greater flexibility in funding the housing and services located on the site, and ensure effective coordination with other reuse Activity Areas. If a City/Coalition proposal is accepted by HHS, approximately 18 acres in the Residential Zone would be deeded to the City at no acquisition cost, as provided by the McKinney Act.

Other Potential Conveyance Mechanisms

Legislation introduced by Senator Pryor of Arkansas on September 10, 1993, could significantly amend federal legislation affecting the closure and reuse of military bases. If passed, the relevant portions of the Pryor Amendment would:

(1) Subject to some restrictions, require free transfer of Navy personal property (such as furniture, fixtures and other non mission essential items) as part of the reuse of the Naval Station Puget Sound;

(2) Allow conveyance of property to encourage economic development;

(3) Allow for interim leasing of the Base property and facilities during the closure process; and

(4) Allow the Secretary of Defense to make grants to the redevelopment authority —in this case, the City of Seattle — of each community adversely affected by the closure of a military installation. Although closure of the Naval Station Puget Sound is not expected to result in a large-scale loss of employment, the City of Seattle has been adversely affected by the large amount of resources expended during the past two years in planning for the reuse of the base.

The Pryor Amendment is currently in Conference Committee between the U.S. Senate and the House of Representatives. A compromise bill is expected to be signed into law before the end of the year.

Rights-of-Way and Easements

A system of rights-of-way and easements will be sought for nominal cost from the Navy. Their purpose will be to provide public access for automobiles, pedestrians, bicycles, emergency vehicles, and utilities. Three types will be conveyed: Public rights-of-way for automobile access and utilities, public rights-of-way for pedestrian/ bicycle access and utilities, and easements for utility access across parcels.

Rights-of-way for public streets and utilities - Certain rights-of-way are required by the City in order to provide basic vehicular access to each parcel created in the disposal process. Most of these include utility lines which also are required by public utilities. These include the following streets (with new names—consult map on page 27):

NE 80th Street	from Sand Point Way NE to 63rd Avenue NE
NE 77th Street	from 61st Avenue NE to 63rd Avenue NE
NE 74th Street	from Sand Point Way NE to 63rd Avenue NE
NE 65th Street	from Sand Point Way NE to 62nd Avenue NE
61st Avenue NE	from NE 80th Street to NE 77th Street
62nd Avenue NE	from NE 74th Street to NE 65th Street
63rd Avenue NE	from NE 80th Street to NE 74th Street

Rights-of-way for pedestrian access and utilities - These public rights-of-way are intended to help reintegrate the Base into the community by providing access for pedestrians and bicyclists to the park from Sand Point Way and the Burke-Gilman Trail. This category is similar to public streets in terms of ownership and maintenance but will prohibit motorized vehicles, except emergency vehicles. These include the following:

60th Avenue NE	from Underpass at NE 80th Street to NE 77th Street
NE 77th Street	from Sand Point Way NE to 61st Avenue NE (around Building 67)
NE 70th Street	from Sand Point Way NE to Magnuson Park property line
NE 68th Street	from Sand Point Way to Magnuson Park property line
Alignment of Sand Point Way NE	from NE 62nd Street to Magnuson Park

Easements - Easements will be set aside where appropriate to allow access for utilities, or pedestrian and emergency access as indicated. Such easements would be negotiated as a condition of property transfer, but underlying ownership would be retained by the property recipient. Easements should include the following:

A temporary utility corridor along Sand Point Way NE on the alignment of existing Avenue A, until utilities can be relocated to public rights-of-way;

A connection north of building 30 to provide utilities to Building 406; and

An emergency and pedestrian access easement from NE 80th Street to the waterfront.

An easement for underground sanitary sewer lift station and line in the vicinity of Building 27.

REZONING AND IMPLEMENTATION

Following the disposition of the Base, the City will rezone the property to reflect the intent of this Plan and the character of the Base and surrounding neighborhoods. Residential areas may be zoned Lowrise 2 in order to reflect the character of neighboring Lowrise 3 zones, and to encourage more "ground-related" units, which enable close supervision of outdoor play areas for families with children. Parcels owned by the Department of Parks and Recreation may retain existing zoning, or may be rezoned to a new "Park" zoning designation, which is currently being developed. Zoning in the Education and Community Activities Area will have to be proposed according to use, based on the guidelines set forth in this Plan.

SITE MANAGEMENT

The City would be the major owner under this Reuse Plan, but expects there would be a number of entities owning, using, and developing facilities at Sand Point. Coordination of activities and cooperation among users of the site will be essential to the successful realization of the Reuse Plan.

Activity Areas 1 and 4, as described in this plan, will be managed directly by the Seattle Department of Parks and Recreation. Other areas, such as the Arts, Culture and Community Center, the Education and Community Activities Area, and the Residential Area, will require specialized management capabilities and their own operating entities. Each operator should implement "good neighbor" policies and maintain an appropriate board or oversight body which includes representatives from the neighboring communities.

Ensuring overall compatibility and integration of activities and uses at Sand Point will require the establishment of a unique coordinated management structure. The City will work with other Sand Point partners to establish an appropriate structure, which shall include representation from community members, owners, operators, and users of Sand Point facilities. The City will explore potential community funding and management models for site management, such as San Francisco's Fort Mason Foundation. The management model ultimately selected for Sand Point must emphasize a high degree of community oversight and participation, leveraging non-City resources for capital improvements, and emphasizing effective management for facilities and operations which would limit City involvement in managing day-to-day operations.

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Options to the City Plan

City of Seattle

Executive Department—Office of Management and Planning

Thomas M. Tierney, Director
Norman B. Rice, Mayor

February 22, 1996

Neil Bass, Director
Environmental Planning and Natural Resources
Engineering Field Activity, NW
Naval Facilities Engineering Command
19917 Seventh Avenue NE
Poulsbo, WA 98370-7570

RE: Input for Draft EIS analysis

Dear Mr. Bass,

During our meeting with you in early February, City of Seattle staff outlined a number of possible changes to the City's Adopted Preferred Reuse Plan for Sand Point that have been proposed over the past several weeks. At that time we were not certain which, if any, of the proposals would receive positive interest from the City Council. At that time you indicated that you would be willing and able to incorporate analysis of some of these new proposals in your Draft Environmental Impact if we provided input to you by the end of February. Earlier this week the City Council adopted the attached Resolution asking for additional consideration of a few specific changes to the Reuse Plan for Sand Point. Those changes include:

1. Shifting building 9 from the housing zone to the educational zone to accommodate a larger presence by the Seattle Community College District at Sand Point.

2. The replacement of the 110 housing units originally slated for building 9 with new construction of 110 units in the housing zone (keeping the total housing unit count at 250 with the same mix of tenants.)

3. The development of building 29 as administrative office space rather than Community College continuing education.

4. The development of building 25 as administrative office space rather than as an elementary school.

5. The development of building 406 as a senior/community center rather than as a branch of the State Archives.

The number of students, faculty, and office space anticipated for building 9 is outlined in the attached memo from the Community College. In addition they anticipate the possibility of 200 beds of dormitory space to be occupied by foreign college students.

I am hopeful that you will be able to incorporate analysis of these additional options in your analysis. I anticipate that we will be making decisions on whether to amend the Reuse Plan to incorporate these changes by early April.

Please call me if you need clarification's or additional information.

Sincerely,

Eric Friedli,
Sand Point Project Manager

cc: Bob Uhrich, EFA, NW

Attachment

eisinpt.doc

EAF
2/8/96: V.3

ATTACHMENT A

DRAFT

RESOLUTION _____

A RESOLUTION regarding the Community Preferred Reuse Plan for Sand Point, requesting the Office of Management and Planning to prepare specific options for updating the Reuse Plan and requesting the U.S. Navy to conduct additional environmental analysis.

WHEREAS, a three year, community-wide planning process culminated in the City Council's adoption of the *City of Seattle Community Preferred Reuse Plan for Sand Point* on November 22, 1993 to guide the Community's applications to the U.S. Navy for property being declared surplus at Naval Station Puget Sound (Sand Point);

WHEREAS, the City Council has not formally revised the Reuse Plan since its initial adoption;

WHEREAS, it is anticipated that the U.S. Navy will convey the Sand Point property to the City and its partner agencies during 1996;

WHEREAS, as information has developed regarding Sand Point some early potential participants in the Reuse of Sand Point have withdrawn their interest, new participants have expressed interest in joining the Reuse of Sand Point, and other potential participants have expressed an interest in changing the nature of their participation in the Reuse of Sand Point; and,

WHEREAS, the City desires to submit applications for acquisition of the property to the appropriate federal agencies in a timely manner and the U.S. Navy may release a Draft Environmental Impact Statement on the Reuse Plan in prior to April 1, 1996;

NOW, THEREFORE,

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SEATTLE AS FOLLOWS:

Section 1. The Office of Management and Planning is requested to propose to the City Council appropriate updates to the *Community Preferred Reuse Plan for Sand Point* to reflect technical changes in the background and timeline information.

Section 2. The Office of Management and Planning is requested to explore the impacts of, and to request the U.S. Navy to conduct environmental analysis on, changes to the Reuse Plan that have been proposed by the Community College District and the Seattle Public Schools, including the change of building nine from the Residential Zone to the Education Zone, the accommodation of the transitional housing planned for building nine elsewhere at Sand Point, and administrative office space in buildings 25 and 29.

Section 3. The Office of Management and Planning is requested to propose to the City Council by April 1, 1996 an updated *Community Preferred Reuse Plan for Sand Point* incorporating appropriate changes.

NORTH SEATTLE COMMUNITY COLLEGE
CONTINUING EDUCATION

MEMORANDUM

Date: February 13, 1996

To: Eric Friedli

From: Katherine Riley

Re: Information for Environmental Analysis

We have compiled the information you have requested. Because this is a new direction for NSCC and the District, the information is as accurate as we can make it.

Number of students that may live in the dorm space.

The District believes that approximately 200 students could be accommodated in the dormitory portion of Building 9; however, our goal would be an occupancy rate of approximately 100 persons per night resulting in 20 to 30 vehicles.

Number of classes expected to be taught by time of day and anticipated attendance.

There are two possible scenarios that affect this figure:

(1) Ballard High School relocates into Building 9 from Fall, 1997, to September, 1999; or
(2) Ballard High School does not relocate into Building 9.

Assuming scenario (1), the following could be expected:

a) High school classes for approximately 1100 students from 9 am to 3 pm, Monday through Friday; and
b) 5 to 7 community based classes from 3 pm to 9 pm, Monday through Thursday for 75 to 105 students, and 1 or 2 classes from 9 am to 1 pm on Saturday for 15 to 30 students.

After the high school moves to its new building in September, 1999, the following could be expected:

a) 10 to 20 college transfer and senior courses from 9 am to 5 pm, Monday through Friday for 150 to 300 students; and
b) 15 to 25 community based courses from 5 pm to 9 pm, Monday through Thursday for 225 to 375 students, and 3 to 5 classes from 9 am to 1pm on Saturday for 45 to 75 students.

Please note that the bulk of the evening students would arrive around 7 pm and leave at 9 pm.

Assuming scenario (2), the following could be expected:

a) 3 to 5 Senior classes from 9 am to 5 pm, Monday through Friday for 45 to 75 students; and
b) 5 to 7 community based classes from 3 pm to 9 pm, Monday through Thursday for 75 to 105 students, and 1 or 2 classes from 9 am to 1 pm on Saturday for 15 to 30 students.

This would last while the building was being renovated. Full utilization of the north end of the building would take approximately 3 to 5 years depending upon funding. Once the renovation was complete, we would anticipate the following:

a) 10 to 20 college transfer and senior courses from 9 am to 5 pm, Monday through Friday for 150 to 300 students; and
b) 15 to 25 community bases courses from 5 pm to 9 pm, Monday through Thursday for 225 to 375 students, and 3 to 5 classes from 9 am to 1pm on Saturday for 45 to 75 students.

Please note that the bulk of the evening students would arrive around 7 pm and leave at 9 pm.

Number of employees expected to use administrative office space.

Assuming that the high school temporarily relocates into Building 9, the following could be expected:

1. 5 to 10 offices which would be shared by the high school administration and NSCC staff; and
2. 1 to 2 offices for residential administration in the dormitory area.

After September, 1999, it is possible that the Seattle Community College District VI offices could relocate to Building 9. This is not an issue that has been decided, it is only being discussed as an option at this time. If this move did occur, it would add approximately 70 employees to the site and require additional office space.

Anticipated parking demand.

As might be expected, this is a very difficult figure to extrapolate. Our best estimate is approximately 150 spaces for NSCC use if the high school temporarily relocates in Building 9. It is unknown what parking requirements the high school would have. After the high school moves to its new building, parking requirements would increase to approximately 150 spaces during the day and 350 spaces during the evening class hours.

If the District offices were to relocate to Building 9, then the parking demand during the day would be approximately 200 spaces. The evening demand would stay the same at 350 spaces.

Anticipated peak hour commute trips.

It is anticipated that very little traffic would be added during rush hours. The bulk of trips during the day would be between 9 am and 1 pm because students take most of their classes during the morning and early afternoon hours. Most of the evening traffic would be between the hours of 7 pm and 9 pm, with a nominal amount of students arriving for classes at 5 pm.

Current use of carpooling or bus trips by North Seattle Community College's students, faculty and staff.

Currently, approximately 15% to 30 % of North Seattle Community College's students, faculty and staff take the bus or carpool to campus.

Appendix D

MUCKLESHOOT INDIAN TRIBE PROPOSED REUSE PLAN FOR SAND POINT

Proposed Reuse Plan For The Naval Station Puget Sound, Sand Point

June 1993
prepared by:

Muckleshoot Indian Tribe
In Cooperation With
ASCG
INCORPORATED

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Photos: Photos of Existing and Proposed Use

Appendix A: Tribal Letters of Intent & 41 CFR 101

- Letter - BIA Preliminary Land Use Plan
- Letter - BIA Withdrawl of Support of UIATF
- Navajo Nation Support of Muckleshoot Tribe
- Resolution #93-76 Affiliated Tribes of Nortwest Indians
- Letter - NOAA
- Letter - Fish & Wildlife Service
- Sign In Sheet Hearing - re: Sandpoint held 6/14/93

Appendix B: Renovation Cost Estimates

Appendix C: Land Reuse Maps

Appendix D: Selective Building Renovation Floor Area Maps

I. Introduction

A. History

In 1926, the United States Navy established the Puget Sound Naval Air Station on the shores of Lake Washington, at 7500 Sand Point Way NE. Significant expansion of the facilities took place during World War II. In 1975, the Navy surplused 215 acres of the facility which was divided between the City of Seattle and the Federal Government. One hundred and fifty one (151) acres of land currently belongs to the federal government named Naval Station Puget Sound. This property is currently operating as an administrative headquarters for the United States Navy, with over 1.5 million square feet of building space. The remaining surplus property currently belongs to the National Oceanic and Atmospheric Administration (NOAA), the US Fish and Wildlife Service, and Warren G. Magnuson Park.

In 1990, the United States Congress passed the Defense Base Closure and Realignment Act (DBCRA) which legislated the closure of several military facilities across the nation, the Naval Station Puget Sound, i.e. Sand Point Navy Base, was among the military facilities to be closed in Fall of 1995.

The Navy must follow a complex and lengthy process to close and dispose of the base. Final decisions regarding disposal and reuse of the base property and facilities are the responsibility of the Secretary of the Navy.

B. Phase One

The first step in the disposal process of the property is to determine whether the base or portions of the facility should be considered "*excess property*". This term describes property under control of a Federal Agency, (i.e. the Navy as part of the Department of Defense) which is not required for the needs of the agency or discharge of its responsibilities.

On February 1993, The Department of the Navy deemed "Naval Station Puget Sound (Sand Point), Seattle, Washington", 'to be excess and is hereby offered to other Federal agencies for possible use under the Federal Property and Administrative Services Act of 1949, and amended, and in accordance with procedures of the Federal Property Management Regulations 101-47'.

C. Phase Two

The Navy's second step, under the federal screening, is to solicit requests from other federal agencies wishing to utilize all or part of the base. Federal agencies have priority over state, county, local governments, and private parties wishing to obtain the base.

In accordance with *41 CFR Ch. 101 (7-1-92 Edition) S 101-47.203-5 "Notices of availability, Calendar days for GSA Firm Requirement"* (See **Appendix A**), on March 19, 1993, through the United States Department of the Interior, Bureau of Indian Affairs, Puget Sound Agency, the Muckleshoot Indian Tribe sent a letter stating their interest in the acquisition of the property at Sand Point Navy Base.

II. Background Information - Muckleshoot Indian Tribe

The Muckleshoot Indian Reservation is situated between the White River and the Green River in King County, Washington. The Muckleshoot Indian Tribe is the only federally-recognized Indian Tribe within King County, Washington. The Reservation was established by Article VI of the Point Elliot Treaty of 1854 and was enlarged to its present boundary by Executive Order of the President of the United States in 1874.

The White River is the backbone of the Reservation and the community. The Reservation is adjacent to unincorporated King County and Pierce County as well as the City of Auburn. These jurisdictions and the various special districts in the area combine with the State of Washington to create a complex web of intergovernmental interactions.

The Reservation is composed of six sections of land laid out in an irregular pattern and encompasses approximately 3,800 acres with over 3,000 members living on the Reservation, and more than 2,500 adjacent off-reservation Indian population. The population growth on the Reservation has been averaging about 4.5% per year. The average size of household is 5.2 persons. Female-headed households represent 47.5% of the total.

The Muckleshoot Indian Reservation was established for the use and benefit of the Indian peoples residing thereon. The allotment process at the turn of the century culminated in the alienation of a significant portion of the land ownership. The period of the 1950's and 1960's saw increased development of non-Indian lands in Sections 20 and 28 of the

4

Reservation, often over the voiced objection of the Tribe. Given the circumstances of the time, the Tribal government was not in a position to utilize the courts or the power of the Federal Government to press the objections.

The Muckleshoot Indian Tribal Council is the duly constituted governing body of the Muckleshoot Indian Reservation by authority of the Constitution and By-Laws approved May 13, 1936 by the Secretary of the Interior and as amended June 28, 1977. The Council is composed of nine members, three of whom are elected each year. From the Council of membership are selected the Chairman and Vice-Chairman.

The Muckleshoot Indian Reservation remains an economically disadvantaged community in the midst of a economically growing region. The above statistics represent no dramatic change or shift in patterns and characteristics since 1979. Efforts in the past several years have provided significant number of employment opportunities. However, this increased supply of jobs still has not kept pace with the population growth, especially growth of population over the age of 16 years.

The current male unemployment rate of just under 60% is nearly 10 times the unemployment rate of the nation. The rate of unemployment among women is estimated at just under 50%.

The 1986 household survey found the median annual income of Reservation households to be $6,552. This represents 20% of the median household income from the Seattle-Everett SMSA ($33,200). Household head employment showed 13.3% employed at their existing Bingo Hall. Fishing comprises the principal occupation of 12.4% for the household heads. Tribal employment accounted for 9.7% of the household head employment. The fact that 53.6% of the employed members earn less that $7,999 per year and that over one-half of the employed are working in seasonal activities or are employed by the Tribe is itself illustrative of the need to expand employment opportunities in non-subsidized and private sector economy. Nearly 40% of the household heads reported their principal source of income is unemployment insurance, public assistance, social security, and other social service.

The success of the Tribe's economic development efforts rests squarely on the ability of the Tribe to control and regulate the use of land and resources on the Reservation and other obtainable lands. While recognition of the Tribe's jurisdictional authority is

growing, the Tribe is still involved in litigation to protect its sovereignty and rights under treaty and the Constitution.

The basic problems and objectives for the Tribe remain essentially the same - basic education and vocational training; creation of job opportunities; health and social services; housing; provision of adequate water and sewer services; reduction of reliance on federal funding through creation of revenues from Tribal enterprise; and preservation of Tribal sovereignty.

As stated earlier, the Muckleshoot Tribe is a federally recognized Indian tribe located on the Muckleshoot Indian Reservation in King County. The Tribe is requesting the property located at Sand Point Navel Base through their rights in Section 105(f) of Public Law 93-638 (Indian Self-Determination Act), as amended, which states:

> *In connection with any self-determination contract or grant made pursuant to section 102 or 103 of this Act, the appropriate Secretary may.... (2) donate to an Indian tribe or tribal organization the title to any personal or real property found to be access to the needs of the Bureau of Indian Affairs, the Indian Health Service, or the General Services Administration, including property and equipment purchases with funds under any self-determination contract or grant agreement; and (3) acquire excess or surplus Government personal or real property for donation to an Indian tribe or tribal organization if the Secretary determines the property is appropriate for use by the tribe or tribal organization for a purpose for which a self-determination contract or grant agreement is authorized under this Act.*

Through the appropriate use of the 638 contract, the facility will be used for economic development and institutional purposes by the Muckleshoot Tribe. The tribe currently has two mature "638 Contract" in place (1) Aid to Tribal Government (ATG) and (2) Natural Resource Contract.

III. The Sand Point N.A.S. Site and Vicinity

The Sand Point facility of the Naval Station Puget Sound is located in King County, in the northeastern portion of the city of Seattle, Washington. It comprises approximately 151 acres in total, and lies on the western shore of Lake Washington adjacent to the city's Magnuson Park and the National Oceanic and Atmospheric Administration (NOAA) office complex. The base has approximately 1.6 million square feet of facilities including the Navel Exchange and Commissary retail complex, five family housing units, and other miscellaneous buildings primarily used for administrative and personnel support purposes by the Naval Station and a variety of tenants.

Approximately 4 acres, on the southeast portion of the property, is currently being used as a National Research Fisheries Institute by the Department of the Interior, Fish and Wildlife Service, pursuant to a Use Agreement in perpetuity.

The following chart summarizes the existing land use on the Sand Point N.A.S.

TABLE 1

BUILDINGS	EXISTING LAND USE	TOTAL SQUARE FOOTAGE
6, 15, 30, 47, 342, 344	RECREATION	104,121
9, 26, 26a, 224, 330, 331, 332, 333, 334	RESIDENTIAL	194,586
193, 194, 195, 198, 228, 301, 308, 342, 344	COMMERCIAL ACTIVITY	123,529
2, 5, 11, 12, 18, 27, 31, 40, 42, 67, 69, 98, 115, 119, 206, 244, 275, 299, 310, 345, 403, 407, 408, 409	MAINTENANCE	809,142
9, 11, 25, 29, 30, 38, 41, 138, 192, 222, 223, 401, 406	ADMINISTRATION	323,448
60, 61, 204, 307 - (Tribe proposes to withdraw request)	FISH AND WILDLIFE Distribution Center	12,726

IV. Land Use Plan and Evaluation

The listing of potential uses evaluated in this Section came from a variety of sources, including Tribal Community input, Tribal economic development specialists, Muckleshoot Indian Tribe Fisheries Department, Muckleshoot Indian Tribe Senior Program, Muckleshoot Alcohol and Drug Program, Muckleshoot Tribe Technical Institute Program, uses of other closed military bases, and the Sand Point N.A.S. reuse team member's experience with other reuse redevelopment projects.

Potential uses for the site were screened on a number of criteria. These criteria included:

- Building Suitability. How well the potential use fits or utilizes the existing structures on the site.

- Functional Suitability. How well the base fits the potential use functionally -- is an appropriate site vis-a-vis other parts of the metro area? Appropriate with adjacent uses? Well located? Are base resources appropriate for the potential use?

- Underlying Market Strength. Is there (or is there potential for) a market for the use? Is that market growing or declining?

- Job Creation. What is the potential level of job creation on the site?

Through P.L. 93-638, the Muckleshoot Indian Tribe will use Sand Point Navel Base for economic development, educational, and institutional purposes. To maximize the economic benefits of redeveloping the base, a number of land uses have been recommended for the reuse plan. The major categories include:

- **Commercial Uses**
- **Educational Uses**
- **Administration/Offices**
- **Institutional Uses**
- **Warehousing/Light Industrial Uses**
- **Recreational/Commercial**

A. Parks and Recreation

Sand Points' location to the metro area of Seattle makes the proposed development for Parks and Recreation particularly appealing. The Muckleshoot Tribe recognizes the need for a Grand Entrance for Magnuson Park adjacent to this area. This can be accomplished by working with the local government and particularly with the Sandpoint Liaison Committee. By this joint effort the Muckleshoot Tribe feels that the final product will be pleasing to all of the parties involved.

The Fish and Wildlife Service [FWS] have proposed using 10 acres out of the heart of the OPEN area designated within our plan for a fishing pond for the handicapped. We are excited about the proposal for the pond, but feel the open lake area next to building 27 would be a better location for this proposed activity. Our reasoning is based on reports from the Fisheries Department. They have advised us that it would be more cost effective to place this activity at this area. In addition, waste water would not be a problem, as it would be in the FWS proposed site. The Tribes' proposed site consists of docks which could have hand rails added for the safety needs, again recognizing a cost savings. This open area of the lake would provide a healthier area for the fish since it already provides fresh water and needs no waste water carry off, reducing the risk of contamination of fish and children.

FWS fishing pond, in their proposed location, would also prevent any Grand Entrance to Magnuson Park, which is the desire of the surrounding community.

Building 193 (Commissary Exchange) is operational and in good condition, although it needs some repair, remodel and refinishing, this building would be suitable for the video and art industry.

The proposed reuse of Buildings 333 and 334 is OPEN. Both buildings are in good shape. Both could be remodeled and used for commercial purposes, or removed to achieve the Grand Entrance to Magnuson Park.

The proposed reuse of Building 404 is OPEN and is presently used for a recreation pavilion. The building needs some repair and remodeling but could remain a recreation pavilion, or to be removed to achieve the Grand Entrance.

TABLE 2

BUILDING NUMBER	EXISTING USE	PROPOSED USE	TOTAL SQUARE FOOTAGE OF BUILDING
330	Family Housing	Commercial/Rental	6,390
331	Family Housing	Commercial/Rental	6,233
332	Family Housing	Commercial/Rental	6,233
333	Family Housing	OPEN	1,990
334	Family Housing	OPEN	2,113
15	Hobby Shop/Arts & Crafts	Senior Center Arts & Crafts Shop	3,268
228	Uniform Shop	Demolition	4,074
401	Sentry House	Demolition	60
244	Maintenance Shop	OPEN	5,011
193	Commissary Exchange	Lease to public for possible use as video and artisan shops	93,334
198	Thrift Shop	Demolition	300
195	Travel Agency	Removal of existing Trailer	819
301	Country Store	Country Store	9,500
344	Country Store	Country Store	11,000
345	Service Bay	Service Bay	5,298
340,341,342	Service Station	Demolition	300
308	Package Store	Package Store	4,202
404	Recreation Pavilion	OPEN	1,120
FECU	Federal Credit Union	Removal of existing Trailer	—

B. Educational Uses

Creating an abundant skilled labor force through effective, broad-reaching training and education is increasingly a critical foundation for economic development. Therefore, Native Americans will need to depend on educating, training and retaining their own work force. Consequently, education and training, already a major factor in economic development, will become a major industry in itself. Sand Points' present use as a training facility suggests that education and training uses would certainly be appropriate uses for the base facilities.

The existing building mix on the base is well-suited to an educational campus. For example, the area south of the main entrance, the existing housing core of the Naval Station, administration and recreational areas. The proposed reuse plan for this area is to make it a college campus for 5,000 to 7,000 students. (See attached Map)

The Muckleshoot Tribe proposes to develop a technical institute which would allow for post-secondary educational opportunities, both vocational programming and college level credit programs.

The Muckleshoot Indian Tribe believes that it has an obligation to provide culturally sensitive higher education and training to its membership and other Native people in the surrounding area.

As a federally recognized Indian tribal government, a sovereign nation, the Muckleshoot Indian Tribe would seek public and private funding toward meeting this purpose.

GOALS

I. To maintain post-secondary institution status and standards of regional and national accrediting associations.

II. To develop and maintain post-secondary, vocational and higher education programming for Native American people in the Puget Sound region.

III. To maintain a facility which would provide for adequate library services, classroom instruction, residences, and ancillary services for vocational and higher education programs.

IV. To develop a well-equipped and professionally trained tribal membership.

Objectives

A. To review the 1993 comprehensive needs assessment and other data of the Muckleshoot Indian Tribe to develop a short and a log range plan for post-secondary training, by the end of the first quarter of 1994.

B. To secure funding for a complete program of instruction for vocational and higher education programming from federal and private sources by January 1995.

C. To renovate the plant facility to meet the needs of classroom instruction and student residency for use by September 1955.

D. To begin instruction by October 1995.

Activities/Strategies

1. The Muckleshoot Indian Tribe would authorize the establishment of a Board of Regents for the institute; the Regents may choose to incorporate itself under a Congressional charter, or a State charter, whichever may offer the best conditions for operating the institute; however, the institute will operate under the auspices of the sovereign tribal government.

2. To engage in joint ventures with local universities (i.e. University of Washington, State Community College Board) and colleges for staffing and offering specialized programming to meet Native community needs; integrate Tribal Institute programming with existing college programs, and act as a feeder program to four year colleges.

3. The Tribe would design a program of instruction which would allow students to earn transferrable college credits, and offer an associates degree program; the Tribe would utilize regional and national college accrediting standards for higher education institutions.

4. The Tribe would design a vocational school program which would give students credit hours to prepare them for apprenticeships and/or the workforce; these would

be short-term course program offerings, which would take eighteen (18) months or less to complete.

5. The Tribe would contact federal agencies (U.S. Department of Education, U.S. Department of Labor, and U.S. Department of the Interior) for funding; the Muckleshoot Tribe is eligible to apply for grants from each of these entities.

6. When the listing of coursework has been determined the plan for the facility renovation will begin to accommodate the needs of vocational and academic classroom settings.

7. Offer policy research services and training for Native American organizations in various issues not offered elsewhere e.g.: Administrating Tribal Programs; Educational Design for the Indian Student; Human Service Delivery Systems for the Native American Family and Child Welfare; Indian Law and Justice Programming; and Economic Planning and Development Within Tribal Jurisdictions.

Policies

1. Emphasize research and development to improve the quality of program offerings in vocational and higher education.

2. Emphasize efficiency and state-of-the-art technology at all levels. Reward high performers and promote productive and creative workers.

3. Emphasize the development of innovative educational programming to meet special and cultural needs of Native American learners.

4. Emphasize the uniqueness of Native American culture:

Philosophy	Spiritualism
Language	Performing Arts
History	Visual Arts
Social Organization	Economics

5. Emphasize the involvement of the community-to-be-served and students groups, of any, in the short-range and long-range planning.

Funding & Budgeting

The Muckleshoot Indian Tribe will develop and operate the institute in four (4) stages:

(1st year)	Planning of the college program;
(2nd year)	Implementing the college program;
(3rd year)	Implementing the vocational programs; and Expanding the college program to include research and community education; and
(4th year)	Expanding the vocational program.

The Tribe would operate a two year college program and vocational technical program. As a federally -recognized tribal government, the Muckleshoot Indian Tribe is eligible to contract and receive grants from various federal agencies. The Tribe would seek assistance through the U.S. Department of Educational and of the Interior's Bureau of Indian Affairs' Office of Indian Education for the planing stages of the college. For vocational training programs the Tribe would request assistance from the U.S. Department of Labor for vocational training planning and project funding. The institute will charge comparable tuition fees, in order to cove the costs of instruction.

As an accredited school program the institute would enable students to be eligible for financial aide to pay for their tuition. For Muckleshoot Tribal members, the Tribe has a scholarship fund (from its economic development enterprises) and manages, through a contract, higher education and vocational grant programs through the Bureau of Indian Affairs.

The institute and Tribe would seek private funding, in addition to the federal funding and tuition fees it would charge. The Tribe would establish a perpetual trust fund and operate a portion of the annual costs from interests; priorities would include, but not be limited to : Instructional personnel and Building Maintenance, defraying student tuition costs.

The college campus would also accommodate the Seniors Program. The current senior program is in need of expansion into the Seattle area due to the increasing enrollment of Seniors in the Seattle community. In association with the college campus the senior's program would be provided with 24 hour health care, social services, counseling, meals, recreation and educational activities, as well as intergenerational programs.

TABLE 3

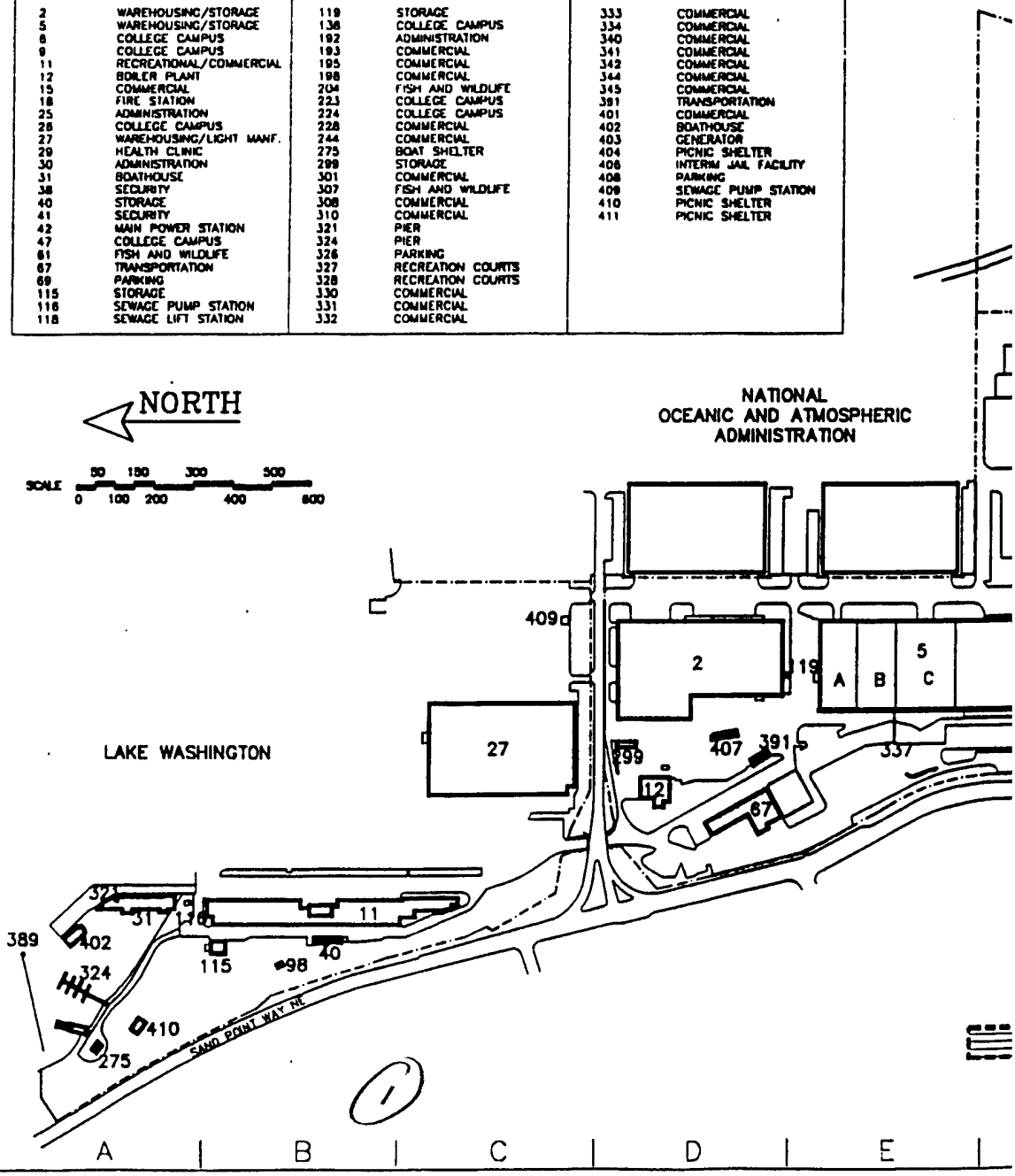
BUILDING NUMBER	EXISTING USE	PROPOSED USE	TOTAL SQUARE FOOTAGE OF BUILDING
9	Barracks	Classrooms, Dorms, Student Union	223,516
222	Administration	Classrooms	30,126
224	Bachelor Quarters	Dormitories	38,264
26	Officer Quarters	Staff Housing	17,282
26A	Storage	Teacher Training Center	16,082
42	Electrical Distribution Center	Electrical Distribution Center	682
138	Security	Security	12,806
47	Recreation	Recreation	50,060
411	Recreation Pavilion	Recreation Pavilion	888
223	Family Service Center	Family Service Center/Counseling Center	9,080
6	Bowling Alley	Bowling Alley	10,793
408	Motorcycle Parking	Demolition	660

EXISTING USES

BLDG	LOC	DESCRIPTION
2	D3	RESERVES
5	E3	SUPPLY
8	I3	BOWLING LANES
9	H2	UEPH/ADMIN
11	B1	PUBLIC WORKS
12	D2	BOILER PLANT
15	K2	CERAMICS SHOP
18	C3	FIRE STATION
25	F3	ADMINISTRATION
26	I2	UOPH
27	C2	RESERVES
29	F2	DISPENSARY
30	F3	ADMINISTRATION
31	A1	BOATHOUSE
38	F2	GUARD STATION
40	B1	FLAMMABLE STORES
41	G3	SECURITY
42	C2	MAIN POWER SUBSTATION
44	D2	BURIED FUEL OIL TANK
47	H3	RECREATION
60	K6	FLAMMABLE STORES
61	K5	STORAGE
67	D2	TRANSPORTATION
69	I3	UOPH PARKING
98	B1	METER SHELTER
109	K2	WATER METER PIT
115	B1	PW STORAGE
116	A1	SEWAGE PUMP STATION
118	F3	SEWAGE LIFT STATION
119	D3	RESERVE STORAGE
138	G2	GATEHOUSE
192	F2	HOMEPORTING
193	J6	NEX/COMMISSARY
195	J6	NEX TICKET OFFICE
198	J6	THRIFT SHOP
204	K5	FISH & WILDLIFE LAB
219	D2	HOT WELL
222	G3	SUPSHIPS
223	G3	COUNSELLING
224	I3	UOPH/UEPH
228	K6	NEX TAILOR SHOP
244	J4	NEX STORAGE
275	A1	BOAT SHELTER
281	D2	WATER METER PIT
282	J6	SEWAGE LIFT STATION
299	D2	PW STORAGE
301	K5	NEX COUNTRY STORE
307	L6	FISH & WILDLIFE STORES
308	J5	NEX CLASS VI STORE
310	K4	AUTO HOBBY SHOP
320	F3	FLAGPOLE
321	A1	PIER 1
324	A1	PIER 7
326	I2	UEPH PARKING
327	G3	RECREATION COURTS
328	J3	RECREATION COURTS
330	K3	QUARTERS A
331	J3	QUARTERS B
332	J3	QUARTERS C
333	K3	QUARTERS D
334	L3	QUARTERS E
337	E2	PEDESTRIAN BRIDGE
340	K4	NEX GASOLINE ISLAND
341	K4	NEX COURTESY ISLAND
342	K4	NEX GASOLINE CASHIER
344	K5	NEX COUNTRY STORE
345	K4	NEX AUTO SERVICE
389	A1	MOORING DOLPHIN
391	D2	TRUCK SCALE
394	H3	TOTEM POLE
395	H3	BELL HOUSING MONUMENT
396	F2	WORLD FLIGHT MONUMENT
401	K4	GUARD ST
402	A1	BOATHOUS
403	F2	GENERATO
404	J4	PICNIC SH
405	K5	NEX COVE
406	F4	BRIG
407	C2	HAZARDOU
408	I3	MOTORCYC
409	C3	SEWAGE P
410	A1	PICNIC SH
411	G4	PICNIC SH
412	F3	FREEDOM
---	J5	FEDERAL C

PROPOSED USES

BLDG	DESCRIPTION
2	WAREHOUSING/STORAGE
5	WAREHOUSING/STORAGE
8	COLLEGE CAMPUS
9	COLLEGE CAMPUS
11	RECREATIONAL/COMMERCIAL
12	BOILER PLANT
15	COMMERCIAL
18	FIRE STATION
25	ADMINISTRATION
26	COLLEGE CAMPUS
27	WAREHOUSING/LIGHT MANF.
29	HEALTH CLINIC
30	ADMINISTRATION
31	BOATHOUSE
38	SECURITY
40	STORAGE
41	SECURITY
42	MAIN POWER STATION
47	COLLEGE CAMPUS
61	FISH AND WILDLIFE
67	TRANSPORTATION
69	PARKING
115	STORAGE
116	SEWAGE PUMP STATION
118	SEWAGE LIFT STATION
119	STORAGE
138	COLLEGE CAMPUS
192	ADMINISTRATION
193	COMMERCIAL
195	COMMERCIAL
198	COMMERCIAL
204	FISH AND WILDLIFE
223	COLLEGE CAMPUS
224	COLLEGE CAMPUS
228	COMMERCIAL
244	COMMERCIAL
275	BOAT SHELTER
299	STORAGE
301	COMMERCIAL
307	FISH AND WILDLIFE
308	COMMERCIAL
310	COMMERCIAL
321	PIER
324	PIER
326	PARKING
327	RECREATION COURTS
328	RECREATION COURTS
330	COMMERCIAL
331	COMMERCIAL
332	COMMERCIAL
333	COMMERCIAL
334	COMMERCIAL
340	COMMERCIAL
341	COMMERCIAL
342	COMMERCIAL
344	COMMERCIAL
345	COMMERCIAL
391	TRANSPORTATION
401	COMMERCIAL
402	BOATHOUSE
403	GENERATOR
404	PICNIC SHELTER
406	INTERIM JAIL FACILITY
408	PARKING
409	SEWAGE PUMP STATION
410	PICNIC SHELTER
411	PICNIC SHELTER



METER PIT	320	F3	FLAGPOLE
ORAGE	321	A1	PIER 1
E PUMP STATION	324	A1	PIER 7
E LIFT STATION	328	I2	UEPH PARKING
VE STORAGE	327	G3	RECREATION COURTS
OUSE	328	J3	RECREATION COURTS
ORTING	330	K3	QUARTERS A
OMMISSARY	331	J3	QUARTERS B
CKET OFFICE	332	J3	QUARTERS C
SHOP	333	K3	QUARTERS D
WILDLIFE LAB	334	L3	QUARTERS E
ELL	337	E2	PEDESTRIAN BRIDGE
PS	340	K4	NEX GASOLINE ISLAND
ELLING	341	K4	NEX COURTESY ISLAND
UEPH	342	K4	NEX GASOLINE CASHIER
NLOR SHOP	344	K5	NEX COUNTRY STORE
TORAGE	345	K4	NEX AUTO SERVICE
SHELTER	389	A1	MOORING DOLPHIN
METER PIT	391	D2	TRUCK SCALE
LIFT STATION	394	H3	TOTEM POLE
ORAGE	395	H3	BELL HOUSING MONUMENT
OUNTRY STORE	396	F2	WORLD FLIGHT MONUMENT
WILDLIFE STORES			
LASS VI STORE			
OBBY SHOP			

	40'	K4	GUARD STATION
	402	A'	BOATHOUSE
	403	F2	GENERATOR
	404	J4	PICNIC SHELTER
	405	K5	NEX COVERED WALKWAY
	406	F4	BRIG
	407	D2	HAZARDOUS WASTE
	408	I3	MOTORCYCLE PARKING
	409	C3	SEWAGE PUMP STATION
	410	A1	PICNIC SHELTER
	41'	G4	PICNIC SHELTER
	412	F3	FREEDOM TREE MEMORIAL
---	---	J5	FEDERAL CREDIT UNION

E	333	COMMERCIAL
E CAMPUS	334	COMMERCIAL
TRATION	340	COMMERCIAL
CIAL	341	COMMERCIAL
CIAL	342	COMMERCIAL
CIAL	344	COMMERCIAL
D WILDLIFE	345	COMMERCIAL
E CAMPUS	391	TRANSPORTATION
E CAMPUS	401	COMMERCIAL
CIAL	402	BOATHOUSE
CIAL	403	GENERATOR
HELTER	404	PICNIC SHELTER
E	406	INTERIM JAIL FACILITY
CIAL	408	PARKING
D WILDLIFE	409	SEWAGE PUMP STATION
CIAL	410	PICNIC SHELTER
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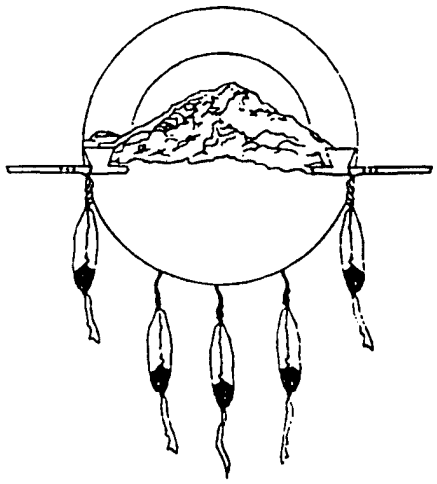

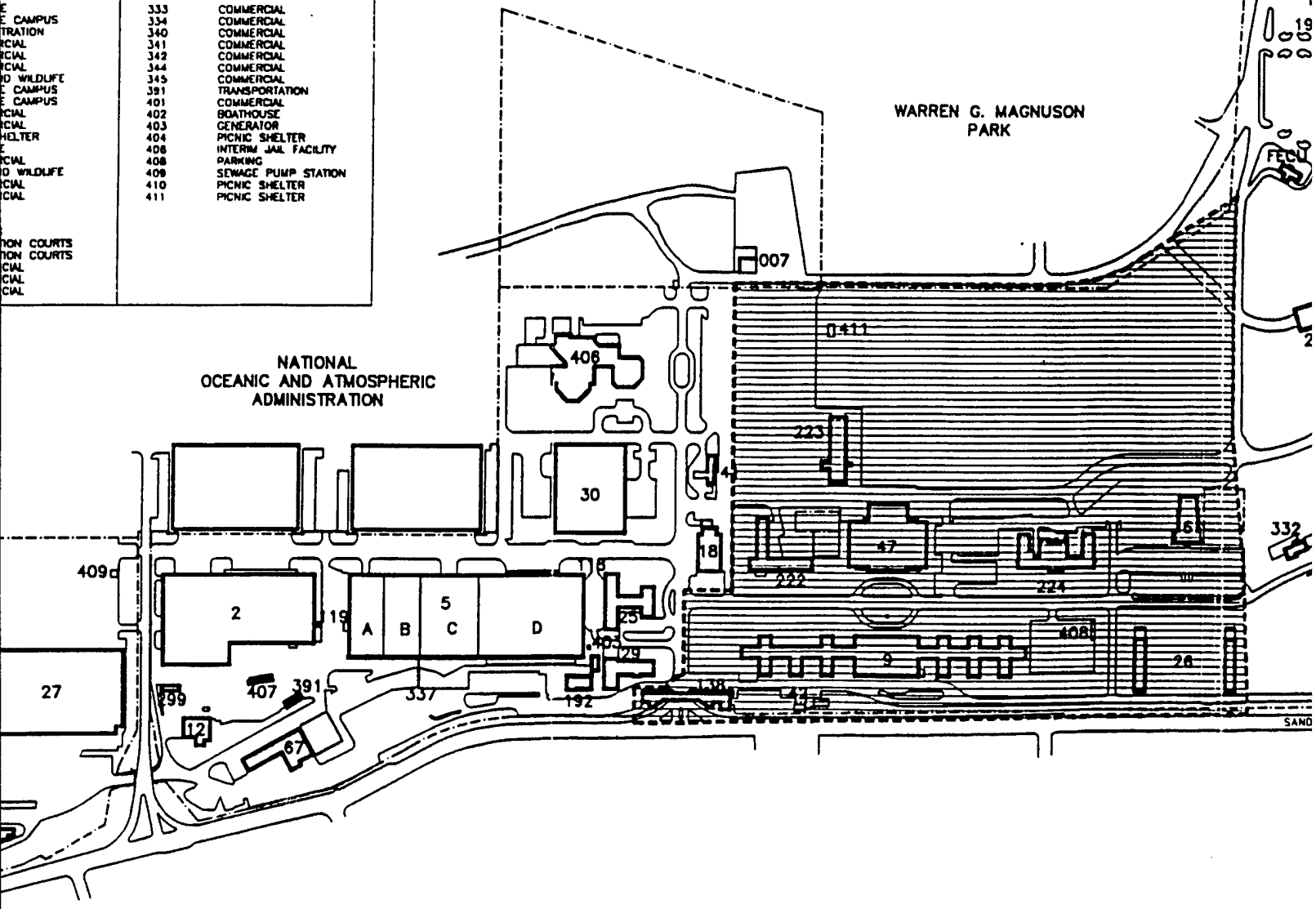

CAMPUS AREA

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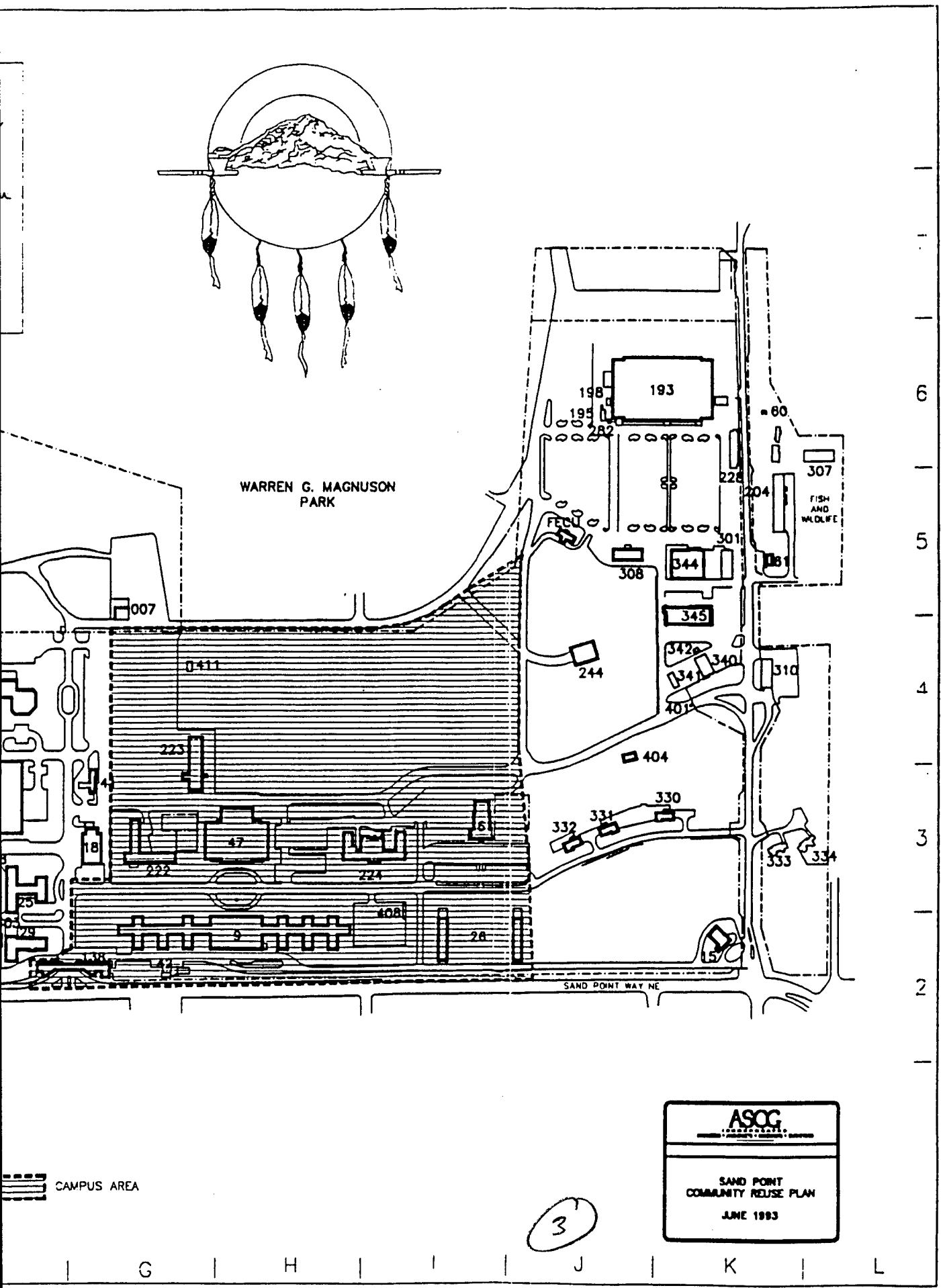
WARREN G. MAGNUSON PARK
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SAND POINT WAY NE
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K
L
CAMPUS AREA
ASCG
SAND POINT
COMMUNITY REUSE PLAN
JUNE 1993
3

EXISTING USES

BLDG	LOC	DESCRIPTION
2	D3	RESERVES
5	E3	SUPPLY
6	I3	BOWLING LANES
9	H2	UEPH/ADMIN
11	B1	PUBLIC WORKS
12	D2	BOILER PLANT
15	K2	CERAMICS SHOP
18	G3	FIRE STATION
25	F3	ADMINISTRATION
26	I2	UOPH
27	C2	RESERVES
29	F2	DISPENSARY
30	F3	ADMINISTRATION
31	A1	BOATHOUSE
38	F2	GUARD STATION
40	B1	FLAMMABLE STORES
41	G3	SECURITY
42	C2	MAIN POWER SUBSTATION
44	D2	BURIED FUEL OIL TANK
47	H3	RECREATION
60	K6	FLAMMABLE STORES
61	K5	STORAGE
67	D2	TRANSPORTATION
69	I3	UOPH PARKING
98	D1	METER SHELTER
109	K2	WATER METER PIT
115	B1	PW STORAGE
116	A1	SEWAGE PUMP STATION
118	F3	SEWAGE LIFT STATION
119	D3	RESERVE STORAGE
138	G2	GATEHOUSE
182	F2	HOMEPORTING
193	J6	NEX/COMMISSARY
195	J6	NEX TICKET OFFICE
198	J6	THRIFT SHOP
204	K5	FISH & WILDLIFE LAB
219	D2	HOT WELL
222	G3	SUPSHIPS
223	G3	COUNSELLING
224	I3	UOPH/UEPH
228	K6	NEX TAILOR SHOP
244	J4	NEX STORAGE
275	A1	BOAT SHELTER
281	D2	WATER METER PIT
282	J6	SEWAGE LIFT STATION
299	D2	PW STORAGE
301	K5	NEX COUNTRY STORE
307	L6	FISH & WILDLIFE STORES
308	J5	NEX CLASS VI STORE
310	K4	AUTO HOBBY SHOP
320	F3	FLAGPOLE
321	A1	PIER 1
324	A1	PIER 7
326	I2	UEPH PARKING
327	G3	RECREATION COURTS
328	J3	RECREATION COURTS
330	K3	QUARTERS A
331	J3	QUARTERS B
332	J3	QUARTERS C
333	K3	QUARTERS D
334	L3	QUARTERS E
337	E2	PEDESTRIAN BRIDGE
340	K4	NEX GASOLINE ISLAND
341	K4	NEX COURTESY ISLAND
342	K4	NEX GASOLINE CASHIER
344	K5	NEX COUNTRY STORE
345	K4	NEX AUTO SERVICE
389	A1	MOORING DOLPHIN
391	D2	TRUCK SCALE
394	H3	TOTEM POLE
395	H3	BELL HOUSING MONUMENT
398	F2	WORLD FLIGHT MONUMENT
401	K4	GUARD ST
402	A1	BOATHOUS
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404	J4	PICNIC SH
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411	G4	PICNIC SH
412	F3	FREEDOM
---	J5	FEDERAL C

PROPOSED USES

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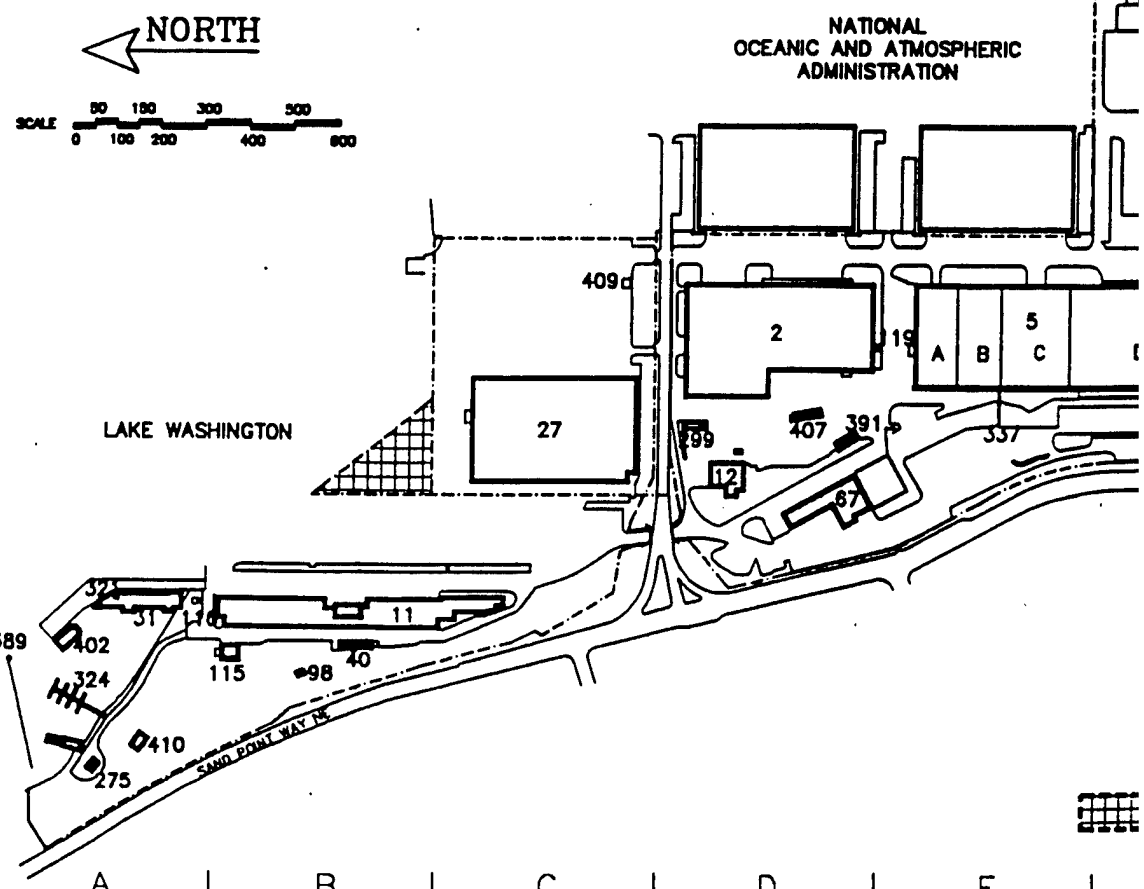
41	SECURITY
42	MAIN POWER STATION
47	COLLEGE CAMPUS
61	FISH AND WILDLIFE
67	TRANSPORTATION
69	PARKING
115	STORAGE
116	SEWAGE PUMP STATION
118	SEWAGE LIFT STATION
119	STORAGE
138	COLLEGE CAMPUS
182	ADMINISTRATION
193	COMMERCIAL
195	COMMERCIAL
198	COMMERCIAL
204	FISH AND WILDLIFE
223	COLLEGE CAMPUS
224	COLLEGE CAMPUS
228	COMMERCIAL
244	COMMERCIAL
275	BOAT SHELTER
299	STORAGE
301	COMMERCIAL
307	FISH AND WILDLIFE
308	COMMERCIAL
310	COMMERCIAL
321	PIER
324	PIER
326	PARKING
327	RECREATION COURTS
328	RECREATION COURTS
330	COMMERCIAL
331	COMMERCIAL
332	COMMERCIAL
333	COMMERCIAL
334	COMMERCIAL
340	COMMERCIAL
341	COMMERCIAL
342	COMMERCIAL
344	COMMERCIAL
345	COMMERCIAL
391	TRANSPORTATION
401	COMMERCIAL
402	BOATHOUSE
403	GENERATOR
404	PICNIC SHELTER
406	INTERIM JAIL FACILITY
408	PARKING
409	SEWAGE PUMP STATION
410	PICNIC SHELTER
411	PICNIC SHELTER



320	F3	FLAGPOLE
321	A1	PIER 1
324	A1	PIER 7
326	I2	UEPH PARKING
327	G3	RECREATION COURTS
328	J3	RECREATION COURTS
330	K3	QUARTERS A
331	J3	QUARTERS B
332	J3	QUARTERS C
333	K3	QUARTERS D
334	L3	QUARTERS E
337	E2	PEDESTRIAN BRIDGE
340	K4	NEX GASOLINE ISLAND
341	K4	NEX COURTESY ISLAND
342	K4	NEX GASOLINE CASHIER
344	K5	NEX COUNTRY STORE
345	K4	NEX AUTO SERVICE
389	A1	MOORING DOLPHIN
391	D2	TRUCK SCALE
394	H3	TOTEM POLE
395	H3	BELL HOUSING MONUMENT
396	F2	WORLD FLIGHT MONUMENT

401	K4	GUARD STATION
402	A1	BOATHOUSE
403	F2	GENERATOR
404	J4	PICNIC SHELTER
405	K5	NEX COVERED WALKWAY
406	F4	BRIG
407	D2	HAZARDOUS WASTE
408	I3	MOTORCYCLE PARKING
409	C3	SEWAGE PUMP STATION
410	A1	PICNIC SHELTER
411	G4	PICNIC SHELTER
412	F3	FREEDOM TREE MEMORIAL
---	J5	FEDERAL CREDIT UNION

333	COMMERCIAL
334	COMMERCIAL
340	COMMERCIAL
341	COMMERCIAL
342	COMMERCIAL
344	COMMERCIAL
345	COMMERCIAL
391	TRANSPORTATION
401	COMMERCIAL
402	BOATHOUSE
403	GENERATOR
404	PICNIC SHELTER
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408	PARKING
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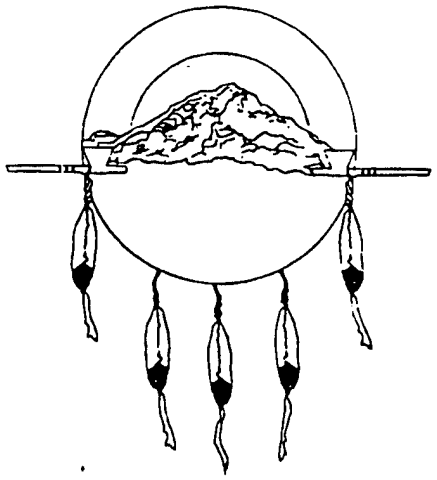

WARREN G. MAGNUSON PARK

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

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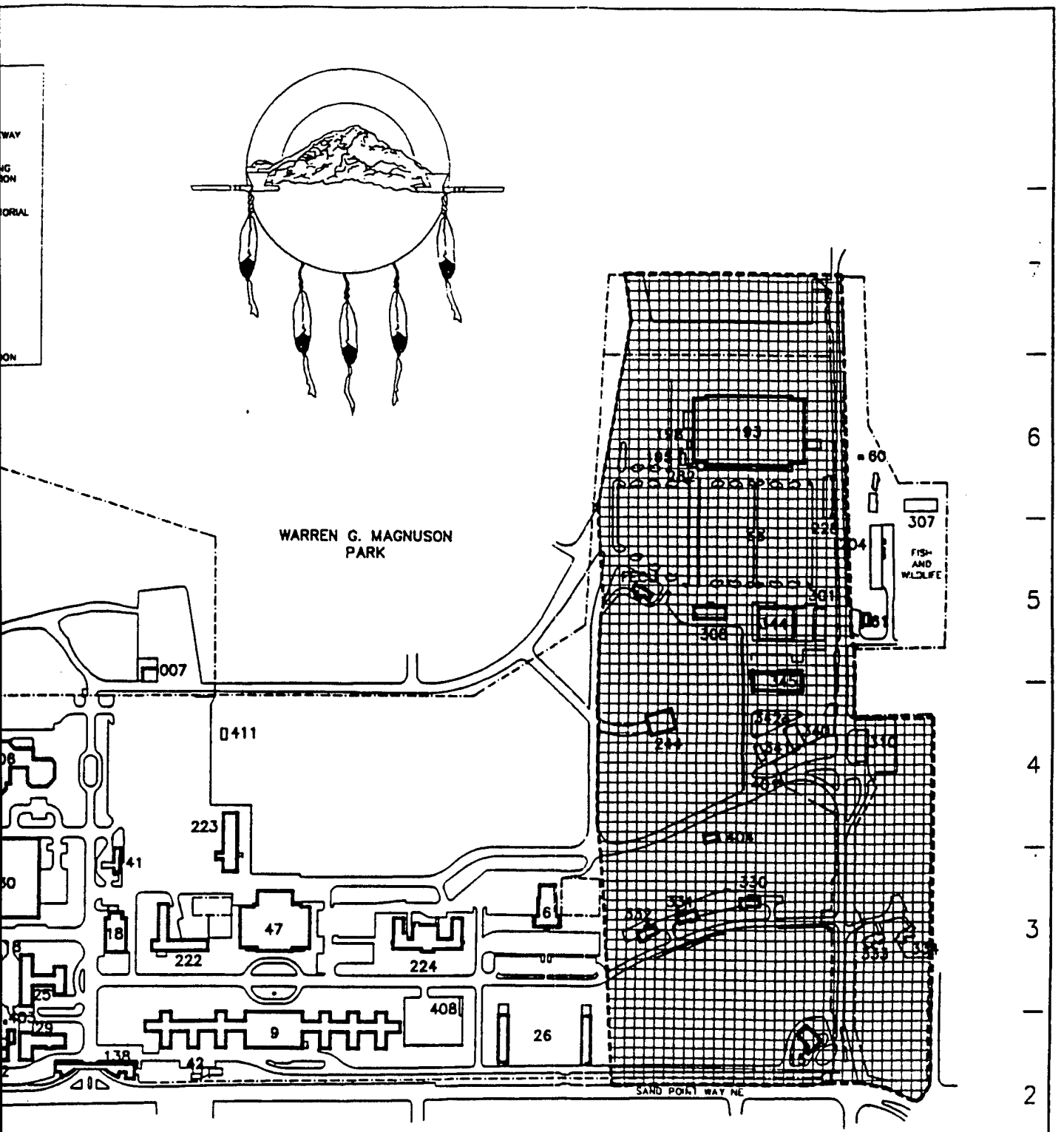
PARKS AND RECREATION

D E F G H I J



ASCG

SAND POINT
COMMUNITY REUSE PLAN

JUNE 1993

PARKS AND RECREATION

C. Administration/Offices

To the south and west of Building 5 is the administrative core of the base. In keeping with the existing use, the proposed use of this area would be "Office/Administration".

BUILDING 29 - ALCOHOL AND DRUG PROGRAM PROPOSAL

The Muckleshoot Alcohol and Drug Program has increased its caseload by approximately 60% since the Winter of 1991. To date, there are approximately 95 active clients participating on various levels of out-patient treatment. Approximately 15-20 referrals are made to In-patient treatment centers a year. With the continuing rise of clientele, the increase of In-Patient Treatment, referrals and services available to recovering people presents a great challenge. Often medical need is never addressed and it is apparent that pregnant mothers have continued to drink/use drugs and are not receiving proper prenatal care. With a Prevention/Outreach office, more preventative measures would be taken in eliminating Fetal Alcohol Effects, Fetal Alcohol Syndrome, and drug addicted babies. The proposed Alcohol and Drug Program would provide a clean and sober Pre-Treatment environment in which an individual, single parent with children or entire families would occupy until their admittance into In-Patient treatment was available. The Muckleshoot Indian Tribe specifically is using the justification in:

> ***"10USC S2687 "Use of closed bases for prisons and drug treatment facilities" Act Nov 29, 1989 P.L. 101.189.Div Title XXXVIII, Part C S2832, 103 Stat 1660*** the findings of congress have been for any "facilities rendered excess by the base closure process should be seriously considered for use as prisons and drug treatment facilities, as appropriate" It is the sense of congress that the Secretary of Defense should pursuant to the provisions of title 11 of the Defense Authorization Amendments and Base Closure and Realignment Act give priority to making real property (including the improvements thereon) of Department of Defense rendered excess or surplus as a result of the recommendations of the Commission on Base Realignment and Closure available to another Federal agency or a State or local government for use as a penal or correctional facility or as a drug abuse prevention, treatment, or rehabilitation center"

to request that Building 29 be specifically used for medical, child care, pre-treatment, and in-patient care. The goal of the facility would be:

EXISTING USES

BLDG	LOC	DESCRIPTION
2	D3	RESERVES
5	E3	SUPPLY
6	L3	BOWLING LANES
9	H2	UEPH/ADMIN
11	B1	PUBLIC WORKS
12	D2	BOILER PLANT
15	K2	CERAMICS SHOP
18	G3	FIRE STATION
25	F3	ADMINISTRATION
26	I2	UOPH
27	C2	RESERVES
29	F2	DISPENSARY
30	F3	ADMINISTRATION
31	A1	BOATHOUSE
38	F2	GUARD STATION
40	B1	FLAMMABLE STORES
41	G3	SECURITY
42	C2	MAIN POWER SUBSTATION
44	D2	BURIED FUEL OIL TANK
47	H3	RECREATION
60	K6	FLAMMABLE STORES
61	K5	STORAGE
67	D2	TRANSPORTATION
69	I3	UOPH PARKING
98	B1	METER SHELTER
109	K2	WATER METER PIT
115	B1	PW STORAGE
116	A1	SEWAGE PUMP STATION
118	F3	SEWAGE LIFT STATION
119	D3	RESERVE STORAGE
138	G2	GATEHOUSE
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193	J6	NEX/COMMISSARY
195	J6	NEX TICKET OFFICE
198	J6	THRIFT SHOP
204	K5	FISH & WILDLIFE LAB
219	D2	HOT WELL
222	G3	SUPSHIPS
223	G3	COUNSELLING
224	I3	UOPH/UEPH
228	K6	NEX TAILOR SHOP
244	J4	NEX STORAGE
275	A1	BOAT SHELTER
281	D2	WATER METER PIT
282	J6	SEWAGE LIFT STATION
299	D2	PW STORAGE
301	K5	NEX COUNTRY STORE
307	L6	FISH & WILDLIFE STORES
308	J5	NEX CLASS VI STORE
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320	F3	FLAGPOLE
321	A1	PIER 1
324	A1	PIER 7
326	I2	UEPH PARKING
327	G3	RECREATION COURTS
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330	K3	QUARTERS A
331	J3	QUARTERS B
332	J3	QUARTERS C
333	K3	QUARTERS D
334	L3	QUARTERS E
337	E2	PEDESTRIAN BRIDGE
340	K4	NEX GASOLINE ISLAND
341	K4	NEX COURTESY ISLAND
342	K4	NEX GASOLINE CASHIER
344	K5	NEX COUNTRY STORE
345	K4	NEX AUTO SERVICE
389	A1	MOORING DOLPHIN
391	D2	TRUCK SCALE
394	H3	TOTEM POLE
395	H3	BELL HOUSING MONUMENT
396	F2	WORLD FLIGHT MONUMENT
401	K4	GU
402	A'	BO
403	F2	GE
404	J4	PIC
405	K5	NE
406	F4	BR
407	D2	HA
408	I3	MO
409	C3	SE
410	A1	PIC
411	G4	PIC
412	F3	FRE
---	J5	FEE

PROPOSED USES

BLDG	DESCRIPTION
2	WAREHOUSING/STORAGE
5	WAREHOUSING/STORAGE
6	COLLEGE CAMPUS
9	COLLEGE CAMPUS
11	RECREATIONAL/COMMERCIAL
12	BOILER PLANT
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29	HEALTH CLINIC
30	ADMINISTRATION
31	BOATHOUSE
38	SECURITY
40	STORAGE
41	SECURITY
42	MAIN POWER STATION
47	COLLEGE CAMPUS
61	FISH AND WILDLIFE
67	TRANSPORTATION
69	PARKING
115	STORAGE
116	SEWAGE PUMP STATION
118	SEWAGE LIFT STATION
119	STORAGE
138	COLLEGE CAMPUS
192	ADMINISTRATION
193	COMMERCIAL
195	COMMERCIAL
198	COMMERCIAL
204	FISH AND WILDLIFE
223	COLLEGE CAMPUS
224	COLLEGE CAMPUS
228	COMMERCIAL
244	COMMERCIAL
275	BOAT SHELTER
299	STORAGE
301	COMMERCIAL
307	FISH AND WILDLIFE
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310	COMMERCIAL
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326	PARKING
327	RECREATION COURTS
328	RECREATION COURTS
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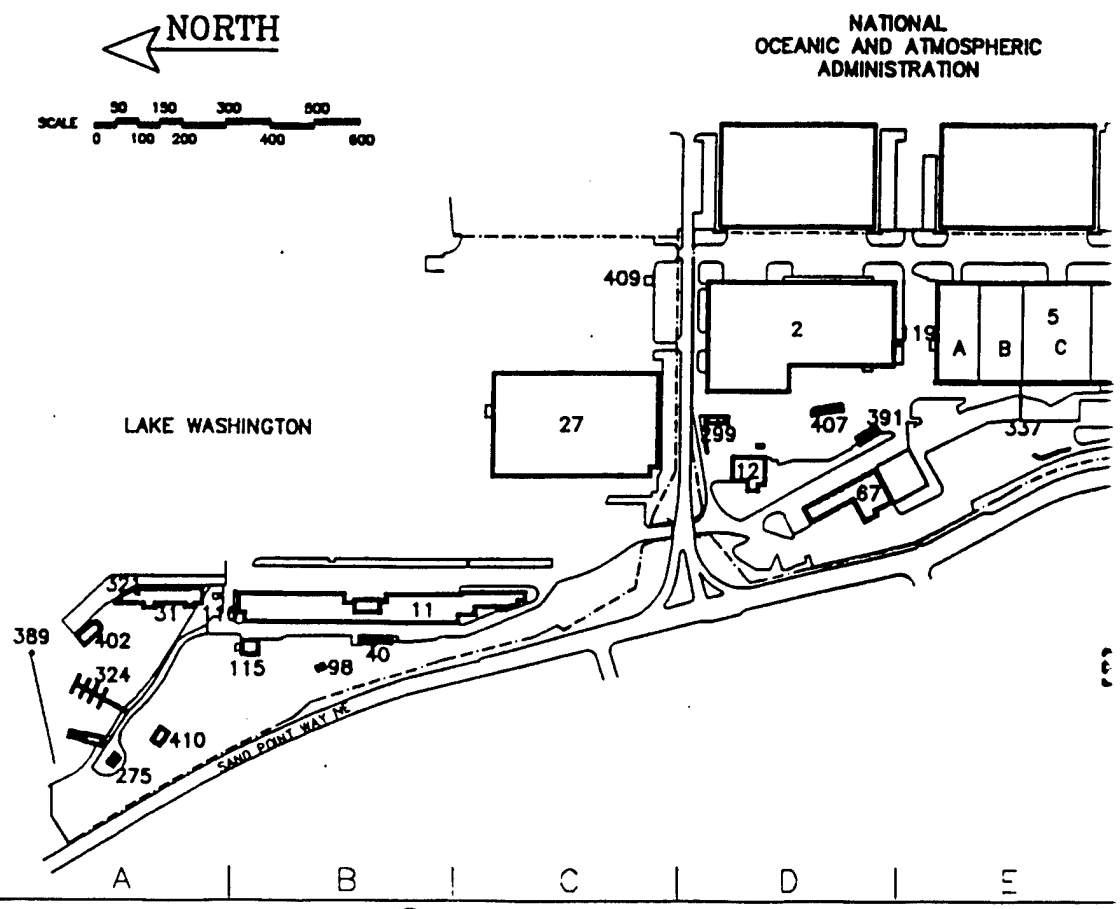
341	COMMERCIAL
342	COMMERCIAL
344	COMMERCIAL
345	COMMERCIAL
391	TRANSPORTATION
401	COMMERCIAL
402	BOATHOUSE
403	GENERATOR
404	PICNIC SHELTER
406	INTERIM JAIL FACILITY
408	PARKING
409	SEWAGE PUMP STATION
410	PICNIC SHELTER
411	PICNIC SHELTER



ETER PIT	320	F3	FLAGPOLE
AGE	321	A1	PIER 1
PUMP STATION	324	A1	PIER 7
IFT STATION	326	I2	UEPH PARKING
STORAGE	327	G3	RECREATION COURTS
GE	328	J3	RECREATION COURTS
TING	330	K3	QUARTERS A
MISSARY	331	J3	QUARTERS B
ET OFFICE	332	J3	QUARTERS C
HOP	333	K3	QUARTERS D
WILDLIFE LAB	334	L3	QUARTERS E
	337	E2	PEDESTRIAN BRIDGE
	340	K4	NEX GASOLINE ISLAND
LING	341	K4	NEX COURTESY ISLAND
PH	342	K4	NEX GASOLINE CASHIER
OR SHOP	344	K5	NEX COUNTRY STORE
AGE	345	K4	NEX AUTO SERVICE
LTER	389	A1	MOORING DOLPHIN
TER PIT	391	D2	TRUCK SCALE
IFT STATION	394	H3	TOTEM POLE
AGE	395	H3	BELL HOUSING MONUMENT
NTRY STORE	396	F2	WORLD FLIGHT MONUMENT
ILDLIFE STORES			
S VI STORE			
BBY SHOP			

	401	K4	GUARD STATION
	402	A*	BOATHOUSE
	403	F2	GENERATOR
	404	J4	PICNIC SHELTER
	405	K5	NEX COVERED WALKWAY
	406	F4	BRIG
	407	D2	HAZARDOUS WASTE
	408	I3	MOTORCYCLE PARKING
	409	C3	SEWAGE PUMP STATION
	410	A1	PICNIC SHELTER
	411	G4	PICNIC SHELTER
	412	F3	FREEDOM TREE MEMORIAL
	---	J5	FEDERAL CREDIT UNION

CAMPUS	333	COMMERCIAL
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AL	340	COMMERCIAL
AL	341	COMMERCIAL
AL	342	COMMERCIAL
WILDLIFE	344	COMMERCIAL
CAMPUS	345	COMMERCIAL
CAMPUS	391	TRANSPORTATION
AL	401	COMMERCIAL
AL	402	BOATHOUSE
LTER	403	GENERATOR
AL	404	PICNIC SHELTER
WILDLIFE	406	INTERIM JAIL FACILITY
AL	408	PARKING
AL	409	SEWAGE PUMP STATION
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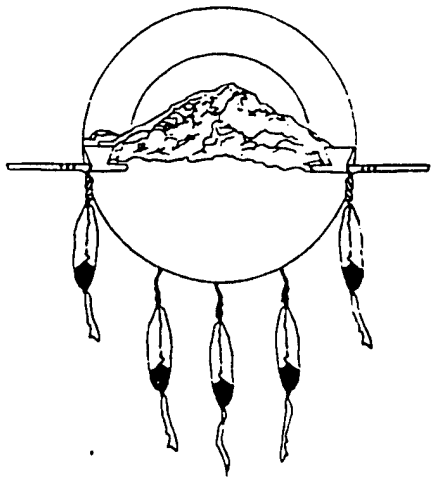

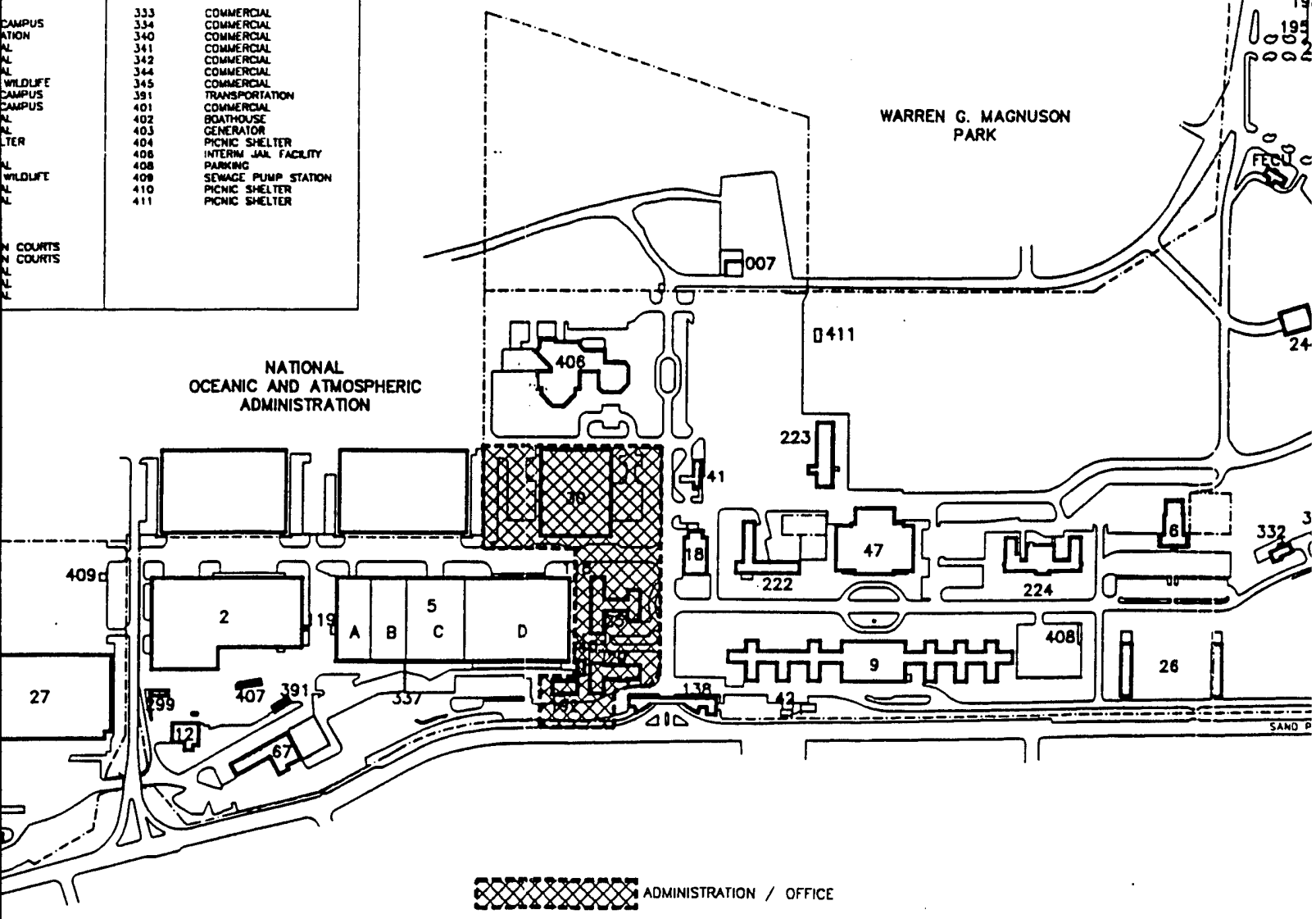

ADMINISTRATION / OFFICE

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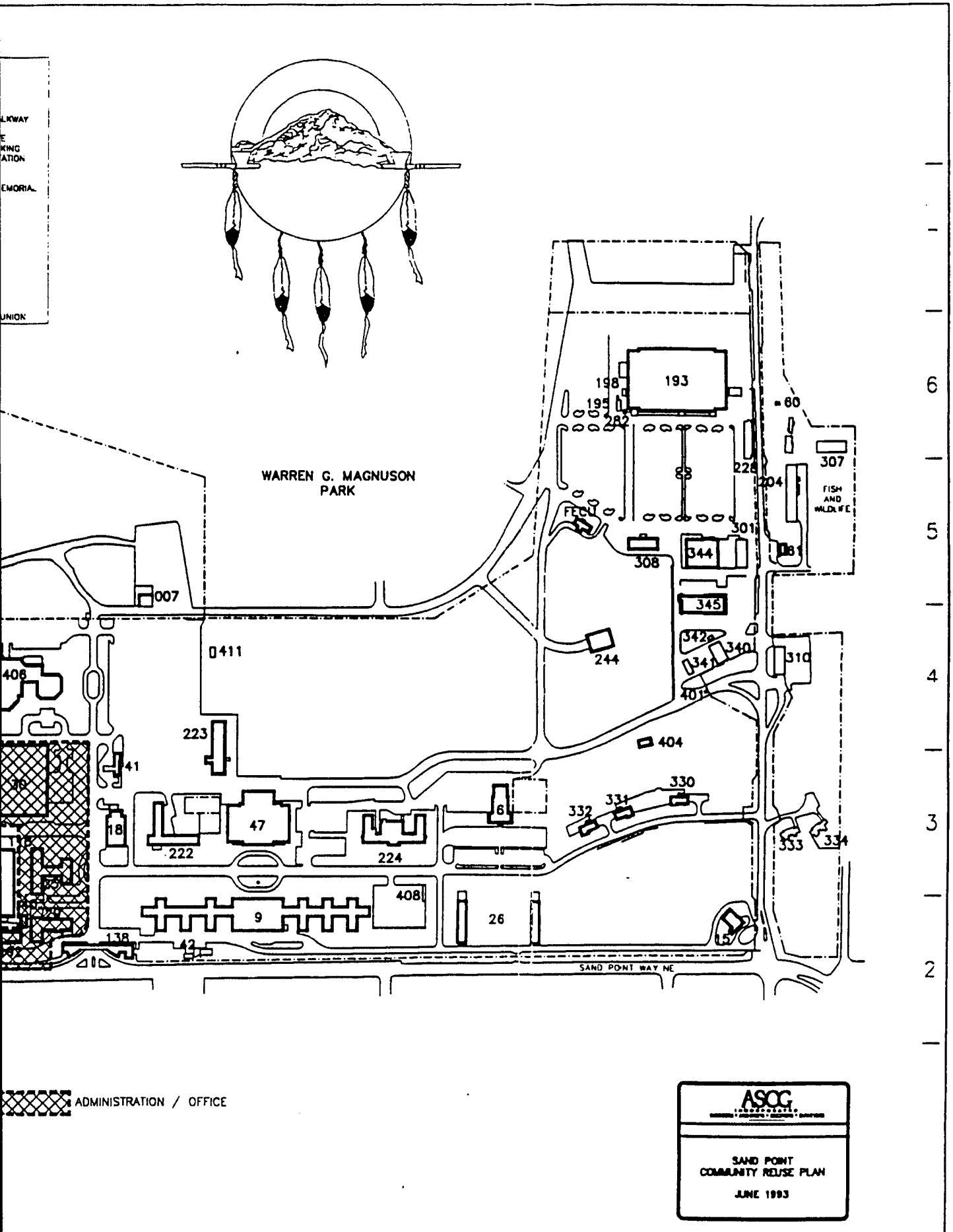
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SAND POINT WAY NE
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SAND POINT
COMMUNITY REUSE PLAN
JUNE 1993
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- To become a "Model Facility" for the development of a rich and positive foundation in reclaiming the strong principles, once established by our own ancestors.

- The program would focus on the cultural aspects of recovery and lifestyle, with the use of sweats, talking circles, and traditional activities such as Pow-Wow's.

TABLE 4

BUILDING NUMBER	EXISTING USE	PROPOSED USE	TOTAL SQUARE FOOTAGE OF BUILDING
30	Administration	Administration	80,066
20	Dispensary	Health Clinic	33,744
25	UOPH	Administration	27,892
192	Administration	Administration	4,800

D. Institutional Uses

To the south and east of Building 30 is the existing Brig, Firestation and Security. All uses would remain the same and be termed "Institutional Facilities".

The existing Brig would be used as an interim jail facility for Native Americans. Presently, when necessary, county jail facilities are used by the tribes. Tribal law enforcement pays the county for the use of their jail facilities. Often Tribal members are arrested for a period of time to allow them to "sober up" of "cool off". These members are incarcerated with hardened criminals. The interim jail facility would allow tribal members the necessary needed "time-out period" in an environment more suitable to their culture. This facility would also operate in conjunction with the proposed Alcohol and Drug Program as well as the Counseling Program associated with the College Campus. The Muckleshoot Indian Tribe is using the justification in

> ***"10USC S2687 "Use of closed bases for prisons and drug treatment facilities" Act Nov 29, 1989 P.L. 101.189.Div Title XXXVIII, Part C S2832, 103 Stat 1660*** the findings of congress have been for any "facilities rendered excess by the base closure process should be seriously considered for use as prisons and drug treatment facilities, as appropriate" It is the sense of congress that the Secretary of Defense should pursuant to the provisions of title 11 of the Defense Authorization Amendments and Base Closure and Realignment Act give priority to making real property (including the improvements thereon) of Department of Defense rendered excess or surplus as a result of the recommendations of the Commission on Base Realignment and Closure available to another Federal agency or a State or local government for use as a penal or correctional facility or as a drug abuse prevention, treatment, or rehabilitation center"

for the request of the brig and other institutional uses. If the entire facility is not utilized, it could be leased out to other entities to generate revenue for operation and maintenance.

Muckleshoot tribe acknowledges that the 13+ acres, located immediately east of Bldg. 406 (Brig), soon to be designated as excess property, should be used for the proposed 200 units of housing for the homeless, and we will not enter the screening process for this property, if the property is used for this purpose.

TABLE 5

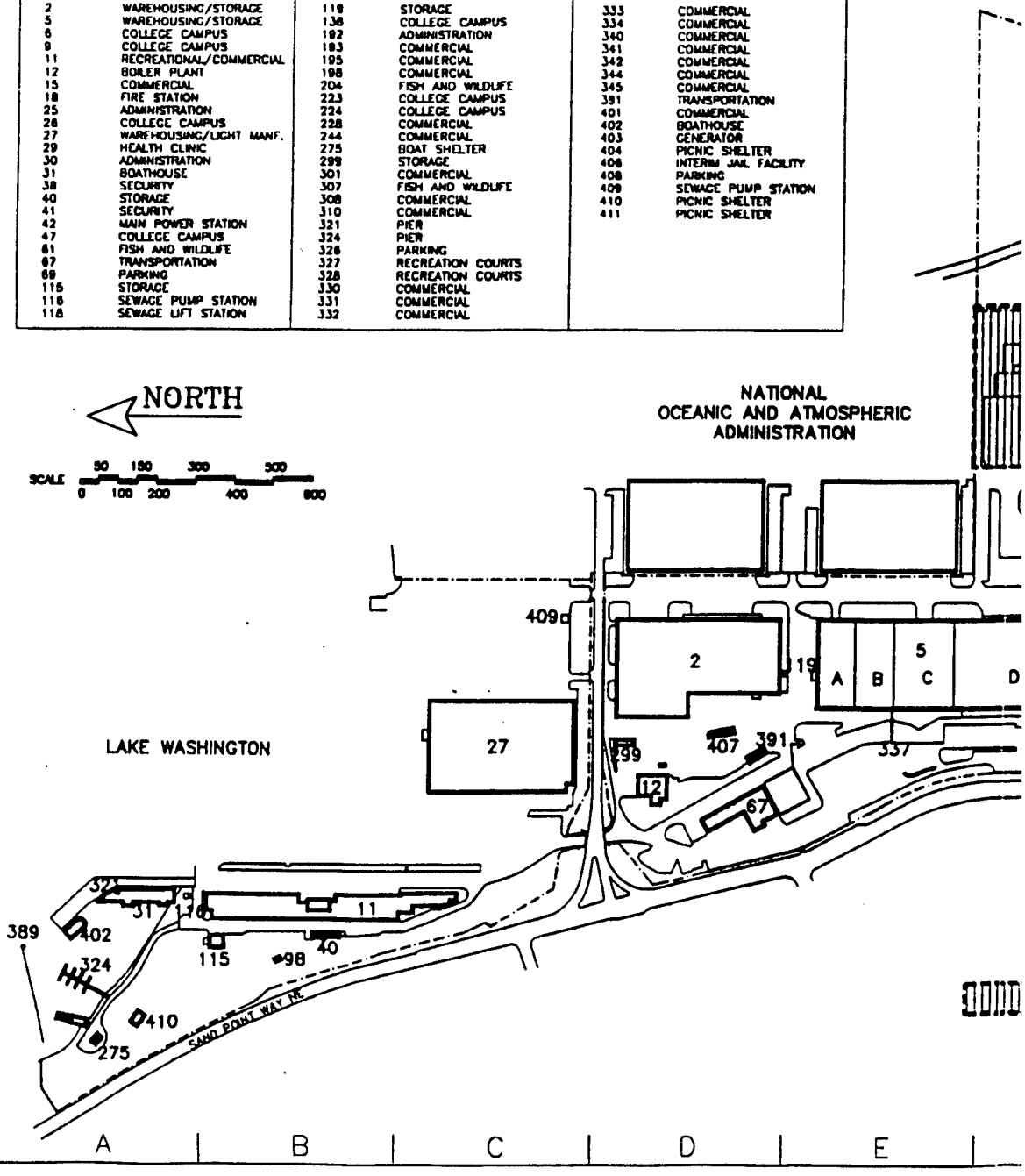
BUILDING NUMBER	EXISTING USE	PROPOSED USE	TOTAL SQUARE FOOTAGE OF BUILDING
406	Brig	Brig	29,270
18	Fire Station	Fire Station	14,137
41	Security	Security	2,030

EXISTING USES

BLDG	LOC	DESCRIPTION
2	D3	RESERVES
5	E3	SUPPLY
6	I3	BOWLING LANES
9	H2	UEPH/ADMIN
11	B1	PUBLIC WORKS
12	D2	BOILER PLANT
15	K2	CERAMICS SHOP
18	G3	FIRE STATION
25	F3	ADMINISTRATION
26	I2	UOPH
27	C2	RESERVES
29	F2	DISPENSARY
30	F3	ADMINISTRATION
31	A1	BOATHOUSE
38	F2	GUARD STATION
40	B1	FLAMMABLE STORES
41	G3	SECURITY
42	C2	MAIN POWER SUBSTATION
44	D2	BURIED FUEL OIL TANK
47	H3	RECREATION
60	K6	FLAMMABLE STORES
61	K5	STORAGE
67	D2	TRANSPORTATION
69	I3	UOPH PARKING
98	B1	METER SHELTER
109	K2	WATER METER PIT
115	B1	PW STORAGE
116	A1	SEWAGE PUMP STATION
118	F3	SEWAGE LIFT STATION
119	D3	RESERVE STORAGE
138	G2	GATEHOUSE
192	F2	HOMEPORTING
193	J6	NEX/COMMISSARY
195	J6	NEX TICKET OFFICE
198	J6	THRIFT SHOP
204	K5	FISH & WILDLIFE LAB
219	D2	HOT WELL
222	G3	SUPSHIPS
223	G3	COUNSELLING
224	I3	UOPH/UEPH
228	K6	NEX TAILOR SHOP
244	J4	NEX STORAGE
275	A1	BOAT SHELTER
281	D2	WATER METER PIT
282	J6	SEWAGE LIFT STATION
299	D2	PW STORAGE
301	K5	NEX COUNTRY STORE
307	L6	FISH & WILDLIFE STORES
308	J5	NEX CLASS VI STORE
310	K4	AUTO HOBBY SHOP
320	F3	FLAGPOLE
321	A1	PIER 1
324	A1	PIER 7
326	I2	UEPH PARKING
327	G3	RECREATION COURTS
328	J3	RECREATION COURTS
330	K3	QUARTERS A
331	J3	QUARTERS B
332	J3	QUARTERS C
333	K3	QUARTERS D
334	L3	QUARTERS E
337	E2	PEDESTRIAN BRIDGE
340	K4	NEX GASOLINE ISLAND
341	K4	NEX COURTESY ISLAND
342	K4	NEX GASOLINE CASHIER
344	K5	NEX COUNTRY STORE
345	K4	NEX AUTO SERVICE
389	A1	MOORING DOLPHIN
391	D2	TRUCK SCALE
394	H3	TOTEM POLE
395	H3	BELL HOUSING MONUMENT
398	F2	WORLD FLIGHT MONUMENT
401	K4	GUARD STAT
402	A1	BOATHOUSE
403	F2	GENERATOR
404	J4	PICNIC SHE
405	K5	NEX COVER
406	F4	BRIG
407	D2	HAZARDOUS
408	L3	MOTORCYCL
409	C3	SEWAGE PU
410	A1	PICNIC SHE
411	G4	PICNIC SHE
412	F3	FREEDOM
---	J5	FEDERAL CR

PROPOSED USES

BLDG	DESCRIPTION
2	WAREHOUSING/STORAGE
5	WAREHOUSING/STORAGE
6	COLLEGE CAMPUS
9	COLLEGE CAMPUS
11	RECREATIONAL/COMMERCIAL
12	BOILER PLANT
15	COMMERCIAL
18	FIRE STATION
25	ADMINISTRATION
26	COLLEGE CAMPUS
27	WAREHOUSING/LIGHT MANF.
29	HEALTH CLINIC
30	ADMINISTRATION
31	BOATHOUSE
38	SECURITY
40	STORAGE
41	SECURITY
42	MAIN POWER STATION
47	COLLEGE CAMPUS
61	FISH AND WILDLIFE
67	TRANSPORTATION
69	PARKING
115	STORAGE
116	SEWAGE PUMP STATION
118	SEWAGE LIFT STATION
119	STORAGE
138	COLLEGE CAMPUS
192	ADMINISTRATION
193	COMMERCIAL
195	COMMERCIAL
198	COMMERCIAL
204	FISH AND WILDLIFE
223	COLLEGE CAMPUS
224	COLLEGE CAMPUS
228	COMMERCIAL
244	COMMERCIAL
275	BOAT SHELTER
299	STORAGE
301	COMMERCIAL
307	FISH AND WILDLIFE
308	COMMERCIAL
310	COMMERCIAL
321	PIER
324	PIER
326	PARKING
327	RECREATION COURTS
328	RECREATION COURTS
330	COMMERCIAL
331	COMMERCIAL
332	COMMERCIAL
333	COMMERCIAL
334	COMMERCIAL
340	COMMERCIAL
341	COMMERCIAL
342	COMMERCIAL
344	COMMERCIAL
345	COMMERCIAL
391	TRANSPORTATION
401	COMMERCIAL
402	BOATHOUSE
403	GENERATOR
404	PICNIC SHELTER
406	INTERIM JAIL FACILITY
408	PARKING
409	SEWAGE PUMP STATION
410	PICNIC SHELTER
411	PICNIC SHELTER



R METER PIT	320	F3	FLAGPOLE
STORAGE	321	A1	PIER 1
GE PUMP STATION	324	A1	PIER 7
GE LIFT STATION	326	I2	UEPH PARKING
RVE STORAGE	327	G3	RECREATION COURTS
HOUSE	328	J3	RECREATION COURTS
EPORTING	330	K3	QUARTERS A
COMMISSARY	331	J3	QUARTERS B
TICKET OFFICE	332	J3	QUARTERS C
T SHOP	333	K3	QUARTERS D
& WILDLIFE LAB	334	L3	QUARTERS E
WELL	337	E2	PEDESTRIAN BRIDGE
HIPS	340	K4	NEX GASOLINE ISLAND
SELLING	341	K4	NEX COURTESY ISLAND
/UEPH	342	K4	NEX GASOLINE CASHIER
TAILOR SHOP	344	K5	NEX COUNTRY STORE
STORAGE	345	K4	NEX AUTO SERVICE
SHELTER	389	A1	MOORING DOLPHIN
R METER PIT	391	D2	TRUCK SCALE
GE LIFT STATION	394	H3	TOTEM POLE
TORAGE	395	H3	BELL HOUSING MONUMENT
COUNTRY STORE	398	F2	WORLD FLIGHT MONUMENT
& WILDLIFE STORES			
CLASS VI STORE			
HOBBY SHOP			

400	K4	GUARD STATION
402	A1	BOATHOUSE
403	F2	GENERATOR
404	J4	PICNIC SHELTER
405	K5	NEX COVERED WALKWAY
406	F4	BRIG
407	D2	HAZARDOUS WASTE
408	I3	MOTORCYCLE PARKING
409	C3	SEWAGE PUMP STATION
410	A1	PICNIC SHELTER
411	G4	PICNIC SHELTER
412	F3	FREEDOM TREE MEMORIAL
---	J5	FEDERAL CREDIT UNION

GE	333	COMMERCIAL
GE CAMPUS	334	COMMERCIAL
ISTRATION	340	COMMERCIAL
ERCIAL	341	COMMERCIAL
ERCIAL	342	COMMERCIAL
ERCIAL	344	COMMERCIAL
AND WILDLIFE	345	COMMERCIAL
GE CAMPUS	391	TRANSPORTATION
GE CAMPUS	401	COMMERCIAL
ERCIAL	402	BOATHOUSE
ERCIAL	403	GENERATOR
SHELTER	404	PICNIC SHELTER
GE	406	INTERIM JAIL FACILITY
ERCIAL	408	PARKING
AND WILDLIFE	409	SEWAGE PUMP STATION
ERCIAL	410	PICNIC SHELTER
ERCIAL	411	PICNIC SHELTER
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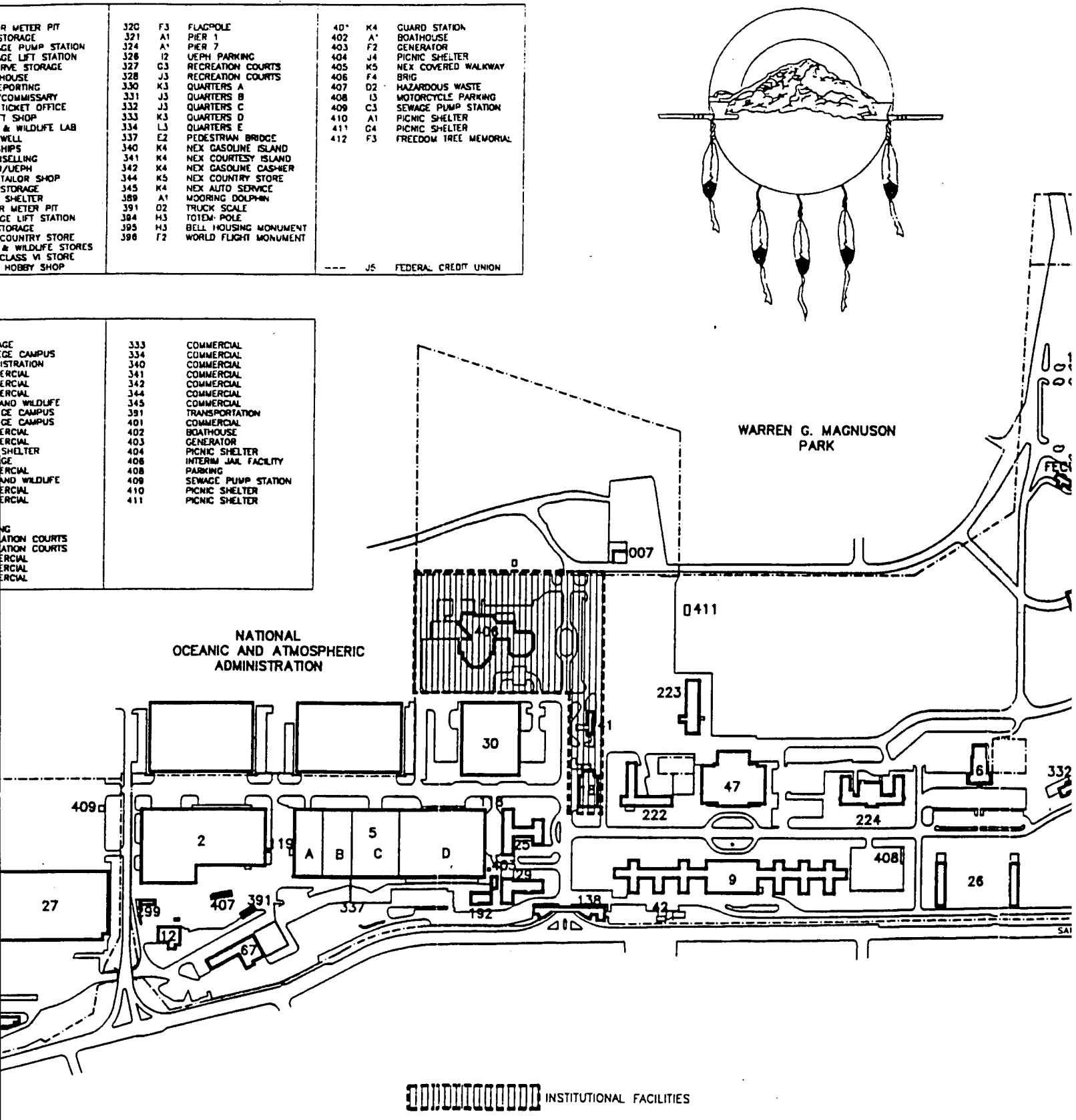

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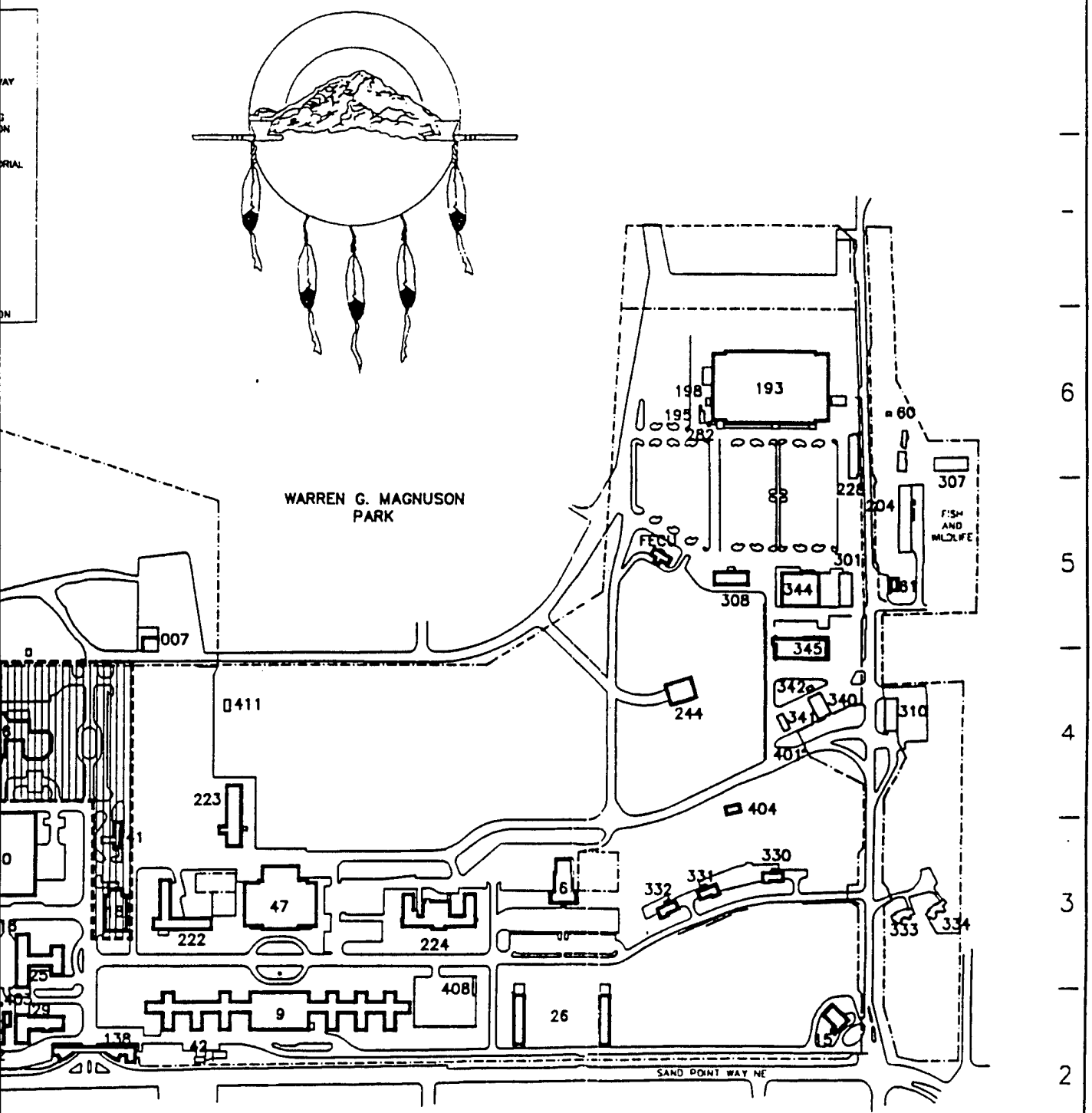
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COMMUNITY REUSE PLAN
JUNE 1993
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E. Warehousing/Light Industrial Uses

Directly south of the waterfront is a large area containing maintenance and storage facilities, including three large hangers. In conjunction with the (Indian Enterprise Zone/Foreign Trade Zone) the proposed use of this property would be "Warehousing/Light Industrial".

The Muckleshoot Tribe has obtained a planning assistance grant given by Economic Development Administration, Department of Commerce. The EDA assistance permits the Tribe to employ a full-time economic development specialist. The planning and development staff of the Muckleshoot Indian Tribe includes the economic development planner, housing specialist, water resources specialist, the Grants and Contracts Officer, the Tribal Attorney and the Executive Director and Administrative Manager. This highly organized department has recently been in contact with outside companies to relocate to the Sand Point Navel property to set up light manufacturing, and warehousing services. These companies would provide employment opportunities that are in accordance with the Muckleshoot Indian Tribe Overall Economic Development Plan. The Tribes main goal is to:

- Create a self-sufficient Tribal economy wherein the Tribe obtains independence from governmental subsidization of Tribal programs and services and individual community members are presented employment opportunities which result in the increased well-being of community households.

- Create warehousing and light industrial space suitable for lease by the tribe and the general public. Revenues generated will be used for operation in the maintenance of the Industrial Park, and will supplement revenues to operate a college.

TABLE 6

BUILDING NUMBER	EXISTING USE	PROPOSED USE	TOTAL SQUARE FOOTAGE OF BUILDING
27	Reserve Training	OPEN	114,617
2	Marine Corps Training	Warehousing, Light Industrial	144,232
5	Warehouse	Warehousing, Light Industrial	417,467
299	PW Storage	Storage	1,500
67	Garage	Garage	33,720

EXISTING USES

BLDG	LOC	DESCRIPTION
2	D3	RESERVES
5	E3	SUPPLY
6	I3	BOWLING LANES
9	H2	UEPH/ADMIN
11	B1	PUBLIC WORKS
12	D2	BOILER PLANT
15	K2	CERAMICS SHOP
18	G3	FIRE STATION
25	F3	ADMINISTRATION
26	I2	UOPH
27	C2	RESERVES
29	F2	DISPENSARY
30	F3	ADMINISTRATION
31	A1	BOATHOUSE
38	F2	GUARD STATION
40	B1	FLAMMABLE STORES
41	G3	SECURITY
42	G2	MAIN POWER SUBSTATION
44	D2	BURIED FUEL OIL TANK
47	H3	RECREATION
60	K6	FLAMMABLE STORES
61	K5	STORAGE
67	D2	TRANSPORTATION
69	I3	UOPH PARKING
98	B1	METER SHELTER
109	K2	WATER METER PIT
115	B1	PW STORAGE
116	A1	SEWAGE PUMP STATION
118	F3	SEWAGE LIFT STATION
119	D3	RESERVE STORAGE
138	G2	GATEHOUSE
192	F2	HOMEPORTING
193	J6	NEX/COMMISSARY
195	J6	NEX TICKET OFFICE
198	J6	THRIFT SHOP
204	K5	FISH & WILDLIFE LAB
219	D2	HOT WELL
222	G3	SUPSHIPS
223	G3	COUNSELLING
224	I3	UOPH/UEPH
228	K6	NEX TAILOR SHOP
244	J4	NEX STORAGE
275	A1	BOAT SHELTER
281	D2	WATER METER PIT
282	J6	SEWAGE LIFT STATION
299	D2	PW STORAGE
301	K5	NEX COUNTRY STORE
307	L6	FISH & WILDLIFE STORES
308	J5	NEX CLASS VI STORE
310	K4	AUTO HOBBY SHOP
320	F3	FLAGPOLE
321	A1	PIER 1
324	A1	PIER 7
326	I2	UEPH PARKING
327	G3	RECREATION COURTS
328	J3	RECREATION COURTS
330	K3	QUARTERS A
331	J3	QUARTERS B
332	J3	QUARTERS C
333	K3	QUARTERS D
334	L3	QUARTERS E
337	E2	PEDESTRIAN BRIDGE
340	K4	NEX GASOLINE ISLAND
341	K4	NEX COURTESY ISLAND
342	K4	NEX GASOLINE CASHIER
344	K5	NEX COUNTRY STORE
345	K4	NEX AUTO SERVICE
389	A1	MOORING DOLPHIN
391	D2	TRUCK SCALE
394	H3	TOTEM POLE
395	H3	BELL HOUSING MONUMENT
396	F2	WORLD FLIGHT MONUMENT
401	K4	GUARD STA
402	A1	BOATHOUSE
403	F2	GENERATOR
404	J4	PICNIC SHE
405	K5	NEX COVER
406	F4	BRIG
407	D2	HAZARDOUS
408	I3	MOTORCYCL
409	C3	SEWAGE PL
410	A1	PICNIC SHE
411	G4	PICNIC SHE
412	F3	FREEDOM T
---	J5	FEDERAL CR

PROPOSED USES

BLDG	DESCRIPTION
2	WAREHOUSING/STORAGE
5	WAREHOUSING/STORAGE
6	COLLEGE CAMPUS
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11	RECREATIONAL/COMMERCIAL
12	BOILER PLANT
15	COMMERCIAL
18	FIRE STATION
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26	COLLEGE CAMPUS
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29	HEALTH CLINIC
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299	STORAGE
301	COMMERCIAL
307	FISH AND WILDLIFE
308	COMMERCIAL
310	COMMERCIAL
321	PIER
324	PIER
326	PARKING
327	RECREATION COURTS
328	RECREATION COURTS
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331	COMMERCIAL
332	COMMERCIAL
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342	COMMERCIAL
344	COMMERCIAL
345	COMMERCIAL
391	TRANSPORTATION
401	COMMERCIAL
402	BOATHOUSE
403	GENERATOR
404	PICNIC SHELTER
406	INTERIM JAIL FACILITY
408	PARKING
409	SEWAGE PUMP STATION
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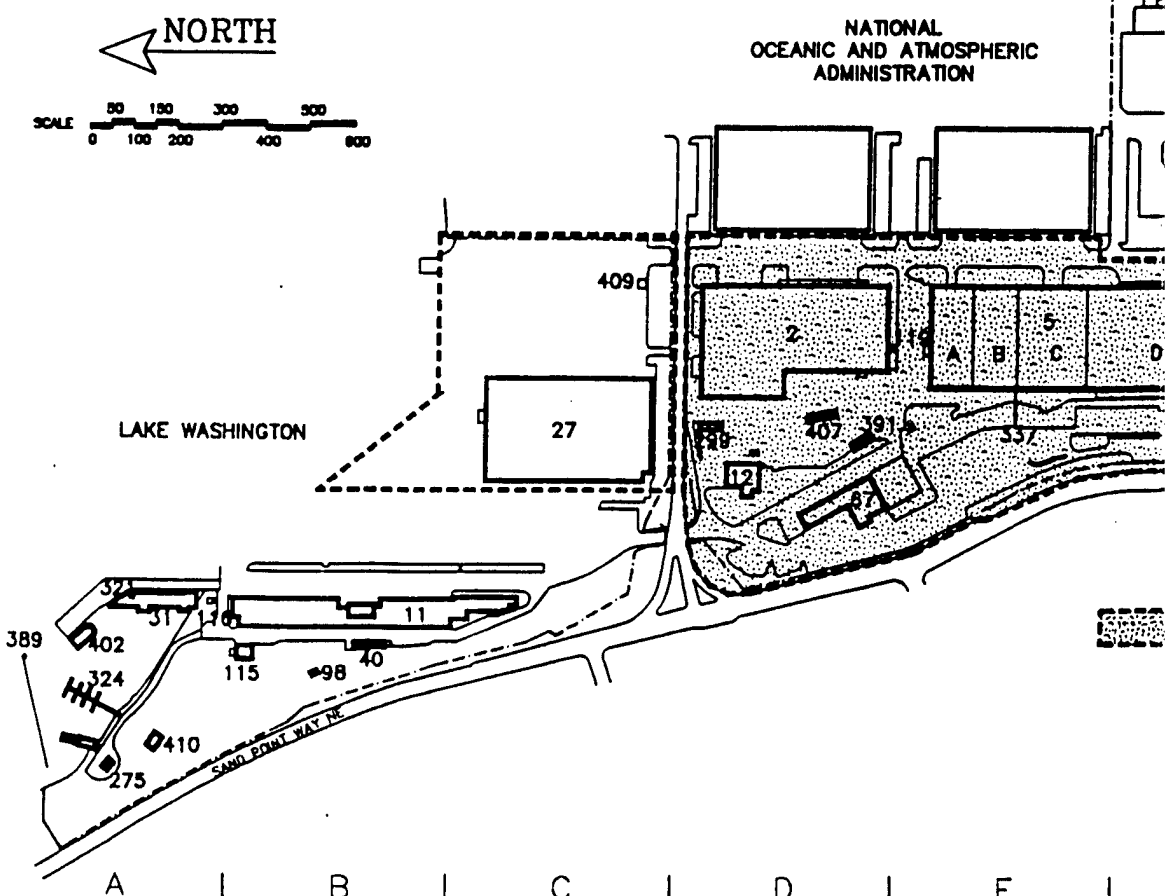
411	PICNIC SHELTER



PIT	320	F3	FLAGPOLE
STATION	321	A1	PIER 1
STATION	324	A1	PIER 7
RAGE	326	I2	UEPH PARKING
	327	G3	RECREATION COURTS
	328	J3	RECREATION COURTS
	330	K3	QUARTERS A
ARY	331	J3	QUARTERS B
FFICE	332	J3	QUARTERS C
	333	K3	QUARTERS D
IFE LAB	334	L3	QUARTERS E
	337	E2	PEDESTRIAN BRIDGE
	340	K4	NEX GASOLINE ISLAND
	341	K4	NEX COURTESY ISLAND
	342	K4	NEX GASOLINE CASHIER
HOP	344	K5	NEX COUNTRY STORE
	345	K4	NEX AUTO SERVICE
	389	A1	MOORING DOLPHIN
PIT	391	D2	TRUCK SCALE
STATION	394	H3	TOTEM POLE
	395	H3	BELL HOUSING MONUMENT
STORE	396	F2	WORLD FLIGHT MONUMENT
FE STORES			
STORE			
SHOP			

	401	K4	GUARD STATION
	402	A1	BOATHOUSE
	403	F2	GENERATOR
	404	J4	PICNIC SHELTER
	405	K5	NEX COVERED WALKWAY
	406	F4	BRIG
	407	D2	HAZARDOUS WASTE
	408	I3	MOTORCYCLE PARKING
	409	C3	SEWAGE PUMP STATION
	410	A1	PICNIC SHELTER
	411	C4	PICNIC SHELTER
	412	F3	FREEDOM TREE MEMORIAL
---	J5		FEDERAL CREDIT UNION

US	333	COMMERCIAL
	334	COMMERCIAL
	340	COMMERCIAL
	341	COMMERCIAL
	342	COMMERCIAL
	344	COMMERCIAL
IFE	345	COMMERCIAL
US	391	TRANSPORTATION
US	401	COMMERCIAL
	402	BOATHOUSE
	403	GENERATOR
	404	PICNIC SHELTER
	406	INTERIM JAIL FACILITY
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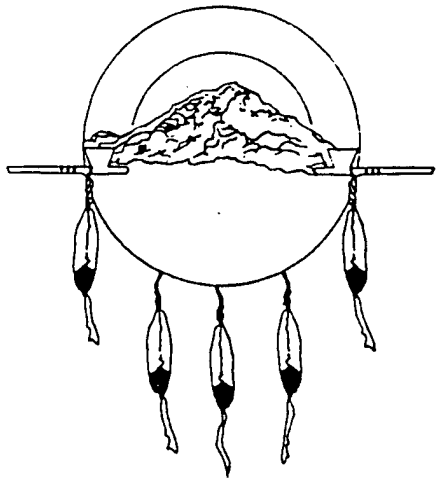

WARREN G. MAGNUSON PARK

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

007 411 406 223 30 41 18 47 222 224 6 332 334 409 2 A B 5 C D 19 25 129 9 408 26 27 407 391 337 192 138 42 12 67 244 198 195 282 SAND POINT

WAREHOUSING LIGHT INDUSTRIAL

C | D | E | F | G | H | I | J

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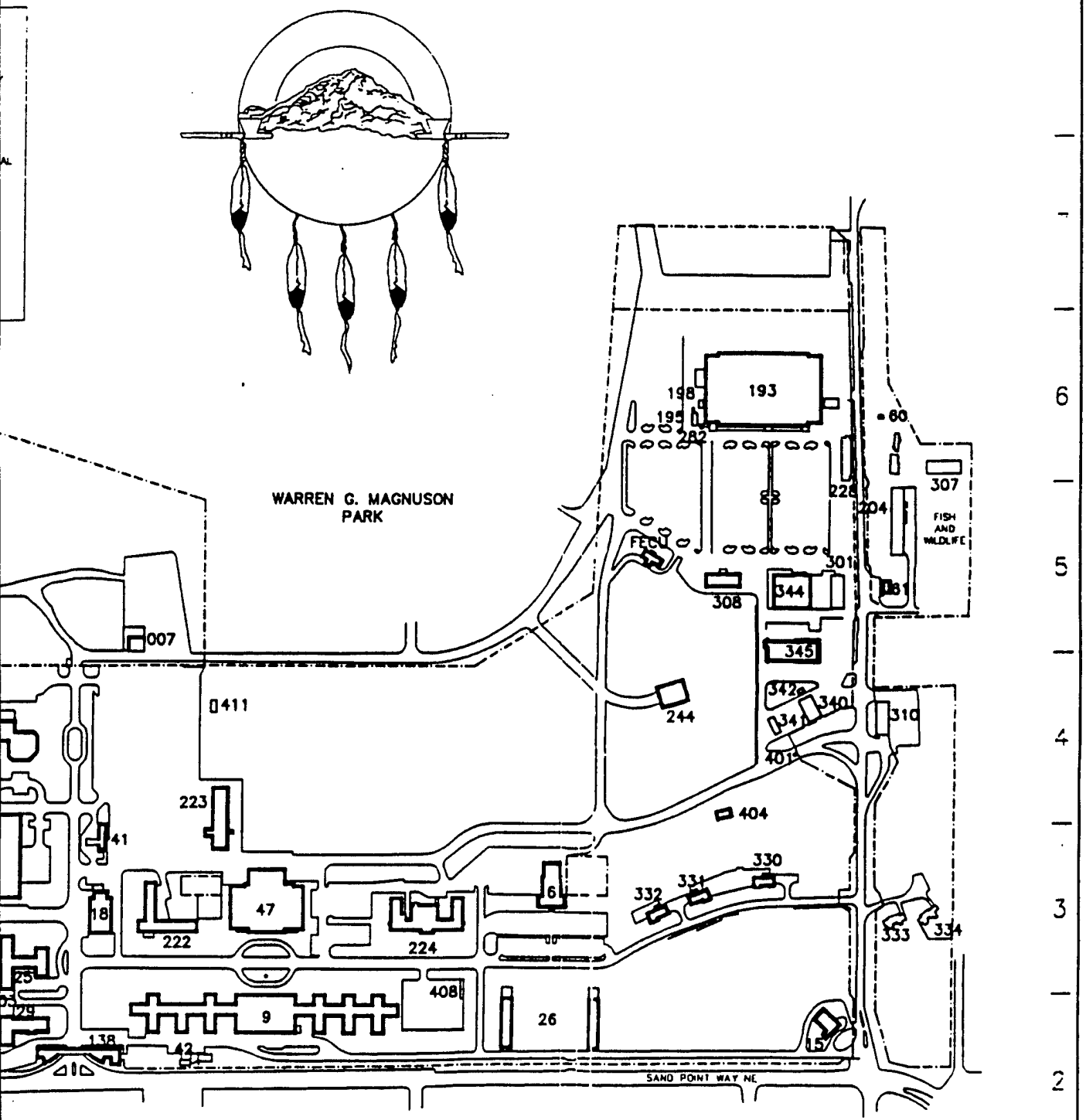

WAREHOUSING LIGHT INDUSTRIAL

ASCG

SAND POINT
COMMUNITY REUSE PLAN

JUNE 1993

F. Recreational/Commercial

The northern most portion of the base, the waterfront property and Building 11, is currently being used for both recreation and administration. This waterfront property supports the existing land use of recreation, therefore it is the intent of this proposed reuse plan to preserve this area as a Marina. The proposed use of this area would be "Recreational/Commercial" and this area would be open to the general public with only minor reservations during the fishing season.

Under the Treaty of Point Elliott (12 Stat. 927), the Tribe holds federally guaranteed treaty fishing rights in its usual and accustomed fishing areas. Lake Washington, where the Navel Station Puget Sound (Sand Point) is located, is within the usual and accustomed fishing areas of the Tribe. The Muckleshoot Indian Tribe Fisheries Department is lacking in facilities for both the tribal fishermen and the fisheries biologist they employ. The goals of the fisheries department in acquiring this area are:

- To participate in a five year, six part, $1.6 million study on Lake Washington to determine the feasibility of a spawning channel for sockeye salmon on the Ceder River.
- To develop facilities for holding and testing adult salmon.
- To develop an area of storage for the 120 licensed fishermen of the Muckleshoot Tribe to store their boats and nets, as well as use the area for net repair.
- Provide fishing access to the lake which in the past has been a problem especially after dusk when gillnet fishing is conducted.
- The tribal fish commissioners are quite active in the region's salmon politics. This site would enable the commissioners to hold their annual meetings; provide a place for the fishermen to hold their meetings; and provide a site in which biological experiments could be performed.
- To provide recreational access to the general public.

TABLE 7

BUILDING NUMBER	EXISTING USE	PROPOSED USE	TOTAL SQUARE FOOTAGE OF BUILDING
11	Public Works	Recreational, Commercial	59,206
40	Paint Shop	Demolition	924
115	PW Storage	Demolition	1,500
275	Small Craft Boathouse	Demolition	288
402	Boat House	Boat House	1,760
410	Recreation Pavilion	Recreation Pavilion	1,760
31	Boat House	Boathouse	3,141

EXISTING USES

BLDG	LOC	DESCRIPTION
2	D3	RESERVES
5	E3	SUPPLY
6	I3	BOWLING LANES
9	H2	UEPH/ADMIN
11	B1	PUBLIC WORKS
12	D2	BOILER PLANT
15	K2	CERAMICS SHOP
18	C3	FIRE STATION
25	F3	ADMINISTRATION
26	I2	UOPH
27	C2	RESERVES
29	F2	DISPENSARY
30	F3	ADMINISTRATION
31	A1	BOATHOUSE
38	F2	GUARD STATION
40	B1	FLAMMABLE STORES
41	G3	SECURITY
42	C2	MAIN POWER SUBSTATION
44	D2	BURIED FUEL OIL TANK
47	H3	RECREATION
60	K6	FLAMMABLE STORES
61	K5	STORAGE
67	D2	TRANSPORTATION
69	I3	UOPH PARKING
98	B1	METER SHELTER
109	K2	WATER METER PIT
115	B1	PW STORAGE
116	A1	SEWAGE PUMP STATION
118	F3	SEWAGE LIFT STATION
119	D3	RESERVE STORAGE
138	G2	GATEHOUSE
192	F2	HOMEPORTING
193	J6	NEX/COMMISSARY
195	J6	NEX TICKET OFFICE
198	J6	THRIFT SHOP
204	K5	FISH & WILDLIFE LAB
219	D2	HOT WELL
222	G3	SUPSHIPS
223	G3	COUNSELLING
224	I3	UOPH/UEPH
228	K6	NEX TAILOR SHOP
244	J4	NEX STORAGE
275	A1	BOAT SHELTER
281	D2	WATER METER PIT
282	J6	SEWAGE LIFT STATION
299	D2	PW STORAGE
301	K5	NEX COUNTRY STORE
307	L6	FISH & WILDLIFE STORES
308	J5	NEX CLASS VI STORE
310	K4	AUTO HOBBY SHOP
320	F3	FLAGPOLE
321	A1	PIER 1
324	A1	PIER 7
326	I2	UEPH PARKING
327	G3	RECREATION COURTS
328	J3	RECREATION COURTS
330	K3	QUARTERS A
331	J3	QUARTERS B
332	J3	QUARTERS C
333	K3	QUARTERS D
334	L3	QUARTERS E
337	E2	PEDESTRIAN BRIDGE
340	K4	NEX GASOLINE ISLAND
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342	K4	NEX GASOLINE CASHIER
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345	K4	NEX AUTO SERVICE
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391	D2	TRUCK SCALE
394	H3	TOTEM POLE
395	H3	BELL HOUSING MONUMENT
396	F2	WORLD FLIGHT MONUMENT
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406	F4	BRIG
407	D2	HAZARDOUS
408	I3	MOTORCYCLE
409	C3	SEWAGE PUM
410	A1	PICNIC SHEL
411	G4	PICNIC SHEL
412	F3	FREEDOM TR
---	J5	FEDERAL CRT

PROPOSED USES

BLDG	DESCRIPTION
2	WAREHOUSING/STORAGE
5	WAREHOUSING/STORAGE
6	COLLEGE CAMPUS
9	COLLEGE CAMPUS
11	RECREATIONAL/COMMERCIAL
12	BOILER PLANT
15	COMMERCIAL
18	FIRE STATION
25	ADMINISTRATION
26	COLLEGE CAMPUS
27	WAREHOUSING/LIGHT MANF.
29	HEALTH CLINIC
30	ADMINISTRATION
31	BOATHOUSE
38	SECURITY
40	STORAGE
41	SECURITY
42	MAIN POWER STATION
47	COLLEGE CAMPUS
61	FISH AND WILDLIFE
67	TRANSPORTATION
69	PARKING
115	STORAGE
116	SEWAGE PUMP STATION
118	SEWAGE LIFT STATION
119	STORAGE
138	COLLEGE CAMPUS
192	ADMINISTRATION
193	COMMERCIAL
195	COMMERCIAL
198	COMMERCIAL
204	FISH AND WILDLIFE
223	COLLEGE CAMPUS
224	COLLEGE CAMPUS
228	COMMERCIAL
244	COMMERCIAL
275	BOAT SHELTER
299	STORAGE
301	COMMERCIAL
307	FISH AND WILDLIFE
308	COMMERCIAL
310	COMMERCIAL
321	PIER
324	PIER
326	PARKING
327	RECREATION COURTS
328	RECREATION COURTS
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409	SEWAGE PUMP STATION
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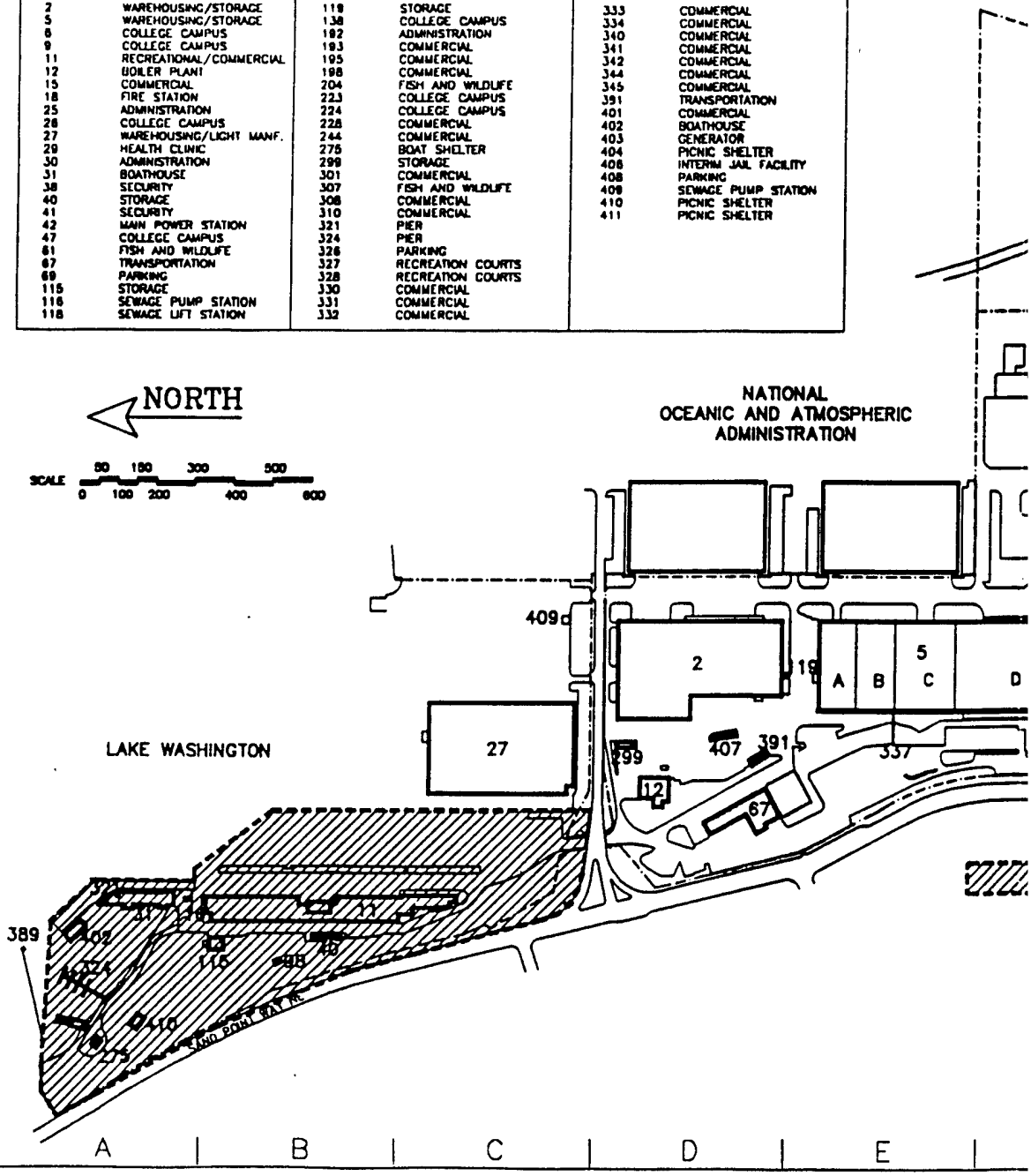

320	F3	FLAGPOLE	
321	A1	PIER 1	
324	A1	PIER 7	
326	I2	UEPH PARKING	
327	G3	RECREATION COURTS	
328	J3	RECREATION COURTS	
330	K3	QUARTERS A	
331	J3	QUARTERS B	
332	J3	QUARTERS C	
333	K3	QUARTERS D	
334	L3	QUARTERS E	
337	E2	PEDESTRIAN BRIDGE	
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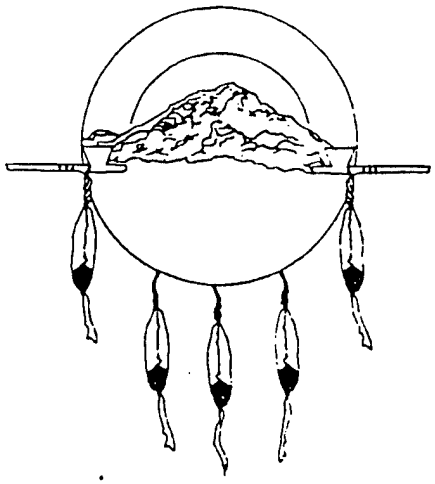

WARREN G. MAGNUSON PARK

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

RECREATIONAL / COMMERCIAL

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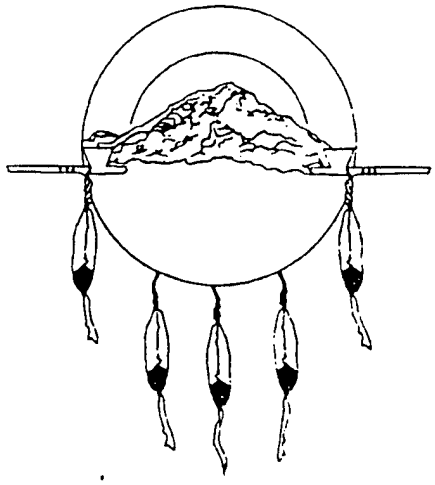

WARREN G. MAGNUSON PARK

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SAND POINT WAY NE

RECREATIONAL / COMMERCIAL

ASCG

SAND POINT
COMMUNITY REUSE PLAN

JUNE 1993

G H I J K L

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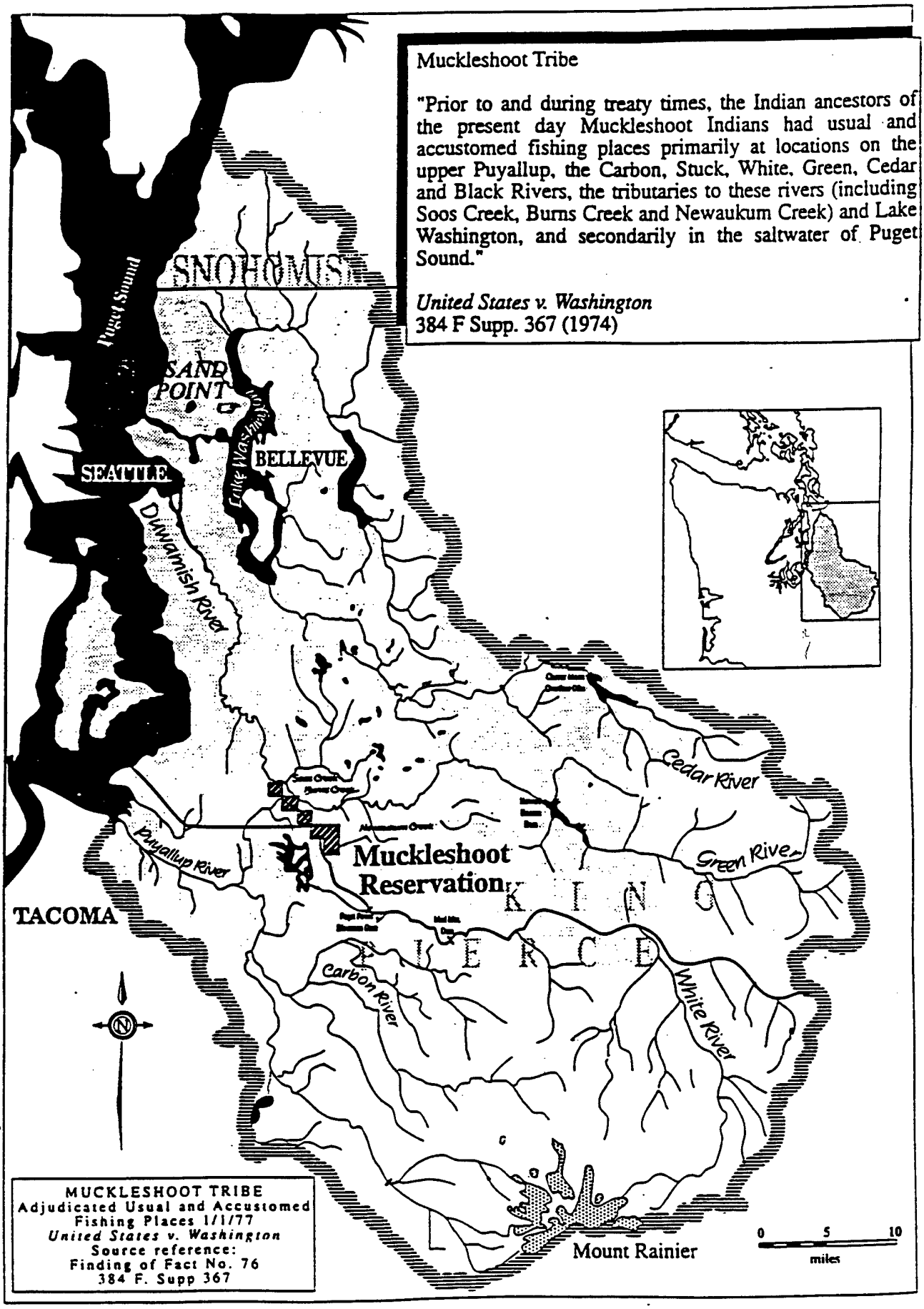
TREATY AREA DRAINAGE



V. Employment Potential

One of the key considerations for the Muckleshoot Tribe in developing the land reuse plan was employment, both to replace the jobs that will be lost when Sand Point closes, and to enhance the tribe's economy with new jobs. The development of the commercial, recreational, warehousing and light industrial, as well as other uses of the property with a variety of uses, will provide a mix of employment opportunities.

Land Use	Potential Number of Employees
Parks and Recreation	200
College Campus (average student load of 40 students per class)	75
Administrative Offices	564
Health Clinic	67
Warehousing/Light Industrial	1044
Commercial (Restaurant)	30
TOTAL	**1,980**

These jobs will be open to the public, with Indian Preference. One of the goals in the Tribes' Overall Economic Development Plan is:

> *"Develop on-going revenue sources to support Tribal administration and services; create businesses that address market opportunities, develop and expand development potentials related to tourism and other service industries."*

According to the Memo dated December 1991 from the Assistant Secretary of Defense to the Secretaries of Military Departments, states that the third objective of the Base Closure Act **is to assist with economic recovery, which involves creation of new jobs.**

TABLE 8

PROPOSED USE	SQUARE FOOTAGE	EMPLOYABLE PERSONS PER SF	TOTAL
Parks and Recreation	60,000	1 person per 300 sf	200
College Campus	396,090	Average load of 40 students per classroom	75
Administrative-Offices	112,758	1 person per 200	564
Health Clinic	33,744	1 person per 500	67
Institutional Use	45,437	1 person per 500	91
Warehousing Light Industrial	811,060	1 person per 1000	1044
Recreational	6,661		
Commercial Restaurant 15,000sf	59,206	1 person per 500	30

VI. Estimated Minimal Renovation Costs

The building by building synopsis (Attached as **Appendix B**) gives an approximation of the renovation and/or demolition cost for the buildings located on Sand Point Navel Base, to bring them into compliance or do basic architectural modifications for the proposed uses. The cost estimates do not include Architectural/Engineering (A/E) fees, the HVAC system or abatement of any hazardous materials. It has been estimated by the Sand Point Navel Base Public Works that installation of the HVAC systems for individual buildings on the base would be approximately $500,000.00.

SUMMARY OF PROPOSED COSTS

Parks and Recreation	199,250.00
Campus Area	4,898,550.00
Administration/Office	2,046,540.00
Institutional Facilities	161,670.00
Warehousing/Light Industrial	1,386,000.00
Recreational/Commercial Area	$ 2,254,240.00
TOTAL	**$10,946,250.00**

VII. Funding Sources

Internal Funding

The Tribe has an established Economic Development Fund, which was specifically created for economic development purposes. The fund is being strengthened through allocations of Tribal Tax Revenues. The tribal tax revenues are coming from existing tribal facilities such as the bingo hall, smokeshop, approved casino and proposed strip mall.

Private Funding

The Tribe will also look to Private Sector funding through tax incentives under the Indian Tribal Tax Status Act (ITTSA) and other Congressional Acts. Under ITTSA the tribe has the ability to issue Tax Exempt Revenue Bonds for raising large sum of money needed for infrastructure improvements on projects of this magnitude. The tribe could also look to Concessions or Vendor contracts for income generating tenants in which portions of the Marina are rented out.

Other Sources

The tribe will also be looking at other methods of acquiring funding through Federal sources such as HUD, FmHA, IHS, EDA, EPA, Small Business Administration and BIA under the Indian Finance Act (IFA) program, as well as other State and Local funding. The Muckleshoot Tribe currently has in place an economic development planning grant through the Economic Development Administration (EDA), Department of Commerce, that can be extend to this project. Once the planning is complete the Tribe can apply for actual infrastructure construction dollars through EDA. One other source for potential income on the site is the lease revenues which will be generated from the Marina, Commercial zone, as well as the Light Manufacturing and the Administrative zones. Lease revenues will more than pay for the maintenance operations of the buildings.

VIII. Conclusion

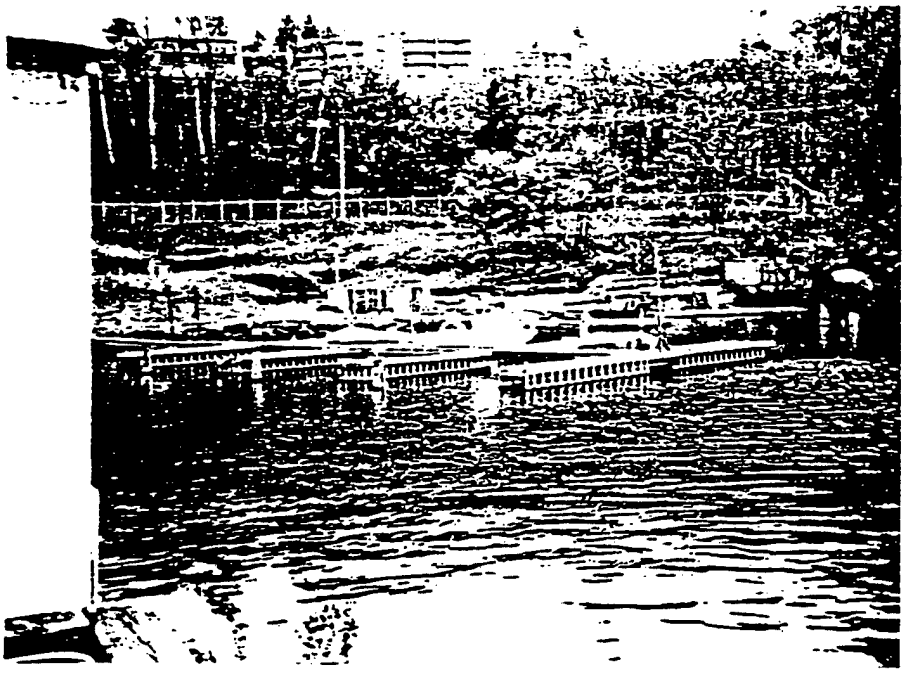
In preparing this Land Reuse Plan the goals of the Muckleshoot Tribe were to:

- Promote new economic activity to minimize adverse impacts of the base closure;
- Respond to the Indian Community;
- Achieve a compatible land use plan with minimal change to existing land use;
- Protect environmental resources;
- Provide for effective implementation;

The proposed Reuse Plan prepared for the Muckleshoot Indian Reservation provides the Naval Station Puget Sound, Sand Point, with the greatest and most economical use of the existing property and will benefit and serve the indian community, the citizens of Seattle and the entire Puget Sound Region.

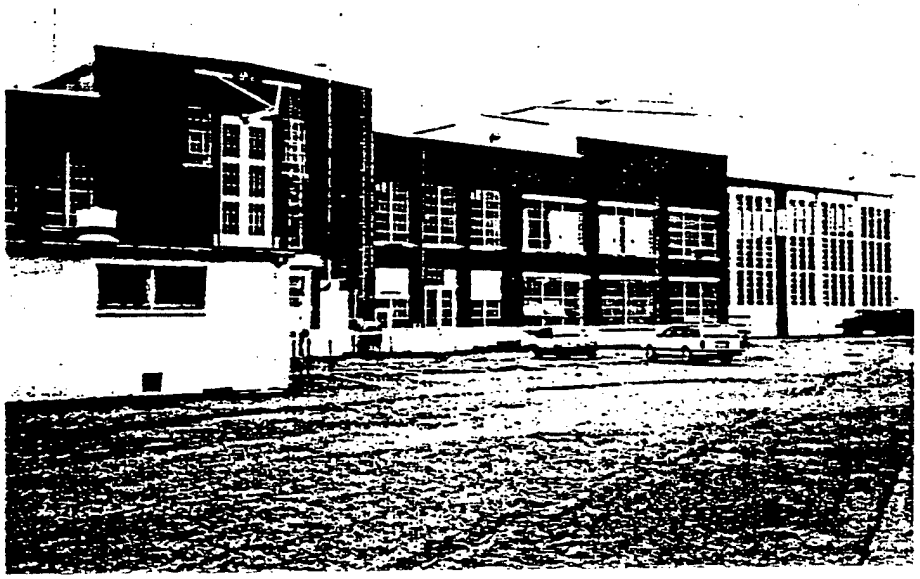
PHOTOS

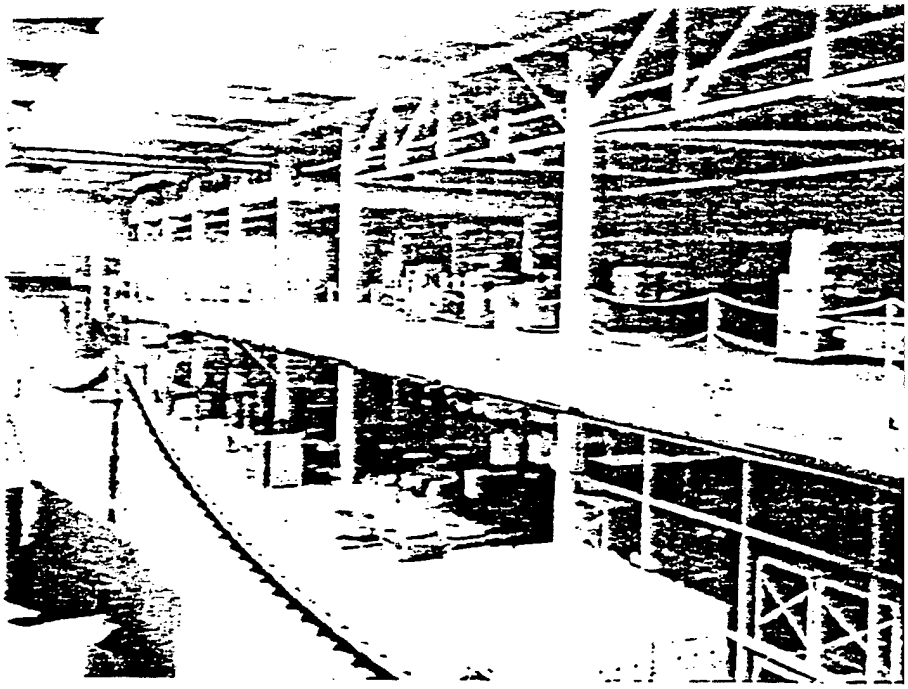
North Side
Existing Boat Ramp
Proposed Boat Ramp



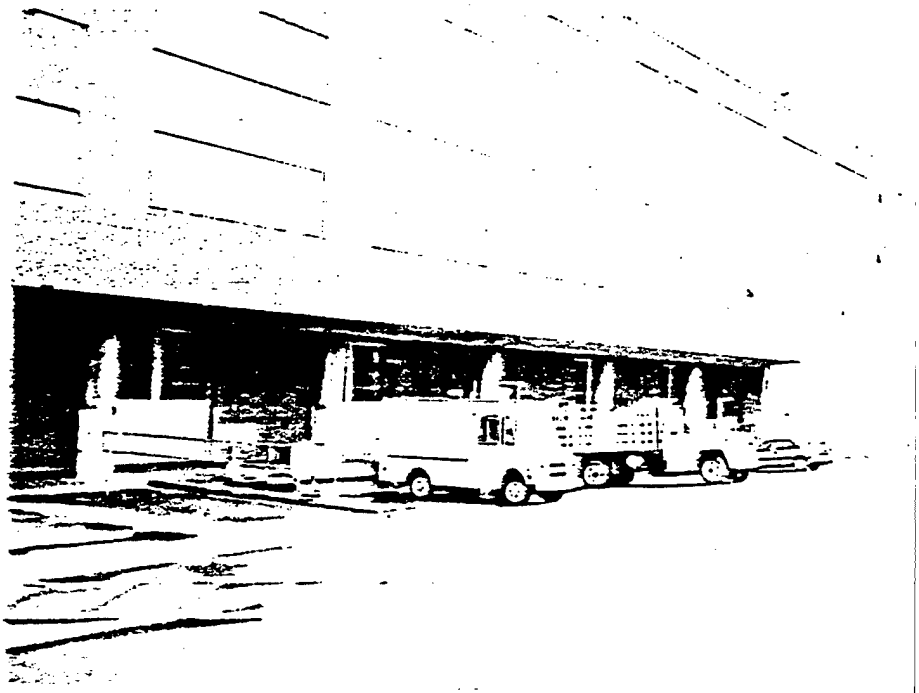
Building 11
Existing Public Works
Proposed Recreational,
Commercial

Building 2
Existing Reserves
Proposed Warehousing,
Light Industrial

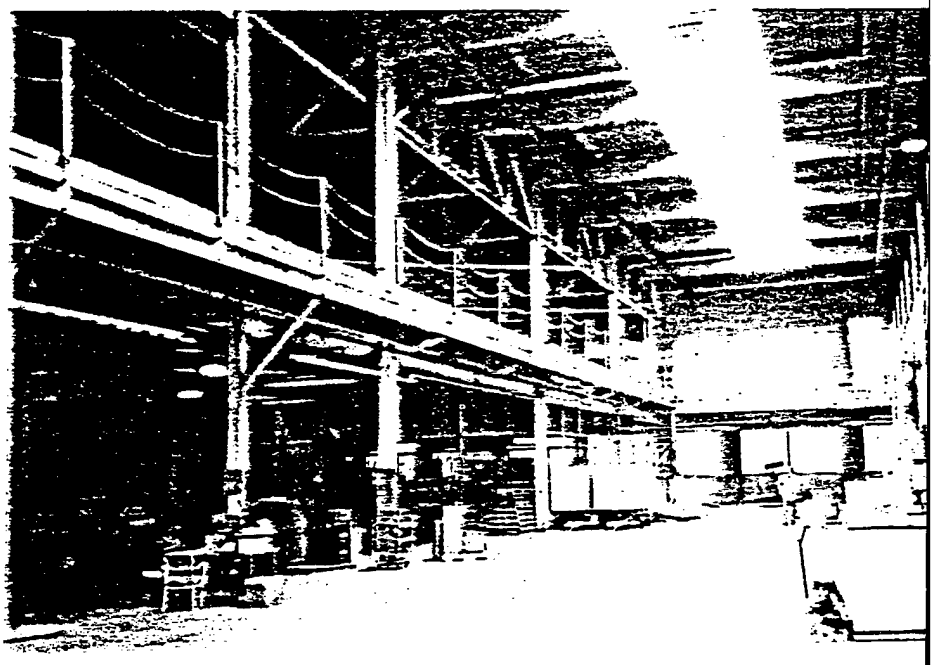




Building 5-Interior
Existing Supply
Proposed Warehousing,
Light Industrial



Building 5
Existing Supply
Proposed Warehousing,
Light Industrial



Building 5
Existing Supply
Proposed Warehousing,
Light Industrial

Building 9
Existing UEPH/Administration
Proposed College Ciassrooms,
Dormitories

Building 9
Existing UEPH/Administration
Proposed College Classrooms,
Dormitories

APPENDIX A

IN REPLY REFER TO

United States Department of the Interior

BUREAU OF INDIAN AFFAIRS
Puget Sound Agency
3006 Colby Avenue - Federal Building
Everett, Washington 98201

April 26, 1993

Mr. Robert K. Uhrich
Director, Real Estate Division
Department of the Navy
Engineering Field Activity
3505 N.W. Anderson Hill Road
Silverdale, WA 98383

Dear Mr. Uhrich:

Enclosed is the April 22, 1993 draft "Sand Point N.A.S. Preliminary Land Use Plan" as submitted by the Muckleshoot Tribe to the Puget Sound Agency. We have met with you and other representatives of the Department of the Navy concerning the tribal government's planned use of the soon to be vacated property. The land use plan is accompanied by a map for your analysis defining proposed uses of certain areas and existing structures. These documents are being submitted herewith to your office by the Puget Sound Agency, Bureau of Indian Affairs for review and action.

The Muckleshoot Tribe is a federally recognized Indian Tribe in the Puget Sound vicinity. The Bureau of Indian Affairs is branch of the U. S. Department of the Interior which will be acquiring the property in trust for the Muckleshoot Tribal Government. Federal agencies have priority over state, county, local governments as well as private parties wishing to appropriate the property.

Please contact me personally with any questions at (206)258-2651 EXT 232 or (206)259-2830.

William A. Black
Superintendent

CC: Muckleshoot Tribe, J. Watkins
ASCG, Inc., Albuquerque
D. Zunie, PAO

United States Department of the Interior

BUREAU OF INDIAN AFFAIRS
Portland Area Office
911 N.E. 11th Avenue
Portland, Oregon 97232-4169

IN REPLY REFER TO:

TAKE PRIDE IN AMERICA

MAY 24 1993

Ms. Virginia Cross
Chairperson
Muckleshoot Indian Tribe
39015 172nd Avenue, S.E.
Auburn, Washington 98002

Dear Chairperson Cross:

This letter is in response to our meeting at the Portland Area Office on May 13, 1993, between your staff and mine. Our research revealed that we cannot support the United Indians of All Tribes Foundation (UIATF). The provisions in the grant the Bureau has with the UIATF does not allow for acquisition of any excess federal real property. We are therefore concentrating our efforts wholly on behalf of the Muckleshoot Indian Tribe. The contractual agreement we have in the Public Law 93-638 contracts obligates the Secretary of Interior to acquire any excess real and personal property for the performance of the contracts.

If you have any questions, please call Derrick Zunie at (503) 231-2279.

Sincerely,

Ronald Eggen

ACTING Portland Area Director

RECEIVED 5-28-93

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MUCKLESHOOT
RECEIVED IN GRANTS/CONTRACTS
DATE - 5/27/93

DISTRIBUTED TO:

DATE: 5/27/93

orig. to UC / all TC
copies: RW; JW; RD
ED ADS

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EDCJN-MEMO-11-93

MEMORIAL OF THE ECONOMIC DEVELOPMENT COMMITTEE OF THE NAVAJO NATION COUNCIL

Supporting the Request made by the Muckelshoot Indian Tribe in their Effort to Acquire the Sand Point Naval Station in the State of Washington

WHEREAS:

1. The Economic Development Committee of the Navajo Nation Council serves as the oversight committee to the Division of Economic Development and as such can recommend and support various economic development and other initiatives that will benefit the Navajo Nation; and

2. The Muckelshoot Indian Tribe whose original homelands include the State of Washington has requsted assistance from the Navajo Nation in their efforts to acquire the Sand Point Naval Base; and

3. Their request is attached hereto as Exhibit "A" and includes the use of the attorneys and lobbyist employed by the Navajo Nation to communicate with Congressional representatives such as Senator Inouye and Senator McCain in order to block any efforts made by non-Indian interests to change or challenge existing Federal laws that permit the Bureau of Indian Affairs to obtain and donate excess or surplus property to Indian Nations and to assist in the monitoring of the status of those Federal laws pertaining to the procurement of Federal property by Indian Nations. The request is also made of the President of the Navajo Nation to join Muckelshoot tribal representatives in meeting with Senator Inouye and others; and

4. The Muckelshoot Indian Tribe's efforts to acquire the Sand Point Naval Base is similar to the Navajo Nation's efforts to acquire the Fort Wingate Army Depot and the result of their efforts may set a precedent for the Navajo Nation in its efforts to acquire the Fort Wingate Army Depot; and

5. Support for the Muckelshoot Tribe to acquire the Sand Point Naval Base is therefore considered to be in the best interest of the Navajo Nation; and

6. The Muckelshoots will submit a formal request to the U.S. Navy through the Bureau of Indian Affairs on June 19, 1993, and therefore need support from the Navajo Nation prior to that date.

NOW THEREFORE BE IT RESOLVED THAT:

The Economic Development Committee of the Navajo Nation hereby supports the request made by the Muckelshoot Indian Tribe to the Navajo Nation in their efforts to acquire the Sand Point Naval Base in the State of Washington and accordingly directs the Division of Economic Development to assist the Muckelshoot Tribe by ensuring that attorneys and lobbyist employed by the Navajo Nation communicate with Congressional representatives such as Senator Inouye and Senator McCain in order to block any efforts made by non-Indian interests to change or challenge existing Federal laws that presently permit the Bureau of Indian Affairs to obtain and donate excess or surplus property to an Indian tribe. Furthermore, it is directed that the attorneys and lobbyist of the Navajo Nation assist in the monitoring of the status of those Federal laws pertaining to the procurement of Federal property by Indian Nations. The Economic Development Committee also encourages the President of the Navajo Nation to meet with Muckelshoot representatives and high ranking Washington officals to discuss issues of similarity in the spirit of strengthening the Navajo Nation's position in acquiring and developing Ft. Wingate.

CERTIFICATION

I hereby certify that the foregoing resolution was duly considered by the Economic Development Committee of the Navajo Nation Council at a duly called meeting at Window Rock, Navajo Nation (Arizona), at which a quorum was present and that the same was passed by a vote of 5 in favor, 0 opposed, and 0 abstaining, this 2nd day of June, 1993.

Chairperson
Economic Development Committee

MOTION: Bennie Shelly
SECOND: Herbert Pioche

Affiliated Tribes of Northwest Indians

1993 Mid-Year Conference
Port Angeles, Washington

Resolution #93 - 76

PREAMBLE

We, the members of the Affiliated Tribes of Northwest Indians of the United States, invoking the divine blessing of the Creator upon our efforts and purposes, in order to preserve for ourselves and our descendants rights secured under Indian Treaties and benefits to which we are entitled under the laws and constitution of the United States and several states, to enlighten the public toward a better understanding of the Indian people, to preserve Indian cultural values, and otherwise promote the welfare of the Indian people, do hereby establish and submit the following resolution:

WHEREAS, the Affiliated Tribes of Northwest Indians (ATNI) are representatives of and advocates for national, regional, and specific tribal concerns; and

WHEREAS, the Affiliated Tribes of Northwest Indians is a regional organization comprised of American Indians in the states of Washington, Idaho, Oregon, Montana, Nevada, northern California, and Alaska; and

WHEREAS, the health, safety, welfare, education, economic and employment opportunity, and preservation of cultural and natural resources are primary goals and objectives of Affiliated Tribes of Northwest Indians; and

WHEREAS, ATNI supports the Muckleshoot Tribe's endeavor to obtain excess Federal property known as the Sand Point Naval Station; and

WHEREAS, ATNI supports the Muckleshoot Tribe's desire to provide education, economic advancement and cultural support to their Tribal members and other Indian people of the Northwest; now

THEREFORE BE IT RESOLVED, that ATNI endorses and supports the Muckleshoot Tribe's request to obtain the Naval Station Property at Sand Point.

825 N.E. 20th Avenue • Suite 310 • Portland, Oregon 97232-2275
Phone: (503) 230-0293 • FAX: (503) 230-0580

CERTIFICATION

The foregoing resolution was adopted at the 1993 Mid-Year Conference of the Affiliated Tribes of Northwest Indians, held at the Red Lion Bayshore Inn in Port Angeles, Washington, on May 27, 1993 with a quorum present.

Bruce Wynne, President

Karen Fenton, Secretary

National Oceanic and Atmospheric Administration,
Host Agency serving:
Bureau of the Census
Economic Development Administration
International Trade Administration
Minority Business Development Agency
Office of the Inspector General
Bureau of Export Administration

U.S. DEPARTMENT OF COMMERCE
Western Administrative Support Center
7600 Sand Point Way N.E.
BIN C15700
Seattle, Washington 98115

June 11, 1993

Virginia Cross, Chairperson
Muckleshoot Indian Tribe
39015 172nd Avenue S.E.
Auburn, Washington 98002

Dear Ms. Cross:

We recently had the opportunity to meet with Dan Stark and Jeff Watkins of your staff to discuss our respective plans for reuse of excess property at Naval Station Puget Sound. As I'm sure you already know, NOAA has expressed its interest in two parcels of land on the Naval Station.

The first parcel of land (see enclosure A) is approximately 10 acres in size and includes a large aircraft hangar of World War II vintage (Building 27). Building 27 will serve to meet an immediate need for bulk storage space at the Western Regional Center (WRC) at Sand Point. The WRC is currently above capacity and NOAA projects a need for an additional 30,000 - 40,000 square feet of office space over the next five years. NOAA's plans call for the construction of an additional office building of as yet undetermined size to house planned growth. Building 27 also provides NOAA with some transitional office space, and the tarmac North of Building will be used by one of our organizations as the permanent site of its cable stretching operations. This area North of Building 27 will allow their operation to be conducted with a much greater degree of safety.

The second parcel of land requested by NOAA is the existing WRC access road (see enclosure B). In 1977, NOAA and the Navy signed a Memorandum of Agreement granting NOAA unrestricted access to its facility across Naval Station Property. The following year, NOAA constructed the existing access road, which has been maintained and used exclusively by NOAA ever since.

Mr. Watkins described in some detail the Tribe's plans for reuse of the Naval Station, including Building 27. In consideration of NOAA's expressed interest in Building 27, he asked if NOAA would be willing to give up Building 32 in exchange for Building 27. I would emphasize here, as I did with Mr. Watkins, that the WRC is already at capacity and would not consider such an exchange. NOAA would not be pursuing the acquisition of another building if we had available capacity in an existing warehouse.
Both Mr. Watkins and Mr. Stark said the Tribe would consider supporting NOAA's interest in the two parcels of land.

United States Department of the Interior

FISH AND WILDLIFE SERVICE

NATIONAL FISHERY RESEARCH CENTER

BLDG. 201, NAVAL STATION

SEATTLE, WASHINGTON 98115-5007

10 June, 1993

Virginia Cross, Chairperson
Muckleshoot Indian Tribe
39015 172nd Ave. SE
Auburn, WA 98002

Dear Chairperson Cross:

Thank you for the invitation and opportunity to meet with you and the Tribal Council this past Monday to discuss our individual interests in the land to be surplused by the Navy at Sand Point. The purpose of this letter is to reiterate the salient points made at our meeting. We recognize that the Muckleshoot Tribe, through the BIA, will be requesting the entire property to be surplused, except for the 4+/- acres that is the site occupied by the Seattle National Fisheries Research Center. The Fish and Wildlife Service will be requesting the referenced 4+/- acres, plus an additional 10 acres for fishing ponds for differently abled children.

We appreciate your endorsement of our request for the site occupied by the Center. We also appreciate that in the event the Navy chooses to transfer the lands indicated for the ponds to the Tribe rather than to the Service, that the Tribe will accommodate this use at that or another appropriate site. In the latter event, we will work cooperatively with the Tribe to realize the objective of a fishing site for these children.

Sincerely,

Allan Marmelstein,
Deputy Director

cc:
EFA,NAVFACENGCOM

MUCKLESHOOT
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JW; ADS; RW; RD

Mr. Watkins also asked about our willingness to abandon our interest in a triangular piece of property just North of Building 27 along the lakefront bulkhead, (see lined area on enclosure A). As I understand it, the Tribe's proposal calls for this property to be used as a fishing area for handicapped children. I am not in a position to modify NOAA's request at this time, but I would agree to further discuss this proposal.

Several members of my staff will be attending the public meeting you have scheduled for Monday, June 14, 1993, and I look forward to hearing their summary of that meeting. If you have any questions regarding this matter, please feel free to contact me at (206) 526-6026.

Sincerely,

Kelly C. Sandy

Kelly C. Sandy
Director

enclosures

THE FOLLOWING SHEET IS A LIST OF THE OF PEOPLE ATTENDING THE SANDPOINT HEARING HELD JUNE 14, 1993.

SIGN-IN

HEARING RE: SAND POINT 6:30 p.m.

JUNE 14, 1993

	NAME	ORGANIZATION	ADDRESS
1	JULIAN ARGEL	MUCKLESHOOT EDUCATION	22825-91st Way S. #D-203 KENT, WA 9803
2	PATTY BLACK	VISITOR	615 SATER LANE EDMONDS WA 9802
3	Rob Olson	Muckleshoot-fishing	39015-172d Ave SE. Auburn, WA 9800
4	John Gorman	NOAA	7600 Sand Point W. Seattle WA 98115
5	Matt Wallis	Valley Reporters	
6	Mike [illegible]	Valley Daily News	
7	LARA	LAW	Muckleshoot Attorney — see #3
8	[illegible]	U Herald	6502 U. E. 61st Seattle 98115
9	A.U. Cleator	ANC Representing: Blue Heart, NAUA, ANS, Grandcamp, NDACHA, Seattle Indian Center, etc.	P.O. 1907 Seattle, WA 98111
10	Aharon Sundin	NOAA	7600 SAND PT. WAY N. Seattle, WA 98115
11	PAT STELL	CONGRESSMAN JIM McDERMOTT	1809-7th Ave, #1212 SEATTLE, WA 98101
12	ROBERT UARICH	NAVY	EHGFLDACT Northwest 3505 NW Anderson Hill Rd. Silverdale, WA 98383

13 ANNA HAALA — NATive American cultural HeriTage OrgaNiZaTioN — 8028 9th NE Seattle WA 98117 — Phone # 784 9350

14 MIKE USEN — SEATTLE PLANNING DEPT — 600 4TH AVE RM 200 SEATTLE

15 DAN STRANDBY — N.O.A.A. - FACILITIES SERVICES — 7600 SAND POINT WAY, SEATTLE, WA 98115

16 A DANIEL STARK — MIT STAFF

17 George Scarola — F.P.A. P.O. Box 31151 Sc. Wa, WA 98103

18 Matt Levin — Seattle-King Co. Coalition for the Homeless % FPA PO Box 31151 Seattle WA 98103

19 William A. BLACK — Puget Sound Agency — 3006 Colby Everett, WA 98201 — 258-2651 x23

20

21

22

23

GSA regional office as to whether or not any such property is available.

[33 FR 571, Jan. 17, 1968]

§ 101-47.203-4 Real property excepted from reporting.

Agencies having transferable excess real property and related personal property in the categories excepted from reporting by § 101-47.202-4 shall, before disposal, satisfy themselves in a manner consistent with the provisions of this section that such property is not needed by other Government agencies.

§ 101-47.203-5 Screening of excess real property.

Excess real property and related personal property reported by executive agencies shall, unless such screening is waived, be screened by GSA for utilization by Federal real property holding agencies (listed in § 101-47.4907), which may reasonably be expected to have use for the property as follows:

(a) Notices of availability will be submitted to each such agency which shall, within 30 calendar days from the date of notice, advise GSA if there is a firm requirement or a tentative requirement for the property. Agencies having tentative or firm requirements for surplus Federal real property for replacement housing for displaced persons, as authorized by section 218 of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (84 Stat. 1902), shall review these notices for the additional purpose of identifying properties for which they may have such a requirement. When such a requirement exists, the agency shall so advise the appropriate GSA regional office.

(1) In the event a tentative requirement exists, the agency shall, within an additional 30 calendar days, advise GSA if there is a firm requirement.

(2) Within 60 calendar days after advice to GSA that a firm requirement exists, the agency shall furnish GSA a request for transfer of the property pursuant to § 101-47.203-7.

(b) Notices of availability for information of the Secretary of Health and Human Services and the Secretary of Education in connection with the exercise of the authority vested in them under the provisions of section 203(k)(1) of the Act, and for information of the Secretary of the Interior in connection with the exercise of the authority vested in him under the provisions of section 203(k)(2) of the Act or a possible determination under the provisions of section 203(k)(3) of the Act, will be sent to the offices designated by the Secretaries to serve the areas in which the properties are located. A similar notice of availability for the information of the Attorney General in connection with a possible determination under the provisions of section 203(p)(1) of the Act will be sent to the Office of Justice Programs, Department of Justice.

(c) The Departments of Health and Human Services, Education, Interior, and Justice shall not attempt to interest a local applicant in a property until it is determined surplus, except with the prior consent of GSA on a case-by-case basis or as otherwise agreed upon. When such consent is obtained, the local applicant shall be informed that consideration of the application is conditional upon the property being determined surplus to Federal requirements and made available for the purposes of the application. However, these Departments are encouraged to advise the appropriate GSA regional office of those excess properties which are suitable for their programs.

(d) Concurrently with the 30-day Federal agency use screening period, those Federal agencies that sponsor public benefit disposals at less than fair market value as permitted by the statutory authorities in § 101-47.4905 may provide the disposal agency with a recommendation, together with a brief supporting rationale, as illustrated in § 101-47.4909, that the highest and best use of the property is for a specific public benefit purpose. The recommendation may be made by the agency head, or designee, and will be considered by the disposal agency in its final highest and best use analysis and determination. After a determination of surplus has been made, if the disposal agency agrees with a sponsoring Federal agency that the highest and best use of a particular property is for a specific public benefit purpose, local public bodies will be notified that the property is available for that use.

[29 FR 16126, Dec. 3, 1964, as amended at 36 FR 11438, June 12, 1971; 47 FR 37175, Aug. 25, 1982; 49 FR 37091, Sept. 21, 1984; 52 FR 9832, Mar. 27, 1987]

§ 101-47.203-6 Designation as personal property.

(a) Prefabricated movable structures such as Butler-type storage warehouses, quonset huts, and housetrailers (with or without undercarriages) reported to GSA with the land on which they are located may, in the discretion of GSA, be designated for disposition as personal property for off-site use.

(b) Related personal property may, in the discretion of the disposal agency, be designated for disposition as personal property. Consideration of such designation shall be given particularly to items having possible historic or artistic value to ensure that Federal agencies, including the Smithsonian Institution (see § 101-43.302), are afforded the opportunity of obtaining them through personal property channels for off-site use for preservation and display. Fixtures such as murals and fixed sculpture which have exceptional historical or artistic value may be designated for disposition by severance for off-site use. In making such designations, consideration shall be given to such factors as whether the severance can be accomplished without seriously affecting the value of the realty and whether a ready disposition can be made of the severed fixtures.

(c) When a structure is to be demolished, any fixtures or related personal property therein may, at the discretion of the disposal agency, be designated for disposition as personal property where a ready disposition can be made of these items through such action. As indicated in paragraph (b) of this section, particular consideration should be given to designating items of possible historical or artistic value as personal property in such instances.

[34 FR 8166, May 24, 1969]

§ 101-47.203-7 Transfers.

(a) The agency requesting transfer of excess real property and related personal property reported to GSA shall prepare and submit to the proper GSA regional office GSA Form 1334, Request for Transfer of Excess Real and Related Personal Property (§ 101-47.4904). Instructions for the preparation of GSA Form 1334 are set forth in § 101-47.4904-1.

(b) Upon determination by GSA that a transfer of the property requested is in the best interest of the Government and that the requesting agency is the appropriate agency to hold the property, the transfer may be made among Federal agencies, to mixed-ownership Government corporations, and to the municipal government of the District of Columbia.

(c) [Reserved]

(d) Transfers of property to executive agencies shall be made when the proposed land use is consistent with the policy of the Administrator of General Services as prescribed in § 101-47.201-1 and the policy guidelines prescribed in § 101-47.201-2. In determining whether a proposed transfer should be approved under the policy guidelines, GSA and OMB may consult informally to obtain all available data concerning actual program needs for the property.

(e) GSA will execute or authorize all approved transfers to the requesting agency of property reported to GSA. Agencies may transfer without reference to GSA excess real property which is not reported to GSA under the provisions of § 101-47.202-4(b) (1), (2), and (4). However, such transfers shall be made in accordance with the principles set forth in this section.

(f) Pursuant to an agreement between the Director, Office of Management and Budget, and the Administrator of General Services, reimbursement for transfers of excess real property is prescribed as follows:

(1) Where the transferor agency has requested the net proceeds of the transfer pursuant to section 204 (c) of the Act, or where either the transferor or transferee agency (or organizational unit affected) is subject to the Government Corporation Control Act (31

U.S.C. 841) or is a mixed-ownership Government corporation, or the municipal government of the District of Columbia, reimbursement for the transfer shall be in an amount equal to the estimated fair market value of the property requested as determined by the Administrator: *Provided*, That where the transferor agency is a wholly owned Government corporation, the reimbursement shall be either in an amount equal to the estimated fair market value of the property requested, or the corporation's book value thereof, as may be agreed upon by GSA and the corporation.

(2) Reimbursement for all other transfers of excess real property shall be:

(i) In an amount equal to 100 percent of the estimated fair market value of the property requested, as determined by the Administrator, or if the transfer is for the purpose of upgrading facilities (i.e., for the purpose of replacing other property of the transferee agency which because of the location, nature, or condition thereof, is less efficient for use), the reimbursement shall be in an amount equal to the difference between the estimated fair market value of the property to be replaced and the estimated fair market value of the property requested, as determined by the Administrator.

(ii) Without reimbursement when the transfer is to be made under either of the following conditions:

(A) Congress has specifically authorized the transfer without reimbursement, or

(B) The Administrator with the approval of the Director, Office of Management and Budget, has approved a request for an exception from the 100 percent reimbursement requirement.

(*1*) A request for exception from the 100 percent reimbursement requirement shall be endorsed by the head of the executive department or agency requesting the exception.

(*2*) A request for exception from the 100 percent reimbursement requirement will be submitted to GSA for referral to the Director, Office of Management and Budget, and shall include an explanation of how granting the exception would further essential agency program objectives and at the same time be consistent with Executive Order 12348, dated February 25, 1982. The unavailability of funds alone is not sufficient to justify an exception. The above required data and documentation shall be attached to GSA Form 1334 by the transferee agency on submission of that form to GSA.

(*3*) If the Administrator with the approval of the Director, Office of Management and Budget, approves the request for an exception, the Administrator may then complete the transfer. A copy of the Office of Managment and Budget approval will be sent to the Property Review Board.

(*4*) The agency requesting the exception will assume responsibility for protection and maintenance costs where the disposal of the property is deferred for more than 30 days because of the consideration of the request for an exception to the 100 percent reimbursement requirement.

(g) Excess property may be transferred to the Senate, the House of Representatives, and the Architect of the Capitol and any activities under his direction, pursuant to the provisions of section 602(e) of the Act. The amount of reimbursement for such transfer shall be the same as would be required for a transfer of excess property to an executive agency under similar circumstances.

(h) The transferor agency shall provide to the transferee agency all information held by the transferor concerning hazardous substance activity as outlined in § 101-47.202-2.

[29 FR 16126, Dec. 3, 1964, as amended at 37 FR 5029, Mar. 9, 1972; 40 FR 12078, Mar. 17, 1975; 42 FR 40698, Aug. 11, 1977; 47 FR 56499, Dec. 17, 1982; 49 FR 29222, July 19, 1984; 56 FR 15048, Apr. 15, 1991]

§ 101-47.203-8 Temporary utilization.

(a) Whenever GSA determines that the temporary assignment or reassignment to a Federal agency of any space in excess real property for office, storage, or related facilities would be more advantageous than the permanent transfer of the property to a Federal agency,. it will execute or authorize such assignment or reassignment for

such period of time as it shall determine. The agency to which the space is made available shall make appropriate reimbursement for the expense of maintaining such space in the absence of appropriation available to GSA therefor.

(b) GSA may approve the temporary assignment or reassignment to a Federal agency of excess real property other than space for office, storage, or related facilities whenever such action would be in the best interest of the Government. In such cases, the agency to which the property is made available may be required to pay a rental or users charge based upon the fair value of such property, as determined by GSA. Where such property will be required by the agency for a period of more than 1 year, it may be transferred on a conditional basis, with an understanding that the property will be reported excess at a time agreed upon when the transfer is arranged (see § 101-47.201-2(d)(7)).

§ 101-47.203-9 Non-Federal interim use of property.

The holding agency may, with the approval of GSA, grant rights for non-Federal interim use of excess property reported to GSA, or portions thereof, when it is determined that such interim use is not required for the needs of any Federal agency.

§ 101-47.203-10 Withdrawals.

Subject to the approval of GSA, and to such conditions as GSA considers appropriate, reports of excess real property may be withdrawn in whole or in part by the reporting agency at any time prior to transfer to another Federal agency or prior to the execution of a legally binding agreement for disposal as surplus property. Requests for withdrawals shall be addressed to the GSA regional office where the report of excess real property was filed.

[35 FR 17256, Nov. 6, 1970]

§ 101-47.204 Determination of surplus.

§ 101-47.204-1 Reported property.

Any real property and related personal property reported excess under this subpart 101-47.2 which has been screened for needs of Federal agencies or waived from such screening by GSA, and not been designated by GSA for utilization by a Federal agency, shall be subject to determination as surplus property by GSA.

(a) The holding agency, the Secretary of Health and Human Services, the Secretary of Education, the Secretary of the Interior, and the Attorney General will be notified of the date upon which determination as surplus becomes effective. Any Federal agency that has identified a property as being required for replacement housing for displaced persons under section 218 of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 will also be notified of the date upon which determination as surplus becomes effective. The Secretary of the Department of Energy will be notified when real property is determined surplus and advised of any known interest in the property for its use or development for energy facilities. Appropriate steps will be taken to ensure that energy site needs are considered along with other competing needs in the disposal of surplus real property, since such property may become available for use under sections 203(e)(3) (G) and (H) of the Federal Property and Administrative Services Act of 1949, as amended.

(b) The notices to the Secretary of Health and Human Services, the Secretary of Education, the Secretary of the Interior, and the Secretary of Energy will be sent to the offices designated by them to serve the area in which the property is located. The notices to the Attorney General will be sent to the Office of Justice Programs, Department of Justice. The notices to the Federal agencies having a requirement pursuant to section 218 of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 will be sent to the office making the request unless another office is designated.

(c) With regard to surplus property which GSA predetermines will not be available for disposal under the abovementioned programs, or whenever the holding agency has requested reimbursement of the net proceeds of disposition pursuant to section 204(c) of

the Act, the notice to the affected department(s) will contain advice of such determination or request for reimbursement. The affected department(s) shall not screen for potential applicants for such property.

[29 FR 16126, Dec. 3, 1964, as amended at 36 FR 8041, Apr. 29, 1971; 47 FR 37175, Aug. 25, 1982; 52 FR 9832, Mar. 27, 1987]

§ 101-47.204-2 Property excepted from reporting.

Any property not reported to GSA due to § 101-47.202-4, and not designated by the holding agency for utilization by other agencies pursuant to the provisions of this subpart 101-47.2, shall be subject to determination as surplus by the holding agency.

Subpart 101-47.3—Surplus Real Property Disposal

§ 101-47.300 Scope of subpart.

This subpart prescribes the policies and methods governing the disposal of surplus real property and related personal property within the States of the Union, the District of Columbia, the Commonwealth of Puerto Rico, American Samoa, Guam, the Trust Territory of the Pacific Islands, and the Virgin Islands. This subpart does not apply to the abandonment, destruction, or donation to public bodies, under section 202(h) of the Act (covered by subpart 101-47.5).

[47 FR 4822, Feb. 1, 1982]

§ 101-47.301 General provisions of subpart.

§ 101-47.301-1 Policy.

It is the policy of the Administrator of General Services:

(a) That surplus real property shall be disposed of in the most economical manner consistent with the best interests of the Government.

(b) That surplus real property shall ordinarily be disposed of for cash consistent with the best interests of the Government.

(c) That surplus real property shall be disposed of by exchange for privately owned property only for property management considerations such as boundary realignment or provision of access or in those situations in which the acquisition is authorized by law, the requesting Federal agency has received approval from the Office of Management and Budget and clearance from its congressional oversight committees to acquire by exchange, and the transaction offers substantial economic or unique program advantages not otherwise obtainable by any other method of acquisition.

[29 FR 16126, Dec. 3, 1964, as amended at 42 FR 47205, Sept. 20, 1977; 42 FR 56123, Oct. 21, 1977]

§ 101-47.301-2 Applicability of antitrust laws.

(a) In any case in which there is contemplated a disposal to any private interest of real and related personal property which has an estimated fair market value of $3,000,000 or more, or of patents, processes, techniques, or inventions, irrespective of cost, the disposal agency shall transmit promptly to the Attorney General notice of any such proposed disposal and the probable terms or conditions thereof, as required by section 207 of the Act, for his advice as to whether the proposed disposal would tend to create or maintain a situation inconsistent with antitrust laws, and no such real property shall be disposed of until such advice has been received. If such notice is given by any executive agency other than GSA, a copy of the notice shall be transmitted simultaneously to the office of GSA for the region in which the property is located.

(b) Upon request of the Attorney General, GSA or any other executive agency shall furnish or cause to be furnished such information as it may possess which the Attorney General determines to be appropriate or necessary to enable him to give the requested advice or to determine whether any other disposition or proposed disposition of surplus real property violates or would violate any of the antitrust laws.

[29 FR 16126, Dec. 3, 1964, as amended at 54 FR 12198, Mar. 24, 1989]

§ 101-47.301-3 Disposals under other laws.

Pursuant to section 602(c) of the act, disposals of real property shall not be made under other laws but shall be made only in strict accordance with the provisions of this subpart 101-47.3 unless the Administrator of General Services, upon written application by the disposal agency, shall determine in each case that the provisions of any such other law, pursuant to which disposal is proposed to be made, are not inconsistent with the authority conferred by this Act. The provisions of this section shall not apply to disposals of real property authorized to be made by section 602(d) of the act or by any special statute which directs or requires an executive agency named therein to transfer or convey specifically described real property in accordance with the provisions of such statute.

§ 101-47.301-4 Credit disposals and leases.

Where credit is extended in connection with any disposal of surplus property, the disposal agency shall offer credit pursuant to the provisions of § 101-47.304-4. The disposal agency shall administer and manage the credit lease, or permit and any security therefor and may enforce, adjust, or settle any right of the Government with respect thereto in such manner and upon such terms as that agency considers to be in the best interests of the Government.

[42 FR 47205, Sept. 20, 1977]

§ 101-47.302 Designation of disposal agencies.

§ 101-47.302-1 General.

In accordance with applicable provisions of this subpart 101-47.3, surplus real property shall be disposed of or assigned to the appropriate Federal department for disposal for public use purposes by the disposal agency.

[36 FR 8042, Apr. 29, 1971]

§ 101-47.302-2 Holding agency.

(a) The holding agency is hereby designated as disposal agency for:

(1) Leases, permits, licenses, easements, and similar real estate interests held by the Government in non-Government-owned property (including Government-owned improvements located on the premises), except when it is determined by either the holding agency or GSA that the Government's interest will be best served by the disposal of such real estate interests together with other property owned or controlled by the Government, that has been or is being reported to GSA as excess; and

(2) Fixtures, structures, and improvements of any kind to be disposed of without the underlying land with the exception of Government-owned machinery and equipment, which are fixtures being used by a contractor-operator, where such machinery and equipment will be sold to the contractor-operator.

(3) Standing timber and embedded gravel, sand, stone and underground water to be disposed of without the underlying land.

(b) GSA may act as the disposal agency for the type of property described in paragraphs (a)(1) and (2) of this section, whenever requested by the holding agency to perform the disposal functions. Where GSA acts as the disposal agency for the disposal of leases and similar real estate interests as described in paragraph (a)(1) of this section, the holding agency nevertheless shall continue to be responsible for the payment of the rental until the lease is terminated and for the payment of any restoration or other direct costs incurred by the Government as an incident to the termination. Likewise, where GSA acts as disposal agency for the disposal of fixtures, structures, and improvements as described in paragraph (a)(2) of this section, the holding agency nevertheless shall continue to be responsible for payment of any demolition and removal costs not offset by the sale of the property.

[29 FR 16126, Dec. 3, 1964, as amended at 31 FR 2058, Feb. 11, 1966; 31 FR 16780, Dec. 31, 1966; 33 FR 8737, June 14, 1968; 48 FR 12526, Mar. 25, 1983; 50 FR 28403, July 12, 1985]

§ 101-47.302-3 General Services Administration.

GSA is the disposal agency for all real property and related personal property not covered by the above designations or by disposal authority del-

egated by the Administrator of General Services in specific instances.

§ 101-47.303 Responsibility of disposal agency.

§ 101-47.303-1 Classification.

Each surplus property, or, if the property is subdivided, each unit of property shall be classified by the disposal agency to determine the methods and conditions applicable to the disposal of the property. Classification shall be according to the estimated highest and best use for the property. The property may be reclassified from time to time by the disposal agency or by GSA whenever such action is deemed appropriate.

§ 101-47.303-2 Disposals to public agencies.

The disposal agency shall comply with the provisions of Executive Order 12372 and 41 CFR subpart 101-6.21, which enables a State to establish the single point of contact process or other appropriate procedures to review and comment on the compatibility of a proposed disposal with State, regional and local development plans and programs. When a single point of contact transmits a State review process recommendation, the Federal agency receiving the recommendation must either accept the recommendation; reach a mutually agreeable solution with the party(s) preparing the recommendation; or provide the single point of contact with a written explanation for not accepting the recommendation or reaching a mutually agreeable solution. If there is nonaccommodation, the agency is generally required to wait 10 calendar days after receipt, by the single point of contact, of an explanation before taking final action. The single point of contact is presumed to have received written notification 5 calendar days after the date of mailing of such notification. The 10-day waiting period may be waived if the agency determines that because of unusual circumstances this delay is not feasible.

(a) Whenever property is determined to be surplus, the disposal agency shall, on the basis of the information given in § 101-47.4905, list the public agencies eligible under the provisions of the statutes referred to above to procure the property or portions thereof, except that such listing need not be made with respect to:

(1) Any such property when the determination of the property as surplus is conditioned upon disposal limitations which would be inconsistent with disposal under the statutes authorizing disposal to eligible public agencies; or

(2) Any such property having an estimated fair market value of less than $1,000 except where the disposal agency has any reason to believe that an eligible public agency may be interested in the property.

(b) Before public advertising, negotiation, or other disposal action, the disposal agency shall give notice to eligible public agencies that the property has been determined surplus. Surplus real property may be procured by public agencies under the statutes cited in § 101-47.4905. A notice to public agencies of surplus determination shall be prepared following the sample shown in § 101-47.4906. This notice shall be transmitted by a letter prepared following the sample shown in § 101-47.4906-1. A copy of this notice shall also be sent simultaneously to the State single point of contact, under a covering letter prepared following the sample shown in § 101-47.4906-2. The point of contact shall be advised that no final disposal action will be taken for 60 calendar days from the date of notification to allow time for the point of contact to provide any desired comments. The disposal agency will wait the full 60 calendar days, even if the comments are received early, to allow time for the point of contact to send additional or revised comments.

(1) Notice for property located in a State shall be given to the Governor of the State, to the county clerk or other appropriate officials of the county in which the property is located, to the mayor or other appropriate officials of the city or town in which the property is located, to the head of any other local governmental body known to be interested in and eligible to acquire the property, and to the point of contact established by the

State or under other appropriate procedures established by the State.

(2) Notice for property located in the District of Columbia shall be given to the Mayor of the District of Columbia and to the point of contact established by the District of Columbia or under other appropriate procedures established by the District of Columbia.

(3) Notice for property located in the Virgin Islands shall be given to the Governor of the Virgin Islands and to the point of contact established by the Virgin Islands or under other appropriate procedures established by the Virgin Islands.

(4) Notice for property located in the Commonwealth of Puerto Rico shall be given to the Governor of the Commonwealth of Puerto Rico and to the point of contact established by the Commonwealth of Puerto Rico or under other appropriate procedures established by the Commonwealth of Puerto Rico.

(c) The notice prepared pursuant to § 101-47.303-2(b) shall also be posted in the post office which serves the area in which the property is located and in other prominent places such as the State capitol building, county building, courthouse, town hall, or city hall. The notice to be posted in the post office shall be mailed to the postmaster with a request that it be posted. Arrangements for the posting of the notice in other prominent places shall be as provided for in the transmittal letters (see § 101-47.4906-1) to eligible public agencies.

(d) A copy of the notice described in paragraph (b) of this section shall be furnished to the proper regional or field office of (1) the National Park Service (NPS) and the Fish and Wildlife Service of the Department of the Interior and (2) the Federal Aviation Administration and the Federal Highway Administration of the Department of Transportation concerned with the disposal of property to public agencies under the statutes named in the notice.

(e) In the case of property which may be made available for assignment to the Secretary of Health and Human Services (HHS), the Secretary of Education (ED) or the Secretary of the Interior for disposal under section 203(k)(1) or (k)(2) of the Act:

(1) The disposal agency shall inform the appropriate offices of HHS, ED or the NPS 3 workdays in advance of the date the notice will be given to public agencies, to permit similar notice to be given simultaneously by HHS, ED or NPS to additional interested public bodies. HHS and ED shall furnish notice to eligible nonprofit institutions.

(2) The disposal agency shall furnish the Departments with a copy of the postdated transmittal letter addressed to each public agency, copies (not to exceed 25) of the postdated notice, and a copy of the holding agency's Report of Excess Real Property (Standard Form 118, with accompanying schedules).

(3) As of the date of the transmittal letter and notice to public agencies the Departments may proceed with their screening functions for any potential applicants and thereafter may make their determinations of need and receive applications.

(f) If the disposal agency is not informed within the 20 calendar-day period provided in the notice of the desire of a public agency to acquire the property under the provisions of the statutes listed in § 101-47.4905, or is not notified by ED or HHS of a potential educational or public health requirement, or is not notified by the Department of the Interior of a potential park or recreation requirement, or is not notified by the Department of Justice (DOJ) of a potential correctional facilities use; it shall be assumed that no public agency or nonprofit institution desires to procure the property.

(g) The disposal agency shall promptly review each response of a public agency to the notice given pursuant to paragraph (b) of this section. The disposal agency shall determine what constitutes a reasonable period of time to allow the public agency to develop and submit a formal application for the property or its comments as to the compatibility of the disposal with its development plans and programs. When making such determination, the disposal agency shall give consideration to the potential suitabil-

ity of the property for the use proposed, the length of time the public agency has stated it will require for its action, the protection and maintenance costs to the Government during such length of time, and any other relevant facts and circumstances. The disposal agency shall coordinate such review and determination with the proper office of any interested Federal agencies listed below:

(1) National Park Service, Department of the Interior;

(2) Department of Health and Human Services;

(3) Department of Education;

(4) Federal Aviation Administration, Department of Transportation;

(5) Fish and Wildlife Service, Department of the Interior;

(6) Federal Highway Administration, Department of Transportation; and

(7) Office of Justice Programs, Department of Justice.

(h) When the disposal agency has made a determination as to what constitutes a reasonable period of time to develop and submit a formal application, the public agency shall be so notified. The public agency shall be advised of the information required in connection with an application to procure the property.

(i) Upon receipt of the formal application for the property, the disposal agency shall consider and act upon it in accordance with the provisions of the statute and applicable regulations. If comments are received indicating that the disposal is incompatible with State, regional, or local development plans and programs, the disposal agency shall attempt to resolve the differences consistent with its statutory responsibilities in the disposal of surplus property.

[29 FR 16126, Dec. 3, 1964, as amended at 34 FR 11209, July 3, 1969; 35 FR 8486, June 2, 1970; 36 FR 9776, May 28, 1971; 40 FR 22256, May 22, 1975; 52 FR 9829, Mar. 27, 1987]

§ 101-47.303-2a Notice for zoning purposes.

(a) Where the surplus land is located in an urban area as defined in section 806 of the Act, that copy of the notice to public agencies required under § 101-47.303-2(b) which is sent to the head of the local governmental unit having jurisdiction over zoning and land use regulation in the area shall be accompanied by a copy of section 803 of the Act (see § 101-47.4906a) and the transmittal letter in such instances shall include an additional paragraph requesting information concerning zoning as set forth in § 101-47.4906b.

(b) Information which is furnished by the unit of general local government pursuant to the action taken in paragraph (a) of this section shall be included in invitations for Bid in advertised sales. In negotiated sales, this information shall be presented to prospective purchasers during the course of the negotiations and shall be included in the sales agreements. In either instance, this information shall be followed by a written statement, substantially as follows:

> The above information was obtained from ———————— and is furnished pursuant to section 803 of the Federal Property and Administrative Services Act of 1949, as amended. The Government does not guarantee that the information is necessarily accurate or will remain unchanged. Any inaccuracies or changes in the above information shall not be cause for adjustment or rescission of any contract resulting from this Invitation for Bid or Sales Agreement.

(c) If no response to a request for such zoning information is received, the property may be offered for sale without furnishing such information to prospective purchasers. If the unit of general local government notifies the disposal agency of its desire to zone the property, it shall be afforded a 30-calendar-day period (in addition to the 20-calendar days afforded in the notice of surplus determination) to issue such zoning regulations. If the zoning cannot be accomplished within this time frame, the sale may proceed but the prospective purchasers shall be advised of the pending zoning of the property.

[34 FR 11209, July 3, 1969]

§ 101-47.303-3 Studies.

The disposal agency shall compile from the title documents and related papers appropriate information, for use in disposal actions, regarding all

real property and related personal property available for disposal.

§ 101-47.303-4 Appraisal.

(a) Except as otherwise provided in this subpart 101-47.3, the disposal agency shall in all cases obtain, as appropriate, an appraisal of either the fair market value or the fair annual rental value of property available for disposal.

(b) *No appraisal need be obtained.* (1) When the property is to be disposed of without monetary consideration, or at a fixed price, or

(2) When the estimated fair market value of property to be offered on a competitive sale basis does not exceed $50,000;

Provided, however, That the exception in paragraph (b)(1) of this section shall not apply to disposals that take any public benefit purpose into consideration in fixing the sale value of the property.

(c) The disposal agency shall have the property appraised by experienced and qualified persons familiar with the types of property to be appraised by them. Any person engaged to collect or evaluate information pursuant to this subsection shall certify that he has no interest, direct or indirect, in the property which would conflict in any manner with the preparation and submission of an impartial appraisal report.

[29 FR 16126, Dec. 3, 1964, as amended at 55 FR 41189, Oct. 10, 1990]

§ 101-47.304 Advertised and negotiated disposals.

§ 101-47.304-1 Publicity.

(a) The disposal agency shall widely publicize all surplus real property and related personal property which becomes available for disposal hereunder, giving information adequate to inform interested persons of the general nature of the property and its possible uses, as well as any reservations, restrictions, and conditions imposed upon its disposal.

(b) A condensed statement of proposed sales of surplus real property by advertising for competitive bids, except where the estimated fair market value of the property is less than $2,500, shall be prepared and submitted, for inclusion in the U.S. Department of Commerce publication "Commerce Business Daily," to: U.S. Department of Commerce (S-Synopsis), room 1300, 433 West Van Buren Street, Chicago, Illinois 60604.

§ 101-47.304-2 Soliciting cooperation of local groups.

The disposal agency may consult with local groups and organizations and solicit their cooperation in giving wide publicity to the proposed disposal of the property.

§ 101-47.304-3 Information to interested persons.

The disposal agency shall, upon request, supply to bona fide potential purchasers and lessees adequate preliminary information, and, with the cooperation of the holding agency where necessary, shall render such assistance to such persons as may enable them, insofar as feasible, to obtain adequate information regarding the property. The disposal agency shall establish procedures so that all persons showing due diligence are given full and complete opportunity to make an offer.

§ 101-47.304-4 Invitation for offers.

In all advertised and negotiated disposals, the disposal agency shall prepare and furnish to all prospective purchasers or lessees written invitations to make an offer, which shall contain or incorporate by reference all the terms and conditions under which the property is offered for disposal, including all provisions required by statute to be made a part of the offer. The invitation shall further specify the form of the disposal instrument, which specifications shall be in accordance with the appropriate provisions of §§ 101-47.307-1 and 101-47.307-2.

(a) When the disposal agency has determined that the sale of specific property on credit terms is necessary to avoid retarding the salability of the property and the price obtainable, the invitation shall provide for submission of offers on the following terms:

(1) Offers to purchase of less than $2,500 shall be for cash.

APPENDIX B

PARKS AND RECREATION

BUILDING 330 (FAMILY HOUSING)

This building is 6,390 square feet and is presently accommodating family housing. The future use of the building would be commercial. The building is operational and in good condition to justify repairs, remodel and refinishing.

General Renovation

ESTIMATED COST	DESCRIPTION
$ 20,000.00	Interior renovations of existing building to include: stairway compliance, Fire separations, exiting, sprinkler system, ADA compliance, i.e. ramps, doorways, hardware, etc.
$ 30,000.00	If second floor is used for business activities an elevator will need to be installed.
$ 50,000.00 TOTAL	

BUILDING 331 (FAMILY HOUSING)

This building is 6,233 square feet and is presently accommodating family housing. The future use of the building would be commercial. The building is operational and in good condition to justify repairs, remodel and refinishing.

General Renovation

ESTIMATED COST	DESCRIPTION
$ 20,000.00	Interior renovations of existing building to include: stairway compliance, Fire separations, exiting, sprinkler system, ADA compliance, i.e. ramps, doorways, hardware, etc.
$ 30,000.00	If second floor is used for business activities an elevator will need to be installed.
$ 50,000.00 TOTAL	

BUILDING 332 (FAMILY HOUSING)

This building is 6,233 square feet and is presently accommodating family housing. The future use of the building would be commercial. The building is operational and in good condition to justify repairs, remodel and refinishing.

General Renovation

ESTIMATED COST	DESCRIPTION
$ 20,000.00	Interior renovations of existing building to include: stairway compliance, Fire separations, exiting, sprinkler system, ADA compliance, i.e. ramps, doorways, hardware, etc.
$ 30,000.00	If second floor is used for business activities an elevator will need to be installed.
$ 50,000.00 TOTAL	

BUILDING 333 (FAMILY HOUSING)

This building is 1,990 square feet and is presently accommodating family housing. The future use of the building would be commercial. The building is operational and in good condition to justify repairs, remodel and refinishing.

General Renovation

ESTIMATED COST	DESCRIPTION
$ 15,000.00	Interior renovations of existing building to include: stairway compliance, Fire separations, exiting, sprinkler system, ADA compliance, i.e. ramps, doorways, hardware, etc.
$ 15,000.00 TOTAL	

BUILDING 334 (FAMILY HOUSING)

This building is 2,113 square feet and is presently accommodating family housing. The future use of the building would be commercial. The building is operational and in good condition to justify repairs, remodel and refinishing.

General Renovation

ESTIMATED COST	DESCRIPTION
$ 15,000.00	Interior renovations of existing building to include: stairway compliance, Fire separations, exiting, sprinkler system, ADA compliance, i.e. ramps, doorways, hardware, etc.

$ 15,000.00 TOTAL

BUILDING 228 (UNIFORM SHOP)

This building is 4,074 square feet and is presently accommodating the uniform shop. The proposed demolition of the building would allow for new commercial tenants to locate on site.

General Renovation

ESTIMATED COST	DESCRIPTION
$ 15,000.00 (.22 per cubic foot)	Total demolition of structure.

BUILDING 401 (SENTRY HOUSE)

This building is 60 square feet and is presently accommodating the Sentry house. The proposed demolition of the building would allow for new commercial tenants to locate on site.

General Renovation

ESTIMATED COST	DESCRIPTION
$ 250.00 (.22 per cubic foot)	Total demolition of structure.

BUILDING 198 (THRIFT SHOP)

This building is 300 square feet and is presently accommodating the thrift shop. The proposed demolition of the building would allow for new commercial tenants to locate on site.

ESTIMATED COST	DESCRIPTION
$ 1,500.00 (.22 per cubic foot)	Total demolition of structure.

BUILDING 195 (TRAVEL AGENCY)

This building is 819 square feet and is presently accommodating the travel agency. The proposed removal of the existing building would allow for new commercial tenants to locate on site.

ESTIMATED COST	DESCRIPTION
$ 0	Removal of existing modular building.

BUILDING 342, 341, and 340 (SERVICE STATION)

This building is 300 square feet and is presently accommodating the service station. The proposed demolition of the building would allow the site to open up for future commercial tenants. Because the tanks have been removed from this site, there is no need for the building.

ESTIMATED COST	DESCRIPTION
$ 2,500.00	Total demolition of structure.

BUILDING FECU (FEDERAL CREDIT UNION)

The proposed removal of the building would allow the site to open up for future commercial tenants. If the building remained on site a lease would need to be developed for its continual use.

ESTIMATED COST	DESCRIPTION
$ 0	Removal of existing modular building.

BUILDING 244 (MAINTENANCE SHOP)

This building is 5,011 square feet and is presently accommodating the maintenance shop. The future use of the building would remain as a maintenance shop for use by the grounds keeper.

BUILDING 15 (HOBBY SHOP/ARTS & CRAFTS)

This building is 3,268 square feet and is presently accommodating the hobby shop and art and crafts facilities. The future use of the building would remain as a hobby shop for use by the college campus or the senior center.

BUILDING 193 (COMMISSARY EXCHANGE)

This building is 93,334 square feet and is presently accommodating the commissary exchange. The future use of the building would remain as a commissary. The building is operational and in good condition to justify repairs, remodel and refinishing, therefore no renovation is needed to this building.

BUILDING 301 (COUNTRY STORE)

This building is 9,500 square feet and is presently accommodating the country store. The future use of the building would remain as a country store. The building is operational and in good condition to justify repairs, remodel and refinishing, therefore no renovation is needed to this building.

BUILDING 344 (COUNTRY STORE)

This building is 11,000 square feet and is presently accommodating the country store. The future use of the building would remain as a country store. The building is operational and in good condition to justify repairs, remodel and refinishing, therefore no renovation is needed to this building.

BUILDING 345 (SERVICE BAY)

This building is 5,298 square feet and is presently accommodating the service bay. The future use of the building would remain as a service bay. The building is operational and in good condition to justify repairs, remodel and refinishing, therefore no renovation is needed to this building.

BUILDING 404 (RECREATION PAVILION)

This building is 1,120 square feet and is presently accommodating the recreation pavilion. The future use of the building would remain as a recreation pavilion. The building is operational and in good condition to justify repairs, remodel and refinishing, therefore no renovation is needed to this building.

BUILDING 308 (PACKAGE STORE)

This building is 4,202 square feet and is presently accommodating the package store. The future use of the building would remain as a package store. The building is operational and in good condition to justify repairs, remodel and refinishing, therefore no renovation is needed to this building.

BUILDING 310 (AUTO HOBBY SHOP)

This building is 4,026 square feet and is presently accommodating the auto hobby shop. The future use of the building would remain as a auto shop. The building is operational and in good condition to justify repairs, remodel and refinishing, therefore no renovation is needed to this building.

TOTAL COMMERCIAL $ 199,250.00

CAMPUS AREA

BUILDING 9 (ENLISTED BARRACKS)

This building is 223,516 square feet and is presently accommodating the enlisted barracks. The future use of the building would be College Classrooms and dormitories. The building is operational and in good condition to justify repairs, remodel and refinishing.

General Renovation

ESTIMATED COST	DESCRIPTION
$3,352,740.00 (15.00 per square foot)	Demolition of interior and renovation of existing building to include: Fire separations, exiting, sprinkler system, ADA compliance, i.e. restrooms, ramps, doorways, hardware, etc.

$3,352,740.00 TOTAL

Note: See Appendices for existing building floor plans.

BUILDING 222 (ADMINISTRATIVE)

This building is 30,126 square feet and is presently accommodating the administration. The future use of the building would be College Classrooms. The building is operational and in good condition to justify repairs, remodel and refinishing.

General Renovation

ESTIMATED COST	DESCRIPTION
$ 451,890.00 (15.00 per square foot)	Demolition of interior and renovation of existing building to include: Fire separations, exiting, sprinkler system, ADA compliance, i.e. restrooms, ramps, doorways, hardware, etc.

$ 451,890.00 TOTAL

BUILDING 224 (BEQ)

This building is 38,264 square feet and is presently accommodating bachelor quarters . The future use of the building would be College dormitories. The building is operational and in good condition to justify repairs, remodel and refinishing.

General Renovation

ESTIMATED COST	DESCRIPTION
$ 573,960 (15.00 per square foot)	Demolition of interior and renovation of existing building to include: Fire separations, exiting, sprinkler system, ADA compliance, i.e. restrooms, ramps, doorways, hardware, etc.

$ 573,960.00 TOTAL

BUILDING 26 (OFFICER QUARTERS)

This building is 17,282 square feet and is presently accommodating the officer quarters. The future use of the building would be used for staff housing. The building is operational and in good condition to justify repairs, remodel and refinishing.

General Renovation

ESTIMATED COST	DESCRIPTION
$259,230.00 (15.00 per square foot)	Minor renovations to include: elevator, stairway compliance, Fire separations, exiting, sprinkler system, ADA compliance, i.e. restrooms, ramps, doorways, hardware, etc.

$ 259,230.00 TOTAL

BUILDING 26A (STORAGE)

This building is 16,082 square feet and is presently accommodating the storage. The future use of the building would be teacher training center. The building is operational and in good condition to justify repairs, remodel and refinishing.

General Renovation

ESTIMATED COST	DESCRIPTION
$ 259,230.00 (15.00 per square foot)	Minor renovations to include elevator, stairway compliance, Fire separations, exiting, sprinkler system, ADA compliance, i.e. restrooms, ramps, doorways, hardware, etc.

$ 259,230.00 TOTAL

BUILDING 408 (MOTORCYCLE PARKING)

This building is 660 square feet and is presently accommodating motorcycle parking. The proposed demolition of the motorcycle site would allow the area to open up and provide for new college buildings.

ESTIMATED COST	DESCRIPTION
$ 1,500.00	Demolition no salvage.

$ 1,500.00 TOTAL

BUILDING 138 (SECURITY)

This building is 12,806 square feet and is presently accommodating the security. The future use of the building would remain as security, therefore no renovation is needed to this building.

BUILDING 42 (ELECTRICAL DIST. SHELTER)

This building is 682 square feet and is presently accommodating the electrical distribution shelter. The future use of the building would remain as electrical distribution shelter, therefore no renovation is needed to this building.

BUILDING 47 (RECREATION)

This building is 50,060 square feet and is presently accommodating the recreation/gym. The future use of the building would remain as recreation/gym, therefore no renovation is needed to this building.

BUILDING 6 (BOWLING ALLEY)

This building is 10,793 square feet and is presently accommodating the bowling alley. The future use of the building would remain as a bowling alley, therefore no renovation is needed to this building.

BUILDING 411 (RECREATION PAVILION)

This building is 888 square feet and is presently accommodating the recreation pavilion. The future use of the building would remain as a recreation pavilion, therefore no renovation is needed to this building.

BUILDING 223 (FAMILY SERVICE CENTER)

This building is 9,080 square feet and is presently accommodating the recreation pavilion. The future use of the building would remain as a family service center and counseling center, therefore no renovation is needed to this building.

TOTAL COLLEGE CAMPUS $4,898,550.00

ADMINISTRATION/OFFICE

BUILDING 30 (ADMINISTRATION)

This building is 80,066 square feet and is presently accommodating the administration. The future use of the building would remain administration. The building is operational and in good condition to justify repairs, remodel and refinishing.

General Renovation

ESTIMATED COST	DESCRIPTION
$1,050,000.00 (15.00 per square foot)	Existing facilities to code compliance and new restrooms to include: Fire separations, exiting, sprinkler system, ADA compliance, i.e. restrooms, ramps, doorways, hardware, etc.

$1,050,000.00 TOTAL

Note: See Appendices for existing building floor plans.

BUILDING 29 (DISPENSARY)

This building is 33,744 square feet and is presently accommodating the dispensary. The future use of the building would remain as a health clinic. The building is operational and in good condition to justify repairs, remodel and refinishing.

General Renovation

ESTIMATED COST	DESCRIPTION
$ 506,160.00 (15.00 per square foot)	Renovation to bring it to code compliance with all applicable fire and life safety codes, to include: Fire separations, exiting, sprinkler system, ADA compliance, i.e. restrooms, ramps, doorways, hardware, etc.

$ 506,160.00 TOTAL

Note: See Appendices for existing building floor plans.

BUILDING 25 (UOPH)

This building is 27,892 square feet and is presently accommodating the administration. The future use of the building would remain as administration. The building is operational and in good condition to justify repairs, remodel and refinishing.

General Renovation

ESTIMATED COST	DESCRIPTION
$ 418,380 (15.00 per square foot)	Renovation to bring it to code compliance with all applicable fire and life safety codes, to include: Fire separations, exiting, sprinkler system, ADA compliance, i.e. restrooms, ramps, doorways, hardware, etc.

$ 418,380.00 TOTAL

Note: See Appendices for existing building floor plans.

BUILDING 192 (ADMINISTRATIVE)

This building is 4,800 square feet and is presently accommodating the administration. The future use of the building would remain as administration. The building is operational and in good condition to justify repairs, remodel and refinishing.

General Renovation

ESTIMATED COST	DESCRIPTION
$ 72,000.00 (15.00 per square foot)	Demolition of interior and renovation of existing building to include: Fire separations, exiting, sprinkler system, ADA compliance, i.e. restrooms, ramps, doorways, hardware, etc.

$ 72,000.00 TOTAL

Note: See Appendices for existing building floor plans.

TOTAL ADMINISTRATION/OFFICES $2,046,540.00

INSTITUTIONAL FACILITIES

BUILDING 406 (BRIG)

This building is 29,270 square feet and is presently accommodating the Brig. The future use of the building would remain as a brig, therefore no renovation is needed to this building.

BUILDING 18 (FIRE STATION)

This building is 14,137 square feet and is presently accommodating the fire station. The future use of the building would remain as a fire station, therefore no renovation is needed to this building.

General Renovation

ESTIMATED COST	DESCRIPTION
$141,370.00 (10.00sf)	Health and Safety Renovation

$141,370,00 TOTAL

BUILDING 41 (SECURITY)

This building is 2,030 square feet and is presently accommodating the security. The future use of the building would remain as security, therefore no renovation is needed to this building.

General Renovation

ESTIMATED COST	DESCRIPTION
$20,300.00 (10.00sf)	Health and Safety Renovation

$20,300.00 TOTAL

TOTAL INSTITUTIONAL FACILITIES **$161,670.00**

WAREHOUSING LIGHT INDUSTRIAL

BUILDING 2 (MARINE CORPS TRAINING)

This building is 144,232 square feet and is presently accommodating the marine corps training. The future use of the building would be to warehousing light industrial. The building is operational and in good condition to justify repairs, remodel and refinishing.

General Renovation

ESTIMATED COST	DESCRIPTION
$ 936,000.00 (15.00 per square foot)	Tenant improvements (62,400 sf) to include: Remodeling, fire separations, exiting, sprinkler system, ADA compliance, i.e. restrooms, ramps, doorways, hardware, etc.

$ 936,000.00 TOTAL

Note: See Appendices for existing building floor plans.

BUILDING 5 (WAREHOUSE)

This building is 417,467 square feet and is presently accommodating the warehouse. The future use of the building would be to warehousing light industrial. The building is operational and in good condition to justify repairs, remodel and refinishing.

General Renovation

ESTIMATED COST	DESCRIPTION
$ 450,000.00 (15.00 per square foot)	Tenant Improvements (30,000sf) to include: Fire separations, exiting, sprinkler system, ADA compliance, i.e. restrooms, ramps, doorways, hardware, etc.

$ 450,000.00 TOTAL

Note: See Appendices for existing building floor plans.

Building 67 (Garage)

This building is 33,720 square feet and is presently accommodating the garage. The future use of the building would remain as a garage/transportation, therefore no renovation is needed to this building.

Building 299 (PW Storage)

This building is 1,500 square feet and is presently accommodating the public works storage. The future use of the building would remain as a storage, therefore no renovation is needed to this building.

TOTAL WAREHOUSING/LIGHT INDUSTRIAL $1,386,000.00

RECREATIONAL/COMMERCIAL AREA

BUILDING 11 (PUBLIC WORKS)

This building is 59,206 square feet and is presently accommodating the public use department. The future use of the building would be to recreational/commercial uses. The building is operational and in good condition to justify repairs, remodel and refinishing.

General Renovation

ESTIMATED COST	DESCRIPTION
$ 84,750.00 (5.65 per square foot)	Interior demolition no salvage for restaurant.
$1,500,000.00 (15,000 sf @100.00)	Construction of new restaurant including furnishings, finishes and equipment.
$ 663,090.00 (15.00 per square foot)	Tenant Improvements this includes: Fire separations, exiting, sprinkler system, ADA compliance, i.e. restrooms, ramps, doorways, hardware, etc.
$2,247,840.00	**TOTAL**

Note: See Appendices for existing building floor plans.

BUILDING 40 (PAINT SHOP)

This building is 924 square feet and is presently accommodating the paint shop.

ESTIMATED COST	DESCRIPTION
$ 2,500.00 (.22 per cubic foot)	Total demolition of structure.

BUILDING 115 (PW STORAGE)

This building is 1,500 square feet and is presently accommodating the storage. The proposed demolition of the building would allow the area to open up and provide for new recreational uses.

ESTIMATED COST	DESCRIPTION
$ 3,300.00 (.22 per cubic foot)	Total demolition of structure.

BUILDING 275 (SMALL CRAFT BOATHOUSE)

This building is 288 square feet and is presently accommodating the small boat house. The proposed demolition of the building would allow the area to open up and provide for new recreational uses.

ESTIMATED COST	DESCRIPTION
$ 600.00	Total demolition of structure.

BUILDING 31 (BOAT HOUSE)

This building is 3,141 square feet and is presently accommodating the boat house. The future use of the building would remain as a boathouse, therefore no renovation is needed to this building.

BUILDING 402 (BOAT HOUSE)

This building is 1,760 square feet and is presently accommodating the boat house. The future use of the building would remain as a boat house, therefore no renovation is needed to this building.

BUILDING 410 (RECREATION PAVILION)

This building is 1,760 square feet and is presently accommodating the recreation pavilion. The future use of the building would remain as a pavilion, therefore no renovation is needed to this pavilion.

TOTAL RECREATIONAL/COMMERCIAL AREA $2,254,240.00

SUMMARY OF PROPOSED COSTS

Parks and Recreation	199,250.00
Campus Area	4,898,550.00
Administration/Office	2,046,540.00
Institutional Facilities	161,670.00
Warehousing/Light Industrial	1,386,000.00
Recreational/Commercial Area	$ 2,254,240.00
TOTAL	**$10,946,250.00**

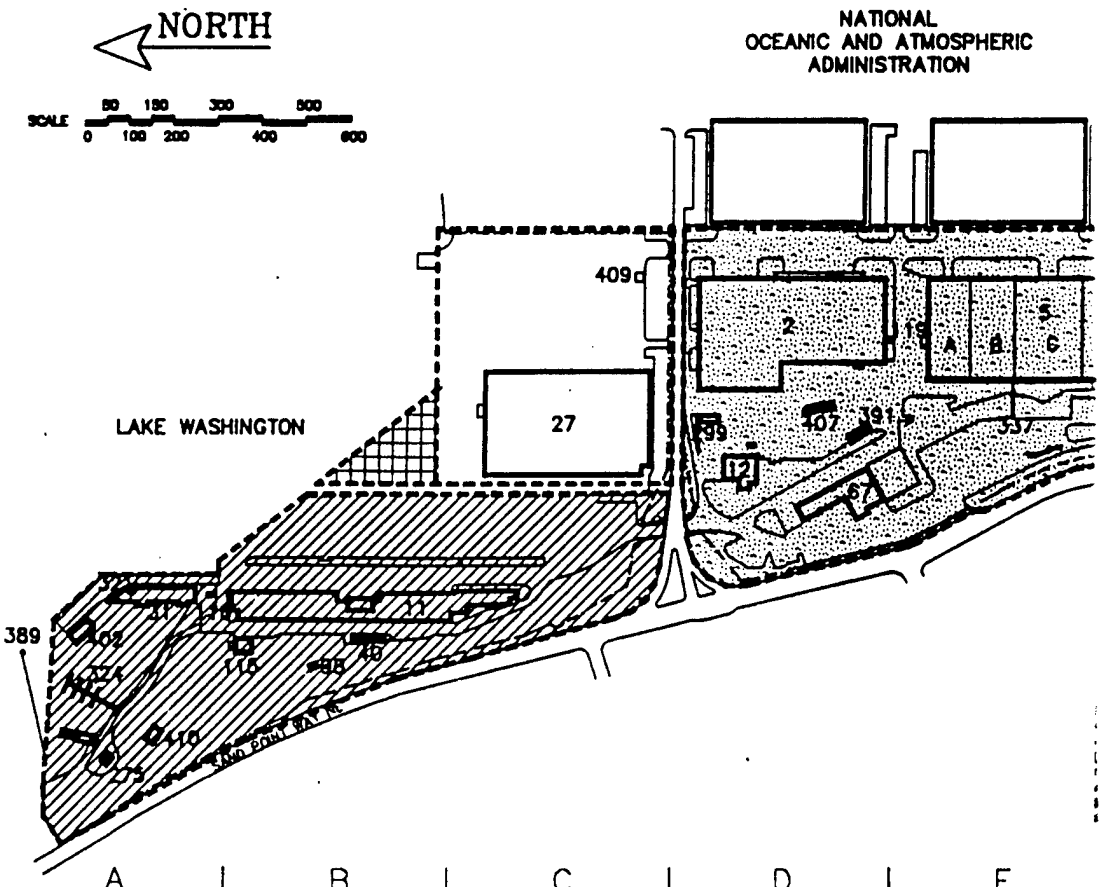
APPENDIX C

EXISTING USES

BLDG	LOC	DESCRIPTION
2	D3	RESERVES
5	E3	SUPPLY
6	I3	BOWLING LANES
9	H2	UEPH/ADMIN
11	B1	PUBLIC WORKS
12	D2	BOILER PLANT
15	K2	CERAMICS SHOP
18	G3	FIRE STATION
25	F3	ADMINISTRATION
26	I2	UOPH
27	C2	RESERVES
28	F2	DISPENSARY
30	F3	ADMINISTRATION
31	A1	BOATHOUSE
38	F2	GUARD STATION
40	B1	FLAMMABLE STORES
41	G3	SECURITY
42	C2	MAIN POWER SUBSTATION
44	D2	BURIED FUEL OIL TANK
47	H3	RECREATION
60	K8	FLAMMABLE STORES
61	K5	STORAGE
67	D2	TRANSPORTATION
69	I3	UOPH PARKING
98	B1	METER SHELTER
109	K2	WATER METER PIT
115	B1	PW STORAGE
116	A1	SEWAGE PUMP STATION
118	F3	SEWAGE LIFT STATION
119	D3	RESERVE STORAGE
138	G2	GATEHOUSE
192	F2	HOMEPORTING
193	J6	NEX/COMMISSARY
195	J6	NEX TICKET OFFICE
198	J6	THRIFT SHOP
204	K5	FISH & WILDLIFE LAB
219	D2	HOT WELL
222	G3	SUPSHIPS
223	G3	COUNSELLING
224	I3	UOPH/UEPH
228	K6	NEX TAILOR SHOP
244	J4	NEX STORAGE
275	A1	BOAT SHELTER
281	D2	WATER METER PIT
282	J6	SEWAGE LIFT STATION
299	D2	PW STORAGE
301	K5	NEX COUNTRY STORE
307	L6	FISH & WILDLIFE STORES
308	J5	NEX CLASS VI STORE
310	K4	AUTO HOBBY SHOP
320	F3	FLAGPOLE
321	A1	PIER 1
324	A1	PIER 7
326	I2	UEPH PARKING
327	G3	RECREATION COURTS
328	J3	RECREATION COURTS
330	K3	QUARTERS A
331	J3	QUARTERS B
332	J3	QUARTERS C
333	K3	QUARTERS D
334	L3	QUARTERS E
337	E2	PEDESTRIAN BRIDGE
340	K4	NEX GASOLINE ISLAND
341	K4	NEX COURTESY ISLAND
342	K4	NEX GASOLINE CASHIER
344	K5	NEX COUNTRY STORE
345	K4	NEX AUTO SERVICE
389	A1	MOORING DOLPHIN
391	D2	TRUCK SCALE
394	H3	TOTEM POLE
395	H3	BELL HOUSING MONUMENT
396	F2	WORLD FLIGHT MONUMENT
401	K4	G
402	A1	B
403	F2	G
404	J4	P
405	K5	N
406	F4	B
407	D2	H
408	I3	M
409	C3	S
410	A1	P
411	G4	P
412	F3	F
---	J5	F

PROPOSED USES

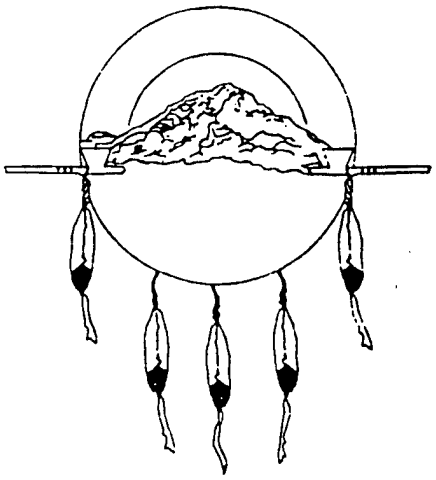
BLDG	DESCRIPTION
2	WAREHOUSING/STORAGE
5	WAREHOUSING/STORAGE
6	COLLEGE CAMPUS
9	COLLEGE CAMPUS
11	RECREATIONAL/COMMERCIAL
12	BOILER PLANT
15	COMMERCIAL
18	FIRE STATION
25	ADMINISTRATION
28	COLLEGE CAMPUS
27	WAREHOUSING/LIGHT MANF.
29	HEALTH CLINIC
30	ADMINISTRATION
31	BOATHOUSE
38	SECURITY
40	STORAGE
41	SECURITY
42	MAIN POWER STATION
47	COLLEGE CAMPUS
61	FISH AND WILDLIFE
67	TRANSPORTATION
69	PARKING
115	STORAGE
116	SEWAGE PUMP STATION
118	SEWAGE LIFT STATION
119	STORAGE
138	COLLEGE CAMPUS
192	ADMINISTRATION
193	COMMERCIAL
195	COMMERCIAL
198	COMMERCIAL
204	FISH AND WILDLIFE
223	COLLEGE CAMPUS
224	COLLEGE CAMPUS
228	COMMERCIAL
244	COMMERCIAL
275	BOAT SHELTER
299	STORAGE
301	COMMERCIAL
307	FISH AND WILDLIFE
308	COMMERCIAL
310	COMMERCIAL
321	PIER
324	PIER
326	PARKING
327	RECREATION COURTS
328	RECREATION COURTS
330	COMMERCIAL
331	COMMERCIAL
332	COMMERCIAL
333	COMMERCIAL
334	COMMERCIAL
340	COMMERCIAL
341	COMMERCIAL
342	COMMERCIAL
344	COMMERCIAL
345	COMMERCIAL
391	TRANSPORTATION
401	COMMERCIAL
402	BOATHOUSE
403	GENERATOR
404	PICNIC SHELTER
406	INTERIM JAIL FACILITY
408	PARKING
409	SEWAGE PUMP STATION
410	PICNIC SHELTER
411	PICNIC SHELTER

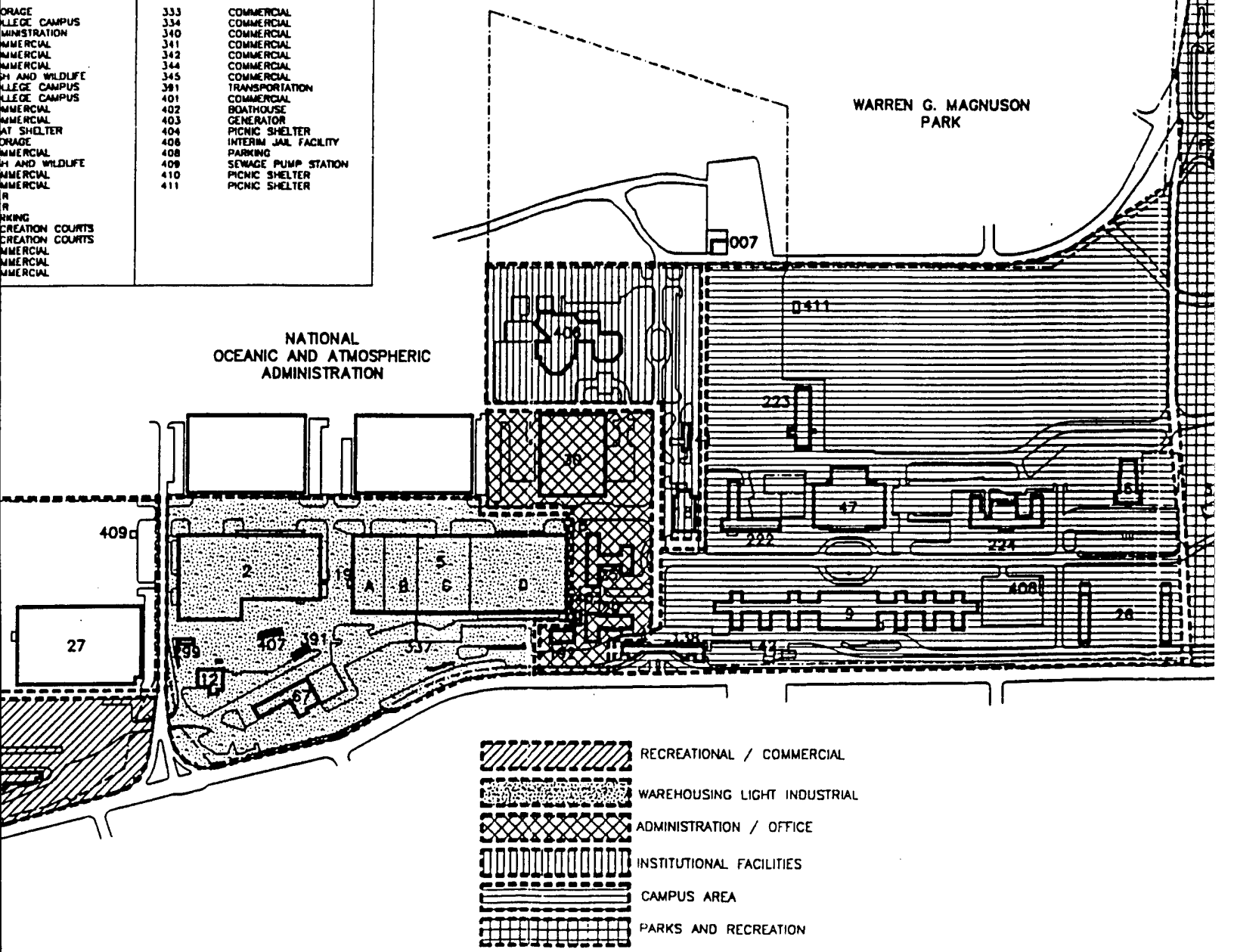


ATER METER PIT	320	F3	FLAGPOLE
W STORAGE	321	A1	PIER 1
EWAGE PUMP STATION	324	A1	PIER 7
EWAGE LIFT STATION	326	I2	UEPH PARKING
ESERVE STORAGE	327	G3	RECREATION COURTS
ATEHOUSE	328	J3	RECREATION COURTS
OMEPORTING	330	K3	QUARTERS A
EX/COMMISSARY	331	J3	QUARTERS B
EX TICKET OFFICE	332	J3	QUARTERS C
IFT SHOP	333	K3	QUARTERS D
SH & WILDLIFE LAB	334	L3	QUARTERS E
OT WELL	337	E2	PEDESTRIAN BRIDGE
UPSHIPS	340	K4	NEX GASOLINE ISLAND
OUNSELLING	341	K4	NEX COURTESY ISLAND
OPH/UEPH	342	K4	NEX GASOLINE CASHIER
EX TAILOR SHOP	344	K5	NEX COUNTRY STORE
EX STORAGE	345	K4	NEX AUTO SERVICE
OAT SHELTER	388	A1	MOORING DOLPHIN
ATER METER PIT	391	D2	TRUCK SCALE
EWAGE LIFT STATION	394	H3	TOTEM POLE
W STORAGE	395	H3	BELL HOUSING MONUMENT
EX COUNTRY STORE	396	F2	WORLD FLIGHT MONUMENT
SH & WILDLIFE STORES			
EX CLASS VI STORE			
IO HOBBY SHOP			

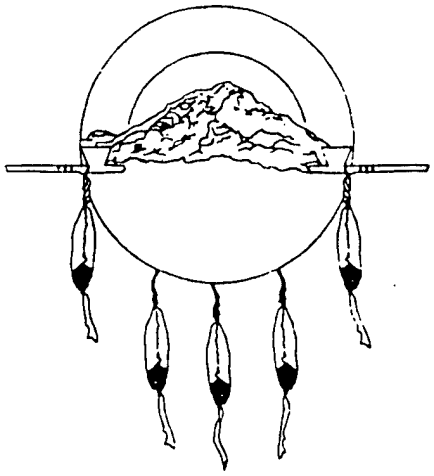
401	K4	GUARD STATION
402	A1	BOATHOUSE
403	F2	GENERATOR
404	J4	PICNIC SHELTER
405	K5	NEX COVERED WALKWAY
406	F4	BRIG
407	D2	HAZARDOUS WASTE
408	I3	MOTORCYCLE PARKING
409	C3	SEWAGE PUMP STATION
410	A1	PICNIC SHELTER
411	G4	PICNIC SHELTER
412	F3	FREEDOM TREE MEMORIAL
---	J5	FEDERAL CREDIT UNION

ORAGE	333	COMMERCIAL
LLEGE CAMPUS	334	COMMERCIAL
MINISTRATION	340	COMMERCIAL
MMERCIAL	341	COMMERCIAL
MMERCIAL	342	COMMERCIAL
MMERCIAL	344	COMMERCIAL
H AND WILDLIFE	345	COMMERCIAL
LLEGE CAMPUS	381	TRANSPORTATION
LLEGE CAMPUS	401	COMMERCIAL
MMERCIAL	402	BOATHOUSE
MMERCIAL	403	GENERATOR
AT SHELTER	404	PICNIC SHELTER
ORAGE	406	INTERIM JAIL FACILITY
MMERCIAL	408	PARKING
H AND WILDLIFE	409	SEWAGE PUMP STATION
MMERCIAL	410	PICNIC SHELTER
MMERCIAL	411	PICNIC SHELTER
R		
R		
RKING		
CREATION COURTS		
CREATION COURTS		
MMERCIAL		
MMERCIAL		
MMERCIAL		





C | D | E | F | G | H | I | I



WARREN G. MAGNUSON PARK

FISH AND WILDLIFE

SAND POINT WAY NE

RECREATIONAL / COMMERCIAL

WAREHOUSING LIGHT INDUSTRIAL

ADMINISTRATION / OFFICE

INSTITUTIONAL FACILITIES

CAMPUS AREA

PARKS AND RECREATION

ASCG

SAND POINT
COMMUNITY REUSE PLAN

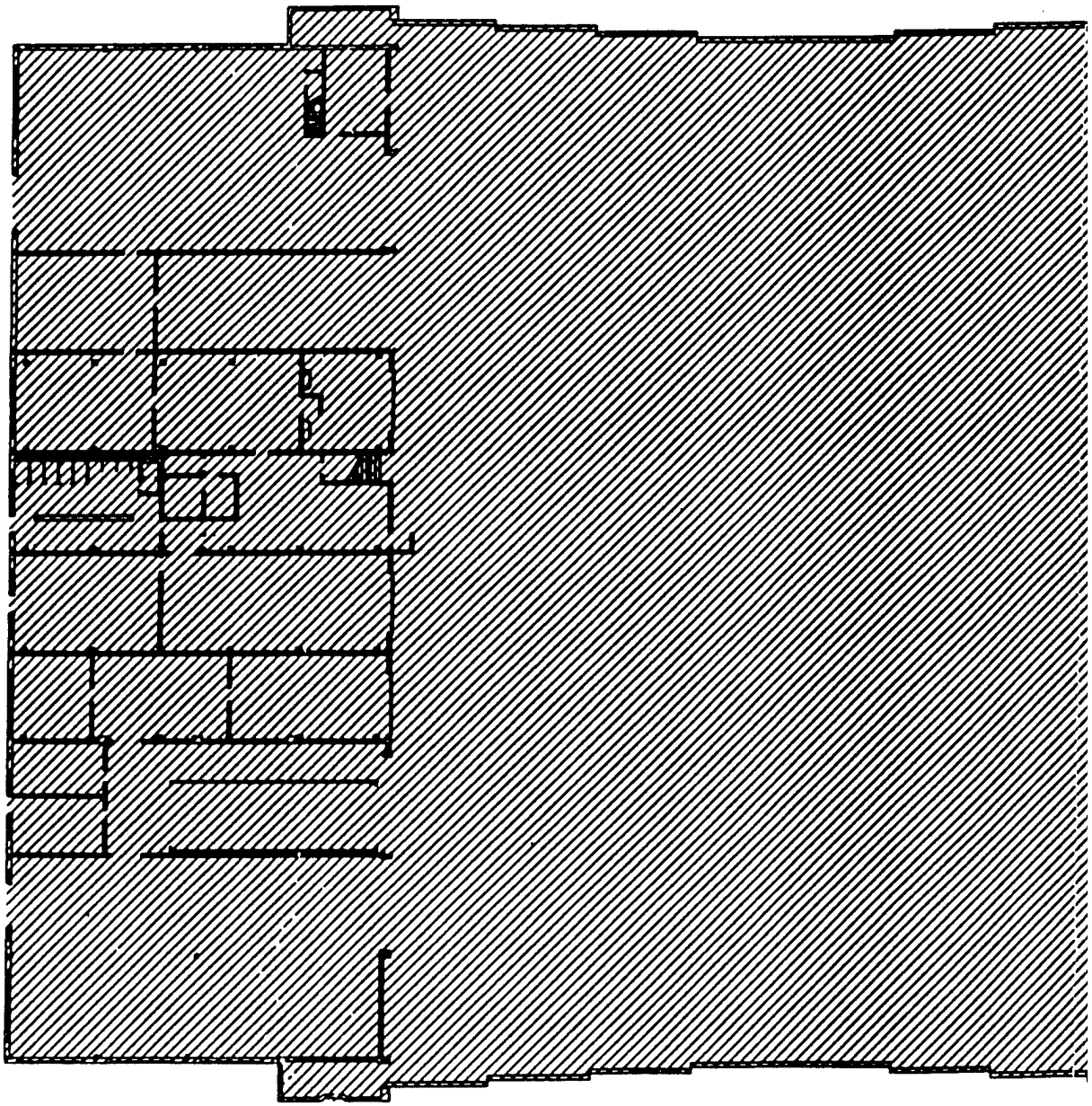
JUNE 1993

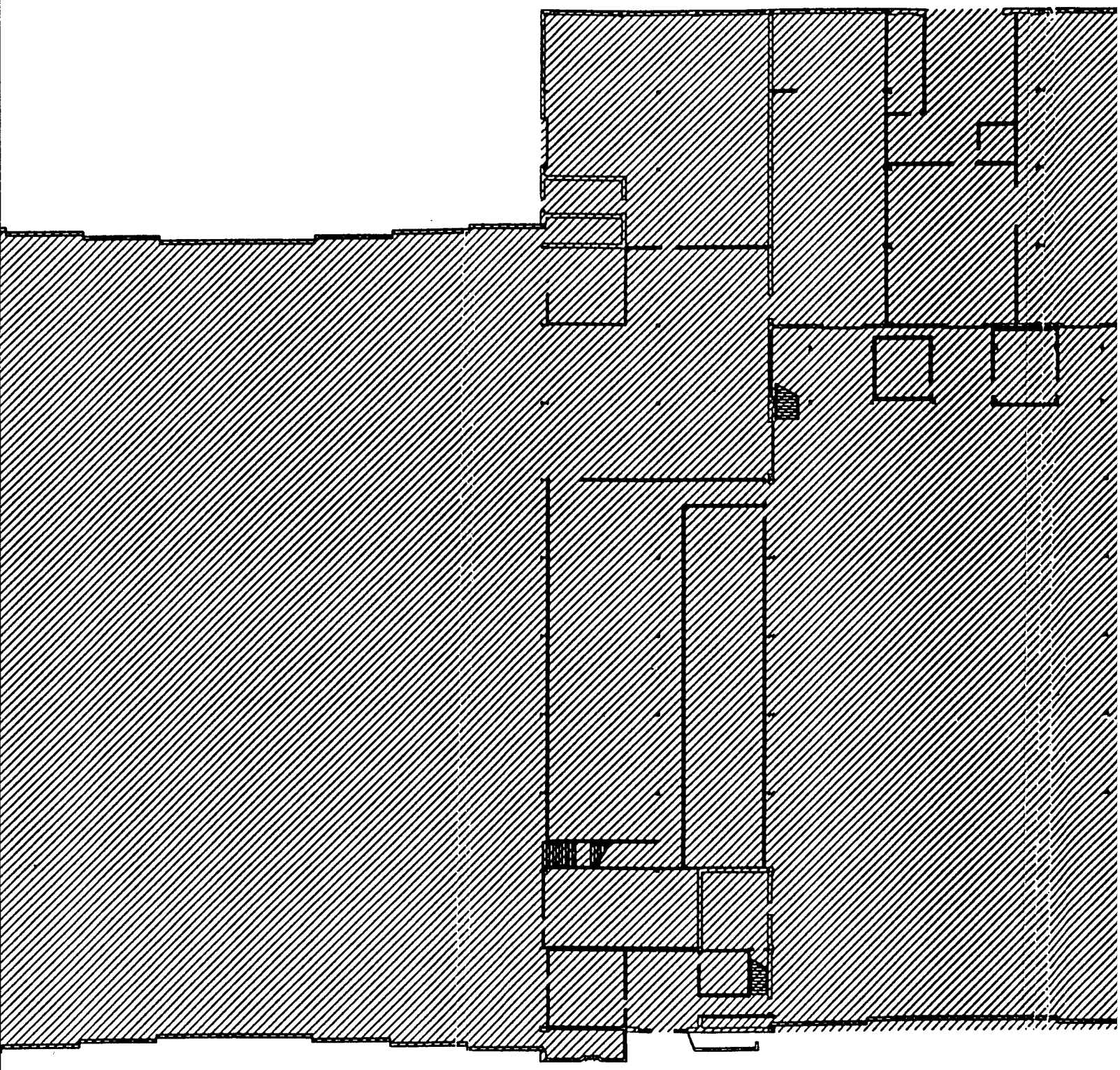
F | G | H | I | J | K | L

6 5 4 3 2

(3)

APPENDIX D



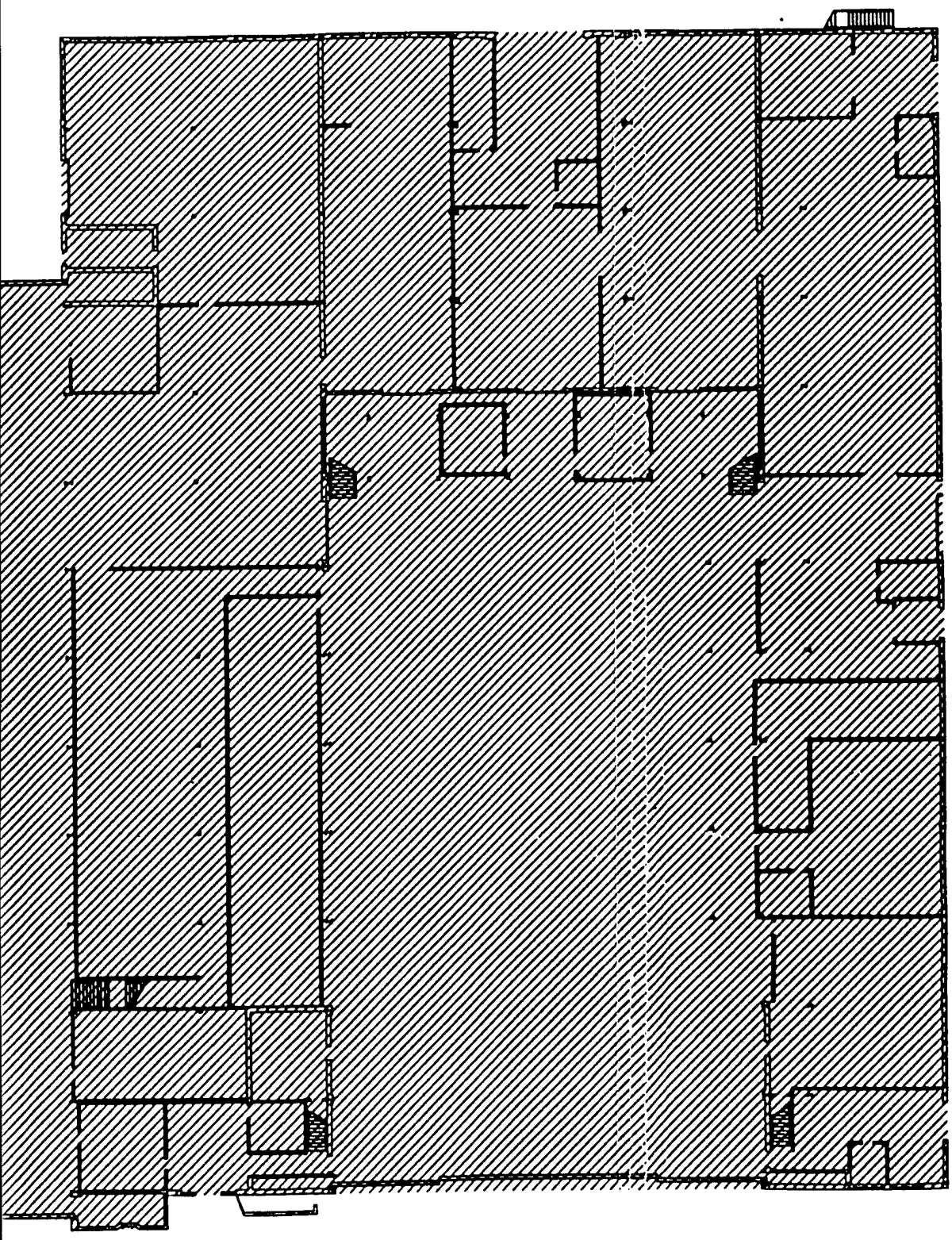


ASCG

BUILDING 2 (

RENOVATION

DEMOLITION (

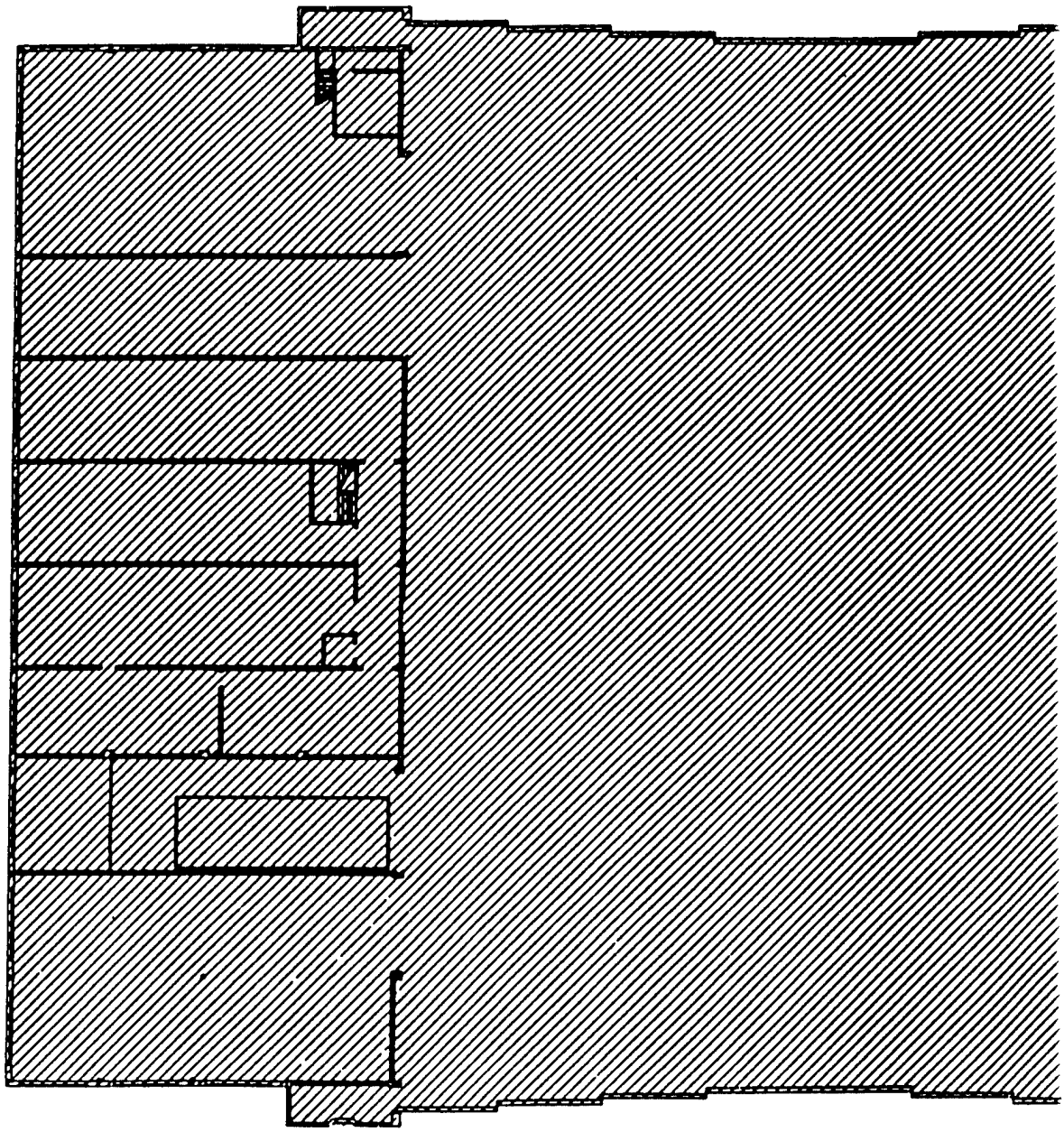


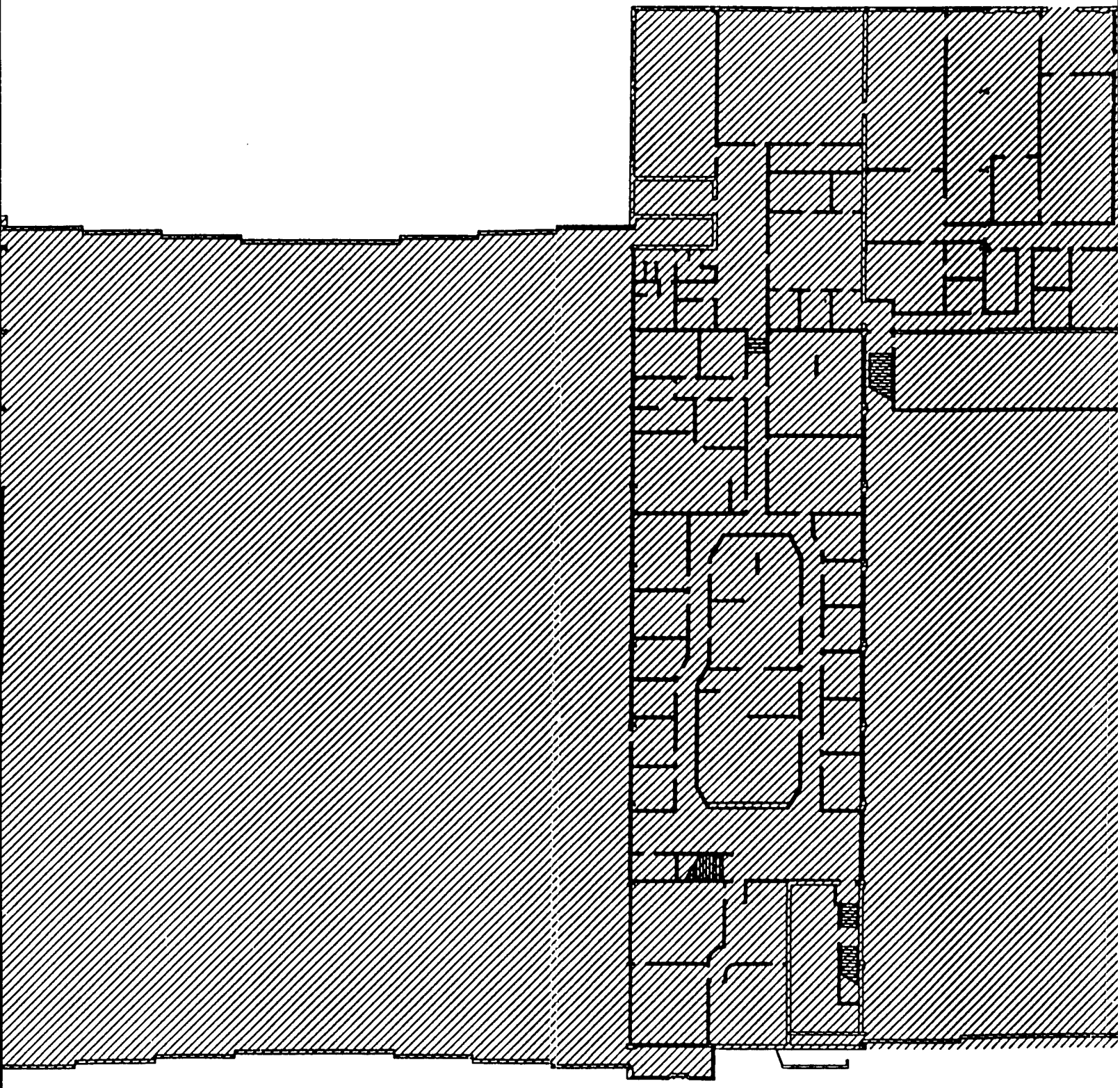
ASOG

BUILDING 2 (GROUND FLOOR)

RENOVATION FOR CODE COMPLIANCE

DEMOLITION OF INTERIOR

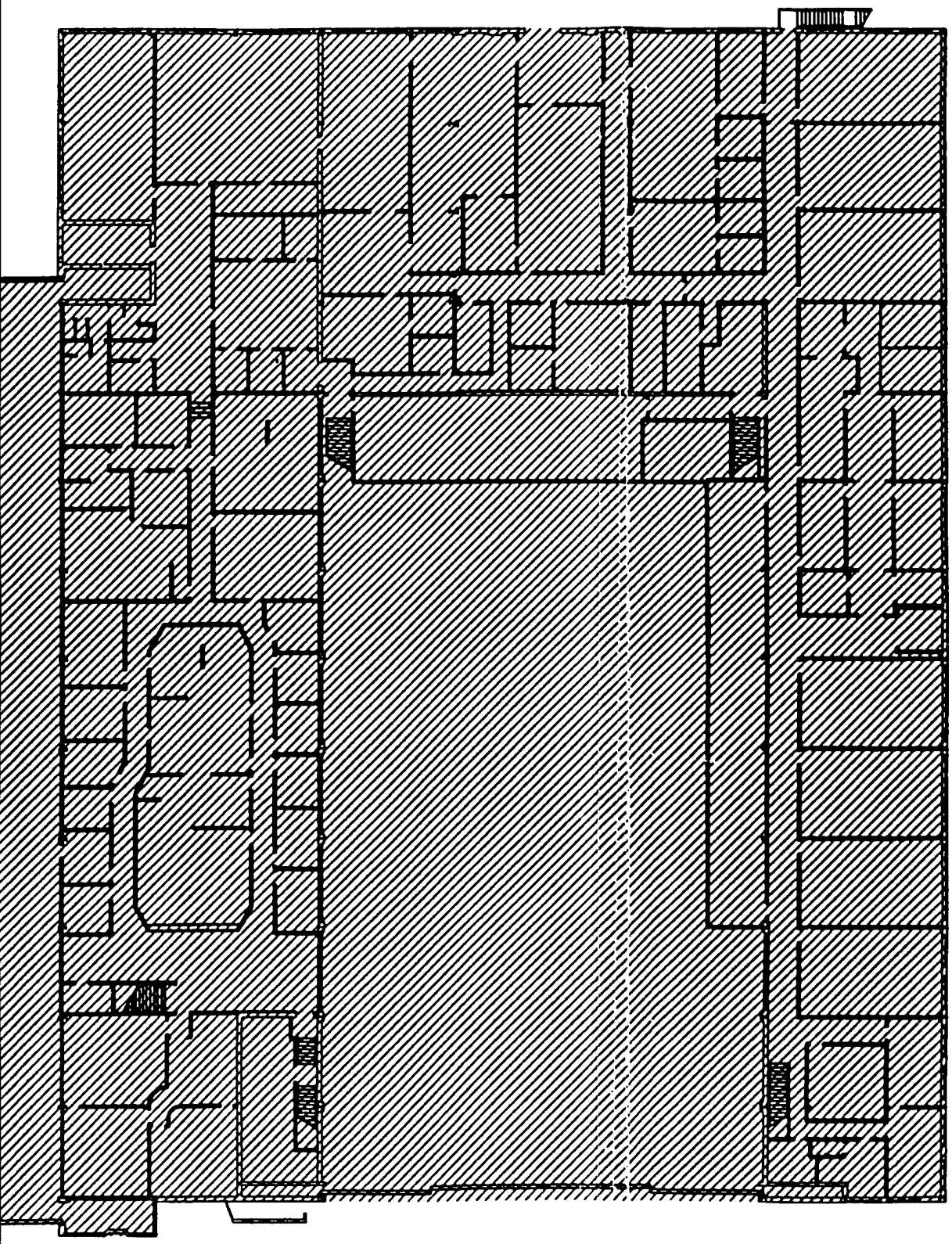




ASCG

RE

DL



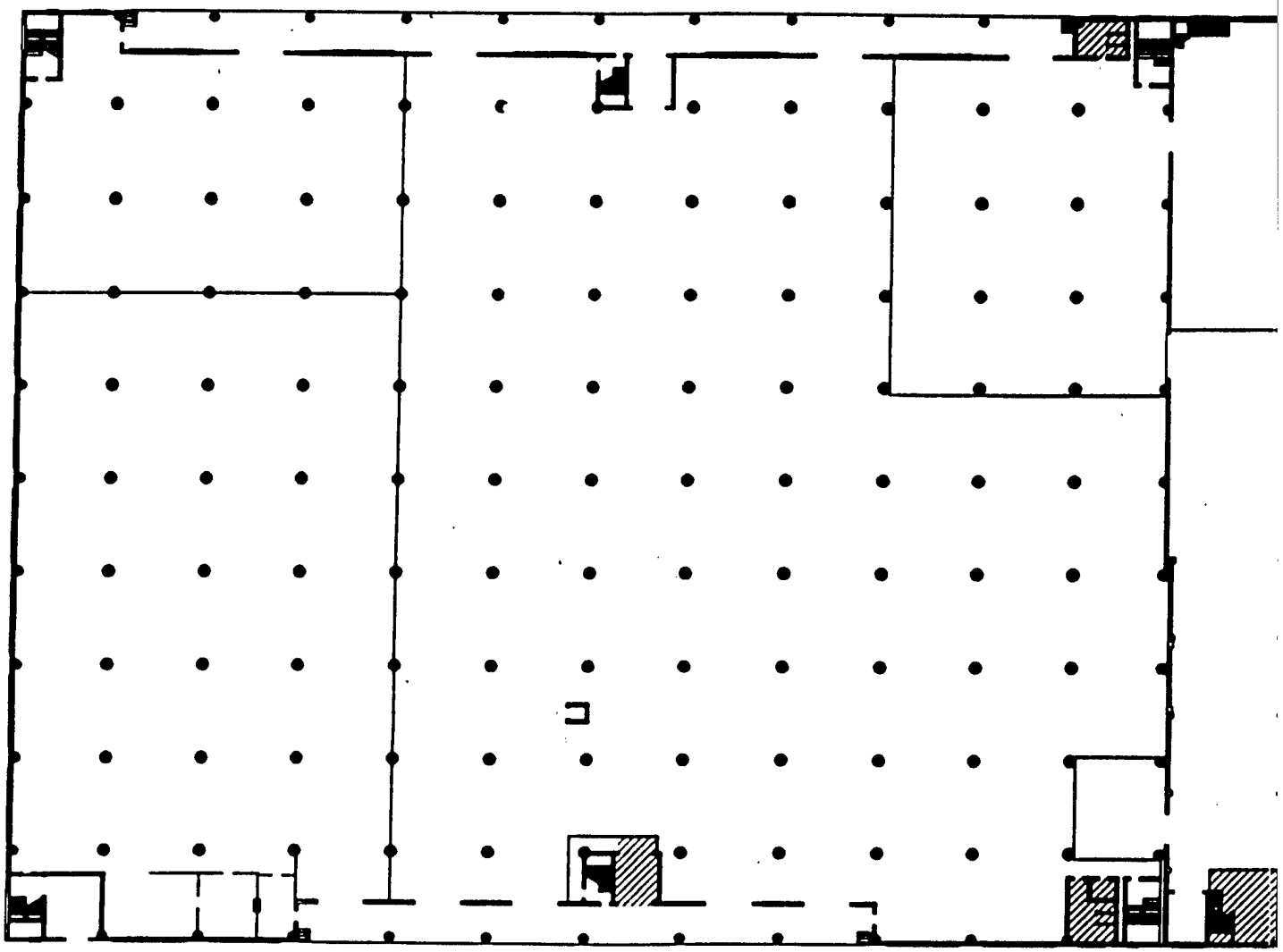
ASCG

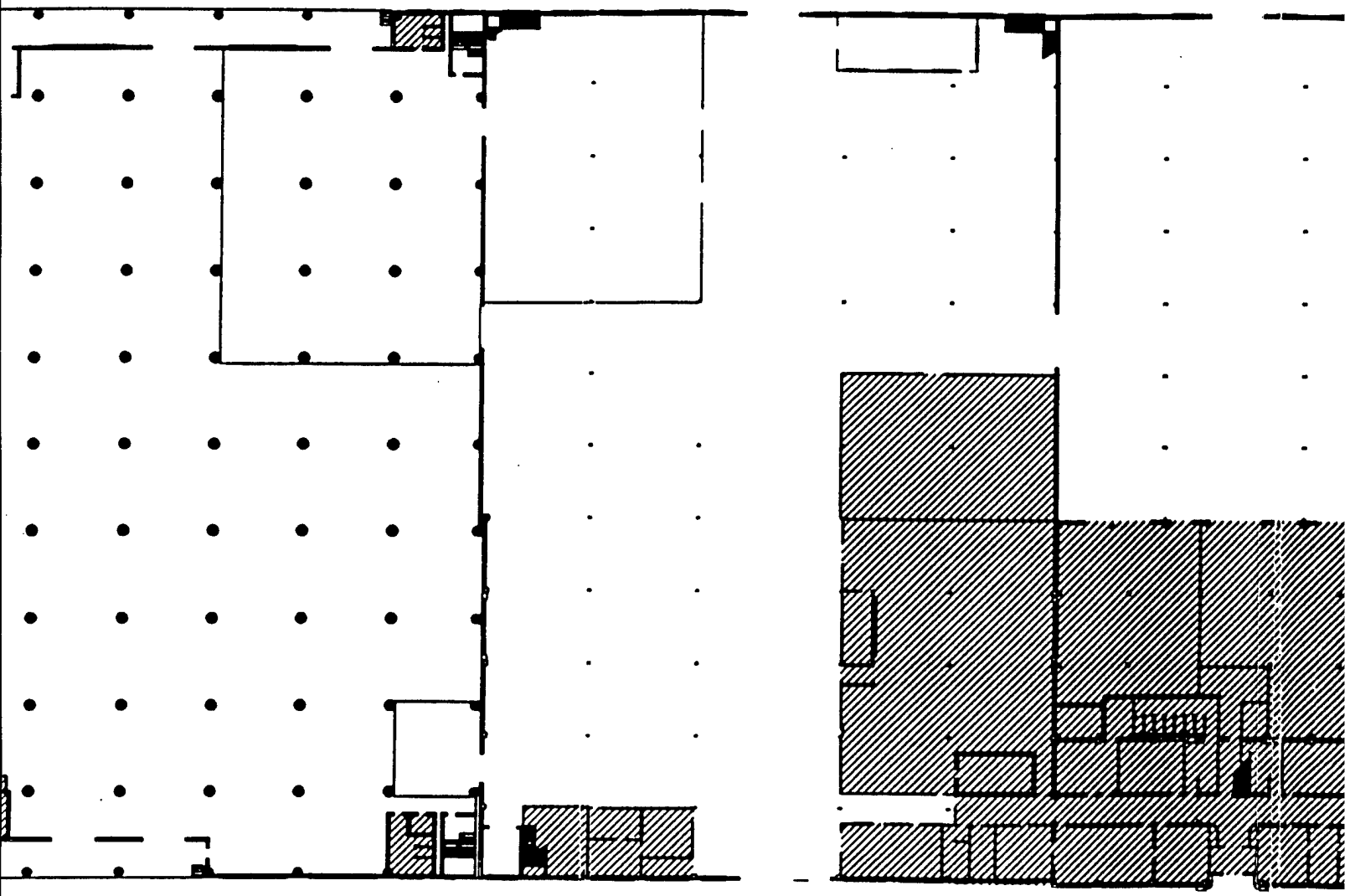
BUILDING 2 (MEZZANINE)

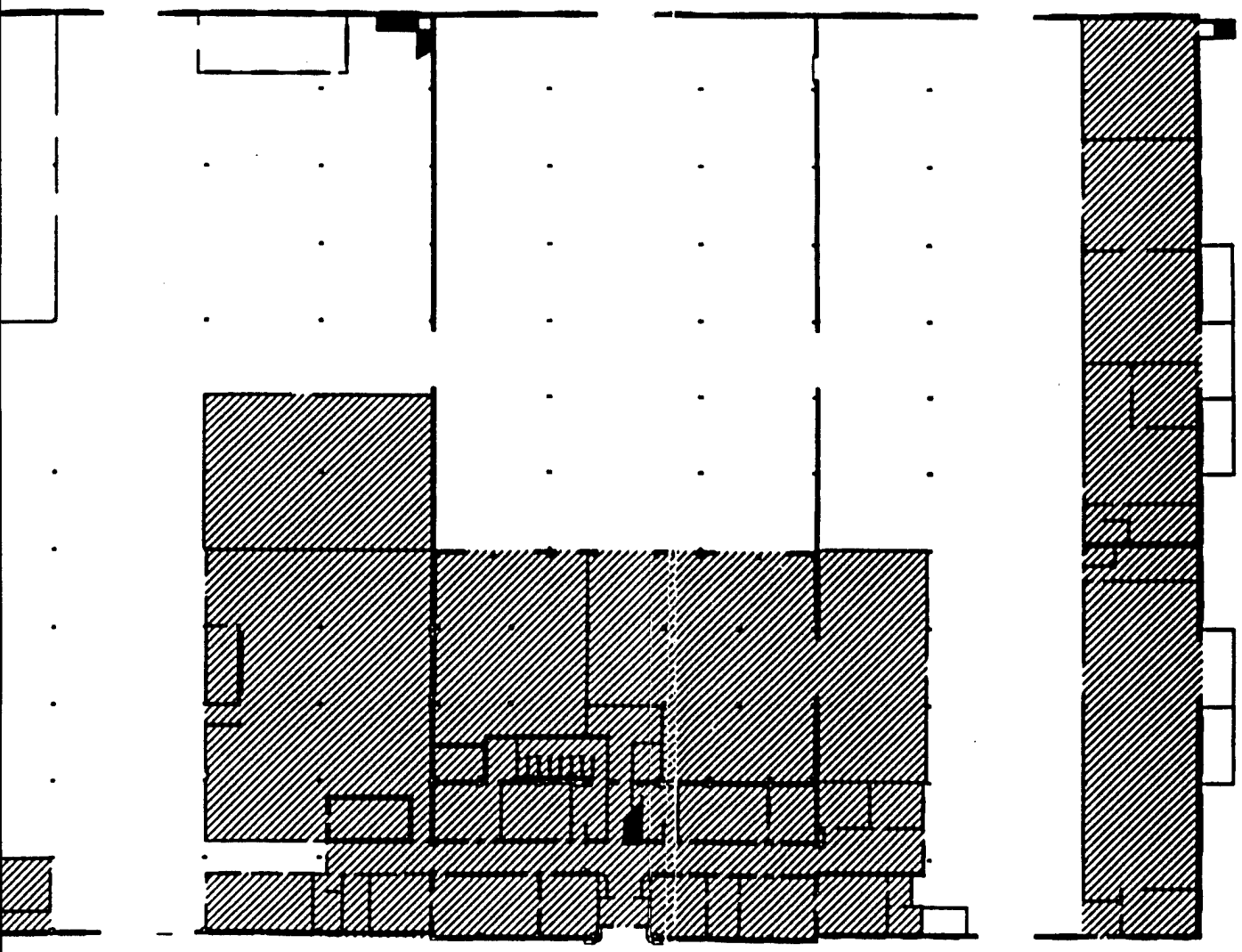
RENOVATION FOR CODE COMPLIANCE

DEMOLITION OF INTERIOR

3





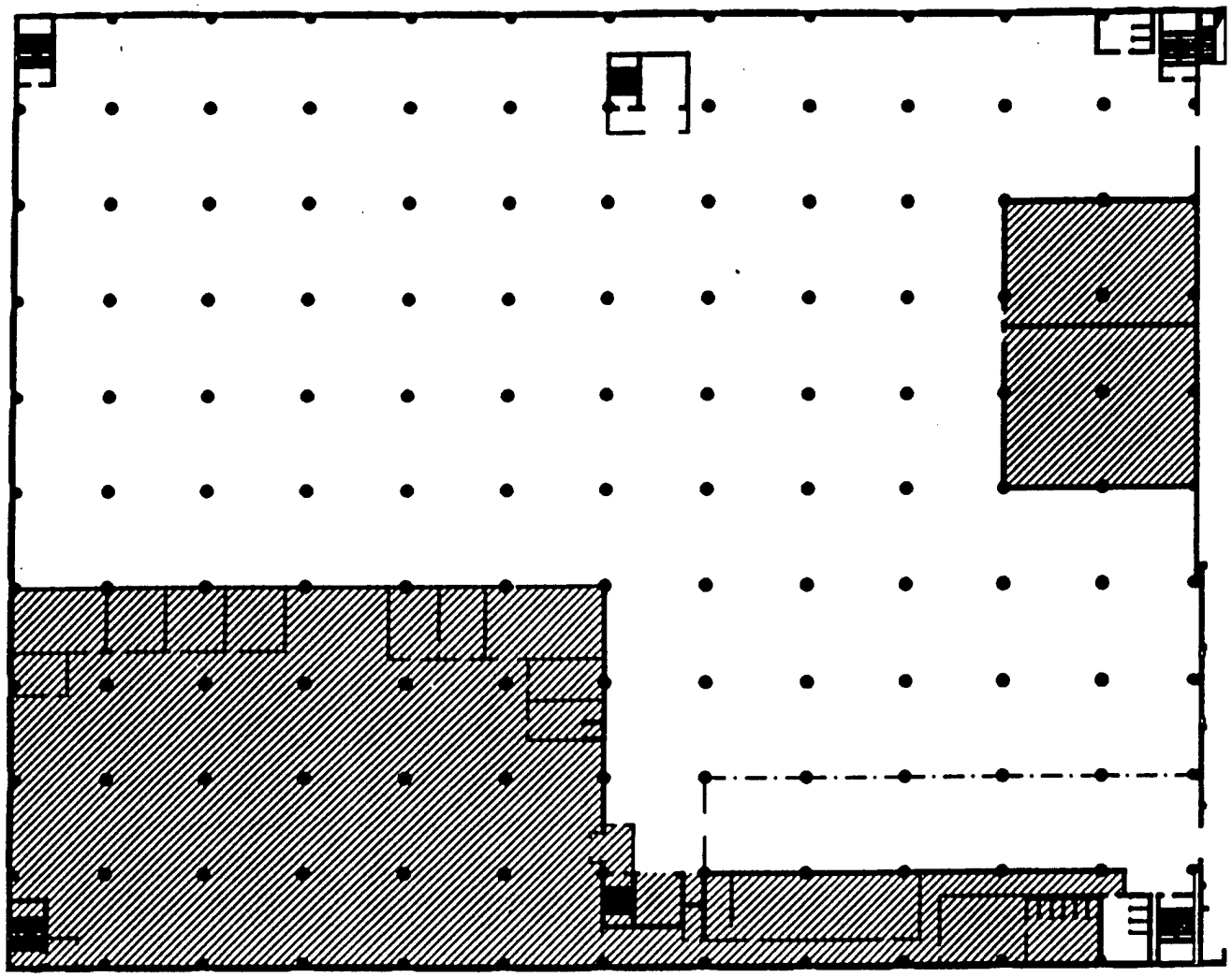


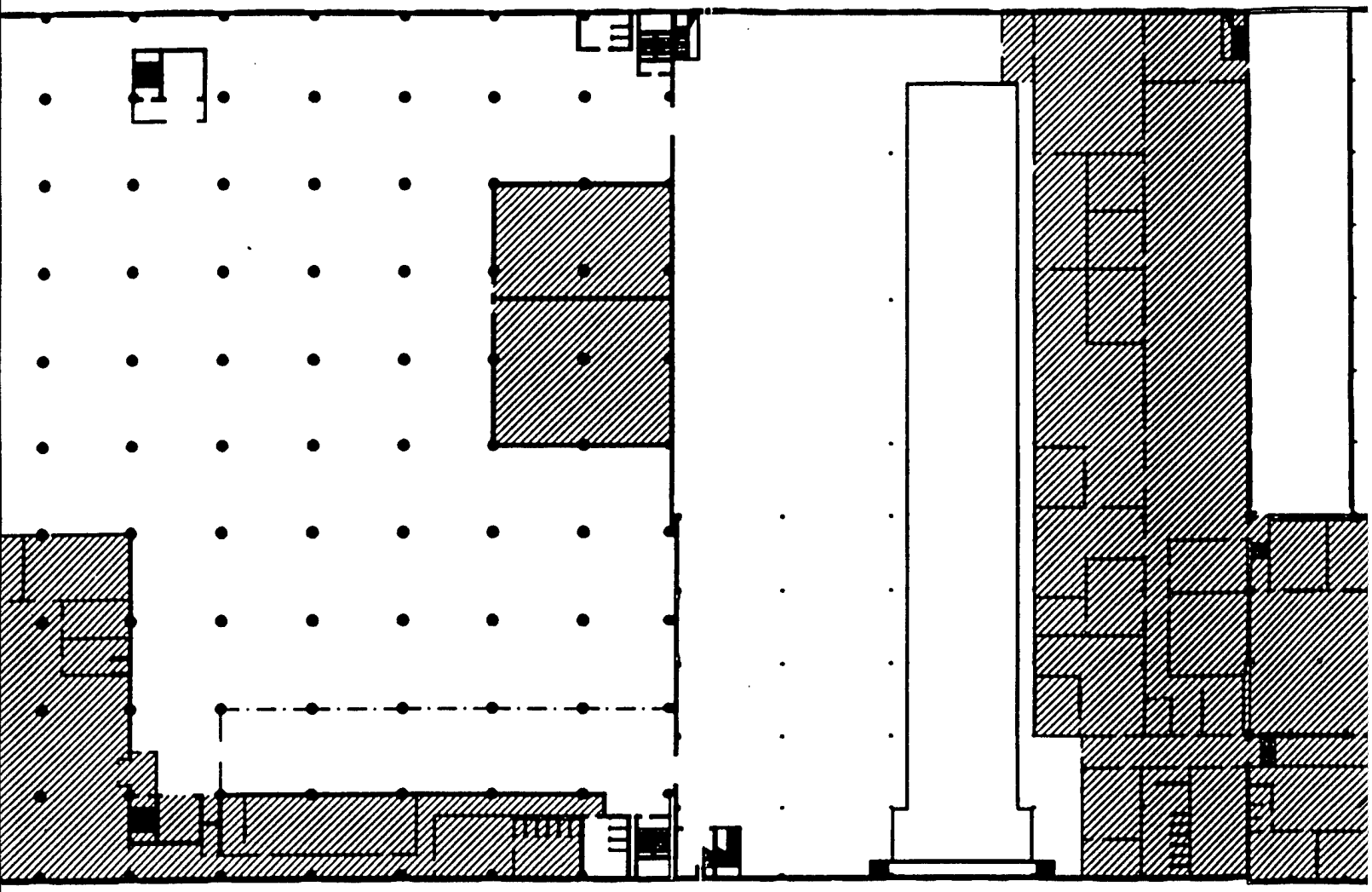
ASCG

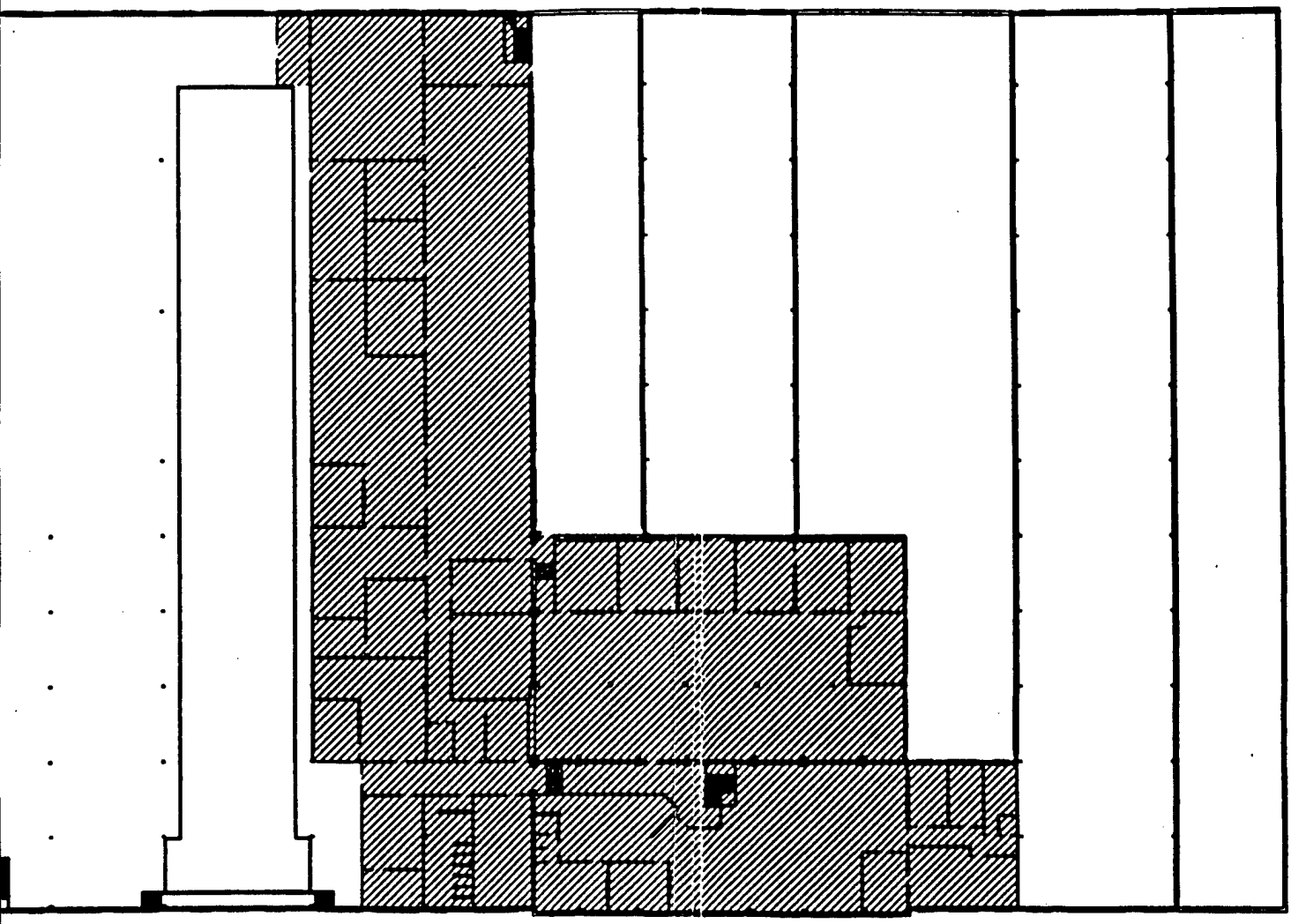
BUILDING 5A, B, C, and D (FIRST FLOOR)

RENOVATION FOR CODE COMPLIANCE

DEMOLITION OF INTERIOR





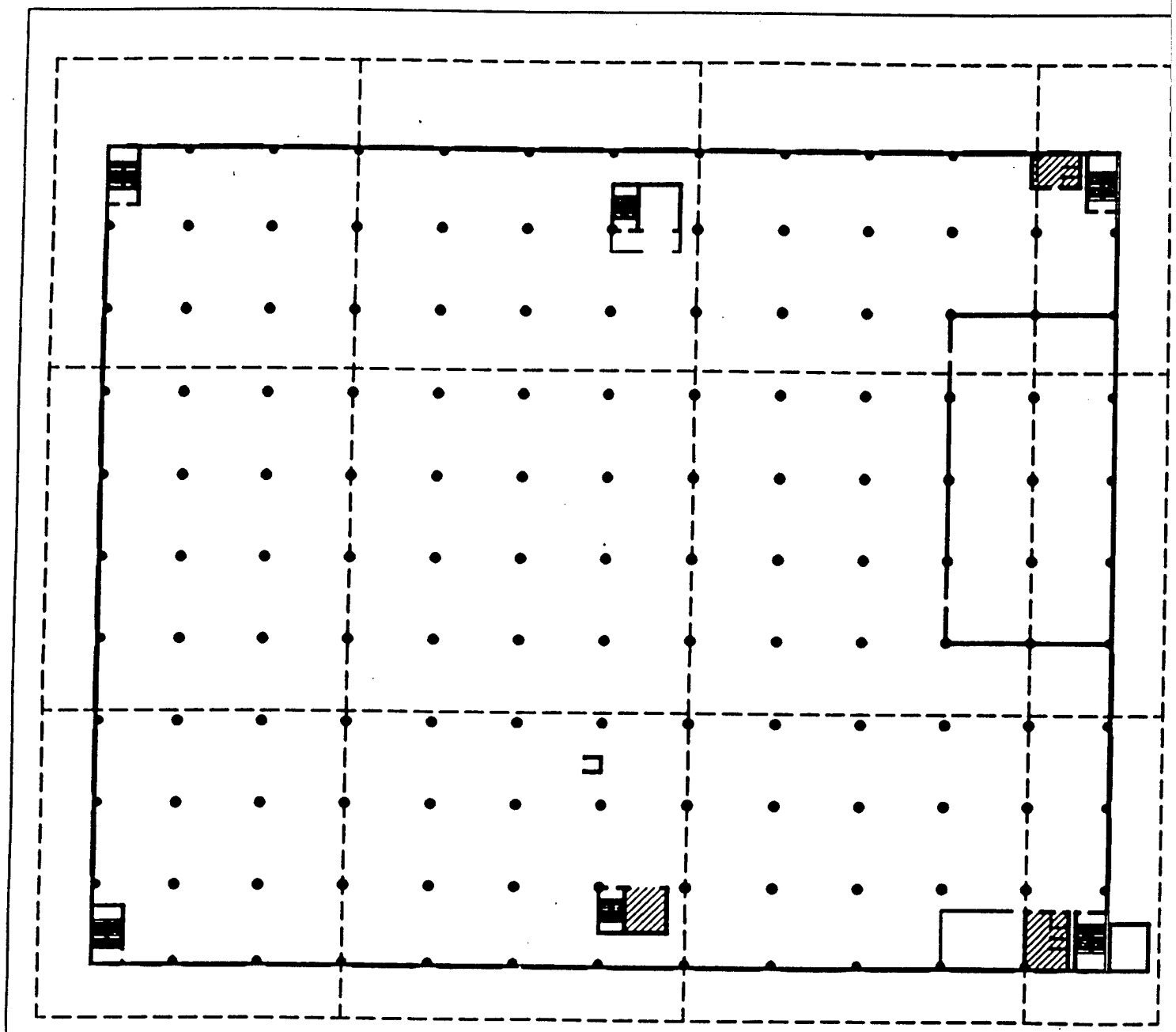


ASOC

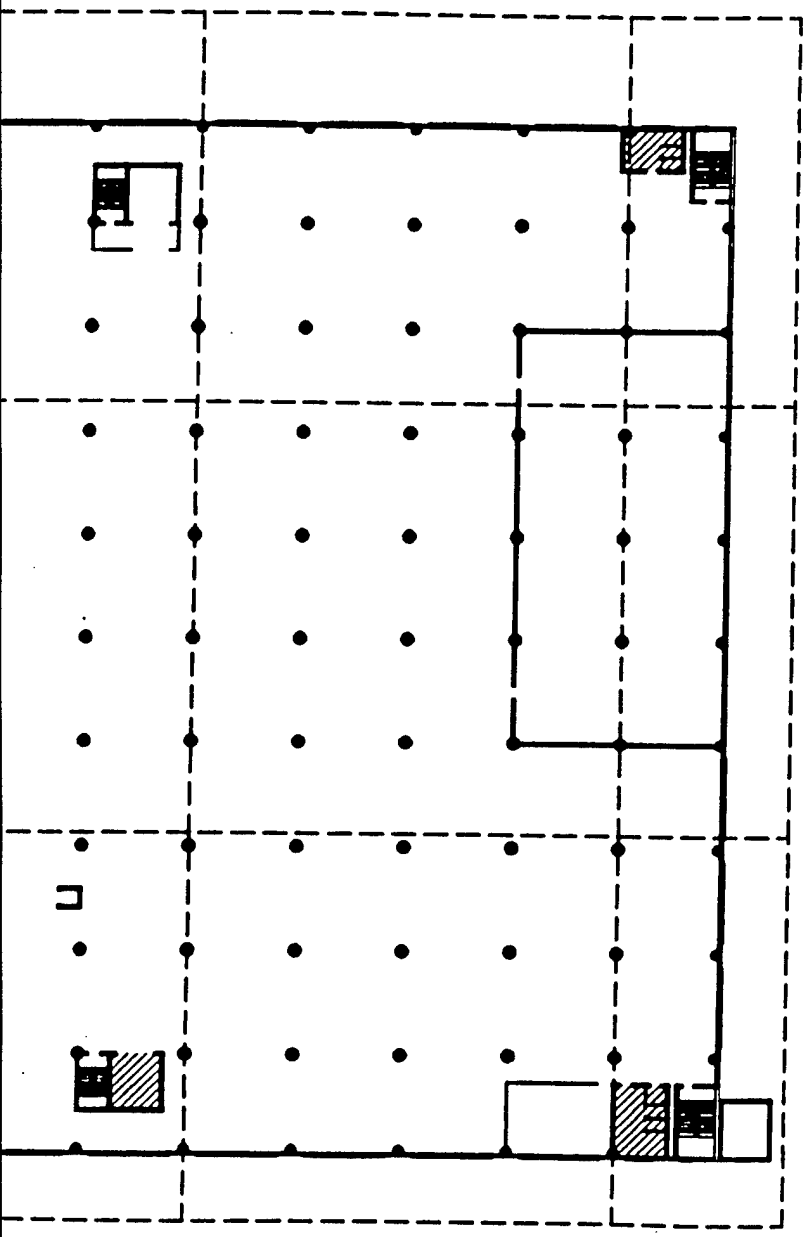
BUILDING BA, B, C, and D (SECOND FLOOR)

RENOVATION FOR CODE COMPLIANCE

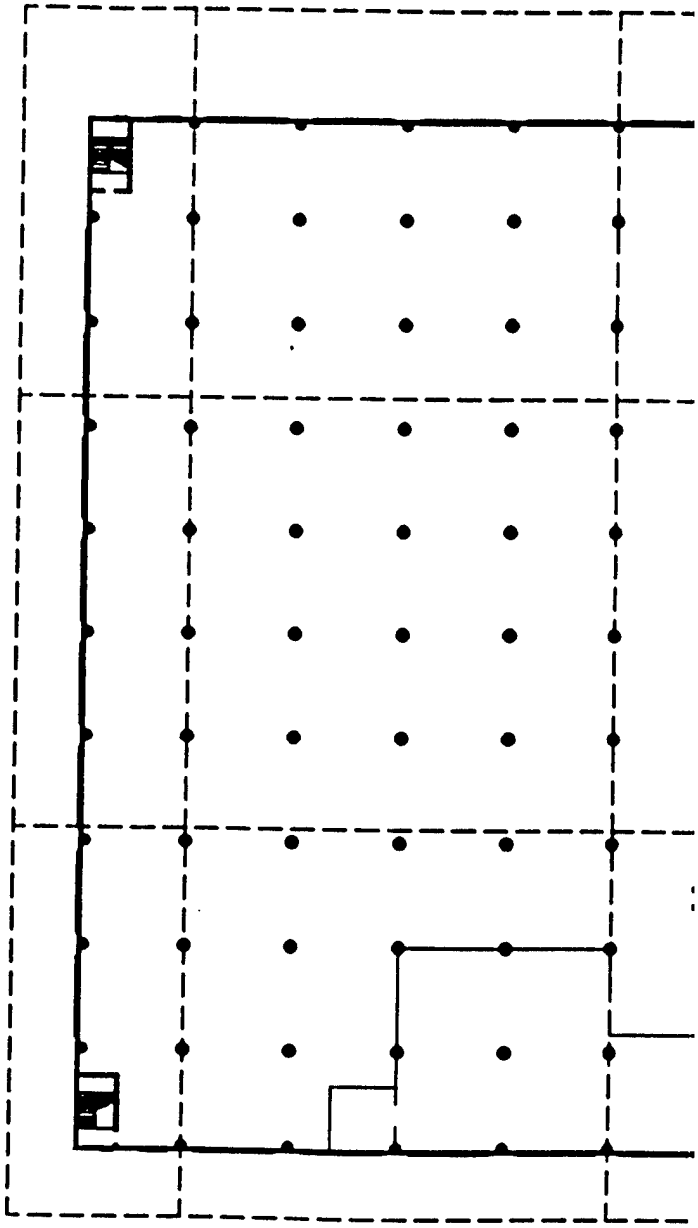
DEMOLITION OF INTERIOR



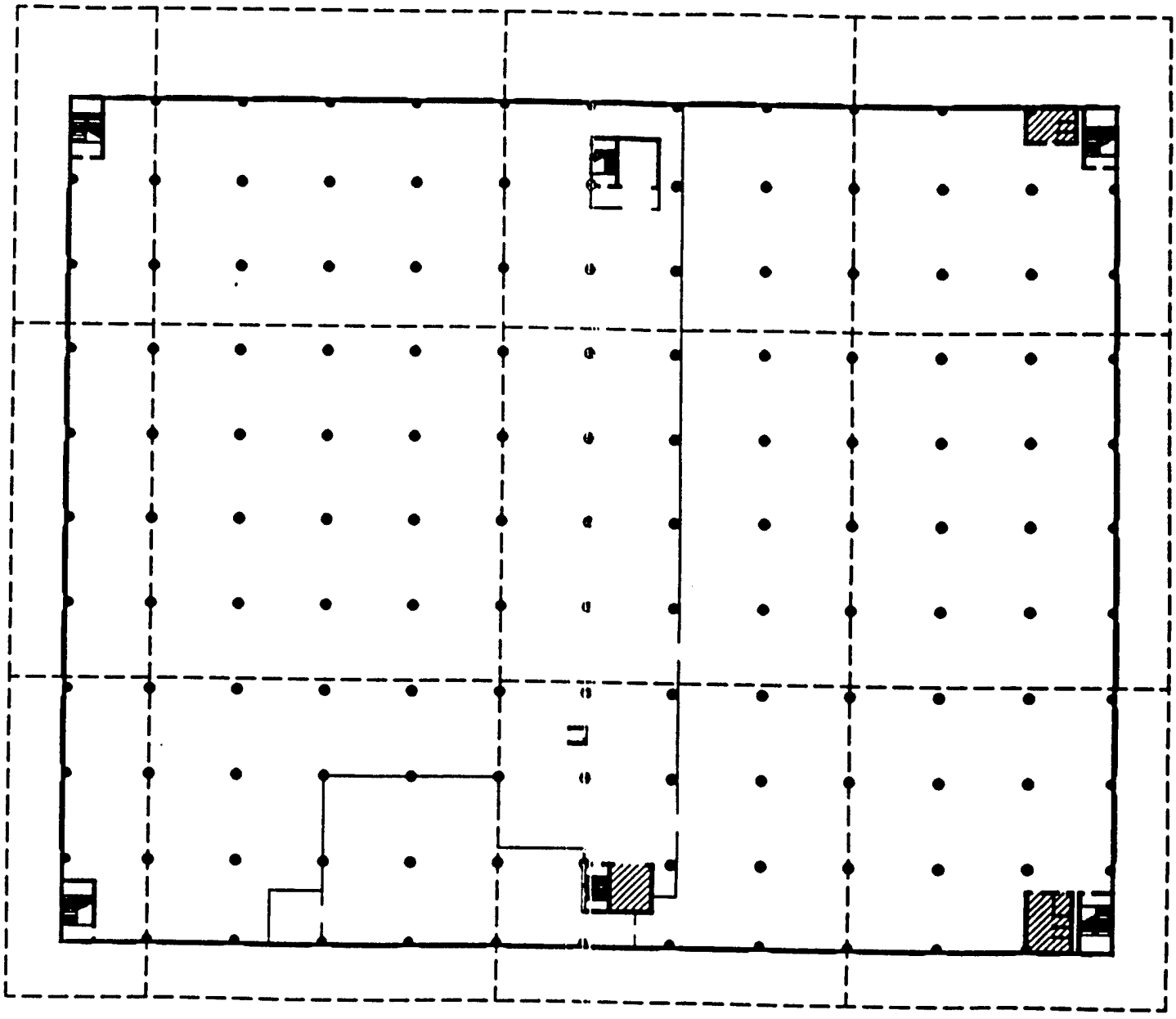
THIRD FLOOR



THIRD FLOOR



FOR



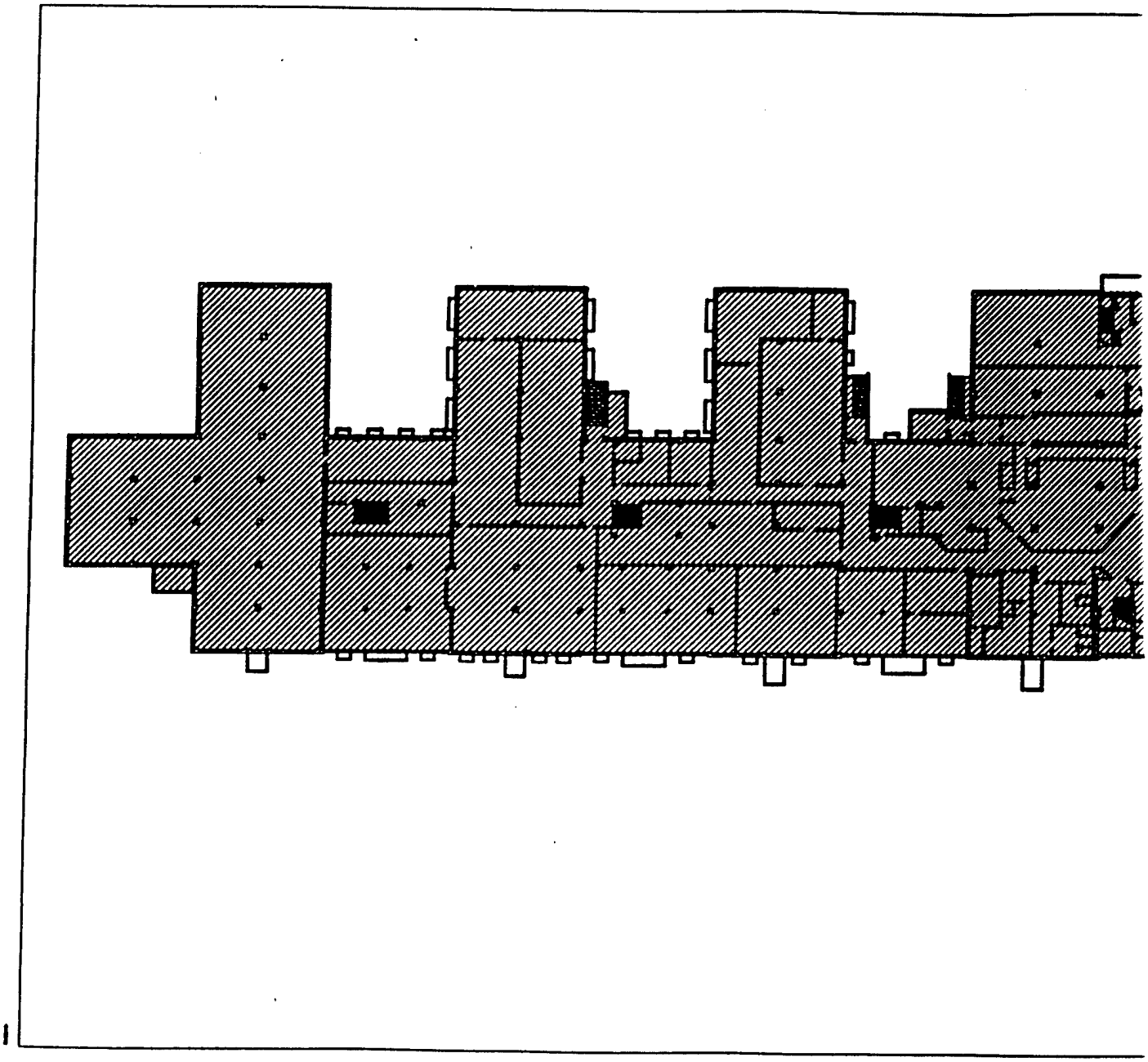
FORLTH FLOOR

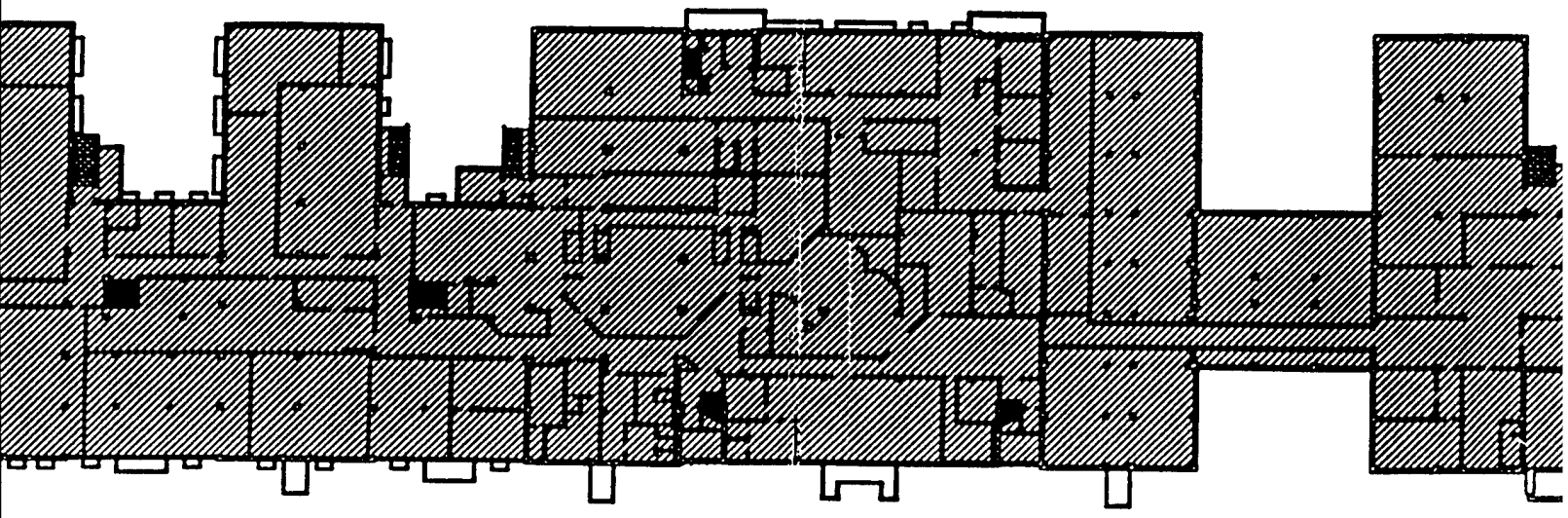
ASCG

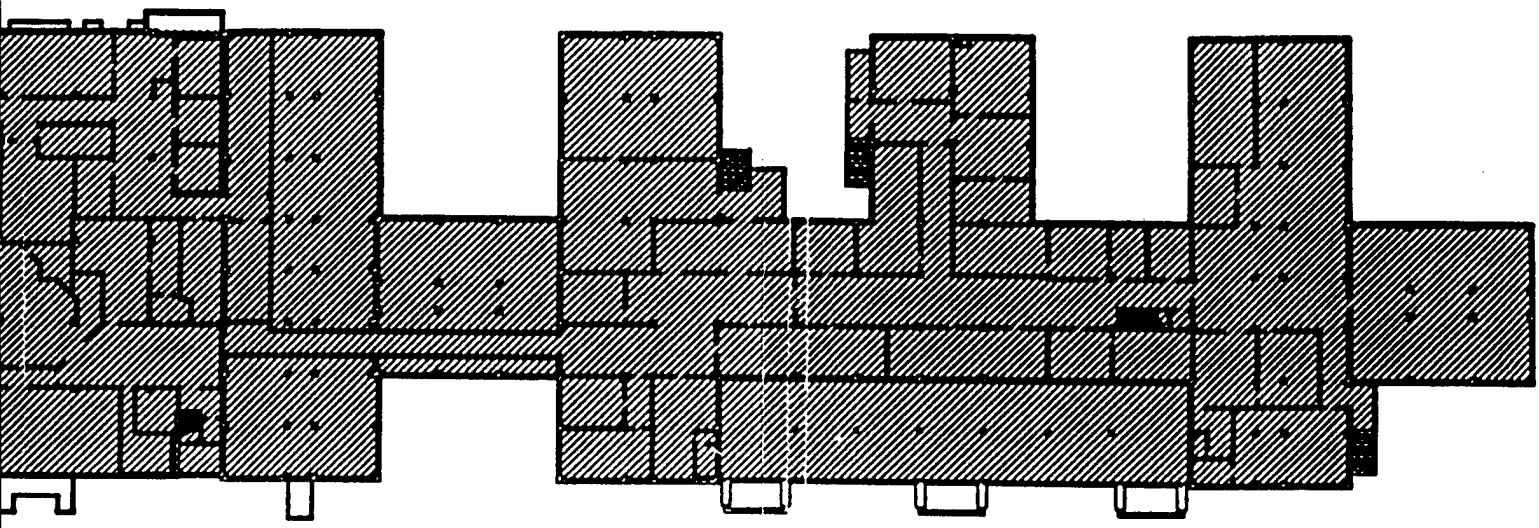
BUILDING 5D (THIRD and FOURTH FLOOR)

RENOVATION FOR CODE COMPLIANCE

DEMOLITION OF INTERIOR



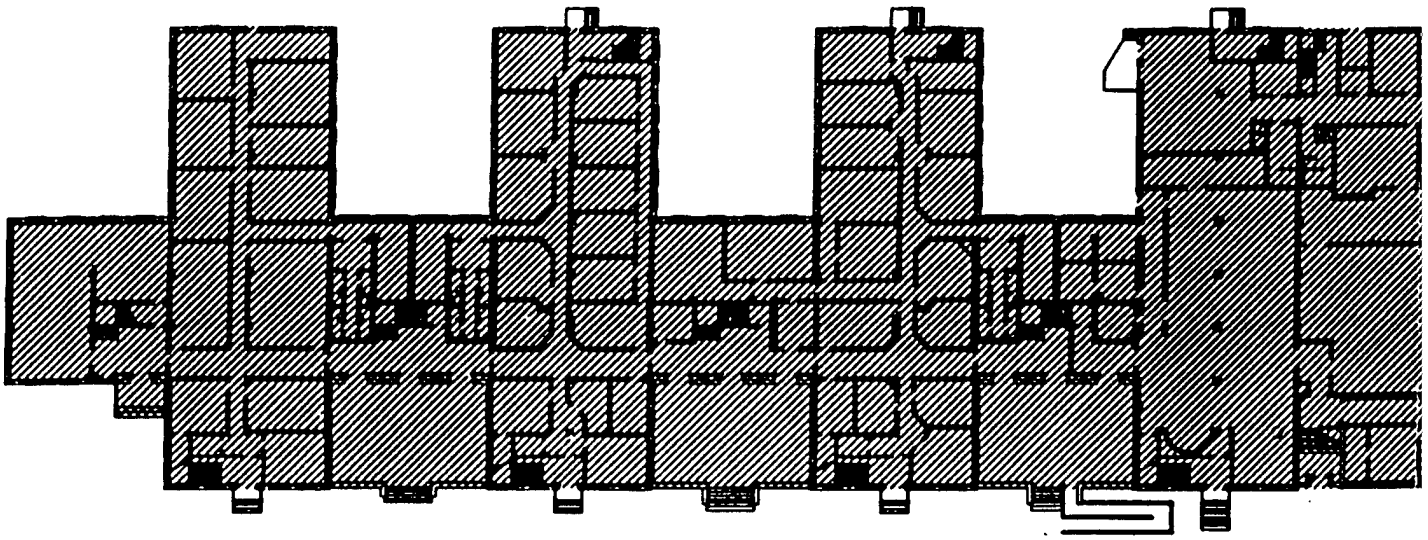


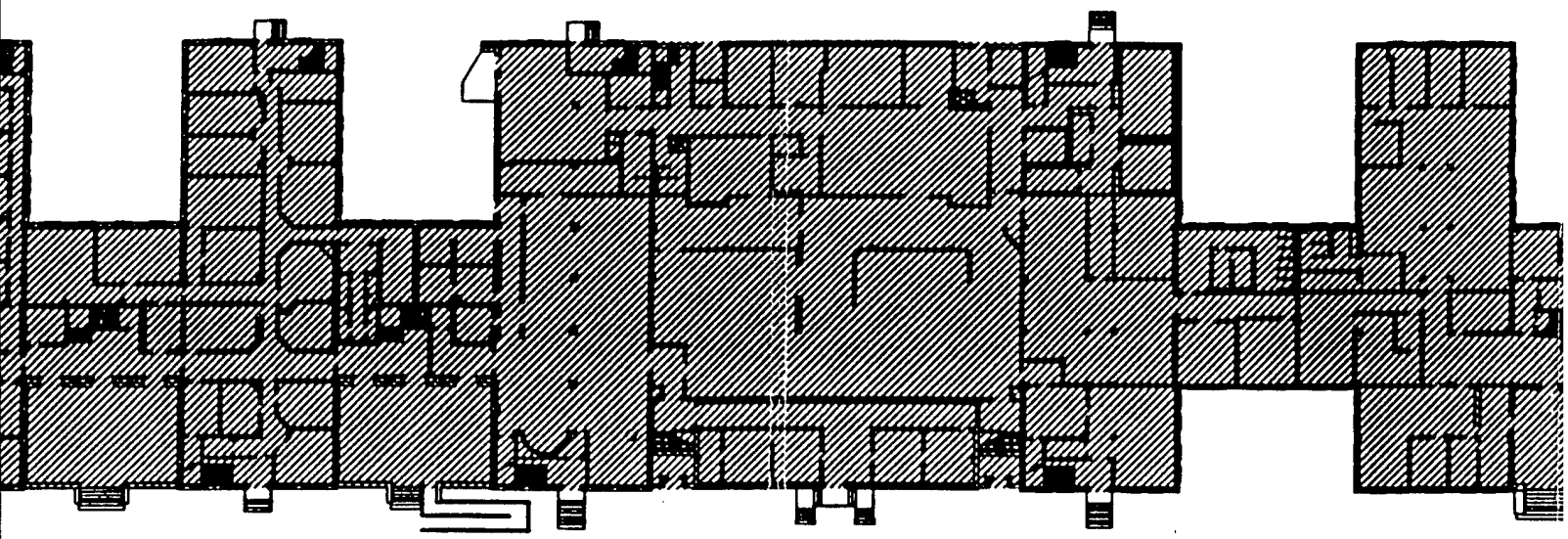


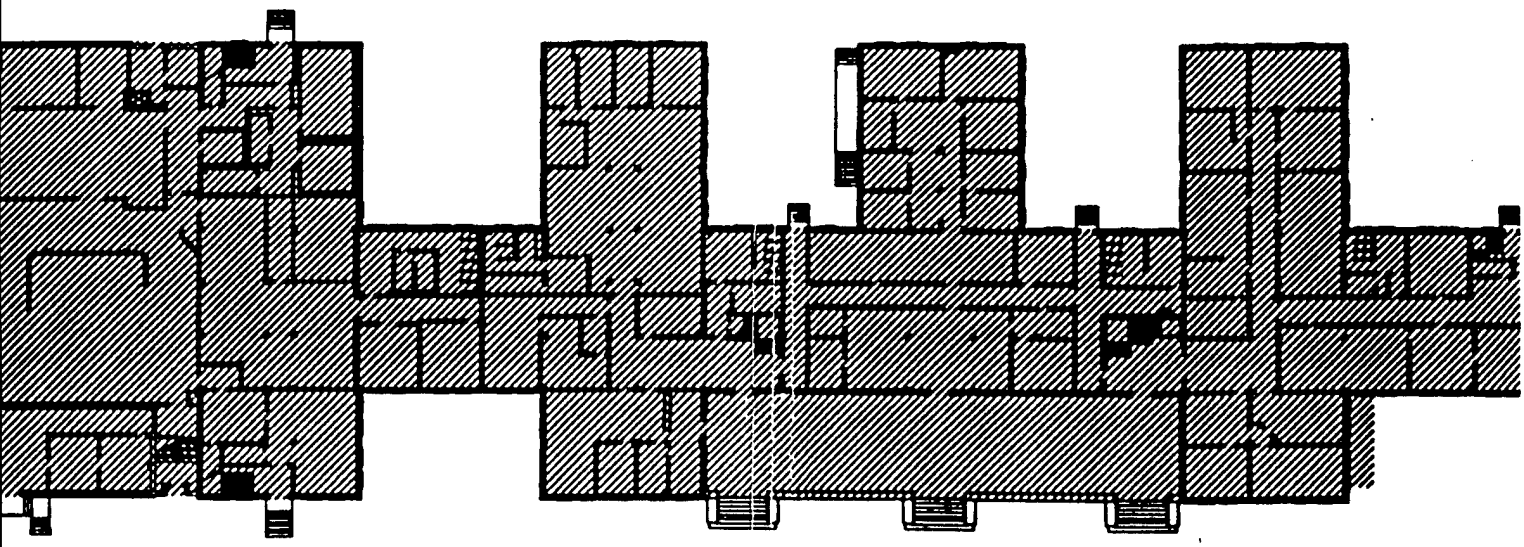
BUILDING 9 (BASEMENT)

RENOVATION FOR CODE COMPLIANCE

DEMOLITION OF INTERIOR





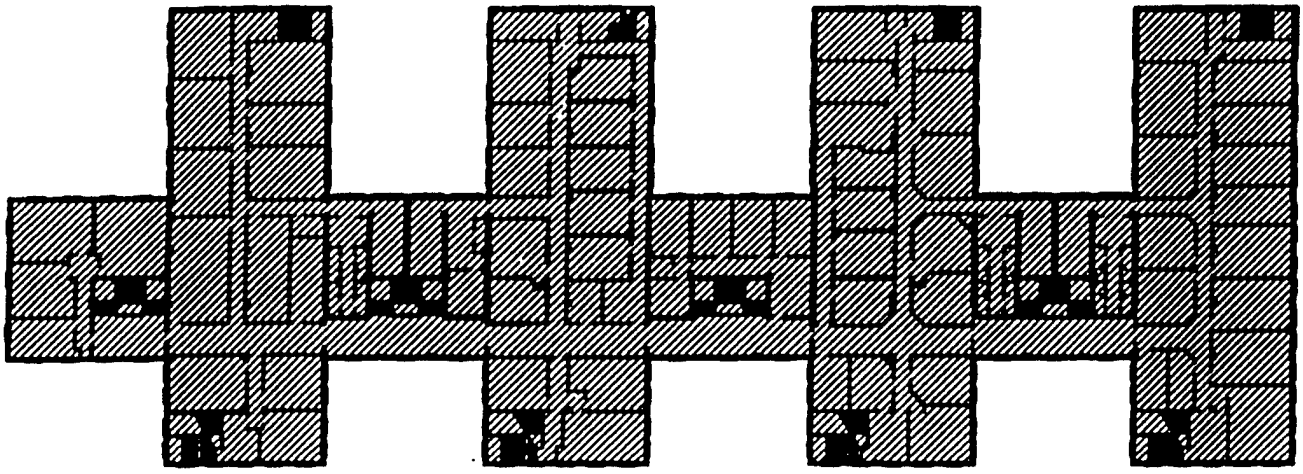


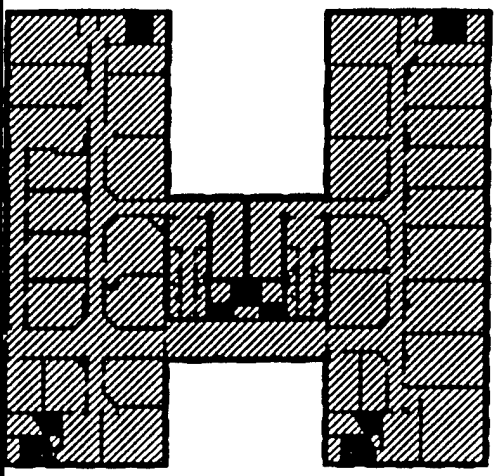
ABCC

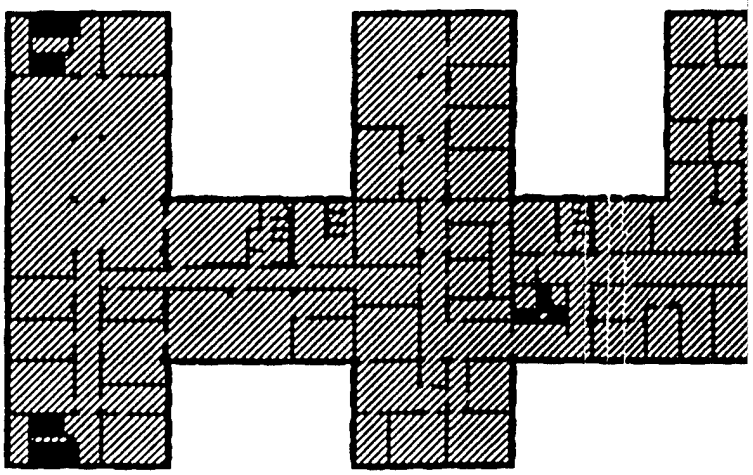
BUILDING 9 (FIRST FLOOR)

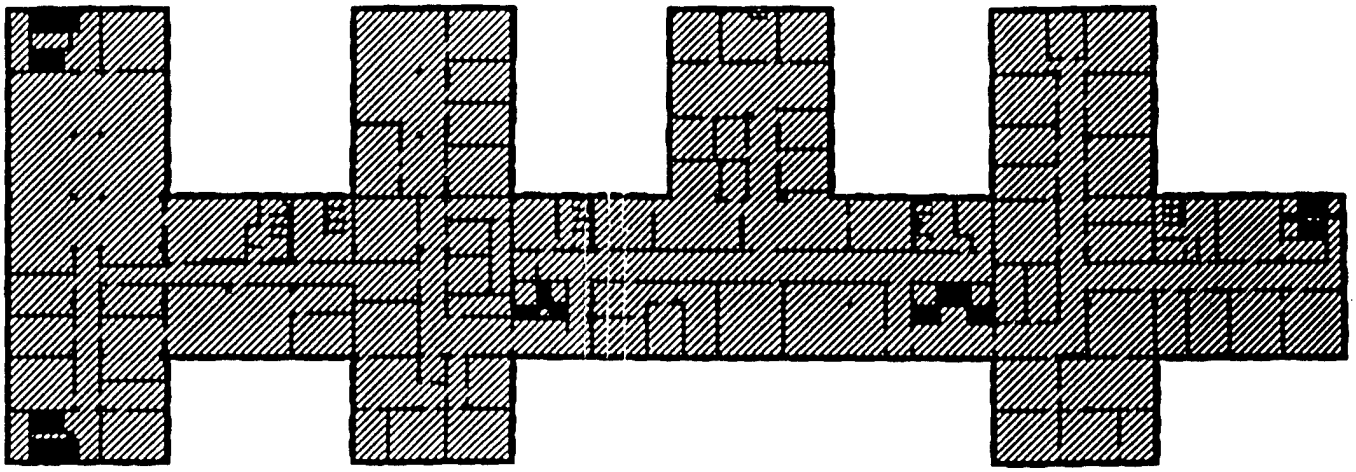
RENOVATION FOR CODE COMPLIA

DEMOLITION OF INTERIOR







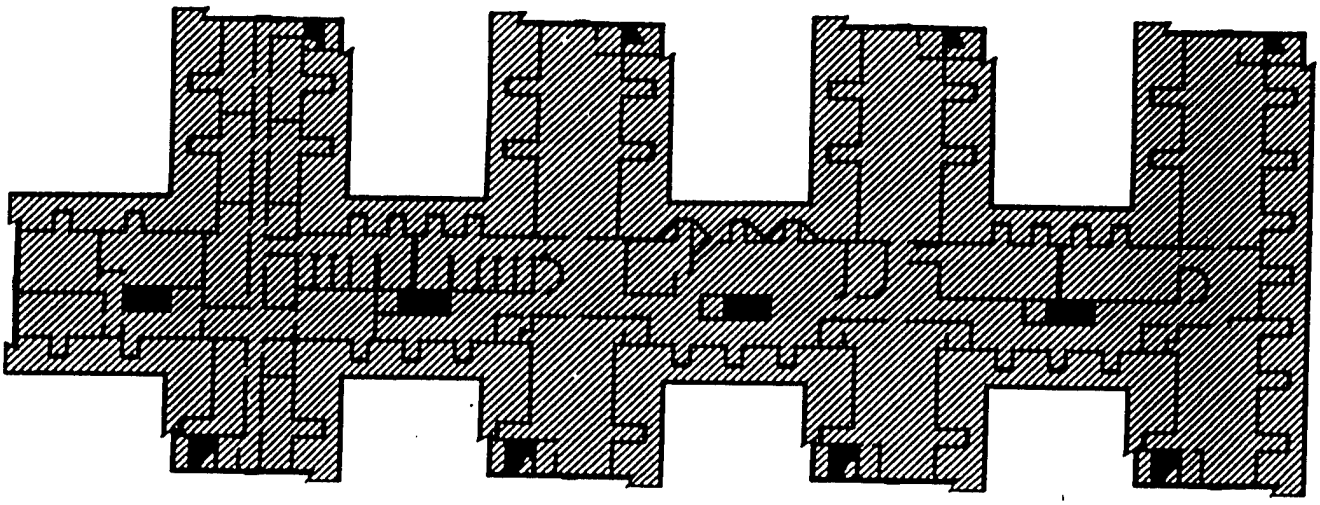


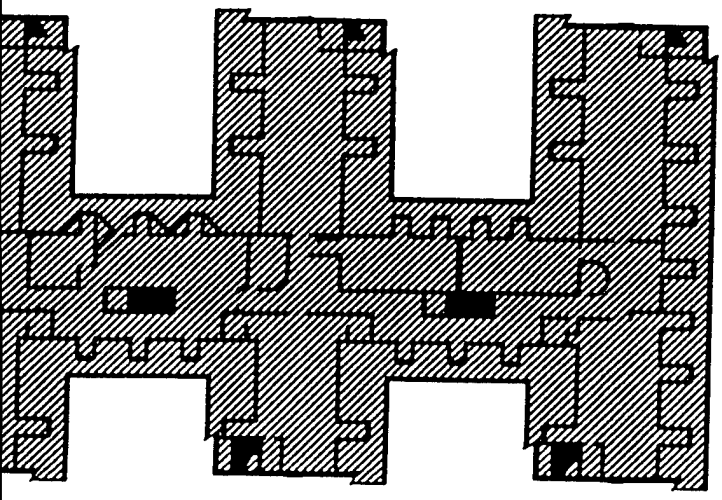
ABCC

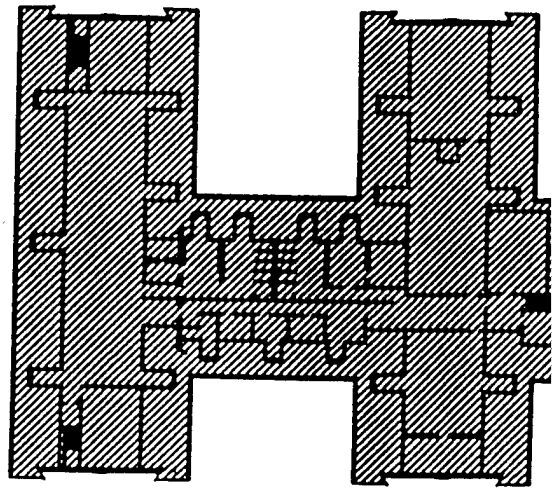
BUILDING 9 (SECOND FLOOR)

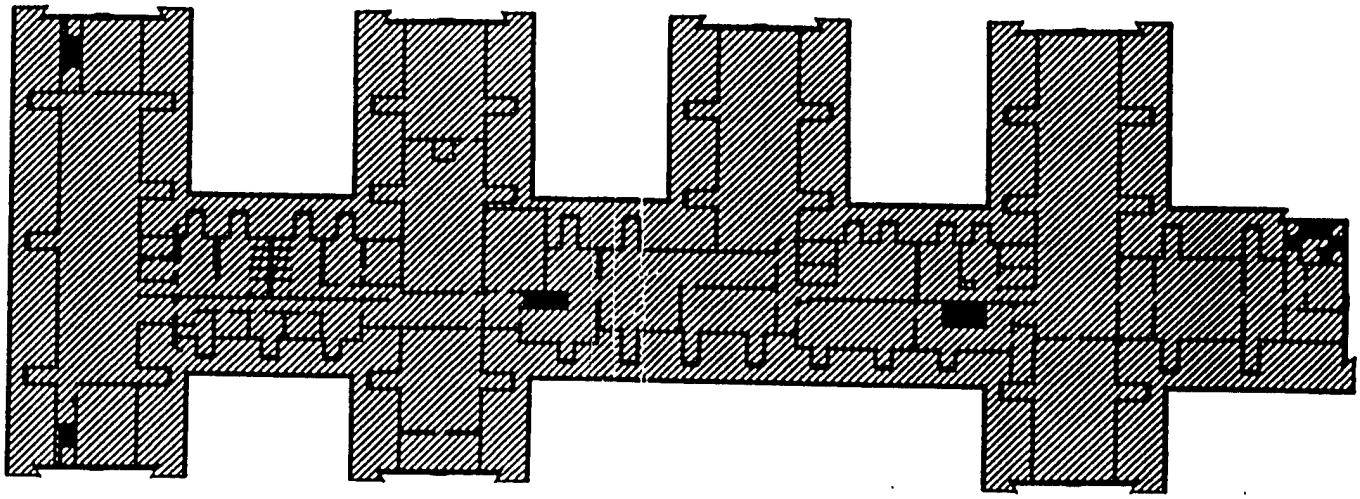
RENOVATION FOR CODE COMPLIANCE

DEMOLITION OF INTERIOR





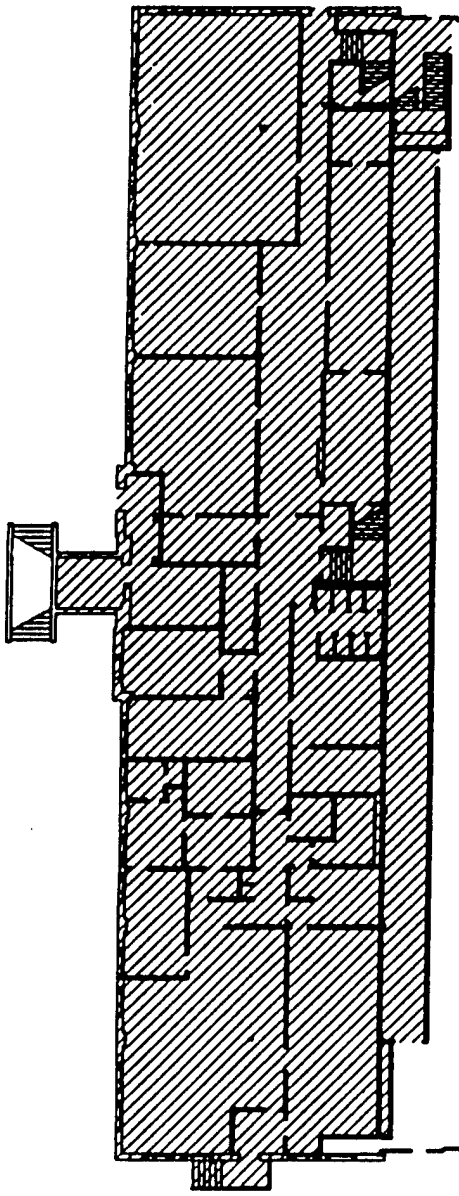


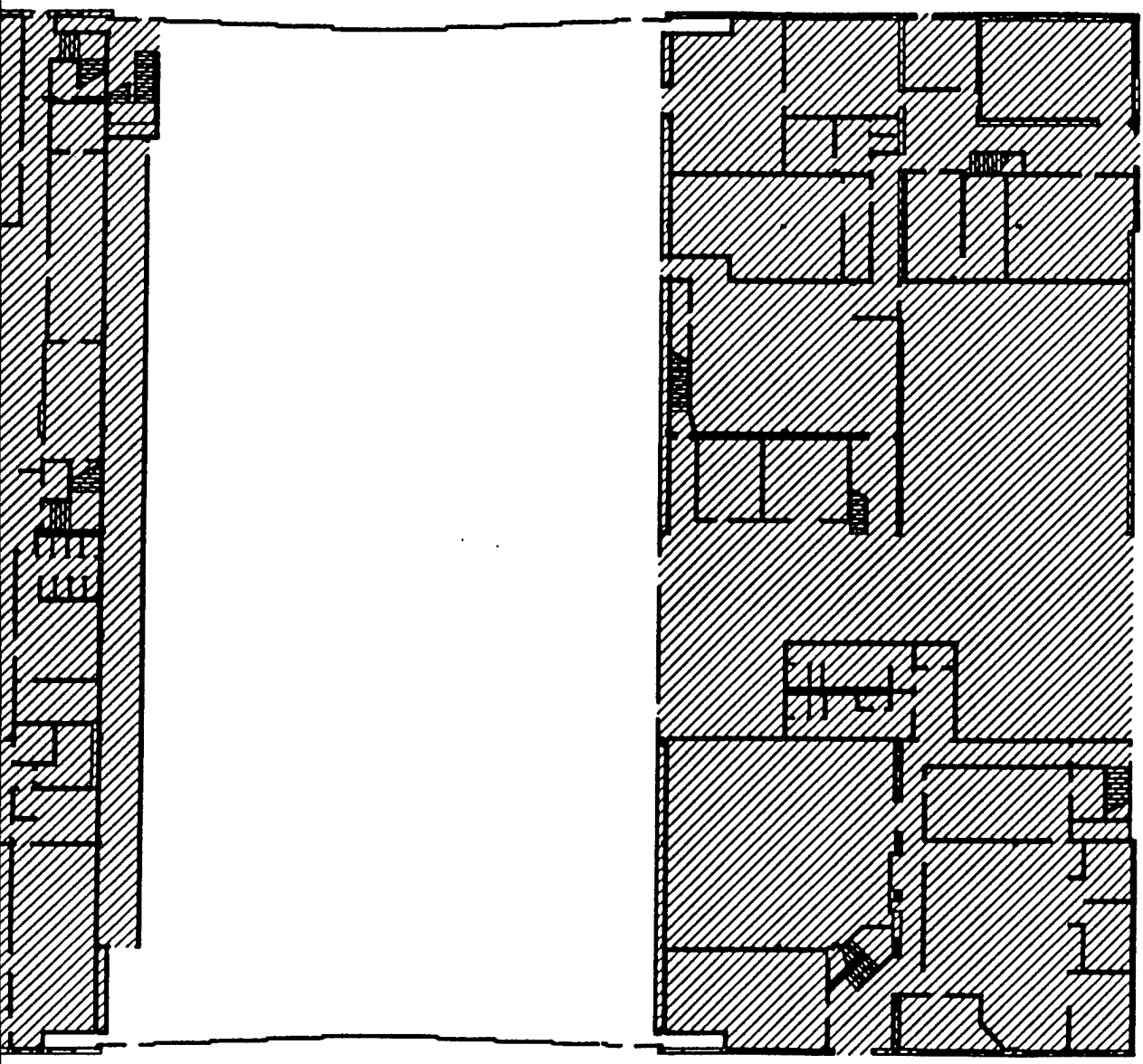


BUILDING 9 (THIRD FLOOR)

RENOVATION FOR CODE COMPLIANCE

DEMOLITION OF INTERIOR



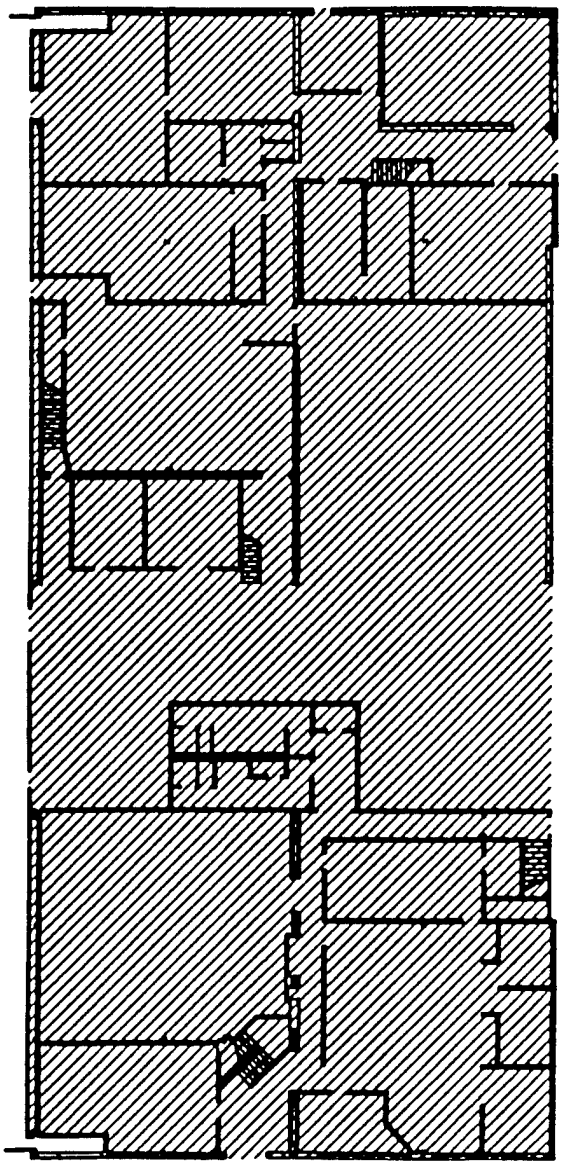


ASCG

BUILDING 3

RENOVATI

DEMOLITIC

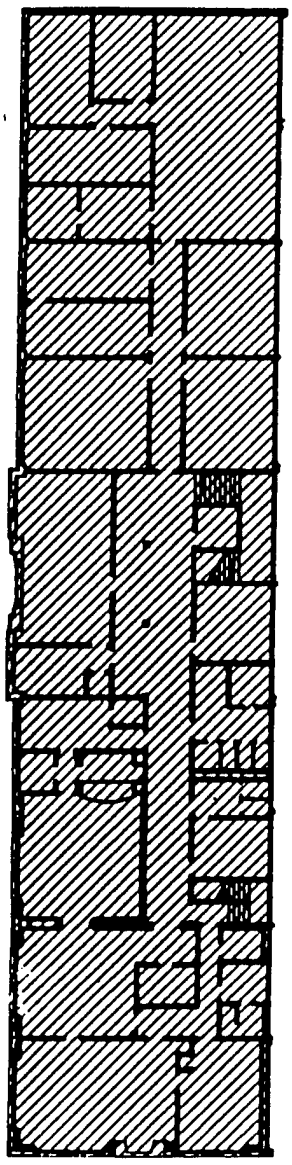


ASCG

BUILDING 30 (GROUND FLOOR)

RENOVATION FOR CODE COMPLIANCE

DEMOLITION OF INTERIOR



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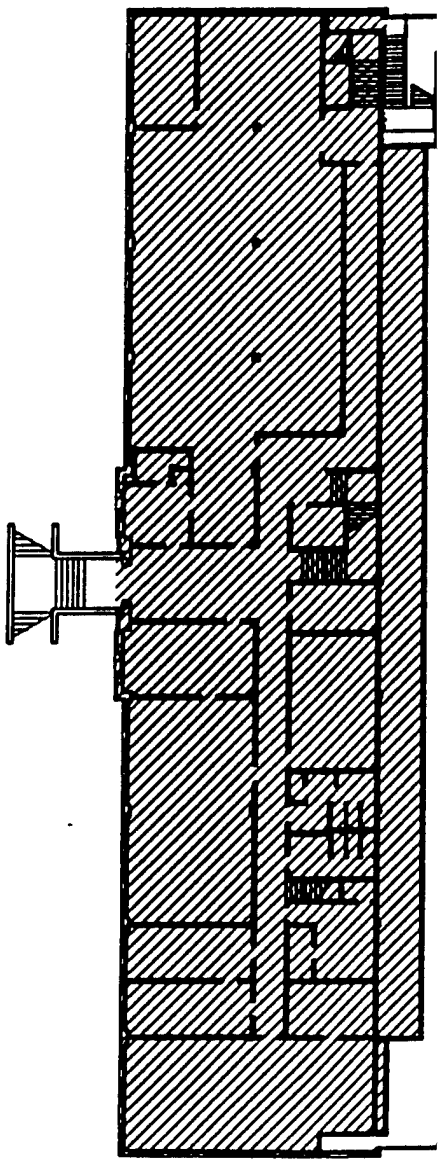

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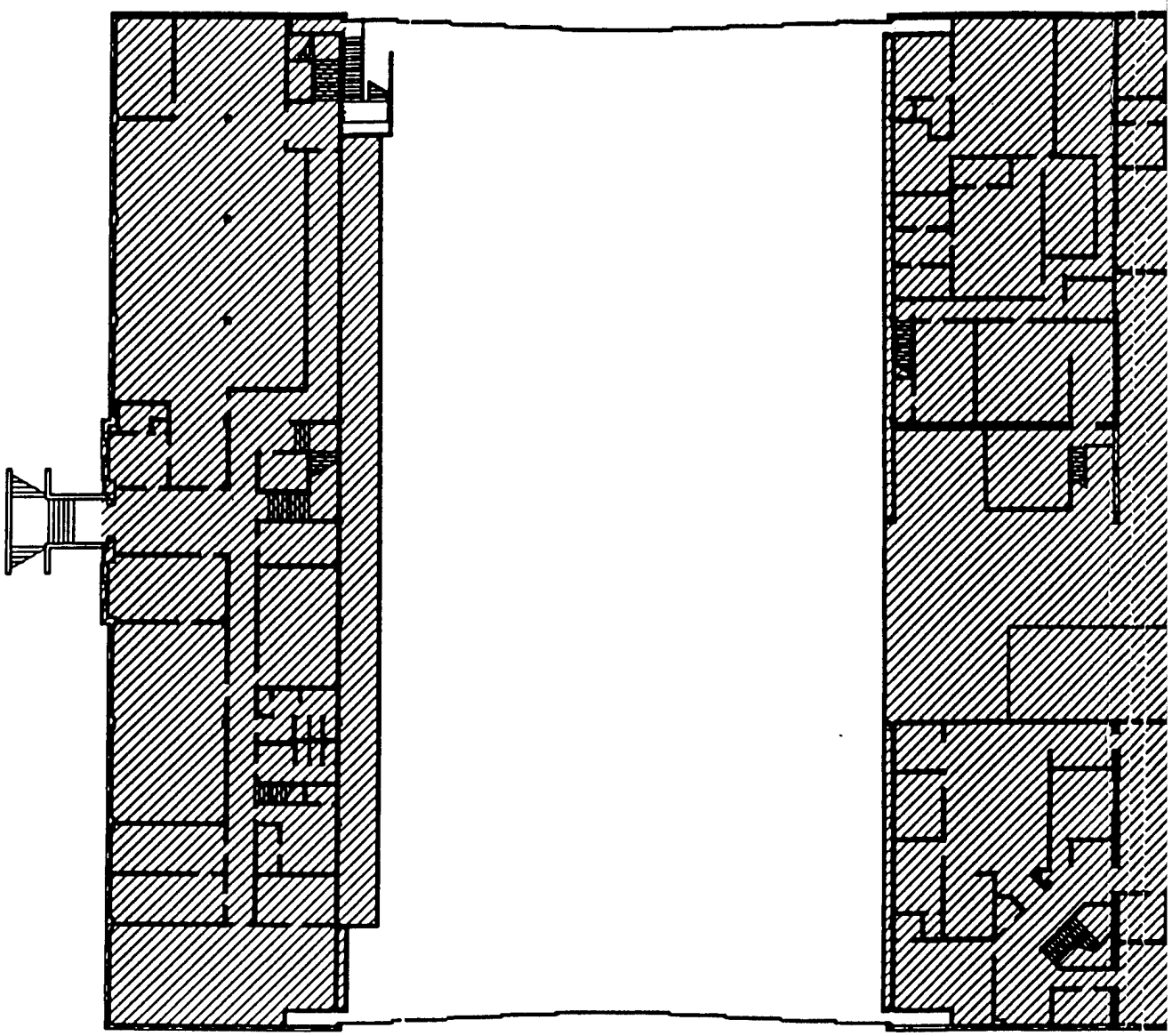

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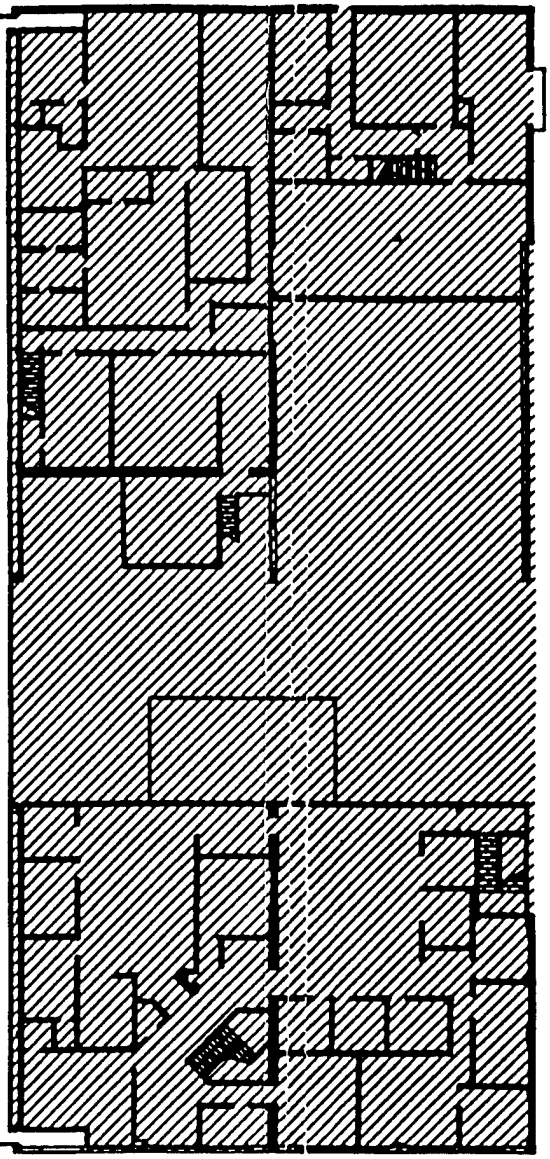

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RENOVATION FOR CODE COMPLIANCE

DEMOLITION OF INTERIOR

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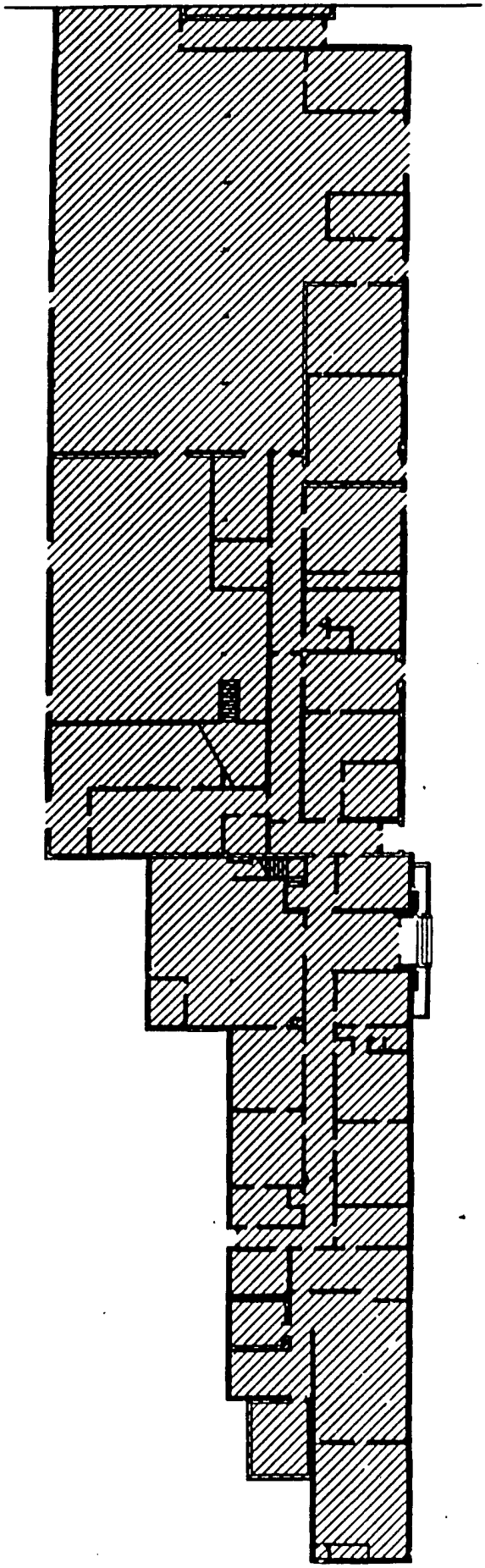

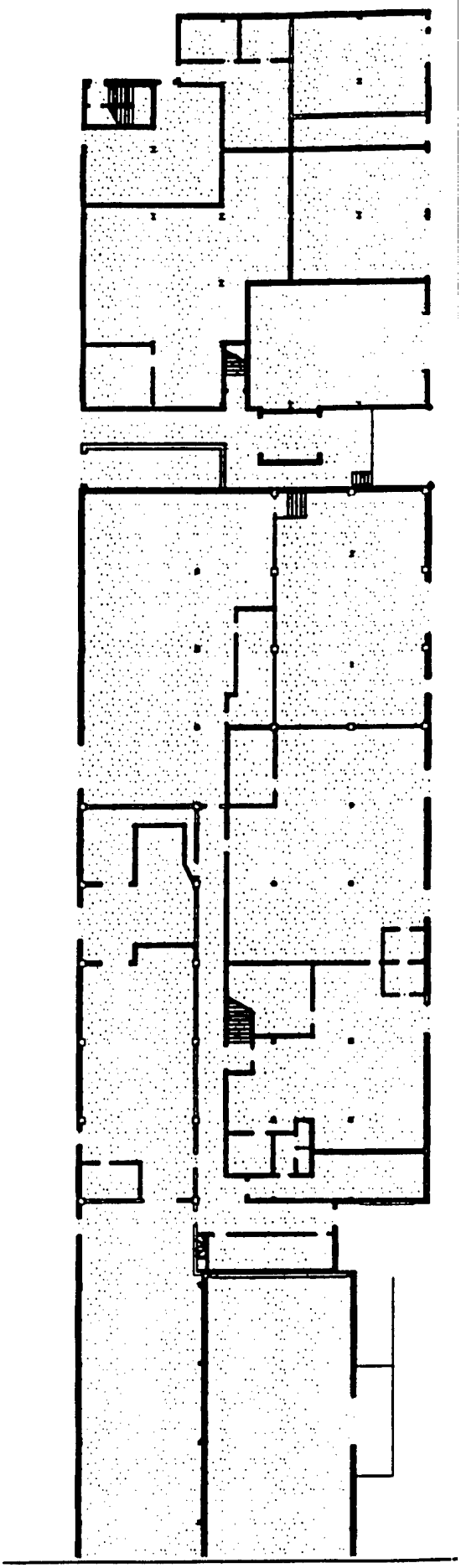

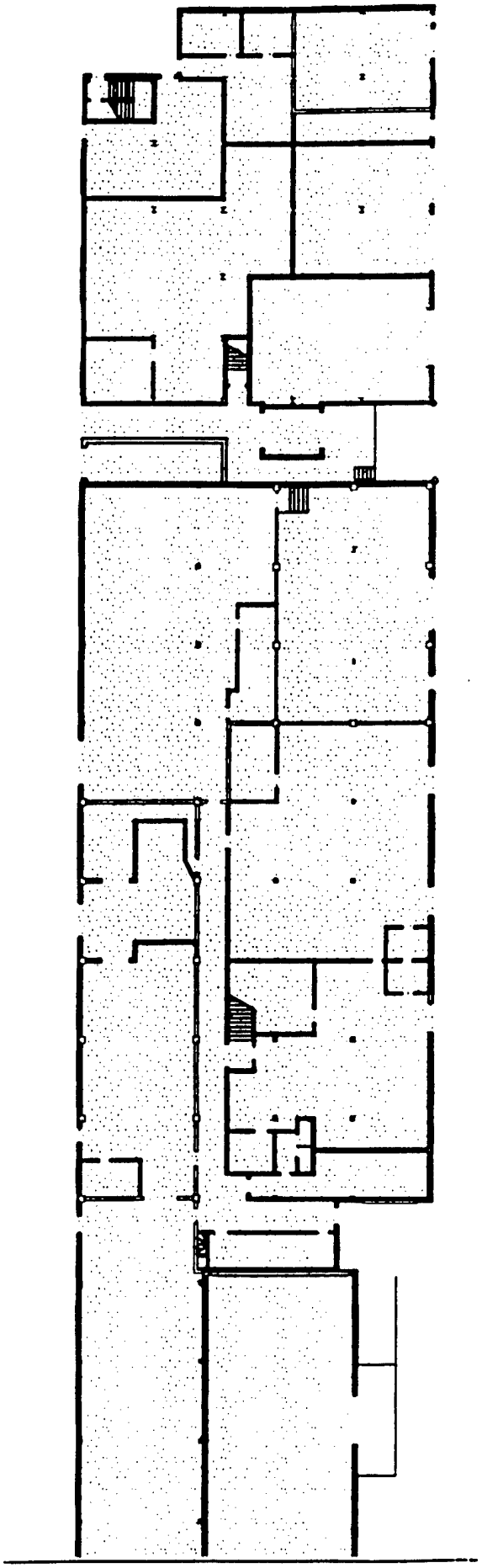

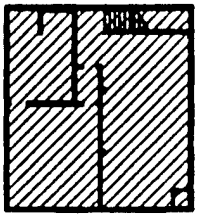

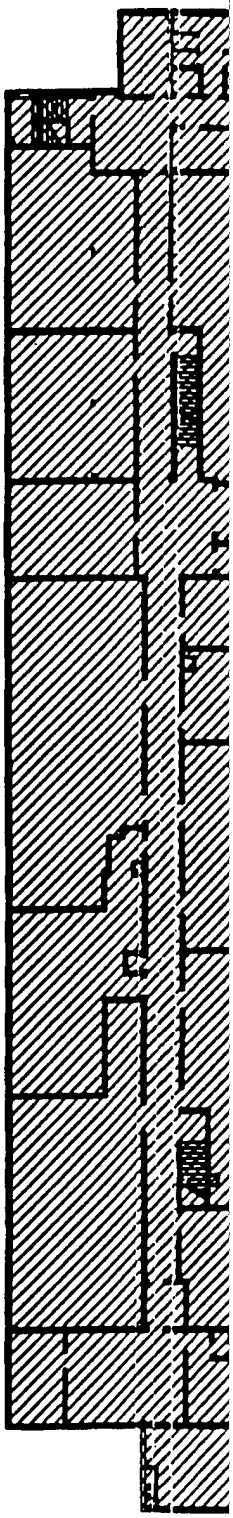

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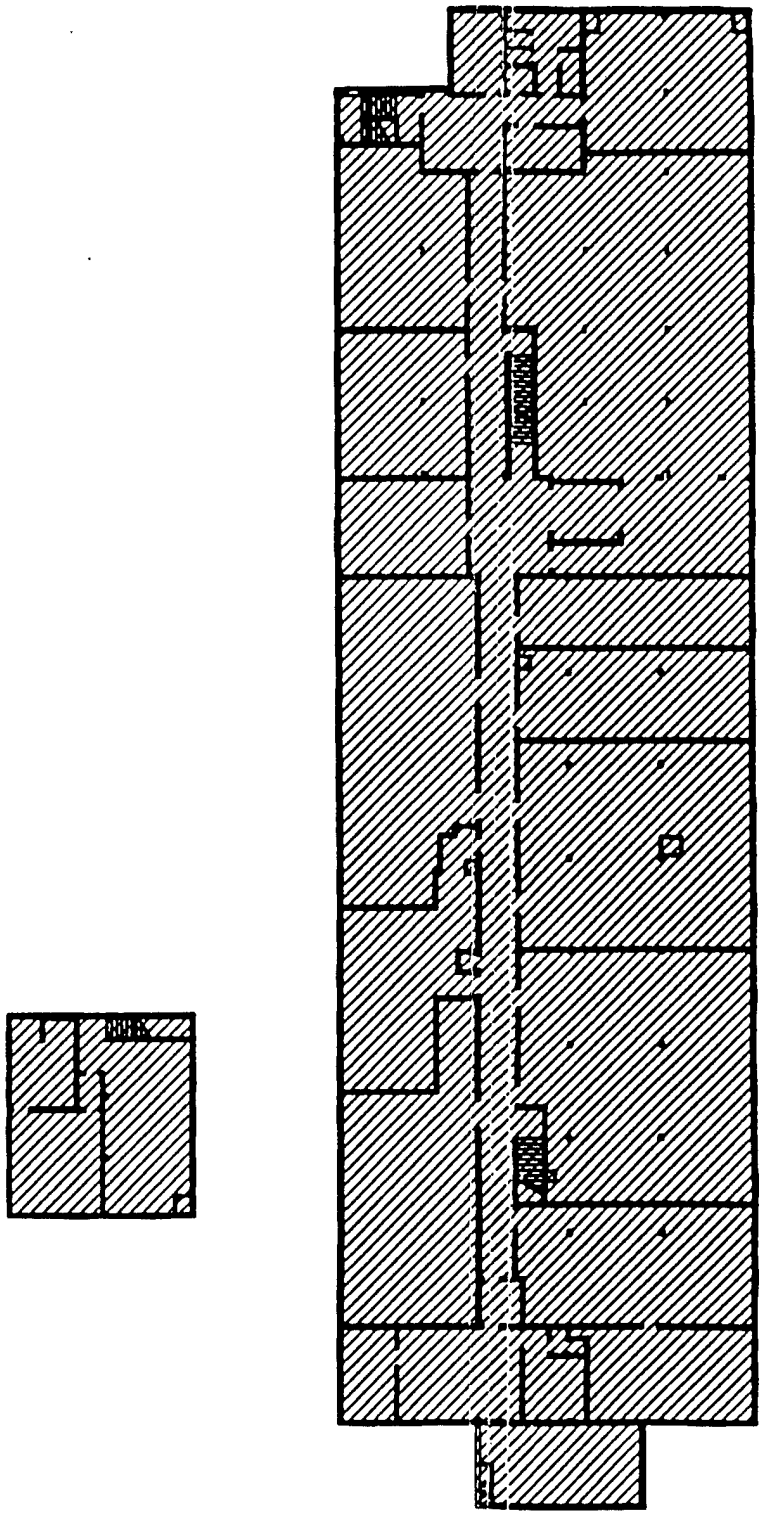

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BUILDING II

RENOVATION FOR CODE COMPLIANCE

DEMOLITION OF INTERIOR

Appendix E

SAND POINT FACILITY INFORMATION

Table E-1
Sand Point Facility Information

Building Number	Building Function	Square Footage	Year Built	Modification Date
2	Marine Corps training	144,232	1929	1989
5	Warehouse	417,467	1929	1982
6	Bowling alley	10,793	1939	
9	Enlisted barracks	223,516	1929	1989
11	Public Works/shops	59,206	1940	1989
12	Boiler plant	5,653	1930	
15	Hobby shop/arts and crafts	3,268	1938	
18	Fire station	14,137	1936	
25	Administrative	27,892	1936	
26	Officer quarters	17,282	1937	1992
26A	Storage	16,082	1937	
27	Reserve training	114,617	1937	1984
29	Dispensary	33,744	1937	
30	Administrative	80,066	1938	1989
31	Boathouse	3,141	1938	
38	Sentry house	58	1942	
40	Paint shop	924	1943	
41	Pass and identification	2,030	1939	
42	Electrical dist. shelter	682	1939	
47	Recreation facility/gym	50,060	1941	1989
67	Garage	33,720	1941	
69	Detached garage	6,776	1940	
98	Sewage pump station	93	1941	
115	Public works storage	1,500	1941	
119	Pump house	95	1941	
138	Security	12,806	1942	
192	Administrative	4,800	1944	1989
193	Commissary/exchange	93,334	1943	
195	Travel agency	819	1984	
198	Thrift shop	300	1960	
204	Laboratory	9,572	1944	
206	Equipment shed (demolished)	315	1944	
222	Administrative	30,126	1944	1981
223	Family service center	9,080	1944	1989
224	Bachelors' enlisted quarters	38,264	1944	1984
228	Uniform shop	4,074	1944	
244	Maintenance shop	5,011	1944	1975
275	Small craft boathouse	288	1945	
299	Public Works storage	1,120	1949	
301	Country store	9,500	1951	
308	Package store	4,202	1951	1977
310	Auto hobby shop	4,020	1952	1989

Table E-1 (Continued)
Sand Point Facility Information

Building Number	Building Function	Square Footage	Year Built	Modification Date
321	Berthing pier	400 lineal feet	1938	
324	Small boat dock	140 lineal feet	1939	
330	Family housing	6,390	1939	
331	Family housing	6,233	1939	
332	Family housing	6,233	1939	
333	Family housing	1,990	1939	
334	Family housing	2,113	1939	
342	Service station	300	1974	
344	Country store	11,000	1974	1978
345	Service bay	5,298	1976	
401	Sentry house	60	1967	
402	Boathouse	1,760	1949	
403	Standby generator plant	164	1971	
404	Recreation pavilion	1,120	1979	
405	Covered walkway	1,120	1986	
406	Brig	29,270	1988	
407	Hazardous waste storage	548	1989	
408	Motorcycle parking	660	1987	
409	Sewage pumping station	175	1989	
410	Recreation pavilion	888	1990	
411	Recreation pavilion	888	1990	

Appendix F

SEATTLE SCHOOL DISTRICT ENROLLMENT

Table F-1
Seattle School District Enrollment

Grade Level	Actual Enrollments on October 1				Actual		Projected Enrollments				
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Kindergarten	3,787	3,741	3,824	3,768	3,970	3,971	3,999	4,043	4,087	4,132	4,176
Grade 1	3,743	4,050	3,958	3,991	3,896	4,074	4,154	4,184	4,230	4,276	4,323
Grade 2	3,780	3,688	3,838	3,879	3,881	3,860	3,973	4,051	4,080	4,125	4,170
Grade 3	3,843	3,707	3,659	3,793	3,862	3,842	3,819	3,930	4,008	4,036	4,081
Grade 4	3,642	3,737	3,562	3,611	3,756	3,793	3,760	3,737	3,846	3,922	3,950
Grade 5	3,509	3,585	3,629	3,547	3,540	3,704	3,732	3,698	3,675	3,783	3,857
Grade 6	3,237	3,479	3,352	3,509	3,366	3,384	3,554	3,581	3,549	3,527	3,630
Grade 7	3,000	3,196	3,161	3,225	3,367	3,318	3,251	3,414	3,440	3,409	3,388
Grade 8	2,973	2,922	2,970	3,096	3,111	3,307	3,205	3,140	3,298	3,323	3,293
Grade 9	3,838	3,986	4,081	3,178	3,238	3,261	3,903	3,783	3,706	3,893	3,922
Grade 10	3,063	3,156	3,184	3,250	3,298	3,281	2,914	3,488	3,380	3,312	3,479
Grade 11	2,701	2,662	2,565	3,023	3,005	3,098	2,950	2,620	3,136	3,039	2,977
Grade 12	2,477	2,535	2,293	3,061	3,296	3,214	3,193	3,040	2,700	3,232	3,132
K-12 headcount	43,593	44,444	44,076	44,931	45,586	46,109	46,407	46,709	47,135	48,009	48,378

Source: State of Washington Superintendent of Public Instruction, Olympia, Washington, April 1996.

Appendix G

PROPERTY VALUE STUDY

APPRAISAL OF

PROPERTY VALUE IMPACT ANALYSIS
Sand Point Reuse EIS

FOR

URS Consultants, Inc.

AS OF

June 6, 1994

JOB NO.

S994-078

PREPARED BY

MICHAEL B. LAMB, MAI, SRA
APPRAISER AND CONSULTANT

LAMB HANSON LAMB
APPRAISAL ASSOCIATES, INC.
Professional Real Estate Appraisers and Consultants

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1.0 EXECUTIVE SUMMARY

1.1 SCOPE OF WORK

Consider the alternatives for the reuse of the Naval Station Puget Sound, Sand Point. These are the City of Seattle Community Preferred Reuse Plan for Sand Point, the Muckleshoot Indian Tribe Proposed Reuse Plan for the Naval Station Puget Sound, Sand Point, and the "No Action" alternative. After considerable research involving property examination, "matched pairs" analysis, literature review, and interviews (more specifically delineated under 4.0 METHODOLOGY, Page 4-1), we have concluded as follows:

1.2 THE CITY'S PLAN

In each plan, there are benefits and detriments affecting neighborhood property values.. Our prime emphasis has been the evaluation of the introduction of Homeless Housing into a generally affluent neighborhood. Under Section 7.0, PROPERTY VALUATION, the applicable Foundations of Property Valuation in this case seem most aptly represented by anticipation, change, conformity and externalities.

1.2.1 Homeless Housing

With proper community presentation, screening, and monitoring, there should be no diminution of value with introduction into the neighborhood of homeless housing. Historically, depending upon neighborhood reaction, there may be some residents who would list their homes at below market prices. Within a year generally prices will become stable and return to their market level.

o Phase III

Our research indicates that the Phase III project, construction of 28 "urban cottages" would due to lack of conformity, have a deleterious effect upon property values in the range of 2% to 5% or 6%.

Mitigation

The "urban cottage" concept is not consistent with the style and character of the community. In our opinion, housing providing greater mass, such as duplexes, triplexes or multiple housing would be more acceptable to the community. We are not architects, but are viewing it from the standpoint of property valuation.

1.2.2 Other Elements of the City's Plan

The other parts of the City Plan have no impact, either positively or negatively on property values.

1.3 THE TRIBE'S PLAN

1.3.1 Vocational School and Two Year College

Our studies have confirmed there is no diminution of property values as a result of the proposed

school, although the increased traffic will affect property values.

1.3.2 Traffic Impact

As a result of the school enrollment primarily, our opinion is that property valuations will be impacted along Sand Point Way NE to the extent of 3% to 7%. The greater the distance from the traffic congestion, the less the impact.

o Mitigation

A reduction in the school's enrollment to approximately 1,500 students will cause no lessening of property valuation.

1.3.3 The Tribe's Marina

Due to the perhaps thirty or more power boats moored in the marina, net repair, and leaving at dusk to gillnet, our research indicates a loss of property value on the adjacent waterfront home of 7% to 10% with a decreasing proportionate impact the greater the distance from the marina.

o Mitigation

Nearby houses are impacted to a greater extent with the Tribal Marina than other marinas due to a lack of buffers. Suggested mitigation is difficult other than storing the vessels in hangars and reducing their number.

1.3.4 Industrial Park

The increased employment will affect the traffic congestion, however, reduction of school enrollment will moderate that. The industrial park needs to be restricted in use to light fabrication, research or assembling, which will not require constant truck traffic in order not to impact property values, provided school enrollment is reduced. The buffering is adequate to compensate for the industrial park.

1.4 "NO ACTION" PLAN

According to the Navy, the facilities at Sand Point would be maintained "as is." This seems inconsistent with the Base being designated for closure and the Navy's assets declared excess. However, maintaining the Base "as is" would result in additional cost to arrest physical obsolescence and temporizing in the utilization of an asset that could be used more effectively under either of the two alternative proposals.

2.0 SCOPE OF WORK

Naval Station Puget Sound, Sand Point, is designated for closure and the Navy's assets are to be excessed. The proposed reuse of this property, both land and improvements, must be analyzed under the National Environmental Policy Act (NEPA) for environmental impacts. *Our EIS (Environmental Impact Study) assignment is a discussion of the property value related impacts of each alternative: the City of Seattle's Proposal, the Muckleshoot Indian Tribe's Proposal, and a "No Action" Proposal in which the Navy acts in the capacity of a caretaker with the property not utilized.* The particular emphasis of the City's proposal should be directed toward the establishment of up to 250 units of housing for the homeless around Sand Point, while the particular emphasis for the Tribe's proposal is the creation of a college with 5,000 to 7,000 student enrollment. A general discussion of the impact on the neighborhood is desired rather than a parcel-by-parcel analysis. Along with the value discussion, measures to mitigate property related impacts of the alternatives are included in the Scope of Work.

2.1 ALTERNATIVES TO BE CONSIDERED

2.1.1 City of Seattle Community Preferred Reuse Plan for Sand Point

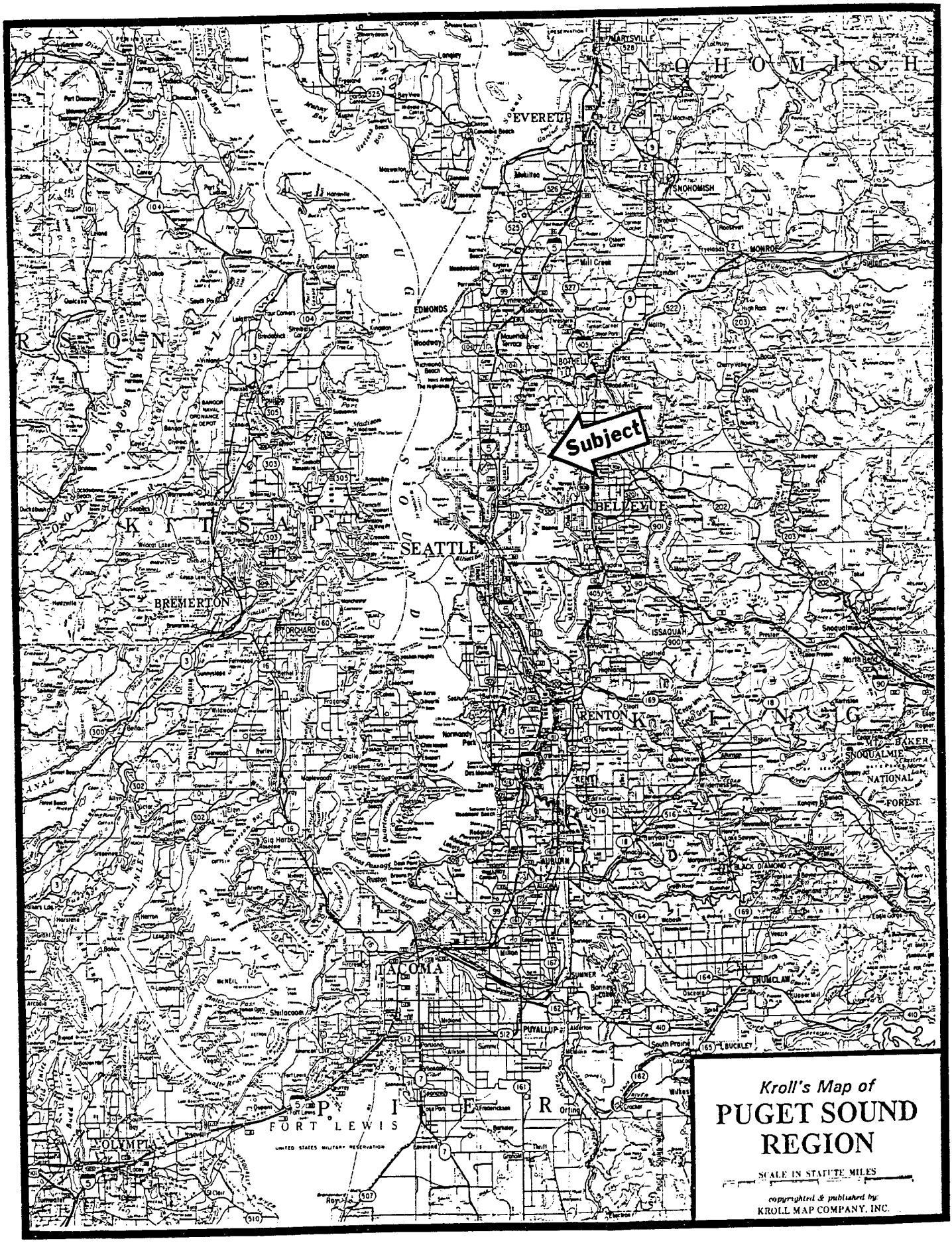
The City's Plan for 151 acres encompasses recreational, educational and cultural facilities and affordable housing. The Plan includes expansion of Magnuson Park with restoration of an original wetlands area called Mud Lake; a new indoor tennis center; a public park with a sailing center and access to Pontiac Bay on Lake Washington; an education and community activities area; an arts center with performing, studio and classroom spaces; up to 250 units of housing including housing for homeless persons and families in transition; allowances for future expansion of University of Washington student housing; and the use of existing facilities by two federal agencies (NOAA and U.S.Fish and Wildlife Service).

2.1.2 Muckleshoot Indian Tribe Proposed Reuse Plan for the Naval Station Puget Sound, Sand Point

The Tribe's plan for 85 acres calls for a Native American vocational and two year college (5,000 to 7,000 students); marina with general public recreational access; fisheries enhancement facility; restaurant; light industry spaces; and use of existing facilities by two federal agencies (NOAA and U.S.Fish and Wildlife Service). The Tribe's plan accommodates present open space use of an additional 66 acres at the south end of the Base.

2.1.3 "No Action" Alternative in which Navy Acts as Caretaker

The "no action" alternative would leave the base in Navy ownership, in a caretaker status.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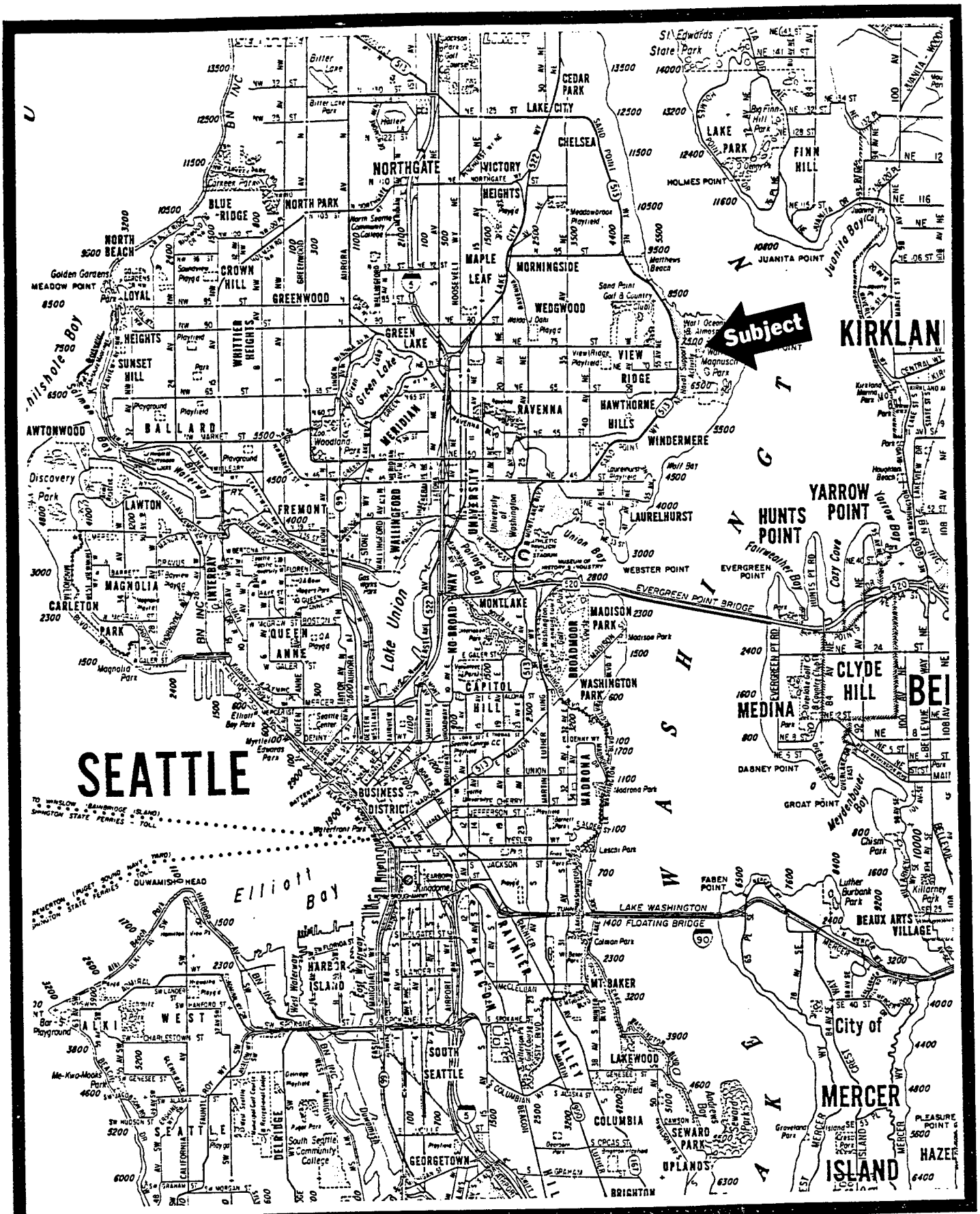

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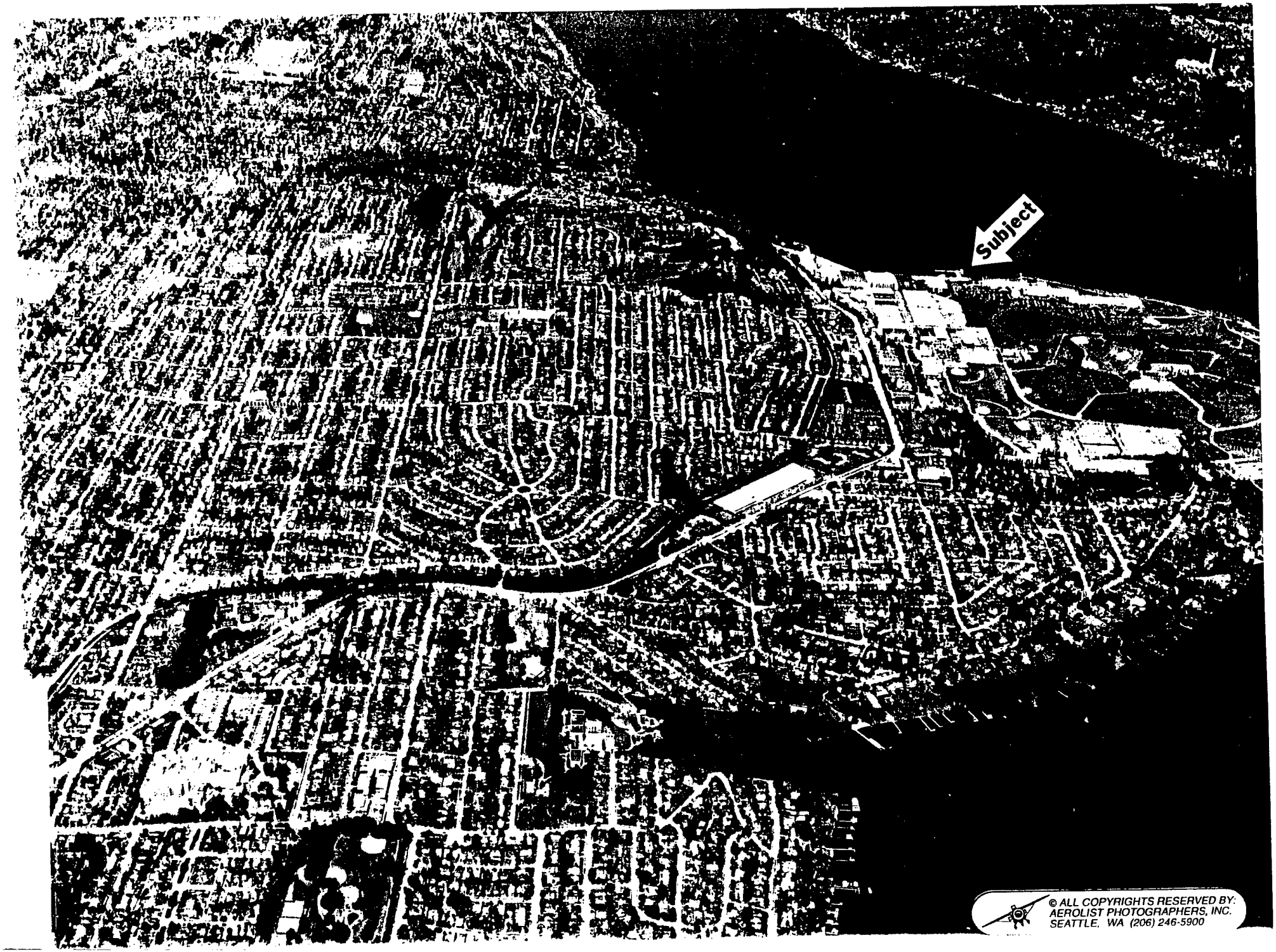
METROPOLITAN AREA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3.0 HISTORY OF SAND POINT

In 1922, King County transferred 366 acres of land to the United States Navy for the Naval Air Station (NAS), Seattle at Sand Point, at 7500 Sand Point Way NE. The Naval Air Station opened in 1925, serving primarily as a reserve training facility. Both Pontiac Bay and Mud Lake were filled in the 1930's to allow construction of a large runway across the peninsula. The construction was done by the Civilian Construction Corps, organized by President Roosevelt to employ the destitute. The CCC camp at Sand Point provided housing as well as employment.

The Works Project Administration (WPA) in 1940 carried out various construction projects to enable Sand Point NAS to become the main supply and repair location for Naval operations in Alaska and the North Pacific.

The NAS achieved its height of activity during World War II with 4,625 Navy and Marine personnel and 2,384 civilians providing repair and logistical services to the Pacific Theater of Operations. Transport squadrons operated cargo flights to Alaska and the Aleutian Islands, supplying stations such as Sitka, Kodiak, Dutch Harbor, Adak and Attu. Outfitting personnel handled the preparation of escort carriers and seaplane tenders built in Tacoma and Vancouver, Washington.

After the war, most flight operations were transferred to the Naval Air Station at Whidbey Island due to better weather conditions, more land and fewer flight restrictions. From 1945 to 1970, the station maintained Naval Reserve squadrons for supplementing active duty forces, both in the continental United States and aboard. Aviation activities officially ceased on June 30, 1970 and NAS Seattle was decommissioned. On July 1, 1970, NAS Seattle was redesignated Naval Support Activity, Seattle.

In 1970, the United States Navy stopped its air activities, and three years later, the facility was divided into three parts. The National Oceanic and Atmospheric Administration (NOAA) received 116 acres, including one-third of the runways and 3,500 feet of the waterfront. The City of Seattle received the southeast portion, including approximately one mile of waterfront, which became Magnuson Park in 1977. The Navy retained the rest. From 1970 until April 1, 1982, the base provided logistic services, such as supply, billeting and administration to the 13th Naval District, Department of Defense and other federal agencies. In April, 1982, Naval Support Activity, Seattle, was designated Naval Station, Seattle, and was later designated Naval Station, Puget Sound on October 10, 1986, because of its increasing support role in the Western Pacific Fleet activities. In 1990, the United States Congress passed the Defense Base Closure and Realignment Act which legislated closure of several military facilities across the nation, including Naval Station Puget Sound, which is scheduled to be closed in the Fall of 1995.

Many of the current functions at the 151 acre base will be transferred to Naval Station Puget Sound, Everett. Prior to closure and transfer, an environmental impact statement (EIS) will be prepared to comply with the National Environmental Policy (NEPA) and Washington's State Environmental Act (SEPA).

NOTE: The information contained in this "History" was taken from information provided by URS Consultants, Inc.; the Proposed Reuse Plan for the Naval Station Puget Sound, Sand Point by the Muckleshoot Indian Tribe dated June, 1993; the City of Seattle Community Preferred Reuse Plan for Sand Point of November, 1993; and At Home At Sand Point, a Proposal by the Seattle-King County Coalition for the Homeless for the Reuse of Naval Station Puget Sound of October, 1993.

4.0 METHODOLOGY

The task of estimating market value increases or decreases of neighboring properties resulting from the adoption of any of the three alternative proposals for Sand Point Naval Station is difficult to quantify. The two major proposals, the City's and the Tribe's, have *quid pro quo* characteristics. In other words, a different use for the Station is proposed and a benefit given. The benefit may take several forms, such as increased community facilities and/or an appeal to increased social responsibility. Obviously, assessment of these "trade-offs", whether positive or negative, becomes a matter of individual perception. Our assignment, however, is to address the market, which brings together the individual perceptions into a market composite and to determine how the market will view these proposals.

Our research indicates that there are no easily obtainable data available to reach definite conclusions on the property value impact of these proposals, due to their uniqueness. Further, we are well aware there are sources of information which can provide some insight. These resources will be explored and applicable information sought. This information will be weighed as to its applicability and passed through the filter of our experience and expertise to assist us in reaching our conclusions and recommendations.

4.1 METHODOLOGY OUTLINED:

Our methodology includes:

- Review of the Sand Point Existing Conditions Drafts, Volume I and Volume 2; Tribe's Proposed Reuse Plan for the Naval Station Puget Sound, Sand Point; City's Community Preferred Reuse Plan for Sand Point; Seattle-King County Coalition for the Homeless Proposal At Home At Sand Point; Traffic Impact Study for Sand Point Reuse Plans; Crime Impact Technical Report; and Noise Impact Study.

- An extensive literature search of all the titles and subjects at the Bellevue Regional Library. Our firm's corporate library plus our personal libraries were perused, including the Appraisal Journal and various reference volumes.

- Reading each comment letter submitted.

- Review of twenty-nine articles from the Seattle Times over the past two years.

- Locating "matched pairs" and street by street analysis which can determine the positive, negative or neutral impacts on value of parks, marinas, homeless

housing, colleges, traffic load, view and commercial activities. "Matched pairs" is a valuation technique comparing sales of one property with another. One of the properties is exposed to the possible element of impact, while the other property does not have that exposure. Both properties are similar, requiring as few adjustments as possible for selling price; time of sale; terms and conditions of sale; size and type of construction; location to shopping, schools, public transportation, recreation; zoning; age; appeal and condition; topography; view; utilities; and stability of the neighborhood. For example: the "matched pairs" type of comparison might be used by comparing a property on a heavily traveled arterial with one on a secondary street. Otherwise, the properties are a similar as possible. Generally, several comparisons of "matched pairs" are used to measure impact.

o Analyzing national studies and their applicability. One study summarized fifty-eight individual studies, many of which involved "matched pairs" of before and after valuation.

o Local studies reviewed, including EIS's for the City of Seattle and King County. Inquiries were made as to possible relevant reports from both governmental entities.

o Contacts with Michael Roberts in charge of school construction for the State of Washington, James St. Germaine of the Seattle Community College District, individuals representing Shoreline Community College, Bellevue Community College, North Seattle Community College, Northwest College and the Seattle Housing Authority.

o Interviews with Jeffrey Watkins, Economic Development Specialist of the Tribe; George Scarola, Fremont Public Association; Richard Hooper, City of Seattle Department of Housing and Health Services; Marcia Royer, Windermere Real Estate Branch Manager on Sand Point Way; neighbors to subsidized housing, handicapped, and youth-at-risk.

o Census tract demographics were obtained and applied.

o Site inspection of the subject site and ten multiple and group homes for low-income, homeless, mentally retarded, youth-at-risk, elderly and handicapped.

o Examination of zoning classifications around the subject site and several comparables to determine the quality of "buffers" which can impact propertty values. Review from zoning maps and physical inspection of the effect of buffers upon property values.

o Review of real estate activities and assessment of valuation trends, based

upon distance from a college, low income or homeless facility, through the use of the Puget Sound Multiple Listing Service and TRW microfiche.

Finally, our years of experience as appraisers and real estate consultants are important resources.

5.0 EXPRESSED CONCERNS FOR REUSE

The Scoping Summary in the Appendix to the EIS enumerates the concerns of public agencies, the Tribe and neighbors in respect to the reuse alternatives for Sand Point. These concerns center on crime, possible increased traffic and noise, environmental impact and how these may affect the quality of life and property values.

Studies of these issues to determine impact, if any, on the neighborhood are being conducted. There are on-going cleanup activities by the Navy, with involvement from the Sand Point Community Liaison Committee, Department of Ecology, the City of Seattle and the Muckleshoot Indian Tribe.

5.1 CRIME IMPACT TECHNICAL REPORT

The crime impact in adjacent neighborhoods is summarized in the conclusions of the report as follows:

> *There is no evidence that either a well-managed educational institution or public housing program will have negative impacts on the level of crime in adjacent neighborhoods. As analyzed in this study, the introduction of housing programs resulted in no increase in crime for the census tracts in which they were located. Likewise, data presented earlier demonstrate that even areas with a high concentration of students can exhibit very low levels of crime.*

5.2 TRAFFIC IMPACT STUDY FOR SAND POINT REUSE PLANS

This study concluded:

5.2.1 Existing 1993 Weekday PM Peak Hour, Level of Service Results

The traffic consultants have determined that roads, intersecting Sand Point Way NE at NE 95th St., NE 65th St., Princeton Ave., and the Main Base Access operate at a satisfactory level of service. NE 45th St. and 25th Ave. NE where they intersect with Montlake Blvd. operate at a satisfactory level, as do the intersections of NE 95th St. and 35th Ave. NE, as well as NE65th St. and 35th Ave. NE.

5.2.2 Projected Year 2000 Weekday PM Peak Hour, Level of Service

The projections with anticipated normal growth and the implementation of either plan would result in acceptable levels of service. Signalization of NE 95th St. and Sand Point Way NE would be required with either plan.

5.3 NOISE IMPACT STUDY

The summary of this study is indicated below:

1. *The "no-action" plan will produce no impact.*

2. *The City Reuse Plan will likely produce the following significant or serious impacts:*

Significant Impacts	*Serious Impacts*
Small musical groups during daytime, or amplified speech at night, in amphitheater.	*Rock concerts at amphitheater or 1,500 seat indoor theater.*
Public address system for ball fields at night.	*Small musical groups using amphitheater at night.*

3. *The Muckleshoot Reuse Plan will not likely produce serious impacts. Significant impacts associated with its plan are likely from the following sources:*

Significant Impacts	*Serious Impacts*
Public address system for ball fields at night.	*None.*
Commercial fishing	
Traffic on Sand Point Way N.E.	

4. *Mitigation measures can reduce impacts for ball field public address systems, the amphitheater, and indoor 1,500 seat theater, and commercial fishing. Although impacts from the amphitheater can be reduced, they remain serious for some activities.*

6.0 THE DEMOGRAPHICS OF THE NEIGHBORHOOD

6.1 CENSUS TRACTS DELINEATED

The census tracts which are most affected by any of the proposed Sand Point reuse alternatives are 22, 40, 41, 42 and 63 (see Map 6-1). These census tracts do not have the same potential impact, due to their distance from the Base. Tract 40 has the highest impact as it is across from the Main Gate at the Naval Station, west of Sand Point Way NE, bounded by NE 75th St. on the north and NE 65th St. on the south. The tract is known as View Ridge. Tract 22 incorporates Sand Point Country Club, Inverness, Fairway Estates and the Matthew Beach area. The impact on Tract 41 would be felt more on its northern boundary, which includes the University of Washington student housing and along Sand Point Way NE as far as any incremental increase in traffic. The principal districts within this census tract are Windermere, Laurelhurst and Belvedere Terrace. Census Tract 42 encompasses the Ravenna District and Hawthorne Hills, while Tract 63 has little impact as it includes Madison Park, Broadmoor and is south of Union Bay.

6.2 OVERALL DEMOGRAPHIC SUMMARY

Tables 6-1 and 6-2 (1990 Census of Population and Housing Summary Tape File 1A) show that the selected census tract areas total 26,811 persons of which the preponderance was white, minorities comprising less than 10% of the total. Asians or Pacific Islanders represent 6.02% of the 8.89% minority classification. These 26,811 persons lived in 12,192 housing units with 69.6% owner occupied, 28.8% renter occupied and 1.6% vacant. The rental vacancy rate was 3.6%. The median value of the owner occupied units within the selected census tracts was $254,740 with 31.16% being valued at $300,000 or more. The 4,143 units paying monthly rent had a median contract monthly rent of $543 with 4.3% of the occupants paying more than $1,000/monthly.

The median age of the population within these tracts was 41.1 years of age with 18.19% under seventeen years of age and 19.83% sixty-five years of age or older. Typical of the general population, females constitute 52.25% of the population mix and males 47.75%. Persons living in group quarters total 269. The addition of the 250 housing units for the homeless would increase those living in group quarters to 549 or approximately 1.9% of the total population of the selected census tracts.

6.3 SELECTED DEMOGRAPHICS FOR CENSUS TRACTS 40 AND 22

Narrowing the scope of the demographic profile to the census tracts more specifically impacted revealed similar statistics. The population was 7,358 with 89.2% white and 10.8% minorities comprised of 8.3% Asians or Pacific Islanders, 1.7% Black, .3%

.3% American Indian, Eskimo or Aleutian, and .6% Other Races. Of the 3,315 occupied housing units, 79.2% were owner occupied, a higher percentage than the larger tract profile, while 19.6% were renter occupied and 1.1% were vacant. The rental units primarily front Sand Point Way NE. The rental vacancy rate for Tract 40 was 4%, while that of Tract 22 was 2.9%. The median value of the owner occupied units for Tract 40 was $227,800 with Tract 22 at $187,000. There were 116 homes valued in excess of $300,000 in Tract 40 and 274 homes in excess of $300,000 in Tract 22. The median rent was $537/monthly for Tract 40 and $547/monthly for Tract 22.

The median age of the population of Tracts 40 and 22 were 44.3 and 41.1 years respectively. In Tract 40, 13.4% of the population was seventeen years of age or younger, while 26.3% were 65 years old or older. In Tract 22, 17.4% was seventeen years of age or younger, while 19.4% were 65 years or older. Fifty-two and six tenths percent were women. There were no persons living in group quarters in either of the selected census tracts.

6.4 DEMOGRAPHIC SUMMARY

Both reuse proposals would affect the present demographic and housing profiles for the selected census tracts. These census tracts are mostly white, affluent and an older population, particularly in Tract 40. Two of several foundation principles of property valuation, change and conformity, would have the greatest application with the introduction of housing for the homeless into a basically affluent neighborhood of predominantly white homeowners. A Native American college of 5,000 to 7,000 enrollment interjected into an area in which less than 2% are 18 to 20 years old constitutes a similar demographic incongruity.

TABLE 6-1

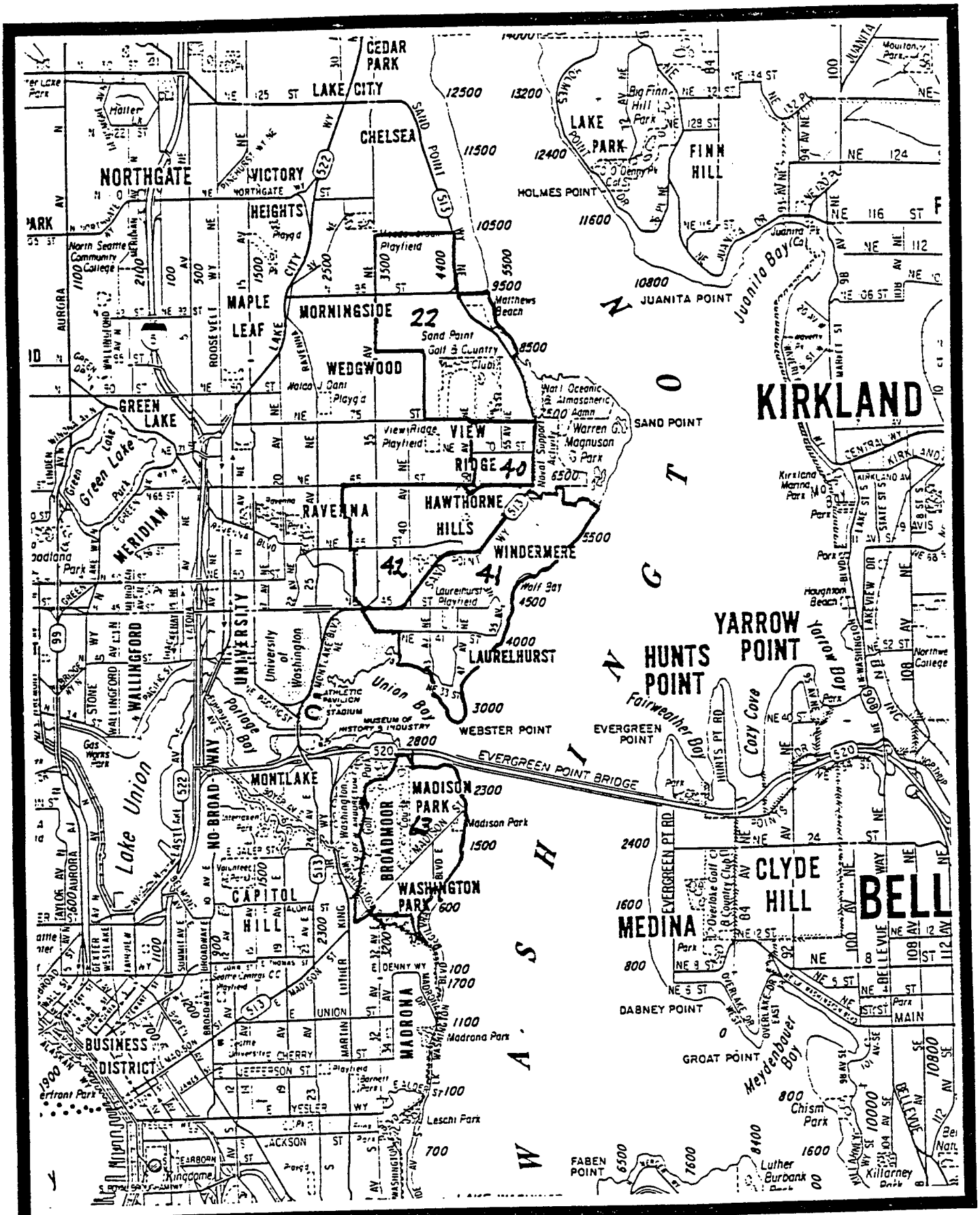
Sand Point Community Reuse Study

Demographic & Housing Profile ***(Source: 1990 U.S. Census)***

	Tract 41	Tract 42	Tract 40	Tract 22	Tract 63	Totals	Percentages
Total Population	7,433	6,880	2,032	5,326	5,140	26,811	100.00%
Gender							
Male	3,463	3,215	938	2,549	2,636	12,801	47.75%
Female	3,970	3,665	1,094	2,777	2,504	14,010	52.25%
Age							
Under 5 years	560	448	93	307	194	1,602	5.98%
5 to 17 years	1,200	769	180	621	504	3,274	12.21%
18 to 20 years	154	128	32	128	85	527	1.97%
21 to 24 years	258	415	83	230	214	1,200	4.48%
25 to 44 years	2,464	2,821	651	1,731	1,717	9,384	35.00%
45 to 54	925	622	244	633	636	3,060	11.41%
55 to 59 years	326	213	98	301	201	1,139	4.25%
60 to 64 years	369	238	116	334	246	1,303	4.86%
65 to 74 years	691	622	327	675	530	2,845	10.61%
75 to 84 years	373	467	179	305	558	1,882	7.02%
85 years and over	113	137	29	55	255	589	2.20%
Median Age	38.00	36.80	44.30	41.10	43.50	41.10	
Households By Type							
Total Households	3,025	3,064	1,045	2,232	2,636	12,002	100.00%
Family Households	2,205	1,760	580	1,569	1,162	7,276	60.62%
Married couple families	1,923	1,445	513	1,398	1,001	6,280	52.32%
Male householder	57	68	22	44	43	234	1.95%
Female Householder	225	247	45	127	118	762	6.35%
Non-family households	820	1,304	465	663	1,474	4,726	39.38%
Householder Living Alone	666	934	403	503	1,243	3,749	31.24%
Householder 65 & Over	295	381	151	196	446	1,469	12.24%
Persons Living in Households	7,401	6,857	2,032	5,326	4,926	26,542	
Persons per household	2.45	2.24	1.94	2.39	1.87	2.18	
Group Quarters							
Persons Living In Group Quarters	32	23	0	0	214	269	
Institutionalized persons	23	0	0	0	214	13	4.83%
Other persons in group quarters	19	23	0	0	0	42	15.61%

TABLE 6-2

(Source: 1990 U.S Census)	Tract 41	Tract 42	Tract 40	Tract 22	Tract 63	Totals	Percentages
Race and Hispanic Origin							
Total Population	7,433	6,880	2,032	5,326	5,140	26,811	100.00%
White	6,670	6,282	1,864	4,700	4,911	24,427	91.11%
Black	87	152	32	90	110	471	1.76%
American Indian, Eskimo or Aleutian	53	57	2	17	10	139	0.52%
Asian or Pacific Islander	567	341	131	481	93	1,613	6.02%
Other Race	56	48	3	38	16	161	0.60%
Hispanic Origin (of any race)	184	165	32	113	63	557	2.08%
Total Housing Units	3,097	3,164	1,082	2,266	2,757	12,366	100.00%
Occupancy and tenure							
Occupied housing units	3,025	3,064	1,045	2,232	2,636	12,002	
Owner Occupied	2,207	2,123	759	1,868	1,532	8,489	68.65%
Renter Occupied	818	941	286	364	1,104	3,513	28.41%
Vacant Housing Units	36	64	18	20	52	190	1.54%
Vacant Homeowner units	11	23	6	9	14	64	
Vacant Rental Units	25	40	11	11	39	126	
Homeowner Vacancy Rate (%)	0.50%	1.10%	0.80%	0.50%	0.90%	0.75%	
Rental Vacancy Rate (%)	3.10%	4.30%	4.00%	2.90%	3.50%	3.60%	
Persons Per owner occupied unit	2.52	2.25	2.06	2.44	2.18	2.29	
Persons per renter occupied unit	2.25	2.20	1.63	2.13	1.44	1.93	
Units with over 1 person per room	72	42	13	24	10	161	
Unit Structures	3,097	3,164	1,082	2,266	2,757	12,366	100.00%
1 unit detached	2,249	2,473	571	1,946	1,350	8,589	69.46%
1 unit attached	85	42	10	12	46	195	1.58%
2 to 4 units	388	209	3	26	142	768	6.21%
50 to 9 units	108	149	15	20	252	544	4.40%
10 or more units	250	245	474	248	930	2,147	17.36%
Mobile home, trailer, other	17	46	9	14	37	123	0.99%
						0	0.00%
Value of Units							
Owner occupied units	1,956	1,903	509	1,603	1,099	7,070	100.00%
Less than $50,000	6	8	0	11	2	27	0.38%
$50,000 to $99,000	70	233	11	130	15	459	6.49%
$100,0000 to $149,000	150	479	62	348	67	1,106	15.64%
$150,000 to $199,999	247	596	117	408	107	1,475	20.86%
$200,0000 to $299,999	485	463	203	432	217	1,800	25.46%
$300,000 or more	998	124	116	274	691	2,203	31.16%
Median (dollars)	$305,200	$169,000	$227,800	$187,000	$384,700	$254,740	
Contract Rent							
Occupied units paying monthly rent	793	904	1,045	336	1,065	4,143	81.51%
Less than $250	8	76	2	7	8	101	2.44%
$250 to $499	462	315	107	132	182	1,198	28.92%
$500 to $749	234	333	137	122	597	1,423	34.35%
$750 to $999	64	146	21	56	190	477	11.51%
$1,000 or more	25	34	12	19	88	178	4.30%
Median (dollars)	$438	$551	$537	$547	$642	$543	



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CENSUS TRACTS

7.0 PROPERTY VALUATION

In order to evaluate the impact of the three reuse alternatives upon neighboring property values, a discussion of property valuation methodology is essential. There are several definitions of value: such as market, use, investment, going-concern, insurable and assessed. The definition adopted in this study is agreed upon by agencies that regulate federal financial institutions in the United States and contained within the Uniform Standards of Professional Appraisal Practice of the Appraisal Standards Board of the Appraisal Foundation:

> *The most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:*
>
> 1. *Buyer and seller are typically motivated;*
>
> 2. *both parties are well informed or well advised, and acting in what they consider their best interests;*
>
> 3. *a reasonable time is allowed for exposure in the open market;*
>
> 4. *payment is made in terms of cash in United States dollars or in terms of financial arrangements comparable thereto; and*
>
> 5. *the price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.*

7.1 INTERDEPENDENT ECONOMIC FACTORS ON VALUE:

"Value is extrinsic to the commodity, good or service to which it is ascribed; it is created in the minds of individuals who constitute a market. The relationships that create value are complex, and values change with changes in the factors that are most influential. Typically, four interdependent economic factors create value: utility, scarcity, desire, and effective purchasing power. All four factors must be present for a property to have value." *(The Appraisal of Real Estate,* Tenth Edition, The Appraisal Institute).

7.2 OBSERVATIONS OF SAND POINT AND VALUATION:

Sand Point was opened in 1925 and over time, facilities were constructed and personnel increased to 7,009 service and civilian personnel during World War II. During the war, there was widespread acceptance of the personnel level, as it was necessary to our war effort, transcending individual concerns about traffic, view, or incompatible activity contiguous to residential uses. The physical improvements, due to their long standing occupation of the site, have been accepted by the community. Any change could elicit a positive or negative response from the community. A change in use will cause some response. With some, the introduction of homeless housing may be balanced by the expanded Magnuson Park and public recreational and cultural activities. Similarly, there are offsetting elements of the Tribe's Proposal. Our premise is that physical change in the area coupled with changes in use are more complex than merely changes in use of the facilities. Examples of physical change are the commercial fishing vessels in the marina in the Tribe's Plan and 28 two story "urban cottages" under the City's Plan.

7.2 FOUNDATIONS OF PROPERTY VALUATION:

There are many dynamic and interactive factors that influence individual's attitudes and beliefs about value. Those most pertinent to the scope of this assignment are the [1]foundations of property valuation. Several of these foundations will be addressed in greater detail due to their application to the proposed reuse alternatives.

7.2.1 Anticipation:

This is a perception that value is created by the expectations of future benefits, not historical prices or the cost of creating the asset. Owners who occupy property value future advantages, amenities, the pleasures of ownership or occupancy. Owners of income producing property are concerned with anticipated income, although a subordinate value is sometimes pride of ownership.

o Community Application

Due to the proposed changes of use of the Base, some owners of single family residences including condominiums, expressed concerns about the possible impact on their properties. This impact may be perceived as a decrease in value, due to longer marketing time and weakened marketability, and a change in neighborhood composition. Also, some income producing property owners may visualize lower rents. Again, these are present apprehensions about the future benefits and their possible reduction. The general market area is highly desirable and any impact may be minimal and short-lived.

7.2.2 Change

Change is a cause and effect relationship affecting value. This could be gradual due to age, functional obsolescence, or deterioration or more pronounced as a consequence of social, economic, governmental and environmental forces. Anticipation is affected by change. Gradual change is expected and can in some cases be remedied by modernization. More precipitous changes are employment reductions caused by plant closings or the economy, tax law revisions, new construction, zoning changes or change of use. The appraisal principles of supply and demand, substitution, balance and externalities help explain shifts in value and to identify value trends.

o Community Application

The expected changes at Sand Point are somewhat precipitous and classified as externalities or something occurring outside the property itself, which may affect the value of the property. However, the community recognizes its limitations in influencing the use of the Base, due to legislation. Change in this case triggers apprehensions based upon expectations, which may be at variance with reality.

7.2.3 Supply and Demand

The price of real estate varies directly, but not necessarily proportionately with supply, and inversely, but not necessarily proportionately, with demand. In other words. the tendency is lower prices with a greater supply and higher prices with a greater demand. The market tends to reach equilibrium. Real property is unique, however, as no properties are exactly alike. Supply is the amount of real estate available for sale or lease at various prices. In real estate, demand is the desire and ability to purchase or lease property at various prices.

o Community Application

Generally, according to our studies and extensive literature review, neighborhood reaction to a major change in use, viewed negatively by some owners, results typically with a limited number of owners listing their homes for sale. This increases the supply and decreases the price levels, due to a reactive desire to sell. Demand may similarly be influenced by the perception of buyers about the unknowns of specific changes and market acceptance. This may cause some price erosion for the short term with a return to equilibrium after that.

7.2.4 Competition

Competition exists between buyers or tenants to secure a purchase or lease and sellers or landlords to sell or lease properties. It is a dynamic fundamental to the concept of supply and demand in a free enterprise system.

o **Community Application**

This concept is more relevant to income producing property, such as the apartments along Sand Point Way. This type of investment competes with other investments with varying degrees of perceived risk. These multifamily housing units are part of the University area in the Seattle-Everett Real Estate Report of Fall, 1993. The overall vacancy rate for September, 1993 was 7.4% with an average rental of $551/monthly. The March, 1993 vacancy rate was 3.3% and an average rental rate of $545/monthly. The King County vacancy rate for September, 1993 was 5.2% with an average rent of $582. The higher September, 1993 rate reflects the seasonality of University area rental properties, which is influenced by whether or not the University of Washington is in session.

7.2.5 Substitution

This principle states that the property with the lowest price generally attracts the greatest demand. The substitution of one property for another is considered in terms of use, structural demand, earnings, attractiveness, location and other factors. The principle of substitution is equally applicable to all three traditional approaches to value: sales comparison, cost and income capitalization.

o **Community Application**

The consideration of demand for properties as exemplified by this principle can be seen in the strength of a market area as contrasted with other market areas and properties in the subject area compared with properties in other areas.

7.2.6 Conformity

Conformity is the principle that asserts that real property valuation is created and sustained when the characteristics of a property conform to the demands of its market. Styles and uses in an area may conform for several reasons such as economic pressures. Houston does not have zoning codes, yet, economic pressures establish land values and the consequent land improvements. Through local zoning ordinances, government encourages conformity by restricting land use. Standards of conformity are established by the market, however. Usually, the value of an overimproved property will decline, or regress, toward the value level of surrounding, conforming properties and conversely underimproved properties may increase, or progress, toward the prevailing market standard.

o **Community Application**

This is a major principle relative to the Base. The surrounding neighborhood is zoned

single family residential, except for some multi-family housing and commercial use, primarily adjoining Sand Point Way NE. The community has accepted its use by the Navy. Now mixed uses are being proposed. Normally, zoning ordinances gradually allow regressive use starting from the most restrictive use, which is some form of single family residences to duplexes or multi-family to retail/commercial, light industrial to heavy industrial. There are gradients within these zoning classifications. Planned unit developments and some compatible variances are often interjected. The proposed uses for Sand Point cover a broad spectrum of uses. For example, light industrial is proposed next to commercial and multi-family. This lack of conformity is usually experienced over a larger area with buffers. Lack of conformity has a bearing on property values.

7.2.7 Externalities

This principle of valuation contends that economies or diseconomies outside a property have a positive or negative effect upon property. Real estate because of its physically immobility is affected by many types of externalities, such as local laws, local government policies and administration, property taxes, economic growth and social attitudes.

o Community Application

The external imposition of one of the three alternative reuse proposals will have either a positive, negative or no effect upon the values of property within the community and contiguous to the base or within an area sensitize to the principles of property valuation. Based on scoping comments, proposed homeless housing or a college probably would evoke some social attitude or response.

7.2.8 Other Principles

There are other principles which affect valuation, such as opportunity cost, balance, surplus productivity, and contribution. These are not considered as important for the purpose of this study.

Summary:

These valuation principles influence property value. Proximity to the area of change may bear upon value. Also, perceptions due to strong feelings and emotions may impact neighborhood residents initially, while with time and emotional stabilization the respective reactions to the alternatives may be substantially diminished. The local perceptions may differ from those outside of the area who may be considering moving into the area.

(1) *The Appraisal of Real Estate* (Tenth Edition), Appraisal Institute.

8.0 ZONING AND BUFFERS

8.1 PURPOSE OF SECTION

The purpose of this discussion is to show the mitigation by gradual transitional zoning and natural buffers, such as Sand Point Way NE. The zoning is gradual such as multi-family zoning next to single family residential. An example of disharmonious or incompatible zoning would be placing single family residential next to heavy industrial.

8.2 ZONING DEFINED

Zoning is the exercise of police power by the zoning instrumentality to regulate land use and control density of development for privately owned real property. Often, the purpose of zoning is to implement the master plan. Zoning codes determine the type and intensity of use, the density of living or business population, height regulations, lot coverage ratios, setbacks from property lines, accessory buildings, parking and loading, along with other requirements. Building permits are not issued unless there is compliance with the zoning code or an approved variance. This is effective protection from lessening property values by the introduction of non-conforming and less desirable uses.

8.2.1 Naval Base Zoning

The City zoned the naval base for residential zoning, when it was annexed into the City in 1953. The zoning as indicated on the following map was SF7200 and SF9600. These are single family residential zones of one house per 7,200 square feet and one house per 9,600 square feet. Sue Putnam of the City of Seattle Department of Construction and Land Use said, in her opinion, conveyance to private ownership by the Navy would necessitate compliance with this zoning, rezoning or variances at the time. Neither of the alternatives, however, would trigger the imposition of these residential zones, as either the City would be granted the property or the Bureau of Indian Affairs would act as Trustees for the Tribe.

8.2.2 Transitional Zoning and "Buffers" Defined

Zoning Map 8-1 illustrates the transitional zoning from the naval base to single family SF5000 in View Ridge. Despite the SF7200 for the naval base, which in effect is a reversionary zoning in case of conveyance to private ownership, there exists an effective buffer zone between Sand Point and View Ridge residences. L-3 zoning means "Low-Rise 3" for apartments and ground related housing of a certain size or townhouses with a maximum building width of 120 feet. The "RC" and "NC1" allows neighborhood commercial uses. This zoning is an effective buffer zone, which is defined in *The Language of Real Estate* by John W. Reilly as follows:

A strip of land separating one land use from another. Sometimes a developer of a large residential subdivision will leave certain land undeveloped as a buffer against adjoining land which might be incompatibly zoned, such as for an industrial park.

Thus there is an effective buffer zone cushioning and moderating the impact of any use non-conforming to that of the homes in View Ridge. The buffer zone consists of Sand Point Way NE, the low rise apartments, neighborhood commercial and the Burke-Gilman Trail. A recent (1)study states the higher more restrictive zoning is only impacted by a contiguous non-conforming land use up to 300 feet unless there are buffers which diminish the impacted area.

Another study, entitled (2)*Expressway Proximity Damages to Residential Property*, concluded in a subdivision study that there was no loss of value to homes located over 300 feet from a Michigan freeway. Further findings revealed a proportional lessening of property value loss the farther homes were from the expressway. Homes fifty feet from the freeway were impacted 56% of those homes 30 feet from the expressway. Homes 100 feet away from the freeway were affected 38% of residences fifty feet away. Thereafter, every fifty feet the property loss impact was about 50% to 60% of single family homes fifty feet closer to the expressway. The homes 300 feet from the expressway experienced only a 3% loss of the loss of the homes thirty feet from the freeway. These homes ranged in size from 1,000 SF to 1,500 SF. The authors qualified their study, by stating: *"The limitation of this approach (statistical) is that the results represent the average relationship of specific variables. It cannot handle unique or unusual factors that do not occur frequently enough to provide a sufficient base of measurement."*

Therefore, on the basis of these studies and our research, one can expect the greatest impact on property values up to 300 feet from the Base. The Executive Summary (see 1-1 and 1-2) is more specific as to the cause and estimated decrease of property value as a consequence of certain features of the proposals.

Zoning Map 8-2 shows the zoning for Magnuson Park and the National Oceanic & Atmospheric Administration property, while Map 8-3 displays the zoning classification north of the base as SF5000 and SF7200. Map 8-4 indicates the Low-Rise 3 zone, used for University of Washington student housing, as well as neighborhood commercial 2 and LDT (duplexes) buffering the SF5000 homes south of the student housing, Belvedere Terrace and Windermere. Map 8-5 shows the zoning east and southeast of Magnuson Park.

8.3 CONCLUSION

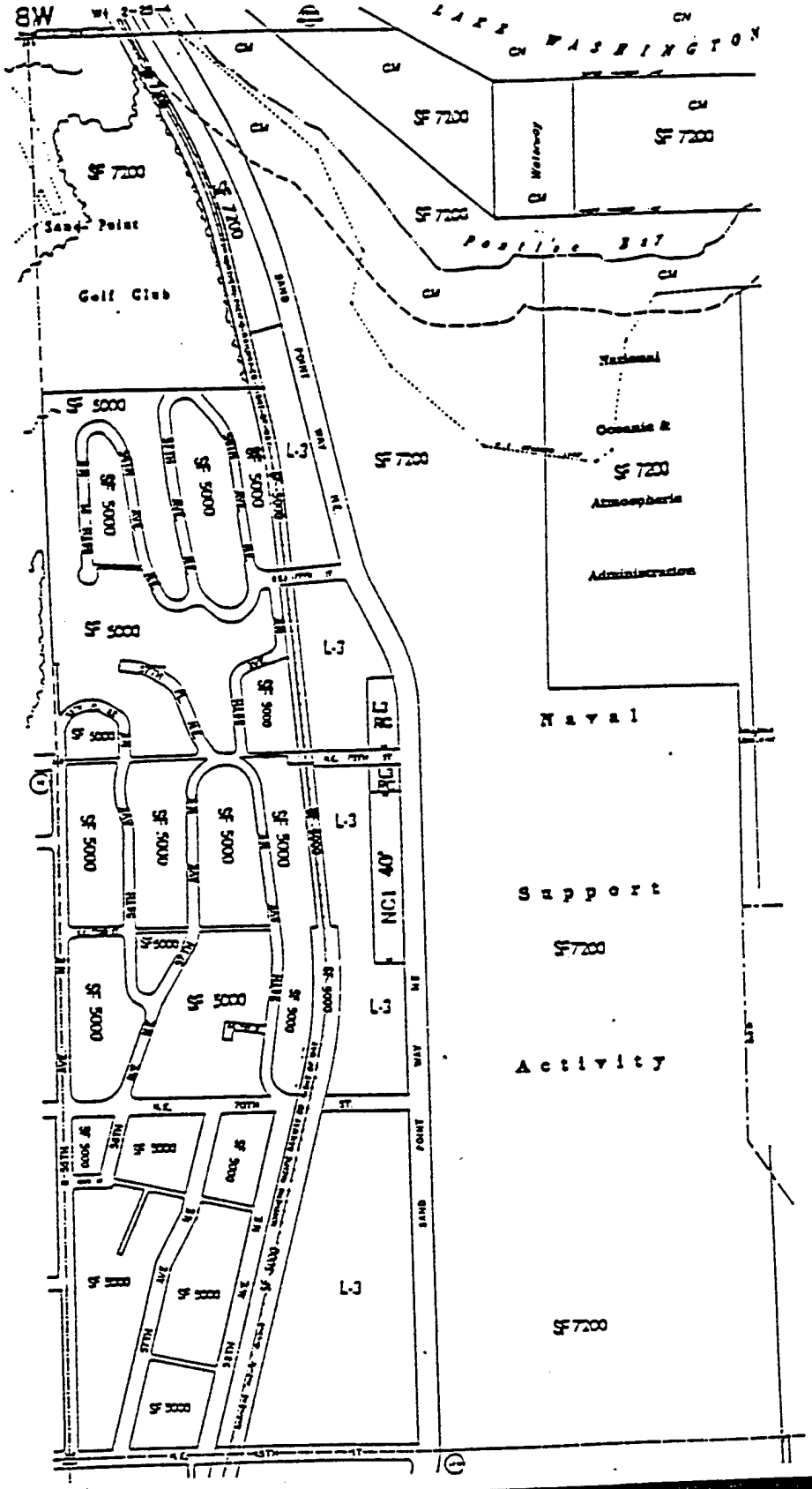
The buffers surrounding the Base provide good protection from any impact on property

values to the south, due to Magnuson Park and the contemplated use changes, attributable to the proposed reuse plans. There will be some impact on waterfront properties, due to the proposed marina (see The Tribe's Marina, 12-1) and the absence of a buffer to the north. In our opinion, Sand Point Way NE and west to the Burke-Gilman Trail provides an excellent buffer for properties west of the Burke-Gilman Trail from loss of property value due to the proposed reuse plans. The impact upon property values east of the Burke-Gilman Trail will vary proportionately with the distance from Sand Point Way NE and any significant car and truck traffic increase.

1) Property Counselors, January, 1992, *Property Values Impacts Report, Phase I Regional Justice Center* for King County Department of Adult Detention.

(2) Roland D. Nelson, SR/WA, MAI, ASA, CPM, CRE and Laurence G. Allen, MAI, ASA, *Expressway Proximity Damages to Residential Property*, Right of Way, February, 1993.

(3) The Valuation of Real Estate by Alfred A. Ring, SRA, MAI, PhD, Prentice Hall, 1970.



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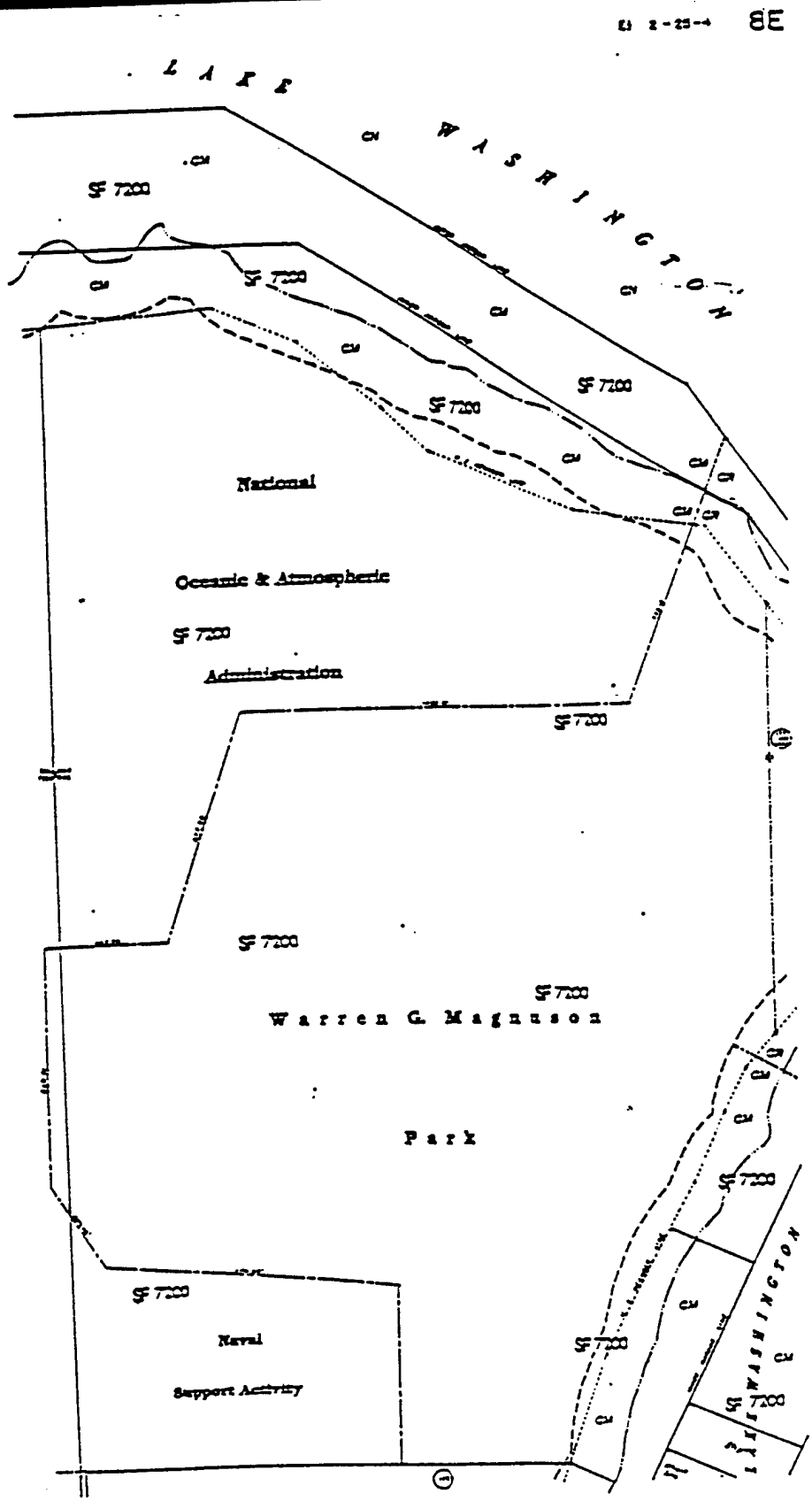
MAP 8-1



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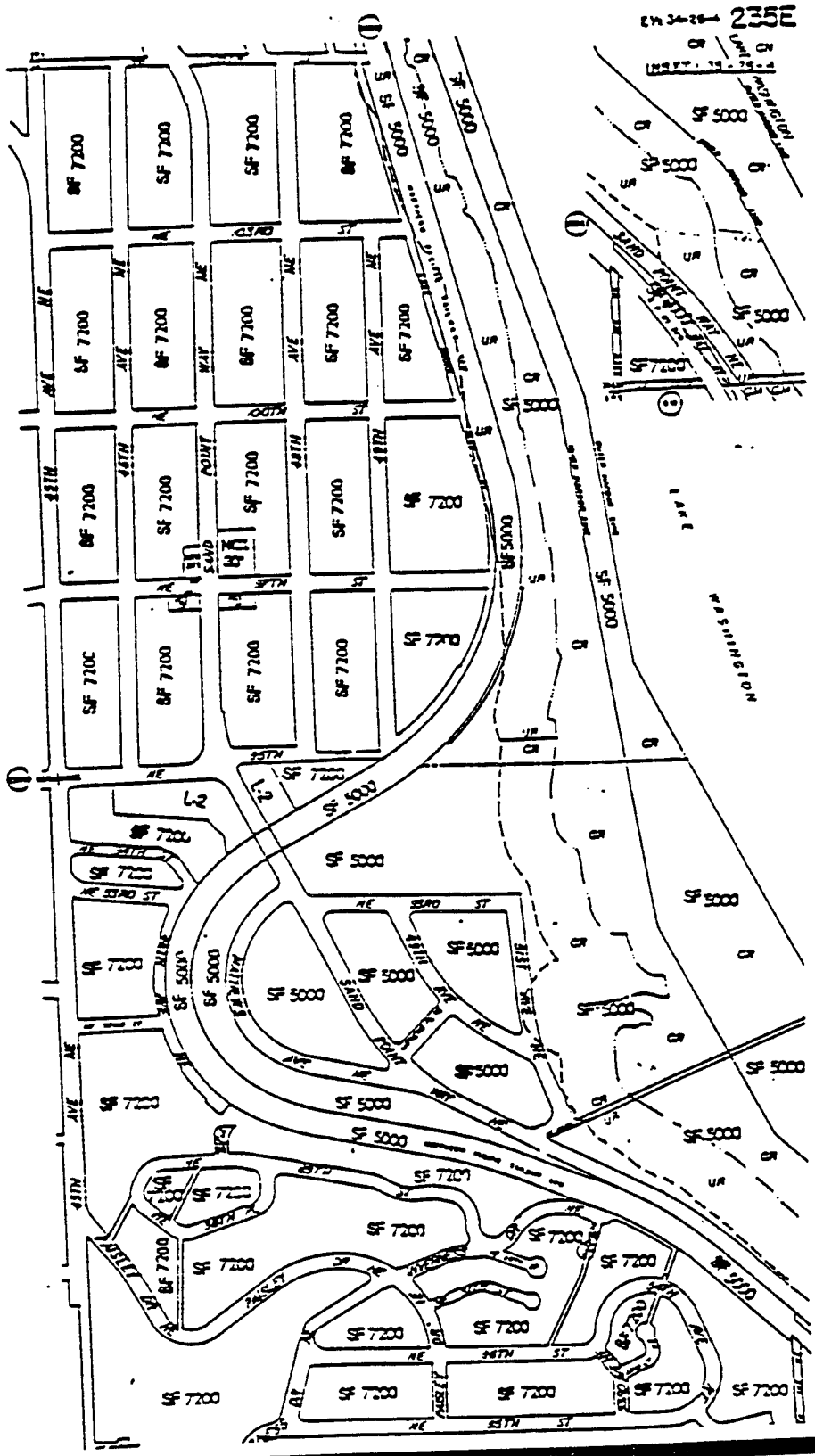
MAP 8-2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SF 5000
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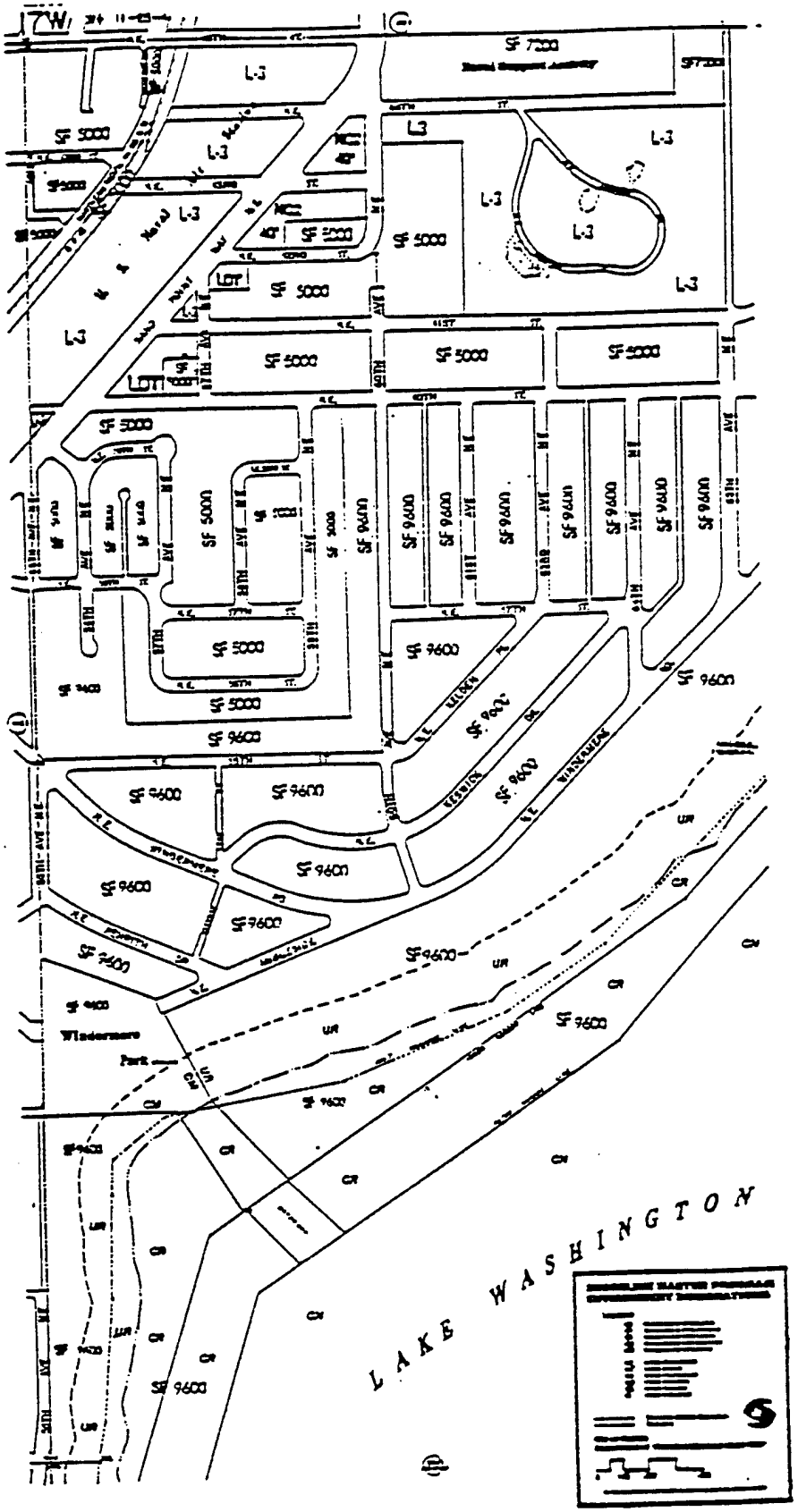

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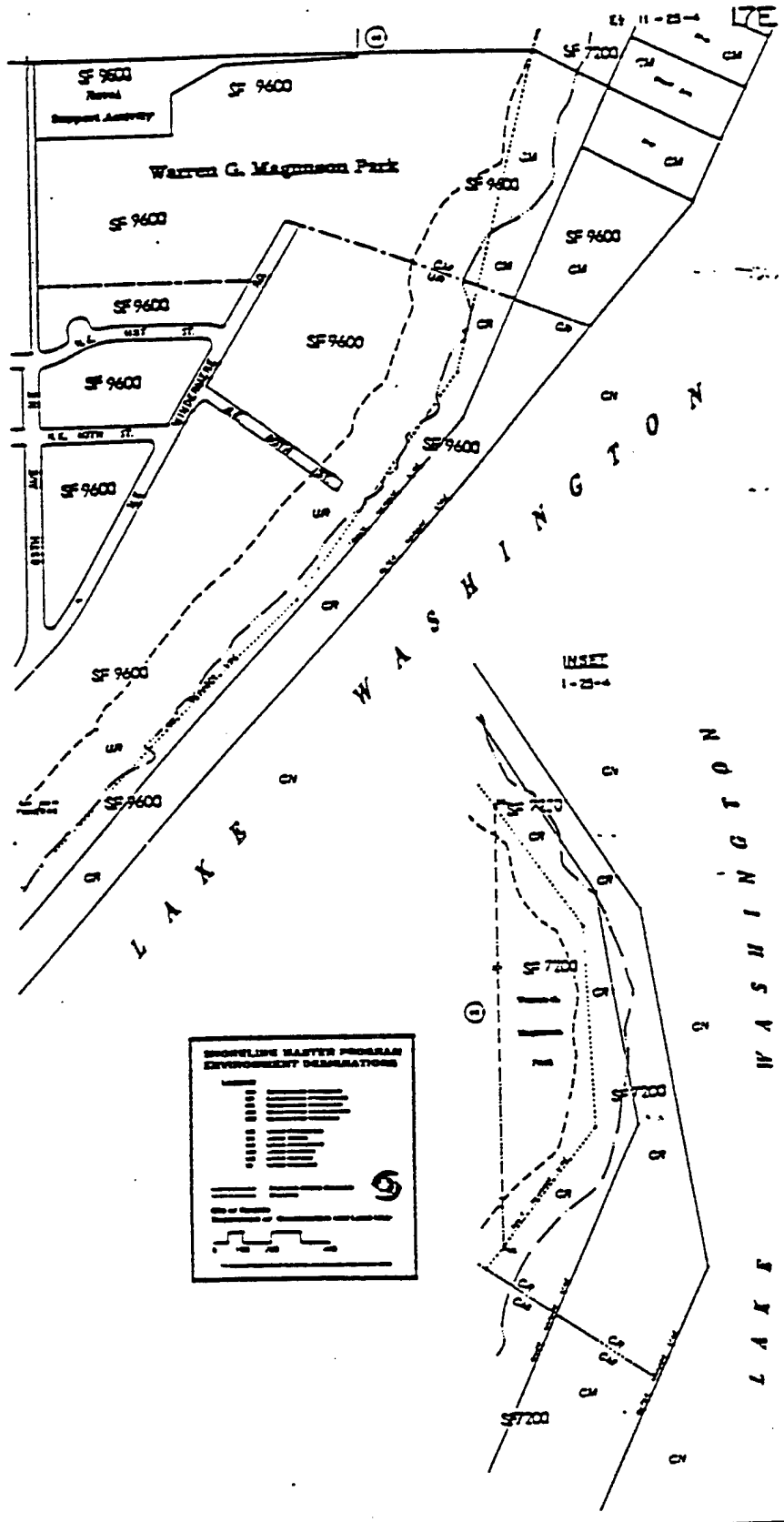
MAP 8-4



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MAP 8-5

9.0 HOMELESS HOUSING

9.1 THE HOMELESS PROBLEM

The citizens of Seattle desire to have no homeless, both from the viewpoint of compassion and a difficult community problem. However, reality, as documented by the City's Planning Department, is there are 14,000 to 17,000 persons in Seattle, who experience homelessness during the course of the year. There are between 3,900 and 4,300 individuals who are homeless in the City on any given day. The fastest growing sector of the homeless population is families with small children, comprising 40% of the total homeless. Only 2,650 individuals or 62% of the estimated total are staying in the City's shelters and transitional housing. The balance are sleeping on the streets, parks, cars or are runaways and street youth with about fifty in the County Alcohol Detoxification Center or Harborview Medical Center.

9.1.1 Reaction to the Homeless Problem

Within the community there is a wide spectrum of reaction to this problem from compassion to indifference. When sites are selected, the reaction of many in the community is predictable. Generally, many adopt the NIMBY (Not In My Back Yard) attitude. Neighborhood concerns expressed during scoping include:

- **Fear** of the homeless or mentally ill as potentially dangerous, due to their instability or use of drugs or alcohol.

- **Inadequate security** to protect the neighborhood from these individuals and the expected increase in the incidence of crime.

- **Decline of property values.**

- **Increase of traffic and/or more crowded schools resulting from the influx of the homeless.**

- **Lack of responsibility and accountability** for the appearance and maintenance of the properties and control of the homeless occupants by those in charge.

9.1.2 Property Value Studies

These concerns are not substantiated by the results of national studies or local data collected. One such [1] study of housing for low income and handicapped was conducted in 1988 by the California Department of Community Development. This

(1) Department of Housing and Community Development, State of California, *"The Effects of Subsidized and Affordable Housing On Property Values: A Survey of Research."* 1988

study summarized fifteen published papers with eleven dealing with the effects of subsidized housing, three with the effects of manufactured housing and one with a group home for the handicapped. **Of the fifteen, fourteen report no negative effects even with some positive effects on non-subsidized housing.** Only one study by Guy, Hysom and Ruth, found evidence of subsidized housing affecting non-subsidized housing in Fairfax County, Virginia.

A (1)Toronto, Canada impact study of five facilities in lower, middle and upper class neighborhoods in comparison to control areas without these facilities **indicated no difference in sales activity or decline in sales prices.** The data was collected quarterly two years before and two years after the introduction of these facilities. A 400 meter "impact zone' was designated with concentric circles every 100 meters.

Property sales in neighborhoods with eight group home facilities in (2)Stamford, Connecticut were analyzed and contrasted with 23 neighborhoods in which there were no group homes. These homes were for the chronically mentally ill, mentally retarded adults, homeless families, adolescent males and recovering alcoholics. Based on an econometric theory of property appreciation, the regression showed **property values are not significantly affected by the establishment of a group home.**

A 1981 (3)review of existing research by the Louisiana Center for the Public Interest concluded the following:

> *"The studies cited surveyed all types of facilities including mental health homes, alcohol and drug centers, ex-offender halfway houses. The facilities were in: upper, middle and low-income neighborhoods; single family, multiple family and apartment zones; white, black and mixed race communities. Although the establishment of group homes in a neighborhood often caused a storm of controversy, almost without exception they were quiet, integrated, well-maintained and inconspicuous on the block.* ***There was no evidence of neighborhood saturation, incompatibility with neighborhood properties, visibly disruptive residents, or decline in neighborhood character or property value."***

An (4)analysis of property values conducted by the Developmental Disabilities Program

(1) Boeckh, John, Michael Dear, PhD, and S. Martin Taylor (1980). *"Property Values and Mental Health Facilities in Metropolitan Toronto.* Canadian Geographer, Vol. XXIV, No. 3:270.

(2) Coleman, Allison R. (August, 1989). *"The Effect of Group Homes on Residential Property Values in Stamford, Connecticut."* Stamford, Connecticut: St. Luke's Community Services.

(3) Louisiana Center For The Public Interest (February, 1981). *"Impact of Group Homes on Property Values and the Surrounding Neighborhoods."* New Orleans, Louisiana.

(4) Developmental Disabilities Program, "An Analysis of Minnesota Property Values of Community Intermediate Care Facilities For Mentally Retarded," Policy Analysis Series: Issues Related to Welsh vs. Noot/No. 11, St. Paul, Minnesota, July, 1982.

of St. Paul, Minnesota concluded that **changes in property values are not related to the presence of a group home on the block.** The study also concluded that the number and timing of property transactions in the neighborhood do not have anything to do with the establishment of a home. The study examined 75 property transactions recording the year preceding and following the establishment of a group home.

o Effect on the Community with Adult Housing Versus Family Housing

A 1983 University of California study addressed the spillover effects human service facilities have on residential property values and the differential impacts in more affluent areas of the city. The study examined seventy-nine census tracts in the city of Oakland. Thirty-six tracts contained a less affluent population of 50% or more. Three hundred seventy-three housing transactions were studied. The housing information examined included sales price, structural characteristics and lot size. **The study found that service facilities for adults have greater negative impacts than those for children. It also found negative residential impacts at levels above five percent. The findings suggested that large segments of subsidized housing and service facilities tend to impact negatively more affluent submarkets.**

In our opinion, these conclusions have substantial relevancy to the City's Proposal, which proposes housing for up to 500 individuals, 375 of which are youths between 5 to 15 years of age. We believe this composition will have less impact upon property values than a total adult community, based upon previous studies.

o Summary of Literature Review

In October, 1990, the (1)Community Residences Information Services Program (CRISP) of White Plains, New York, published a summary of 58 studies that addressed the most often expressed fears, about the effects of subsidized housing and group homes on neighborhood property values. Only one study suggested negative impacts.

o Conclusions

Communities can absorb a limited number of residential care facilities without measurable property/transaction effects, or negative impact on surrounding properties. Several studies cautioned about "saturation" of a community with these facilities. However, only one study quantified "saturation" as having these facilities constitute five percent or more of the community.

Initial concerns about proximity to these facilities disappear within twelve months, causing some increase in time on the market, but not reduction in selling price.

(1) Community Residences Information Services Program, *"There Goes The Neighborhood,"* White Plains, New York, October, 1990.

There are absolute limits (although the limits were not specified in the studies) as to how many deinstitutionalized individuals can be absorbed by a community. "Deinstitutionalized individuals" are those who were previously in prison, mental health institutions, drug treatment facilities or similar institutions. **The housing proposal is for the homeless, however, and not "deinstitutionalized individuals."**

o **Seattle Group Facilities**

Burke-Gilman Townhouses

Photographs of Seattle group facilities for the homeless, mentally ill, elderly, handicapped, and youth-at-risk follow. Three of these have greater relevancy to the City's Plan for Sand Point, as they house seventy or more individuals in larger complexes in or adjacent to residential neighborhoods, rather than in group houses with an appearance similar to other houses in the neighborhood. Two of the three are relatively near the Base. The Burke-Gilman Townhouses are a subsidized housing development on Sand Point Way, started in 1989. The following zoning map, 9-1, demonstrates the concept of transitional zoning and buffers, covered in greater detail in the section "Zoning and Buffers." Please note the Burke-Gilman Trail on the west and Sand Point Way NE on the east with transitional L-2, L-3, LDT and the Children's Orthopedic Hospital's property fronting on Sand Point Way. Also, landscape mounds broke the flatness of the site. The site planning was done attractively.

The properties across Sand Point Way NE from the Burke-Gilman Townhouses are duplexes and triplexes, income properties. As income properties they are traded or bought and sold, which was done prior to the construction of the Burke-Gilman Townhouses. When construction started on the townhouses, the following transactions occurred:

5214 Sand Point Way NE
Sale on 5/15/89 for $185,000 ($53.67/SF) for 3,460 SF triplex built in 1959.

5220 Sand Point Way NE
Sale on 1/25/89 for $179,055 ($51.75/SF) for 3,460 SF triplex built in 1959.

5030 Sand Point Way NE
Sale on 1/17/90 for $300,000 ($56.60/SF) for 5,300 SF triplex built in 1960.

5035 Sand Point Way NE
Sale on 7/10/90 for $360,000 ($105.26/SF) for 3,420 SF triplex built in 1961.

5027 Sand Point Way NE
Sale on 11/27/90 for $370,000 ($73.71/SF) for 5,020 SF triplex built in 1958.

Since 11/27/90, there were no market sales indicated. There was a sale on 3/11/88 at 5208 Sand Point Way NE for $325,000 ($59.96/SF) for 5,420 SF built in 1967. Other sales were much earlier and their relevancy questionable with changes in the real estate market clouding the validity of the comparisons.

Sale Date	Price Per Square Foot
1/25/89	$51.75
5/15/89	$53.67
1/17/90	$56.60
7/10/90	$105.26
11/27/90	$73.71

There were no market transactions shown on the TRW microfiche since 11/27/90 to the present date. With construction started in 1989, these sales seem to validate studies indicating an adjustment period of up to twelve months. Also, a (1)study in a medium-sized northeastern city and three adjoining towns substantiate the conclusion that there is an upward trend of sales occurring just prior to the community residences opening. Thirty-nine percent of the sales took place the year before and 21% the year after.

Summary for the Burke-Gilman Townhouses

A case can be made for the single sale on 3/11/88 at $59.96/SF and the subsequent sale on 1/25/89 at $51.75/SF, a reduction of 13.7%. There is insufficient evidence to conclude that this reduction is valid and is related to the low income housing development. The earlier sale at the higher price was built eight years later than the lower priced sale. On the basis of the chronological sales comparisons, however, two sellers were willing to sell at prices lower than attainable in ten months. The most logical reason is the low income housing development. Prices rose and stabilized subsequently. This validates the extensive national studies which substantiate early selling by a few at lower than market with the market rising within a year to earlier or higher levels.

2401 Blakely

Seventy units of subsidized housing for the elderly and handicapped at 2401 Blakely is a well maintained facility in a multi-family area. The zoning around the apartments are L-3 and C-1, (see Map 9-2). This illustrates the property value principle of conformity. The location conforms with the adjacent uses. Judging from the sales transactions the neighborhood has stable property values. The sales history of thirty multiple family zoned housing around the subject confirms that conclusion.

(1) Lindauer, Martin S. (August, 1980). Pauline Tung and Frank O'Donnell. *"The Effect of Community Residences for the Mentally Retarded on Real Estate Values in the Neighborhoods in Which They Are Located."* Brockport, New York: State University of New York at Brockport.

Mt. Baker Village

Mt. Baker Village was started in 1988. There are 150 units of subsidized housing on McClelland, east of Rainier Avenue (see Map 9-3). This site is zoned L-3 with Neighborhood Commercial to the south; Martin Luther King, Jr., another buffer on the west; and a natural hillside on the east. Little impact on property values was expected due to location, buffers and transitional zoning. Review of sales in the immediate area, substantiated this expectation.

Group Housing

In addition, inspections were made along with limited interviews of the following:

William Booth Center, Salvation Army for the homeless at South Charles St. and Maynard Ave. South.

Westlake Hotel at Virginia and Westlake, Catholic Archdiocese, is a facility for fifty homeless elderly men.

El Rey Hotel on Second Avenue, between Lenora and Blanchard, is owned by the City and operated by the Community Psychiatric Clinic and contains fifty units for the mentally ill.

Straley House at 5602 15th Ave. NE has thirteen units for youth-at-risk, owned and operated by Youth Care.

Linden Apartments at 4127 Linden Ave. North has six units for the mentally ill and is owned and operated by the Community Psychiatric Clinic.

Summary for Group Housing

The group homes were well maintained and consistent in style and appearance with the other homes or buildings in their respective areas. There was no evidence of failure of the neighbors in absorbing the group homes into the neighborhood. Interviewees stated they were quiet and good neighbors.

o Low Income Housing Projects

A study of these projects was considered pertinent, due to the similarity of Phase Three of the City's Plan which calls for the erection of 28 two story 1,000 square foot "urban cottages" with presumably 500 square foot footprints. These buildings are to be constructed by the homeless after training under the auspices of the Seattle Conservation Corps. Two low income housing projects were selected as subjects for a "matched pair" analysis. They are as follows:

Park Lake Homes

This is a relatively small housing project and the newest of the three examined. Matched pairs were discovered and compared for similarities and adjusted for slight differences. Sale #1, located at 701 S. 142nd St., sold for $129,500 in August, 1993. This sale was built in 1978 with 1,380 SF, 3 bedrooms, 1 3/4 baths, a fireplace and a double garage. Sale #2, closer to the project, at 504 SW 118th St. sold for $117,000 in January, 1994. Sale #2 was built in 1978 with 1,400 SF, 3 bedrooms, 1 3/4 baths, a fireplace and a double garage. These two sales of comparable homes were both one story, similar in appeal and design. The only difference between these sales is Sale #2 is located directly across the street from Park Lake Homes. **The $12,500 difference or 9.7% reduction in the selling price may be directly attributable to its closer proximity to Park Lake Homes.**

Highpoint

The matched pair analysis produced more dramatic results at this development. Three proximate sales were noted. Sale #1, located at 5627 31st Ave. SW, sold for $95,000 in November, 1993, being built in 1981 with 1,060 SF, three bedrooms and a bath. Sale #2, located at 504 SW 118th St., sold for $89,900 in June, 1993, being built in 1981 with 1,060 SF, three bedrooms and a bath. Sale #3, located at 5426 31st Ave. SW, sold for $88,900 in December, 1993, being built in 1981 with 1,060 SF, three bedrooms and a bath. These three sales were matched and paired with very similar, but more distant sales, located at 6333 17th Ave. SW and 6337 17th Ave. SW. Both are 1980 construction, one story, 1,060 SF, three bedrooms and a bath. Both sales sold in July, 1993 and September, 1993 for $120,000. This reduction in value may be explained by proximity to Highpoint. The reduction ranged from 20% to 26%.

Summary of Low Income Projects

The reduction of property values of homes surrounding the smaller and nicer Park Lake Homes was approximately 10%, while those surrounding the larger Highpoint project were impacted to the extent of 20% to 25%. The differential can also be attributed to Highpoint's reputation and age. Our research indicates that if these projects were more representative of the style and character of the surrounding neighborhoods and well-buffered, the property value reductions would be less.

9.2 Summary of Findings and Conclusions

9.2.1 Findings

o Limited Absorption and Saturation

Housing for the homeless can be absorbed into neighborhoods without impact to

property values. This absorption is limited, however, and neighborhoods can be saturated with this type of housing. One study indicated a 5% of the neighborhood housing mix as being the "point of saturation."

o Greatest Impact Areas and Mitigation

The greatest impact to property values in a neighborhood from an alien or non-conforming use is within the first 300 feet. Buffers, including mounding and landscaping, streets, parks and transitional zoning can moderate the impact.

o Housing for Families

Housing for families and children is more acceptable than adult housing exclusively.

o Drug Treatment

Housing for drug treatment is the most difficult for a neighborhood to assimilate.

o Introduction of Housing

How housing is introduced into a community is critical to its acceptance.

o Large Projects Can Saturate a Community

Large low income housing projects similar to Park Lake Homes or Highpoint will diminish property values from 8% to 15%, depending upon the project and distance from the project and neighborhood buffers.

9.2.2 Conclusions

o Buffers and Transitional Zoning

Due to the **excellent "buffers" and existing transitional zoning** with **knowledgeable community involvement,** there should be **no impact** on property values with the introduction of homeless housing to Sand Point. **Any effect upon the actual market prices should be of relatively short duration.** The duration can be influenced by sellers' desires to dispose of their properties even at "below market" values. **Within a year, price stability should return.** Initially, time on the market may increase, but even this will return to equilibrium within the area market. The **neighborhood reaction** to housing for the homeless by anxious neighbors willing to sell at below market values **can influence the market as perceived by buyers for a relatively short time only.**

o **Presentation, Screening, Monitoring, Training**

Appropriate neighborhood presentation is vital to neighborhood acceptance of this housing. **Policies that selectively screen occupants, maintain buildings and grounds, establish and enforce house rules, monitor, train and counsel occupants will minimize neighborhood perception of property value diminution.** Presentation of these policies and their continued application will provide comfort to the neighboring community.

o **Traffic and School Attendance**

We do not believe possibly increased traffic and school attendance will decrease property values.

o **Saturation**

Saturation is pivotal to stable property valuation. What constitutes "saturation" has not been defined except as an ambiguous "more than 5%" in one study. Assuming that premise is correct, the question becomes "5% of what." Of necessity without quantifiable definition, **"saturation" becomes very subjective. It is our opinion, therefore, that the contemplated Phases I and II can be assimilated into the community without any adverse impact,** other than the short term influence mentioned above. **Based upon our studies, we believe Phase III falls into the realm of "saturation" and that not so much as to the incremental 87 family members intended to occupy the 28 new two story urban cottages, but by the type of housing provided.**

These 28 "cottages" have a small footprint (500 square feet or perhaps 20 feet by 25 feet) and are two stories high. This is totally out of character for the community. The historic structures of Sand Point are accepted and their adaptation to a "inharmonious land use" (see Zoning and Buffers) are more readily acceptable to the community.

o **Loss of Property Value**

Based upon our studies and experience, Phase III, as currently proposed, will diminish property values in the area. The diminution of value could be 2% to 5% or 6% depending upon proximity to the development. Again, we believe that multiple housing units, providing greater mass, to accommodate the incremental number of residents, would be more acceptable to the neighboring community than individual small "urban cottages."

o **Mitigation of Phase III**

The urban cottage concept is not consistent with the style and character of the surrounding area. Burke-Gilman Townhouses were satisfactorily absorbed into the neighborhood. View impact is not a factor due to mature trees and landscaping acting as buffers to the line of sight from View Ridge, except for the condominiums across Sand Point Way NE.

Sand Point Way buffers the Naval Station and the multi-family apartments.

Mt. Baker Village. 150 units of subsidized housing on McClelland, east of Rainier Avenue. The property is set apart from adjacent properties.

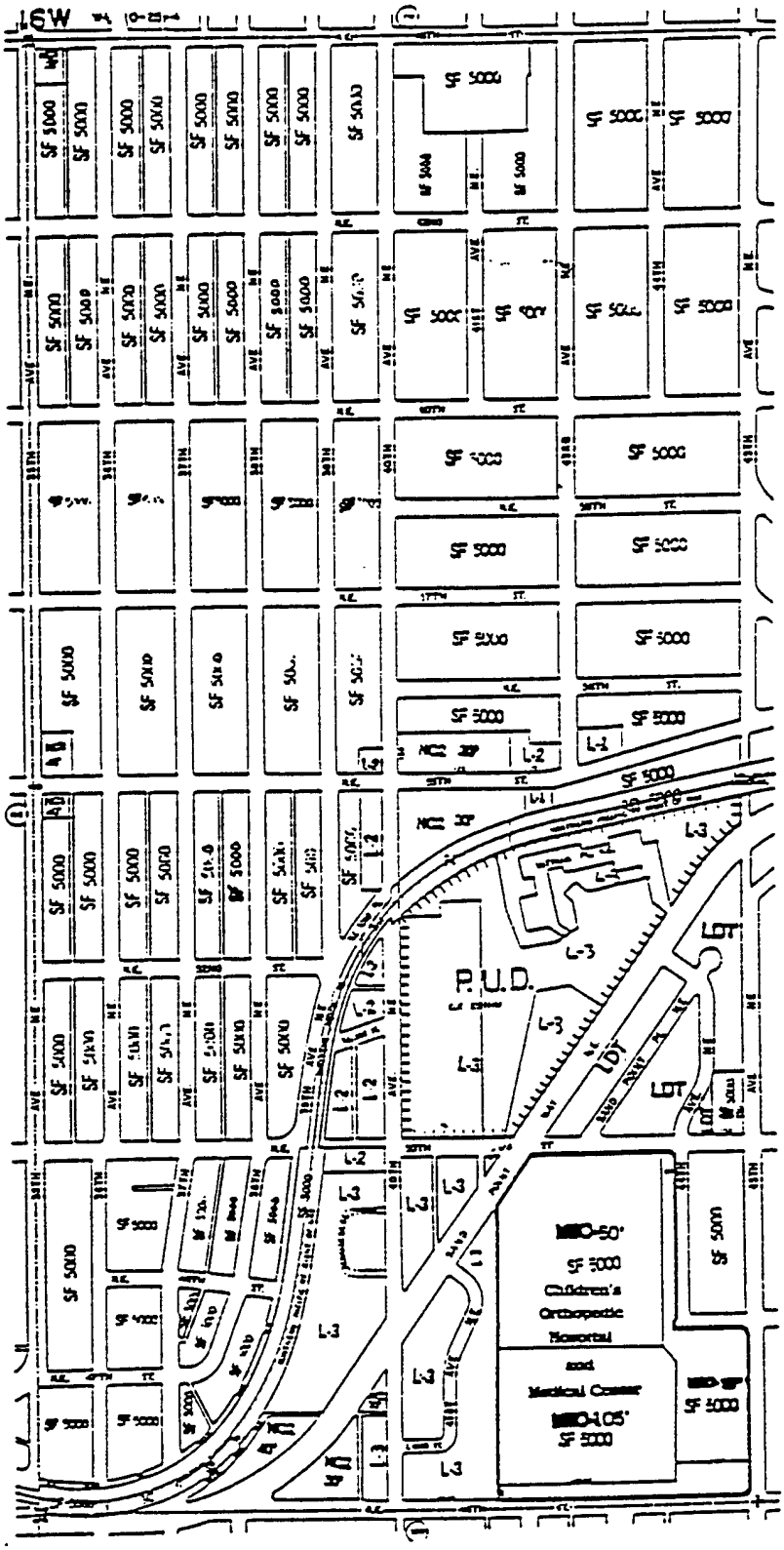
Burke-Gilman Townhouses: a subsidized housing development on Sand Point Way. Owner of the duplex at 5063 and 5065 Sand Point Place NE said when the development was built there was some initial concern, but it did not last long nor did it effect rent or property values.

William Booth Center, Salvation Army for the homeless at South Charles St. and Maynard Ave. South. (Top)
Westlake Hotel at Virginia and Westlake, Catholic Archdiocese. Fifty units for homeless elderly men. (Bottom)

2401 Blakely (off Ravenna Boulevard): 70 units of subsidized housing for elderly and handicapped, located in a multi-family area. Well maintained.

El Rey Hotel on Second Avenue, between Lenora and Blanchard is owned by the City and operated by the Community Psychiatric Clinic. Contains 50 units for the mentally ill. (Top) Straley House at 5602 15th Ave. NE, 13 units owned and operated by Youth Care. Neighbor never hears them - says they are good neighbors. (Bottom)

Linden Apartments at 4127 Linden Ave. North, owned and operated by the Community Psychiatric Clinic for the mentally ill, six units.



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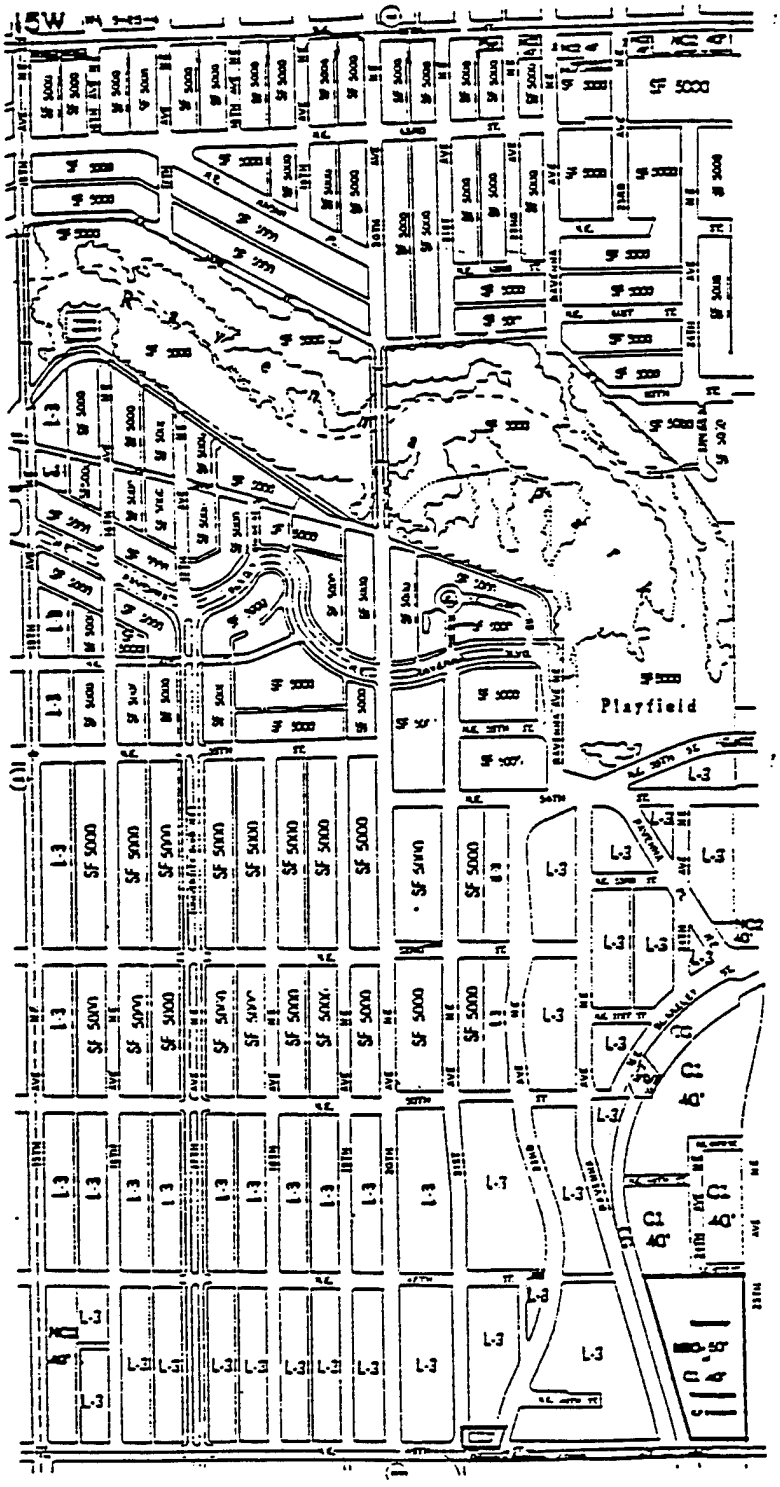
MAP 9-1



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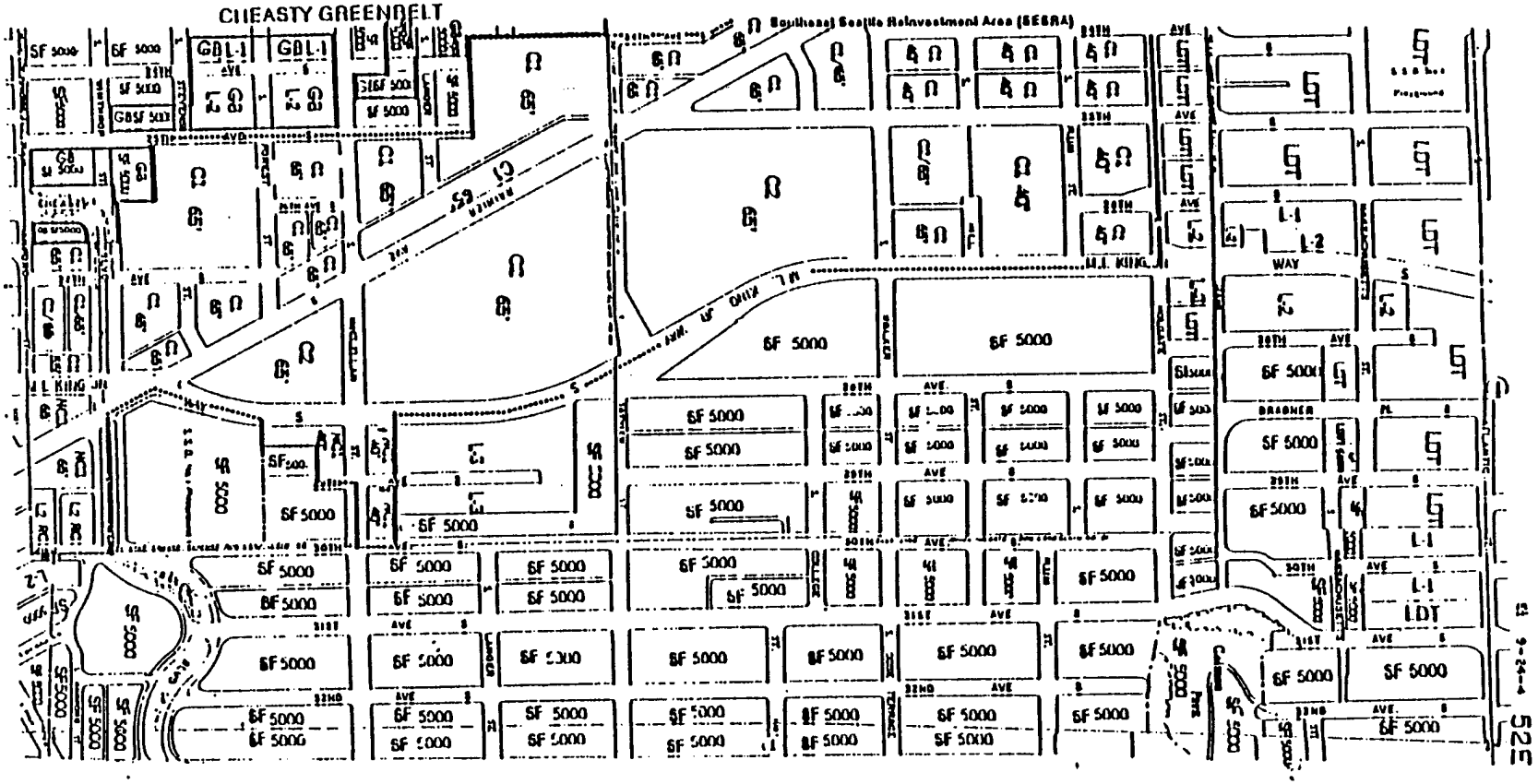
MAP 9-2


CHEASTY GREENBELT
Southeast Seattle Reinvestment Area (SESRA)
SF 5000
GDL-1
L-1
L-2
L-3
LDT
MLK WAY
BRADNER PL
9-24-4

MAP 9-3

10.0 DISCUSSION OF A NATIVE AMERICAN VOCATIONAL SCHOOL AND COLLEGE

Perhaps the primary and pivotal focus of the Tribe's Proposal is the establishment of a school with planned enrollment of 5,000 to 7,000 students. The school's emphasis is twofold: first, provision of a two year associates degree program with an emphasis on Native American culture and secondly, establishing a vocational school, preparing Native Americans "for apprenticeship and/or the workforce." Other integral segments of this proposal are conversion of some of the existing base buildings for classrooms and dormitories and setting up "light manufacturing and warehousing services" in some of the existing buildings. The "revenues generated will be used for operation in the maintenance of the Industrial Park, and will supplement revenues to operate a college." Although the light industrial and warehousing facilities may or may not employ tribal members, the desire is that companies occupying these spaces will employ members of the Tribe.

10.1 SELECTED COMPARABLES FOR SCHOOLS

Four colleges were selected as the bases of "matched pair" analyses. The basis was enrollment similar to that proposed and the composition of the neighborhood. The University of Washington was for a number of reasons considered an inferior comparable. The schools selected were Bellevue Community College, Northwest College in Kirkland, Shoreline Community College in Seattle and North Seattle Community College.

10.1.1 Bellevue Community College

Bellevue Community College has been operating as a non-residential college for approximately twenty-four years on a 96 acre main campus. The present enrollment or head count is 16,000 student with an FTE (Full Time Equivalents) of 7,000. Its address is 3000 Landerholm Circle SE, Bellevue 98007, which is north of I-90 at 148th Ave. SE. Average quality single family homes are located to the north and southwest. East of the campus is a large Mormon temple and seminary and Robinswood Park. Southeast of the College is a large shopping plaza, commercial offices and I-90 freeway.

o Study Methods

Approximately 300 sales of single family residences between 9/1/92 and 5/28/94 were examined to estimate selling price differentials, if any, between homes near the community college and those similar but more distant. Home purchases may also be influenced by proximity to the Mormon facility, but this effect will be similar throughout the neighborhood examined.

o **Study Comparables**

The sale of the two story home at 2664 146th Ave. SE (directly across from the College) was consummated in February, 1994 for $140,500. This Comparable #1 of 1,730 SF was built in 1962. Comparable #2 at 1725 147th Place SE sold in June of 1993 for $149,745. This two story home was built in 1969 with 1,870 SF in a similar neighborhood not directly impacted by nearness to the College. After adjustments for dissimilarities, the reduction in property value due to the college was determined to be $3,000 or approximately 2%.

A comparison was made of three homes immediately northwest and north of the College, but less influenced by the College. These comparisons were 2445 139th Ave. SE with 1325 144th Ave. SE; 2419 138th Ave. SE with 1226 147th Ave. SE; and 14227 SE 22nd St. with 1906 145th Ave. SE. Price variables between the subject comparables were negligible and considered more attributable to size and amenities differences than college proximity.

o **Study Conclusions**

Due to the limited 2% differential and absence of strong supporting evidence to the contrary, there is no sustainable negative impact due to proximity to Bellevue Community College.

10.1.2 North Seattle Community College

North Seattle Community College is a non-residential college, located at 9600 College Way North, Seattle 98133 on sixty-eight acres of land with 9,400 enrollment and 3,500 FTE. The school went into operation in 1970. The campus is bounded on the east by I-5 Freeway. Northgate Mall is just east of I-5 to the northeast of the College. This campus is the most urban of those investigated, attracting students from mostly working class backgrounds with some on poverty assistance programs and the typical mix of middle income backgrounds. The surrounding neighborhood is comprised of average quality homes on small lots along with multi-family housing and offices.

o **Study Methods**

Approximately 400 sale transactions between 1/1/93 and 5/28/94 were scrutinized. Comparisons were made between homes within three to four blocks of the College and those more distant. Some constraints were apparent because of the homes in the area older than 1945, their diversities in condition and improvements. No attempt was used to discover "matched pairs" for these older homes.

o **Study Comparables**

Two closer-to-campus homes at 10031 Wallingford Ave. N, a 1,760 SF rambler, built in 1962 and sold in August, 1993 for $155,000 and 10019 Wallingford Ave. N, a 1,750 SF rambler, built in 1962 and sold in April, 1994 for $154,000 were compared to a similar 1,740 SF rambler, built in 1955 at 11733 Evanston Ave. N, selling for $167,500 in July, 1993. After adjustments for garage differences, (11733 has a 2-3 car garage, while 10031 and 10019 each have a one car garage) there existed a $6,500 to $7,500 or 5% variance., which appears attributable to closeness to the community college.

Another effective comparison was 9528 Densmore Ave. N, a 1,270 SF, two story home built in 1986, selling in February, 1994 for $150,000 and 9525 Wallingford N, a 1,300 SF, two story house built in 1986, selling in October, 1993 for $157,000 and a most similar sale, but more distant, at 2129 N. 88th St., a 1,300 SF, two story home built in 1988, selling in March, 1994 for $160,000. This comparison demonstrated a $3,000 to $10,000 differences, attributable to community college proximity.

o **Study Conclusions**

This more urban community college has an estimated 5% negative impact on the selling prices of relatively newer homes nearby to the College.

10.1.3 Northwest College

This college was at one time a government housing facility in Stewart Heights. It was established in 1954 on a sixty-five acre campus at NE 53rd St. in Kirkland, 98033. There are 850 students enrolled with a 777 FTE. The college is a Seventh Day Adventist school about five blocks east of I-405, surrounded by homes of above average quality, although there are some of merely average quality. The headquarters and training facility for the Seattle Seahawks of the National Football League abuts the college on the southeast.

o **Study Methods**

Approximately 175 sales of single family homes sold between 9/1/92 and 5/28/94 were examined.

o **Study Comparables**

Lower priced homes, nearby and away, from the College were compared as follows:

5423 108th Ave. NE (1947 built 1,040 SF rambler) sold in February, 1994 for $132,000 compared with 6514 103rd Ave. NE (1942 built 910 SF rambler) sold in February, 1994 for $135,000.

5330 106th Ave. NE (1948 built 1,070 SF rambler) sold in May, 1993 for $139,000 and 5428 106th Ave. NE (1955 built 1,060 SF rambler) sold in November, 1992 for $135,000 compared to more distant 6530 103rd Ave. SE (1942 built 910 SF rambler) sold in November, 1992 for $130,000 and 6520 102nd Place NE (1942 SF 1,060 SF rambler) sold in November, 1992 for $122,000.

More superior homes of size and quality were compared, the nearby with the more distant. 5912 105th Ave. NE to 6298 105th Ave. NE and the close 5913 112th Place NE with 4435 109th Place NE and 105 NE 44th St.

o Study Conclusions

Closeness to the College has no impact on home values for better quality homes, while actually enhancing the value of basic or "starter" homes by about 5%. This is covered on Page 7-4 under Conformity. Another factor at work is that "starter" homes near colleges are often used for rentals, although no rent studies were conducted.

10.1.4 Shoreline Community College

Shoreline Community College is sited at 16101 Greenwood Ave. N, King County 98177, having been established in 1965 on eighty-three acres with an 8,500 non-residential enrollment and 4,500 FTE. Although it is located in an unincorporated area in northwestern King County, the surrounding residential area is nearly fully developed. A large county park is contiguous on the west and northwest effectively buffering residential areas to the west, especially the large Innis Arden development of near to above quality homes built in the 1950's. Also unimpacted is the exclusive Highlands, a gated community to the southwest with most homes in excess of $1,000,000. Area homes to the east and north are more typically average to above average quality.

o Study Methods

Approximately 300 sales of single family homes, sold between 5/1/93 and 5/28/94. were analyzed.

o Study Comparables

A sale of nearby 17316 Palatine Ave for $147,500 on 11/4/93 was contrasted with the 9/17/93 sale of 15241 Densmore Ave. N for $151,500 and a 4/11/94 sale of 18215 Dayton Ave. N for $147,500. These similar tri-levels showed no price differential due to location in relation to Shoreline. Additional comparisons were made between nearby 545 N. 170th Place, a 1,430 SF rambler, and 20218 Densmore Ave. N, along with comparisons with nearby 542 N. 170th Place and 203 N. 168th to four more distant 1,250 SF to 1,300 SF 1950 built ramblers. There were no differences attributable to proximity to Shoreline.

o **Study Conclusions**

Proximity to Shoreline Community College has little or no impact on the value of area homes.

10.2 INTERVIEWS

Interviews with Michael Roberts, in charge of school construction for the State of Washington, and James St. Germaine of the Seattle Community College District were conducted. They knew of no studies or literature regarding value changes of properties located near colleges. Mr. St. Germaine stated their experience has always been positive as to property value increases and the desirability of being located near a college.

10.3 STUDY SUMMARY

Based upon extensive research and transaction analysis of four college neighborhoods, there is little impact or loss of property values on surrounding homes by virtue of a nearby college except those contiguous to the college. The impact upon properties around **Shoreline and Bellevue Community Colleges**, both established in relatively stable middle class neighborhoods with higher income residents and with a student body drawn from those neighborhoods, appears minimal and neutral. Northwest College with a predominantly single religion student body appears to increase the value of the most affordable nearby homes with no impact on those of better quality. **Northwest College** has a well maintained campus in keeping with the neighborhood and spacious grounds for a small college. **North Seattle Community College** appears detrimental to closeby newer single family homes. This is an interesting study as single family homes are across College Way from the school and then the next block west is an L-2 zone and then five blocks of multiple zoning and C-1 and C-2 fronting Aurora Avenue. In other words between Aurora Avenue and the I-5 Freeway, there is little effective buffering of single family homes (see Maps 10-1 and 10-2).

On the basis of the study, it appears the proposed vocational school or two year college will have little impact on the adjoining property values.

10.3.1 Mitigating Measures

Jeffrey Wakens, Economic Development Specialist for the Muckleshoot Indian Tribe, commented that the 5,000 to 7,000 enrollment with a tribe population of only 1,200 members is unrealistic, although non Native Americans could also enroll. He felt that a maximum enrollment of 1,500 students with 600 in the dormitories is realistic.

11.0 TRAFFIC, VIEWS AND PARKS

There are other factors which influence property values. These are traffic, views and parks.

11.1 TRAFFIC

A traffic study was completed, which indicated that the arterials, roads and streets are adequate to handle the growth and the adoption of either the City's or the Tribe's Proposals. Adequacy does not mean that there is no impact on property values due to incremental traffic. The market makes price adjustments for increased traffic flow. Although the prime concern in any study is the measurement of any possible loss of value for residential properties on heavily traveled streets and those not fronting on these streets, there is another concern for the commuter. Once he or she gets into the traffic flow, even if he or she does not live on the street, the individual commuter is subject to the frustrations of heavy traffic during the peak hours, which may not cause them to sell, but may cause them not to buy in an area subject to traffic congestion.

According to the Tribe's employment and enrollment figures, there will be 7,000 to 9,000 people on the Base. This can be contrasted with the highest number of individuals at the Station during World War II of 4,625 Navy and Marine personnel and 2,384 civilians or a total of 7,009 persons. During the war, however, the base was over three times larger in area than it is today. That included substantial acreage in runways. Many service personnel lived on the Base, so commuter traffic was reduced. We can assume that the community was more receptive during the war to this increased traffic. Under the Tribe's Plan some of the buildings and hangars will be used in an industrial park, which will create truck traffic to move products fabricated in the area. In comparison to the war years, the University of Washington more than doubled in enrollment, more houses were built and traffic increased.

11.1.1 Research Method

An analysis of 150 home sales was conducted to determine whether homes fronting on arterials with greater traffic volume have a loss of property value in comparison to those homes fronting smaller feeder streets with substantially less traffic. "Matched pair sales" were attempted in order to discover any value differences. No specific matched pairs were discovered due to the dissimilarities between properties. For example, few houses front Sand Point Way NE, except near Matthews Beach. Much of Sand Point Way NE is occupied by commercial and multi-family housing.

However, based upon the historical sales pattern of the areas of study, a noticeable difference in sales prices were observed in homes that front Sand Point Way NE and

those on 53rd St. NE. The sales price variance seems to be ascribed only to the busy arterial. There were no matched pairs discovered to quantify the price differential, however, there were enough sales around Sand Point Way NE to make a reasonable assumption based on the historical data available.

11.1.2 Study Conclusions

Based upon the three areas examined, the following conclusions were derived:

o **Over the last ten years, sales around Sand Point Way NE, fronting on this arterial or other busier arterials, sell for less than houses not on as busy a street. The research and analysis concludes that there is a 2% to 3% differential in price due to arterial traffic and usually an extension of the marketing period.**

o **Typically, home owners living on Sand Point Way NE have fewer children under the age of ten than those on less busy streets. Real estate brokers acknowledge this and also that the market is more restrictive along with a longer marketing period generally for homes on busy streets.**

o **The incremental traffic generated by the 7,000 to 9,000 individuals, employed and in school at Sand Point under the Tribe's plan will impact property values. Condominiums and apartments on Sand Point Way NE will be materially affected. Demand will lessen for both rentals and condominium purchases and the marketing period will be extended, causing higher vacancies. This impact is estimated at an incremental 3% to 6%, although it will lessen proportionately the greater the distance from the traffic congestion. The few alternative routes will also increase their traffic load as the traffic study indicated.**

o **The traffic generated by the City's proposed reuse plan will have no effect upon property value. The traffic study indicated the traffic generated by the City's plan to be less than 40% of that generated by the Tribe's plan.**

11.2 VIEW IMPACT

With the View Ridge district immediately across Sand Point Way NE and up the hill, the question must be asked as to what loss of property value would result from the impact on view of some of the changes proposed on the Base. **After physically inspecting many of the streets in View Ridge and the surrounding areas, our conclusion is there will be little or no impact on property values.** View Ridge is a mature area with much vegetation serving to act as a buffer, keeping the surrounding area from seeing most of the Base. Inverness' view orientation is northeast of the Base. Of course, the apartments and condominiums on Sand Point Way NE see the brick buildings as they have.

11.3 VALUATION INCREASE DUE TO PARK?

On the basis of research, no data was discovered to sufficiently measure the impact of a park on property values. Often, there is an inseparable relationship between traffic and a park. For example, Laurelhurst Playfield has homes on streets that dead end into the Playfield. This location is quite desirable to families with small children, not only from the benefits of the park, but also less traffic.

The fifty acre expansion of Magnuson Park under the City's plan, which restores Mud Lake and the wetlands and increases public recreational facilities, enhances the desirability of the area. This should provide a positive effect upon the property values in the neighborhood. Statistically quantifying this amenity is difficult with any certainty, however.

12.0 THE TRIBE'S MARINA

The Tribe in its proposal outlined its concept of a marina with several functions. One is to participate in a study of the feasibility of a spawning channel for sockeye salmon on the Cedar River and to hold and test adult salmon. Another is to develop an area for the 120 licensed fishermen of the Tribe to store boats, repair nets, and the ability to access the Lake after dusk, when gillnet fishing is done. It would also be used to meet with tribal fish commissioners, the fishermen, and to conduct biological experiments. The public would have recreational access, except "during parts of the fishing season." A restaurant is planned for the site.

12.1 SELECTION OF ELLIOTT BAY MARINA AS COMPARISON

A good comparison was afforded by the Elliott Bay Marina, a large 1,200 slip privately owned public marina, completed in October, 1991 on Puget Sound with Port of Seattle, formerly US Navy docks and light industrial area to the northeast. Residential areas to the north and northwest contain typically older above average to good quality homes with some homes on privately owned waterfront.

12.1.1 Study Methods

Analysis of about 100 sales consummated between 5/28/93 and 5/28/94 were examined in an endeavor to measure the impact of the marina. In addition, approximately 400 sales between 9/1/90 and 12/29/92 were examined with the focus of the effect of construction on property values. The Seattle area experienced rapid increases in residential property values prior to about May, 1990. Older sales were not utilized due to the strong rising market and the additional need to factor in changes in market prices, both general as to Seattle and specific as to location.

12.1.2 Rationale for Selecting Elliott Bay Marina

Elliott Bay Marina was the only large marina constructed in the greater Seattle area within the past ten years. The marina is substantially larger than the one contemplated on Pontiac Bay by the Tribe, but there is a property value relationship. A small marina the size the Tribe is considering for their fishing boats is similar to a small light industrial facility, well buffered from existing residences. The Salmon Bay terminal was considered as a possible study area due to similar use and size. This terminal is well buffered from single family residences by other commercial and industrial uses and by a rail yard. A comparison due to pertinent dissimilarities would provide questionable conclusions.

12.1.3 Comparable Sales After Completion

The relatively close 1923 34th Ave. W (built in 1951, 1,590 SF with 660 SF finished in

basement) sold for $275,000 in January, 1994 was contrasted with the more distant 2611 40th Ave. W, which sold for $280,000 in October, 1993 (built in 1946, 1,530 SF with a basement, 500 SF finished). $5,000 differential could be attributable to the marina.

The close-by 1615 28th W, sold in August, 1993 for $282,000 was compared to the very similar, but distant 2118 29th Ave. W, sold in July, 1993 for $284,000 - no discernible distinction. Two proximate smaller homes (1,000 to 1,100 SF with basements): 2002 28th Ave. W. (July, 1993 sale at $175,000) and 2206 28th Ave. W (November, 1993 sale at $171,500) were compared to two more distant sales at 2607 W. Howe St. (May, 1994 sale at $178,000) and 2858 30th Ave. W. (December, 1993 sale at $186,500) illustrating a difference of $3,000 to $10,000 due to marina proximity after adjustments.

o Conclusions

A $5,000 negative effect can be estimated due to the nearness to the marina. In this price range, this difference is only 2% to 3%, less than the typical price fluctuation throughout the general Seattle area.

12.1.4 Valuation Before and After Construction

Five matched pairs were compared, concluding that prices went up slightly before and after construction was completed. This was parallel to market increases, however. The obvious conclusion was that there was no detrimental valuation effect during construction.

12.2 APPLICATION TO THE TRIBE'S PROPOSAL

Our research indicates a property value impact on the waterfront properties adjacent to the Tribe's marina. This is due to the fishing boats and their traffic. Their number is uncertain with 120 fishermen, but in all probability the number could exceed 30 boats. The boats will be moored in the marina, moving out at dusk creating engine noise during the gillnet season. There is little to buffer their activity from waterfront homes to the north. It is estimated that the impact on property values would be in inverse proportion to the distance from the marina. The waterfront home immediately contiguous could have an estimated diminution of property value of 7% to 10%. The impact area would be the waterfront properties and those nearby in the Matthews Beach area.

ADDENDUM

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UNDERLYING ASSUMPTIONS AND LIMITING CONDITIONS

1) By this notice, all persons and firms reviewing, utilizing or relying on this report in any manner bind themselves to accept these assumptions and limiting conditions. Do not use this report if you do not so accept. These conditions are a part of the appraisal report, they are a preface to any certification, definition, fact or analysis, and are intended to establish as a matter of record that the appraiser's function is to provide a present market value indication for the subject property based upon the appraiser's observations as to the subject property and real estate market. This appraisal is not an engineering, construction, legal or architectural study nor survey and expertise in these areas, among others, is not implied.

2) The liability of Lamb Hanson Lamb Appraisal Associates, Inc., its Associated Appraisers, its employees and affiliated independent contractors is limited to the client only and only up to the amount of the fee actually received for the assignment. Further, there is no accountability, obligation or liability to any third party. If this report is placed in the hands of anyone other that the client, the client shall make such party aware of all limiting conditions and assumptions of the assignment and related discussions. The appraisers are in no way responsible for any costs incurred to discover or correct any deficiencies of any type present in the property; physically, financially, and/or legally. In the case of limited partnerships or syndication offerings or stock offerings in real estate, client agrees that in case of lawsuit (brought by lender, partner or part owner in any form of ownership, tenant, or any other party), any and all awards, settlements, or cost of any type in such suit, regardless of outcome, client will hold Lamb Hanson Lamb Appraisal Associates, Inc., its Associate Appraisers, its employees and affiliated independent contractors, completely harmless in any such action. Acceptance of and/or use of this appraisal report by client or any third party is prima facie evidence that the user understands and agrees to these conditions.

3) The appraisal is based on the premise that there is full compliance with all applicable licenses, consents, permits, legislative or administrative authority, environmental regulations, building permits, and any other constraints.

4) The appraiser has inspected as far as possible, by observation, the land and the improvements; however, it was not possible to personally observe conditions beneath the soil or hidden structural, or other components. We have not critically inspected mechanical components within the improvements and no representations are made herein as to these matters unless specifically stated and considered in the report. The value estimate assumes that there are no such conditions that would cause a loss of value.

5) Unless otherwise stated in this report, the existence of hazardous substances, including without limitation: asbestos, polychlorinated biphenyls, petroleum leakage, or agricultural chemicals, which may or may not be present on the property, or other environmental conditions, were not called to the attention of nor did the appraiser(s) become aware of such during the appraiser's inspection. The appraiser has no knowledge of the existence of such materials on or in the property unless otherwise stated. The appraiser, however, is not qualified to test such substances or conditions. The presence of such substances, such as asbestos, urea formaldehyde foam insulation, or other hazardous substances or environmental conditions, may affect the value of the property. The value estimated is predicated on the assumption that there is no such condition on

or in the property or in such proximity thereto that it would cause a loss in value. No responsibility is assumed for any such conditions, nor for any expertise or engineering knowledge required to discover them. The client is urged to retain an expert in this field, if so desired.

6) No specific soil bearing tests were furnished or made as a part of this report; however, soil stability and bearing capacity are assumed to be sufficient to permit development.

7) The drawings and dimensions are assumed to be correct as supplied. Any maps, sketches, reproductions or photographs included in this report are for illustration and as an aid in visualizing the property only. No survey was provided the appraiser, nor was a legal description supplied.

8) All information as found in data furnished or in public records is deemed reliable. If any errors are found, the right is reserved to modify the conclusions reached.

9) It is assumed that the property which is the subject of this report will be under prudent and competent ownership and management, neither inefficient not super-efficient.

10) The distribution of the total valuation in this report between land and improvements applies only under the existing program of utilization. The separate valuations for land and building must not be used in conjunction with any other appraisal and are invalid if so used. The values assigned to improvements shown in this report are in proportion to the contribution said improvements make to the value of the property as a whole.

11) Appraisal reports that contain a valuation relating to an estimate in land that is less than the whole fee simple estate are subject to the following: "the value reported for such estates relates to a fractional interest only in the real estate involved and the value of the fractional interest plus the value of all other fractional interests may or may not equal the value of the entire fee simple estate considered as a whole."

12) Appraised values that relate to geographical portions of a large parcel or tract of real estate are subject to the following: "the value reported for such geographical portion relates to such portion only and should not be construed as applying with equal validity to other portions of the larger parcel or tract. The value reported for such geographical portion plus the value of all other geographical portions may or may not equal the value of the entire parcel or tract considered as an entity."

13) The appraiser assumes that the purchaser, lender or guarantor are aware that (1) this appraisal of the subject property does not serve as a warranty on the condition of the property, (2) it is the responsibility of the purchaser, lender or guarantor to examine the property carefully and to take all necessary precautions before signing a purchase contract, mortgage or any other documents, and (3) any estimate for repairs is a non-warranted opinion of the appraiser(s) unless otherwise stated.

14) The value premises cited in this report are considered foundational and basic to the value opinions reported herein, and the right is hereby reserved by the appraiser to alter, revise and/or rescind any of these said value opinions should subsequent or additional data be found, or in the event the conditions are modified to any extent.

15) Possession of this report, or any portion or copy thereof, does not carry with it the right to publication, nor may the same be used for any purpose by anyone but the client without

the prior written consent and approval of the appraiser, and in any event, only in its entirety.

16) Employment to make this appraisal does not require testimony in court unless mutually satisfactory arrangements are made in advance.

17) Any estimated market value, which is defined in the report, is subject to change with market changes over time; value is highly related to exposure, time, promotional effort, terms, motivation, and conditions surrounding the offering. The value estimate considers the productivity and relative attractiveness of the property physically and economically in the marketplace.

18) In cases of appraisals involving the capitalization of income benefits, the estimate of market value is a reflection of such benefits and appraiser's interpretation of income yields and other factors derived from market information. Such estimates are as of the date of the estimate of value; they are thus subject to change as the market and value are naturally dynamic.

19) Where a discounted cash flow analysis has been used, it has been prepared on the basis of information and assumptions stipulated in this report. The achievement of any financial projections will be affected by fluctuating economic conditions and is dependent upon the occurrence of other future events that cannot be assure. Therefore, the actual results achieved may vary from the projections made and such variations may be material.

20) Neither all nor any part of the contents of this report (especially any conclusions as to value, the identity of the appraisers, or the firm with which they are connected, or any reference to the Appraisal Institute or the MAI designation) shall be disseminated to the public through advertising media, public relations media, news media or any other public means of communications without the prior written consent and approval of the appraiser(s).

CERTIFICATION OF APPRAISER

I hereby certify that, to the best of my knowledge and belief,...

1) The statements of fact contained in this report are true and correct.

2) The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are my personal, unbiased professional analyses, opinion and conclusions.

3) I have no present or prospective interest in the property that is the subject of this report, and I have no personal interest or bias with respect to the parties involved.

4) My employment and/or compensation are not contingent upon the reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value estimate, the attainment of a stipulated result, or the occurrence of a subsequent event.

5) My reported analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the requirements of the Appraisal Institute's Code of Professional Ethics, the Uniform Standards of Professional Appraisal Practice of the Appraisal Foundation, and the Principles of Appraisal Practice and Code of Ethics of the American Society of Appraisers.

6) I have made personal inspections of the property that is the subject of this report.

7) In arriving at the analyses, conclusions and opinions concerning real estate contained in this appraisal report, we consulted with Leonard A. Carey, CCIM, ASA, Charles O. Russell, PhD, Kevin A. Hildebrandt and James P. Goebelbecker, MBA, and we hereby acknowledge their professional contribution to the analyses, conclusions and opinions concerning real estate set forth in the appraisal report.

8) I am a Washington State Certified Appraiser #27011-LA-MB-*MB83R3

6-6-44
Date

Michael B. Lamb, MAI, SRA

QUALIFICATIONS AND EXPERIENCE

MICHAEL B. LAMB, MAI, SRA

State - Certified General Real Estate Appraiser # 270-11 LA-MB-*M-B83R3

Since 1969, appraisal experience in various types of property for financing, acquisition, economic studies, estate valuation, feasibility reports, Ad Valorem Tax Reevaluation, Just Compensation, partial interests, business valuation, mechanical and equipment, and Fair Market Value in the states of Alaska, Idaho, Oregon and Washington.

EDUCATION:

University of Portland - B.A. in Political Science and Business Administration.

Completed MAI, Course 1A, American Institute of Real Estate Appraisers - Basic Principles, Methods and Techniques (1971).

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Completed MAI, Course 11 - American Institute of Real Estate Appraisers - Urban Properties (1974).

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Instructor Course 201 - Society of Real Estate Appraisers - Income Property Valuation.

International Conference, Workshop #2, #8, #11, #14, #16 - American Institute of Real Estate Appraisers - Aug. l987.

Litigation Valuation Seminar - American Institute of Real Estate Appraisers - June 1988.

Numerous AIREA and SREA Education Seminars.

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Certified Real Estate Appraiser - General - State of Washington.

EXPERIENCE:

Currently President of Lamb Hanson Lamb Appraisal Associates, Inc., Seattle, Washington.

State of Washington Real Estate License.
Project Manager, Whitman County (Washington) Ad Valorem Tax Reevaluation, 1970.

Qualified as expert witness in King County, Washington Superior Courts and United States District Courts.

Lecturer - Pacific Northwest Bell, Lions, Kiwanis, Rotary Club, American Right of Way Association, Shoreline Community College, Washington State Bar Association, Real Estate Companies and Lending Institutions.

Department of Natural Resources Appraisal Panel on Aquatic Properties, 1979.

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TYPES OF PROPERTIES APPRAISED:

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PROFESSIONAL MEMBERSHIPS:

Member, Appraisal Institute	1974
Founder, SEED South East Effective Development	1984
Past President, Seattle Prep Alumni Association	1990
Member, Western Washington Energy Efficient Mortgage Task Force	1992
Member & Chapter Services-Region 1 Representative	1993
Member, Washington State Governmental Regulations Subcommittee	1993
Member, Minorities Relations Committee	1990 - 1994
Chair, Washington State Real Estate Appraisal Advisory Committee	1994
Chair, Board of Directors - Appraisal Institute Region 1	1994
Member, American Real Estate Society	1994
Member, International Right-of-Way Association	1994
Panel Member, American Arbitration Association Commercial Panel	1994
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Member, Columbia Tower Club	1994
Member, The Academy of Political Science	

PUBLICATION:

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Alpac Corporation
American Express
American Savings
Arthur Mortgage
Bank of California
Capitol Savings
Capretto & Clark Investment
Cascade Savings
Centrust Mortgage
Church of Latter Day Saints
Citicorp Financial Center
Citizens Federal
City of Bellevue
City of Kent
City of Redmond
City of Renton
City of Seattle
Clallam County
Commonwealth Relocation
Continental, Inc.
Dade Mortgage
Dupont Company
Eastman Kodak
Equitable Relocation
Farmers Insurance
Federal Home Loan Bank
First Line Mortgage
First Mutual Savings
FISCO
Foster & Marshall Realty
Gibralter Savings
GSA
Gulf Oil Company
Highline Savings
Hudson Oil Company
Kent Parks Department
Kent Public Schools
Kent Public Works
King County
Kittitas County
Lincoln Mutual Savings
Lockheed Fed. Credit Union
McChord Credit Union
Merrill Lynch Relocation
METRO
Metropolitan Mortgage
Old National Bank
Old Stone Mortgage
Pacific Northwest Bell
Peoples Bank
Pierce County
Port of Seattle
Prudential Mutual
Puget Sound National Bank
Puget Sound Power and Light
Queen City Savings and Loan
Rainier Mortgage
Puget Sound Bank
Security Pacific Mortgage
Seafirst Mortgage
Seafirst National Bank
Seattle Telco Credit Union
Shearson American Express
Shelter Mortgage
Snohomish County
Stouffer Hotels
Transamerica
University Savings Bank
U.S. Bank
U.S. Credit Corporation
Van Relco Relocation
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Washington Mutual
Washington State
WestAmerica Bank
Weyerhaeuser

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Former State Representative
State Representative
Former State Senator
Former King County Assessor
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Mayor, City of Seattle
Seattle City Council:

Puyallup Tribal Claims
U.S. Senator Inouye
U.S. Representative Norm Dicks
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Fred May
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Leonard A. Carey is currently the manager of the Multi-Disciplinary Group (MDG) of Lamb Hanson Lamb Appraisal Associates, Inc. and President of Carey, Inc., a real estate consulting and appraisal services firm. He is experienced in consulting and/or appraising a variety of commercial properties, institutions, industrial facilities, retail, apartments, land, and special purpose buildings. His consulting experience has involved highest and best use studies, feasibility/market studies, investment analysis, site observation, economic analysis, acquisition, contract negotiations, financial structuring and obtaining financing.

CREDENTIALS:
Accredited Senior Appraiser (ASA), Real Property-Urban, American Society of Appraisers.

Certified Commercial Investment Member (CCIM) of the Commercial Investment Real Estate Institute of the National Association of Realtors.

Certified General Real Estate Appraiser (State of Arizona, #30469).

Specialist in Real Estate Securities (SRS), Real Estate Securities and Syndications Institute.

State of Arizona Real Estate Broker.

EDUCATION:
Bachelor of Arts, University of Washington School of Economics, majoring in Management and Accounting. Attended the Graduate School of Business, Arizona State University, taking courses in finance, marketing, and managerial accounting.

PRIOR EXPERIENCE:
Former President of Carey Investments, Inc. and a DPP Broker/Dealer, real estate securities.
General Partner and Sponsor of twenty-seven partnerships, owning a variety of properties.
Broker and Co-owner of A.L.Harris & Associates, a real estate commercial/residential brokerage with three offices and seventy associates.
Vice President of Eaton International Corporation and General Manager of Pagosa-In-Colorado, a 26,000 acre recreational development, subsequently purchased by Fairfield Communities.
Southwest Divisional General Manager of Fibreboard Corporation, a packaging firm. With Fibreboard was Corporate Marketing Manager with 1,100 distributor salesmen, and Divisional and District Sales Manager.
Aggregate real estate experience - twenty-six years.
Chairman of Southwestern Colorado Economic Development Council with five counties and two Indian reservations.
President of Pagosa Properties Owners Association (4,500 members).
Treasurer of Pagosa Water and Sanitation District, raising over $15,000,000 in general obligation bonds.
President of Arizona Chapter of the Real Estate Securities and Syndications Institute.
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Authored Commercial Investment Journal article.
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PROFESSIONAL MEMBERSHIP:
Life Member of Commercial Investment Real Estate Institute of National Association of Realtors
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AT&T (Industrial Plant Appraisal)
Puget Sound Naval Shipyard (Parking Garage Feasibility Study)
Sedona Springs Bottled Water Co. (Financial Feasibility)
Empire Brush Co. (Plant Relocation)
Broadway Apartments (Investment Analysis and Acquisition Negotiation)
Key Bank of Washington (Appraisals)
The Money Store Investment Corp. (Appraisals)
Pagosa Water & Sanitation District (General Obligation Bond Funding)
Houston General Insurance Co. (Valuation prior to fire damage)
Resolution Trust Corporation (Appraisals)
Pagosa Best Western Lodge (Feasibility Study & Funding)
O'Connor Cavanaugh Anderson Westover Killingsworth & Beshears (Securities Consultation))
Pagosa Racquet Club (Feasibility Study)
Old Stone Federal Savings Bank (Appraisal)
Camelback Bible Church (Rollback Appraisal)
Pagosa Lakes Property Owners Association (Court Testimony & Golf Course Review)
Forest Plywood Inc. (Plant Site Acquisition)
Marana Joint Venture I (Acquisition & Partnership Management)
First Mutual Bank (Appraisal)
Semantodontics, Inc. (Plant Site Acquisition)
RPC-Mitchell (Appraisal)
Balar Equipment Co. (Appraisal)
Ryan Field Joint Venture (Acquisition and Partnership Management)
BJF-Grant Thornton (Appraisal)
Mesa/Williams Field Partners (Acquisition and Partnership Management)
State of Washington, Department of Natural Resources (Acquisition & Disposition Consultant)
Vladivostok, Russia (Appraisal of Docks, Land, Seventeen Warehouses)
City of Ocean Shores (Appraisal of Marina and Uplands)
US Bank of Washington (Appraisal)

Appendix H

URS TRAFFIC ANALYSIS

Streets: (E-W) 45th St. (N-S) Montlake
Analyst: JFV File Name: 45M.HC9
Area Type: Other 4-19-94 PM Peak
Comment: No Action Year 2000

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes		2	<	2	1		1		2			
Volumes		535	5	705	610		250		1665			
Lane Width		12.0		12.0	12.0		12.0		12.0			
RTOR Vols			0			0			0			

Signal Operations

Phase Combination	1	2	3	4		5	6	7	8
EB Left					NB Left	*			
Thru		*			Thru				
Right		*			Right	*			
Peds					Peds				
WB Left	*	*			SB Left				
Thru	*	*			Thru				
Right					Right				
Peds					Peds				
NB Right	*	*			EB Right				
SB Right					WB Right				
Green	38P	28P			Green	24P			
Yellow/A-R	2	4			Yellow/A-R	4			
Lost Time	3.0	3.0			Lost Time	3.0			

Cycle Length: 100 secs Phase combination order: #1 #2 #5

Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	TR	1032	3559	0.58	0.29	23.6	C	23.6	C
WB	L	1213	3279	0.61	0.69	7.0	B	6.5	B
	T	1230	1782	0.52	0.69	6.0	B		
NB	L	423	1693	0.62	0.25	27.3	D	4.1	A
	R	2593	2673	0.68	0.97	0.6	A		

Intersection Delay = 7.9 sec/veh Intersection LOS = B

Lost Time/Cycle, L = 0.0 sec Critical v/c(x) = 0.656

Center For Microcomputers In Transportation

Streets: (E-W) 45th St. (N-S) Montlake
Analyst: JFV File Name: 45MM.HC9
Area Type: Other 6-9-94 PM Peak
Comment: Muckleshoot Year 2000

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes		2	<	2	1		1		2			
Volumes		670	5	1095	775		250		1975			
Lane Width		12.0		12.0	12.0		12.0		12.0			
RTOR Vols			0			0			0			

Signal Operations

Phase Combination	1	2	3	4		5	6	7	8
EB Left					NB Left	*			
Thru		*			Thru				
Right		*			Right	*			
Peds					Peds				
WB Left	*	*			SB Left				
Thru	*	*			Thru				
Right					Right				
Peds					Peds				
NB Right	*	*			EB Right				
SB Right					WB Right				
Green	41P	30P			Green	19P			
Yellow/A-R	2	4			Yellow/A-R	4			
Lost Time	3.0	3.0			Lost Time	3.0			

Cycle Length: 100 secs Phase combination order: #1 #2 #5

Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	TR	1103	3559	0.68	0.31	24.0	C	24.0	C
WB	L	1312	3279	0.83	0.74	10.1	B	8.1	B
	T	1319	1782	0.62	0.74	5.4	B		
NB	L	339	1693	0.78	0.20	36.2	D	5.4	B
	R	2593	2673	0.80	0.97	1.5	A		

Intersection Delay = 9.2 sec/veh Intersection LOS = B

Lost Time/Cycle, L = 0.0 sec Critical v/c(x) = 0.778

TRAFFIC IMPACT STUDY
FOR
SAND POINT REUSE PLANS

Engineering Field Activity
Naval Facilities Engineering Command
Silverdale, Washington

Prepared by:
URS Consultants, Inc.
Seattle, Washington

June 1994

Revised March 1996

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1.0 PURPOSE AND SCOPE

The purpose of this study is to evaluate the traffic impacts of the proposed reuse plans for the Naval Station Puget Sound, Seattle, ("Sand Point"). Two reuse plans are being considered; one from the Muckleshoot Indian Tribe, one from the City of Seattle.

The scope of this traffic impact study includes determination of the ability of the external system of local and collector streets to serve the community with the new uses of Sand Point in place.

2.0 BACKGROUND INFORMATION

As shown on Figure 1, Sand Point is located in King County in the northeastern section of Seattle. Adjacent to the National Oceanic and Atmospheric Administration (NOAA) and Magnuson Park, on the west bank of Lake Washington, it comprises approximately 151 acres of land. The station has nearly 1.6 million square feet of facilities which provide Naval support and billeting facilities for the Northern Pacific Fleet. There are no industrial operations or aviation support activities at the station.

Sand Point is primarily surrounded by NOAA and Magnuson Park to the east, and residential land uses to the north, south and west. The nearby nonmilitary residents are not allowed on the base, which has security controlled access locations. Figure 2 shows the existing site and land uses around the base.

Sand Point is scheduled for closure and transfer in 1995. Many of the current functions will be transferred to other Naval facilities. Two reuse plans are being considered for the Sand Point property and facilities, and are described in the following section of this report.

3.0 REUSE PLANS

In 1993, two reuse plans for Sand Point were developed; one from the City of Seattle, the other from the Muckleshoot Indian Tribe.

3.1 CITY PLAN

In November 1993, the City of Seattle published their community preferred reuse plan. This plan emphasizes recreational, educational and community facilities, and opportunities for affordable housing. This report, the City of Seattle Community Preferred Reuse Plan for Sand Point was used as a reference for analysis.

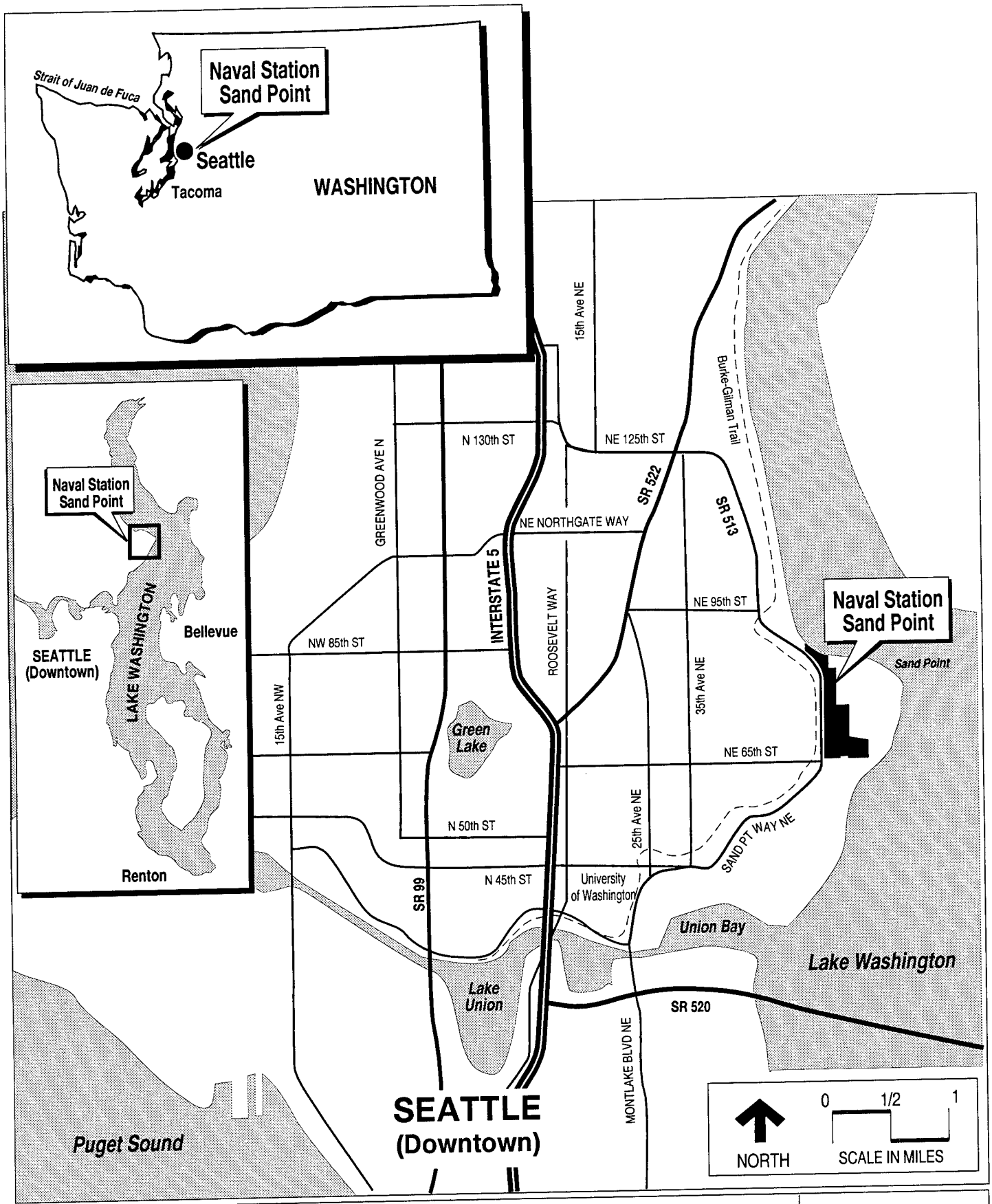
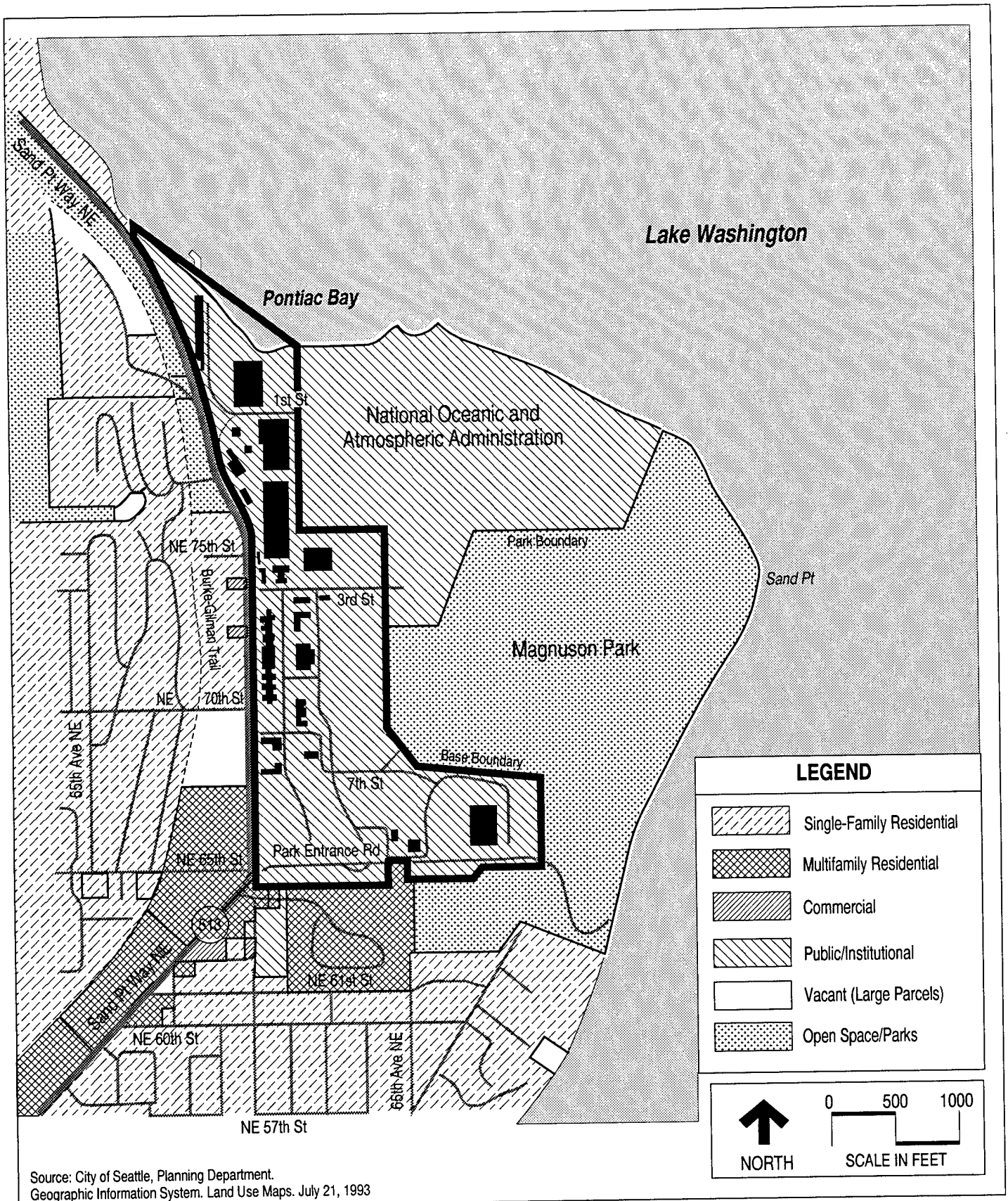


Figure 1
Vicinity Map

NAVAL STATION
SAND POINT
Draft EIS
August 1996

533125804-1t-073196



Source: City of Seattle, Planning Department.
Geographic Information System. Land Use Maps. July 21, 1993

Figure 2
Site Map and Land Use

NAVAL STATION
SAND POINT
Draft EIS
August 1996

533125808-2t-073196

3.2 MUCKLESHOOT PLAN

In March 1993, the Muckleshoot Indian Tribe stated their interest in acquiring the Sand Point property. Their reuse plan as published in June 1993 emphasizes education, employment and health services for the Muckleshoot people. This Proposed Reuse Plan For The Naval Station Puget Sound, Sand Point, was used as a reference for analysis.

4.0 TRAVEL FORECAST

Travel forecasting, or projection of future traffic volumes, is based upon background (non-site produced) traffic volumes, plus the traffic volumes resulting from the site development (reuse plans). For this project analysis assumes that Sand Point will be fully redeveloped by year 2000. Following are detailed descriptions of the elements of the travel forecasting process.

4.1 BACKGROUND TRAFFIC VOLUMES

Background, or non-site generated traffic, was provided by the Existing Conditions Traffic Analysis for Sand Point Naval Station E.I.S. by Kittleson & Associates, Inc. This report provided the background forecasted PM peak hour turning volumes for year 2000. Background forecasted average daily traffic (ADT) was determined by increasing existing ADT volumes to year 2000 using a growth factor of 1 percent per year, and rounding the value to the nearest fifty vehicles.

4.2 SITE GENERATED TRAFFIC VOLUMES

In order to develop site generated traffic, site land use must be known for use in trip generation, and expected travel patterns determined for use in trip distribution.

4.2.1 Trip Generation

Using the proposed site land use of the City and Muckleshoot reuse plans, and trip generation rates from the Institute of Traffic Engineers (ITE) book of Trip Generation, 5th edition, 1991, site generated average vehicle trips per day (ADT) and peak hour traffic was determined for each plan. The City plan had estimates of the expected number of ADT, but no peak hour volumes, for each land use. Those volumes were compared to volumes determined using the ITE trip rates, but were not used in the final analysis in order to keep analysis of the two reuse plans consistent.

When proposed land uses do not correlate exactly with ITE categories professional judgement is commonly used to choose which ITE trip rate is most appropriate. Uses such as homeless housing and film studio do not fit the ITE categories, and judgement was used to assign these trip generation rates. Table 1 and Table 2 summarize the

SAND POINT
MUCKLESHOOT LAND USE PLAN

Table 1

VEHICULAR TRIP GENERATION – AVERAGE WEEKDAY
6/9/94

USE CATEGORY	LAND USE	BUILDINGS	UNIT	DAILY VOLUME	IN 50 %	OUT 50 %	AM PK VOL	AM IN	AM OUT	PM PK VOL	PM IN	PM OUT
EDUCATION [540]	TECHNICAL SCHOOL	9,26,26A,222, 224/6,42	5000 STUDENTS	6650	3325	3325	800	776	24	600	450	150
	OTHER USES	47,138,223,411										
			TOTAL	6650	3325	3325	800	776	24	600	450	150
PARKS/REC. [812]	COMMERCIAL	15,193,301,334	121304 SQ FT	3707	1854	1854	232	155	77	377	177	200
[221]	GROUP HOME	330-2	20 UNITS	132	66	66	9	2	8	12	8	4
			TOTAL	3839	1919	1919	241	157	84	389	185	204
ADMIN./OFFICE [630/720]	HEALTH CLINIC	29	67 EMPLOYEES	395	197	197	36	28	8	78	27	50
[714]	ADMINISTRATION	25,30,192	564 EMPLOYEES	1235	618	618	262	243	18	251	28	223
			TOTAL	1630	815	815	298	271	27	327	54	273
INSTITUTIONAL [571]	JAIL	406	59 EMPLOYEES	106	53	53	25	16	8	14	4	10
[571]	OTHER	18,41	32 EMPLOYEES	58	29	29	13	9	5	7	2	5
[760]	FISH & WILDLIFE LAB	204	5 EMPLOYEES	13	7	7	2	2	0	2	0	2
			TOTAL	177	89	89	40	27	13	23	6	17
WARE/INDUST. [110]	WARE/LT.INDUSTRIAL	2,5	723 EMPLOYEES	2183	1092	1092	266	221	45	265	32	233
[110]	OTHER	27,67,299	321 EMPLOYEES	969	485	485	157	130	27	150	18	132
			TOTAL	3153	1576	1576	423	351	72	415	50	365
REC/COMMER. [495]	REC./PAVILLION	410	1760 SQ FT	13	7	7	2	1	1	2	1	2
[831]	RESTAURANT	11	15000 SQ FT	1448	724	724	14	13	1	115	80	34
[812]	COMMERCIAL	11	44206 SQ FT	1351	675	675	87	59	29	140	66	74
			TOTAL	2812	1406	1406	103	73	30	257	147	110
			PROJECT TOTALS	18260	9130	9130	1905	1655	250	2011	892	1119

*Reference: ITE Trip Generation, 1991

SAND POINT
CITY PLAN

VEHICULAR TRIP GENERATION–AVERAGE WEEKDAY
6/8/94

Table 2

USE CATEGORY	LAND USE	BUILDINGS	UNIT	DAILY VOLUME	IN 50%	OUT 50%	AM PK TRIPS	AM IN	AM OUT	PM PK TRIPS	PM IN	PM OUT
REC [495]	SAILING CTR	11	19000 SQ FT	140	70	70	21	13	8	26	7	19
			TOTALS	140	70	70	21	13	8	26	7	19
EDUC/COMM [140]	FILM STUDIO	2	144232 SQ FT	555	278	278	113	61	52	108	57	51
[630/720]	MEDICAL CLINIC	29,192	38544 SQ FT	917	458	458	104	80	24	150	45	105
[530]	EDUCATION	5,25,67,299	480199 SQ FT	3680	1840	1840	818	605	213	520	177	343
			TOTALS	5152	2576	2576	1034	746	288	778	279	499
CULT/COMM [495]	ARTS & CULTURE CTR	18,30,41,406	125503 SQ FT	927	464	464	136	84	52	173	48	125
			TOTALS	927	464	464	136	84	52	173	48	125
OPEN SPACE [417]	MAGNUSON PARK		50 ACRES	957	479	479	29	20	9	60	29	31
[491]	TENNIS CTR		8 COURTS	267	133	133	13	7	7	23	11	11
[495]	RECREATION CTR	47	50060 SQ FT	370	185	185	54	34	21	69	19	50
			TOTALS	1594	797	797	96	61	36	152	59	92
* RESIDENTIAL	LOW RISE HOUSING	9,26N&S,224, 330,331,332	250 UNITS	538	269	269	15	9	6	43	24	19
[252]												
[221]	UNIV OF WASHINGTON	333,334	80 UNITS	527	264	264	38	8	30	46	31	16
			TOTALS	1065	532	532	53	17	36	89	54	34
INSTITUTE [760]	NOAA STOR/RESEARCH	27	20 EMPLOYEE	53	27	27	9	7	1	8	1	7
[760]	FISH & WILDLIFE LAB	204	4 ACRES	13	7	7	2	1	0	2	0	1
			TOTALS	66	33	33	10	9	2	10	1	8
		PROJECT TOTAL		8945	4473	4473	1349	928	421	1228	450	778

References: *ITE Trip Generation, 1991

expected number of vehicle trips of the two reuse plans. Numbers in brackets "[ ]" reflect the ITE trip generation category. A site map of building numbers and locations, Figure A-1, is located in Appendix A.

It should be noted that some land uses are similar between the two plans. Trip generation was calculated using the known variable that best reflects expected trips. For instance, the education category for the Muckleshoot plan was calculated based on number of students. This is the most accurate way to predict expected trips. The City's educational uses are not as well defined, with number of students unknown. The expected trips had to be calculated less accurately by using square footage of the buildings.

4.2.2 Trip Distribution

Trip distribution determines the percent of site generated trips that enter and exit the site through the external roadway system. The site trips were distributed entering and exiting the site via the main entrance (N.E. 74th Street - 3rd Street) and the N.E. 65th Street entrance. Forty percent, 25 percent, and 35 percent of vehicles were distributed to the north, west, and south, respectively. Figure A-2 in Appendix A details the distribution entering and exiting Sand Point.

4.3 TRIP ASSIGNMENT

Using the background volumes, trip generation and distribution information, a transportation model was developed to estimate expected traffic volumes on external roadways. The traffic forecasting software package IMPAX was used to develop the model and produce expected vehicle volumes. Figures 3 and 4 show year 2000 PM peak hour site generated and total traffic, and Figures 5 and 6 show year 2000 site generated and background ADT volumes.

5.0 CAPACITY ANALYSIS

The expected operations of the external roadways are analyzed by capacity of roadway sections and by intersection operations. In both instances, analysis was based on existing roadway and intersection laneage.

5.1 ROADWAY

According to the recently published (March 1994) draft arterial planning map from the City of Seattle, the roadways external to the Sand Point site are expected to be classified as follows.

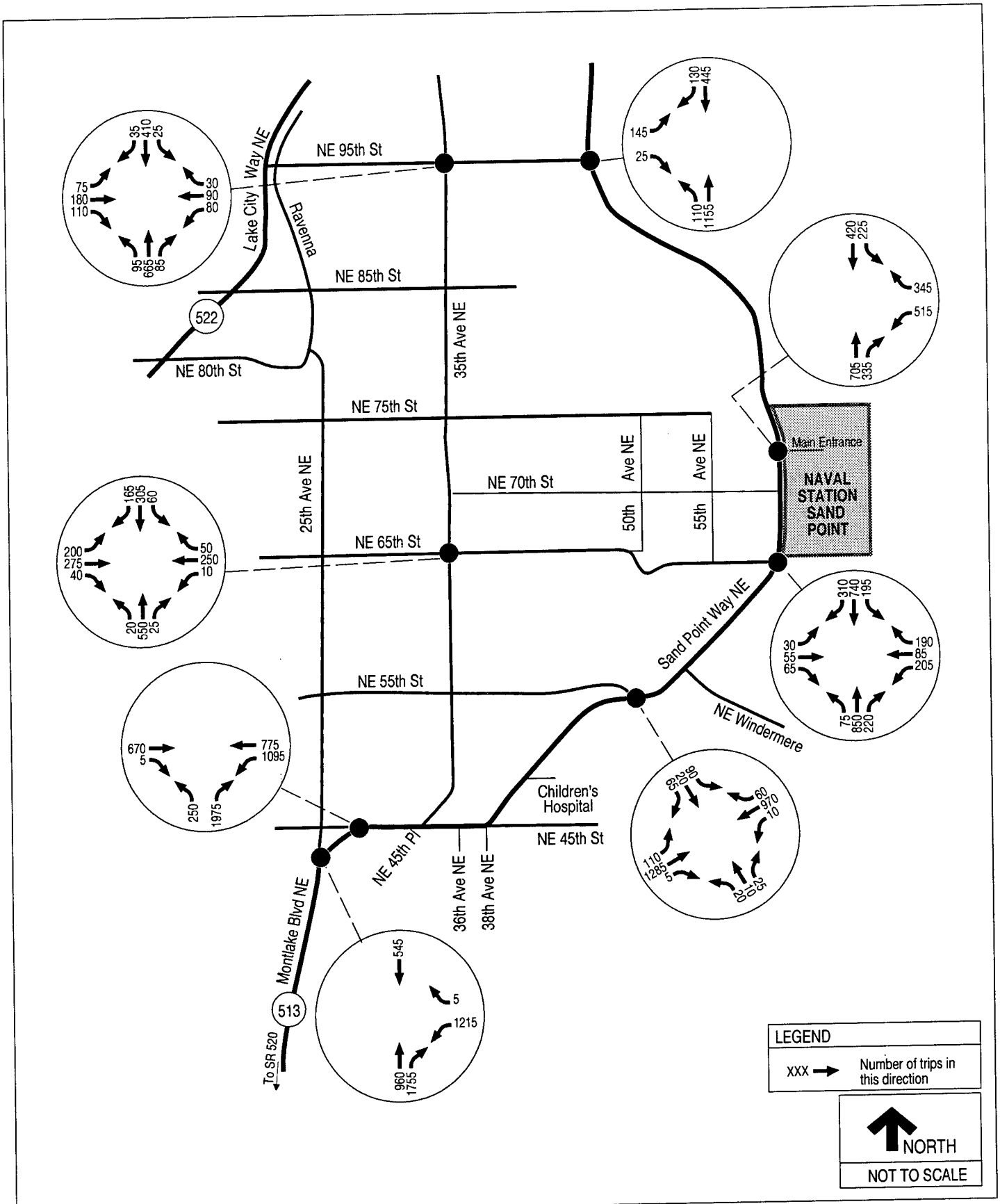


Figure 3
Forecasted Year 2000 Weekday P.M. Peak-Hour Traffic Volumes
Muckleshoot Plan

NAVAL STATION
SAND POINT
Draft EIS
August 1996

533125808-3t-073196

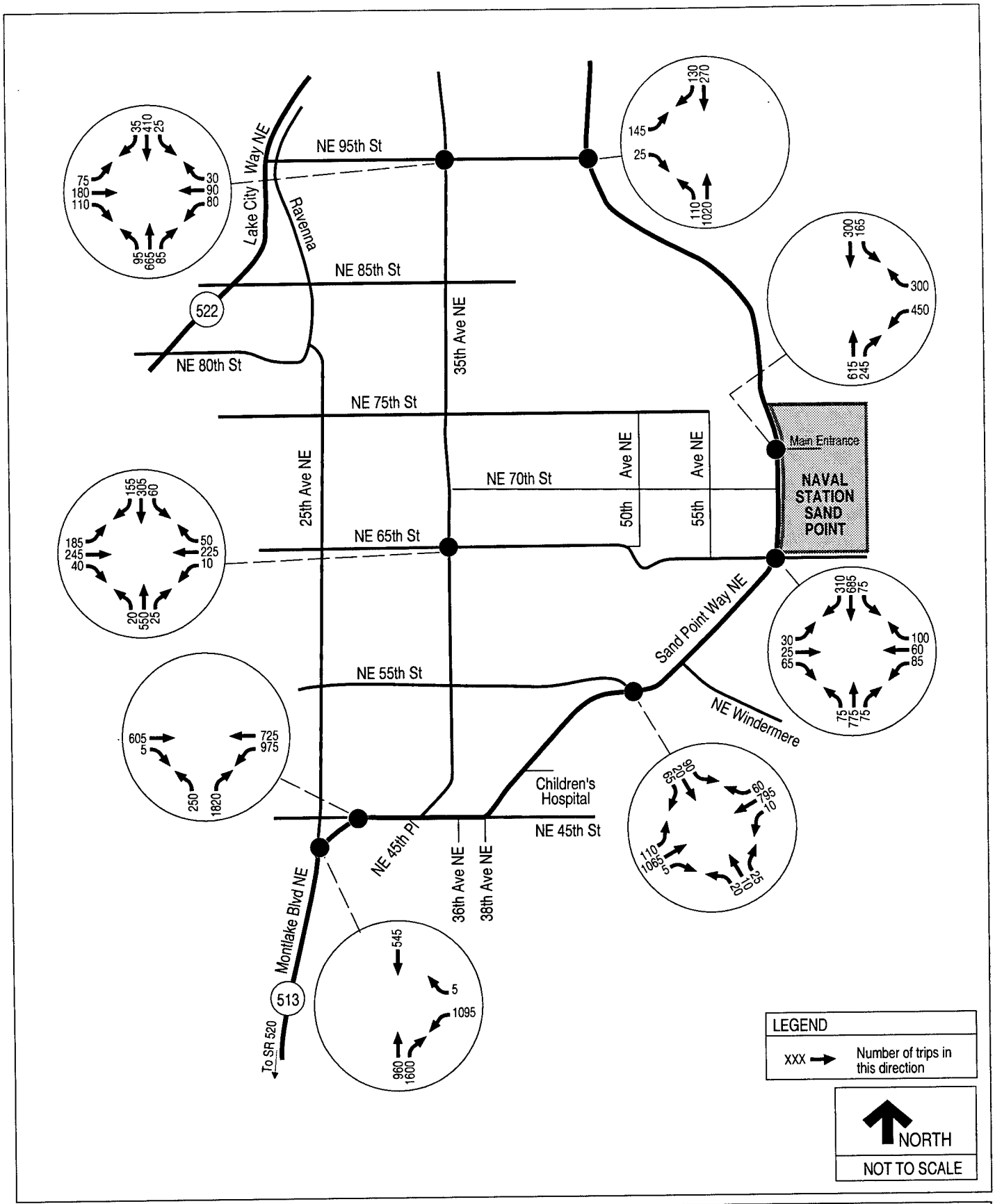


Figure 4
Forecasted Year 2000 Weekday P.M. Peak-Hour Traffic Volumes
City Plan

NAVAL STATION
SAND POINT
Draft EIS
August 1996

533125808-4t-073196

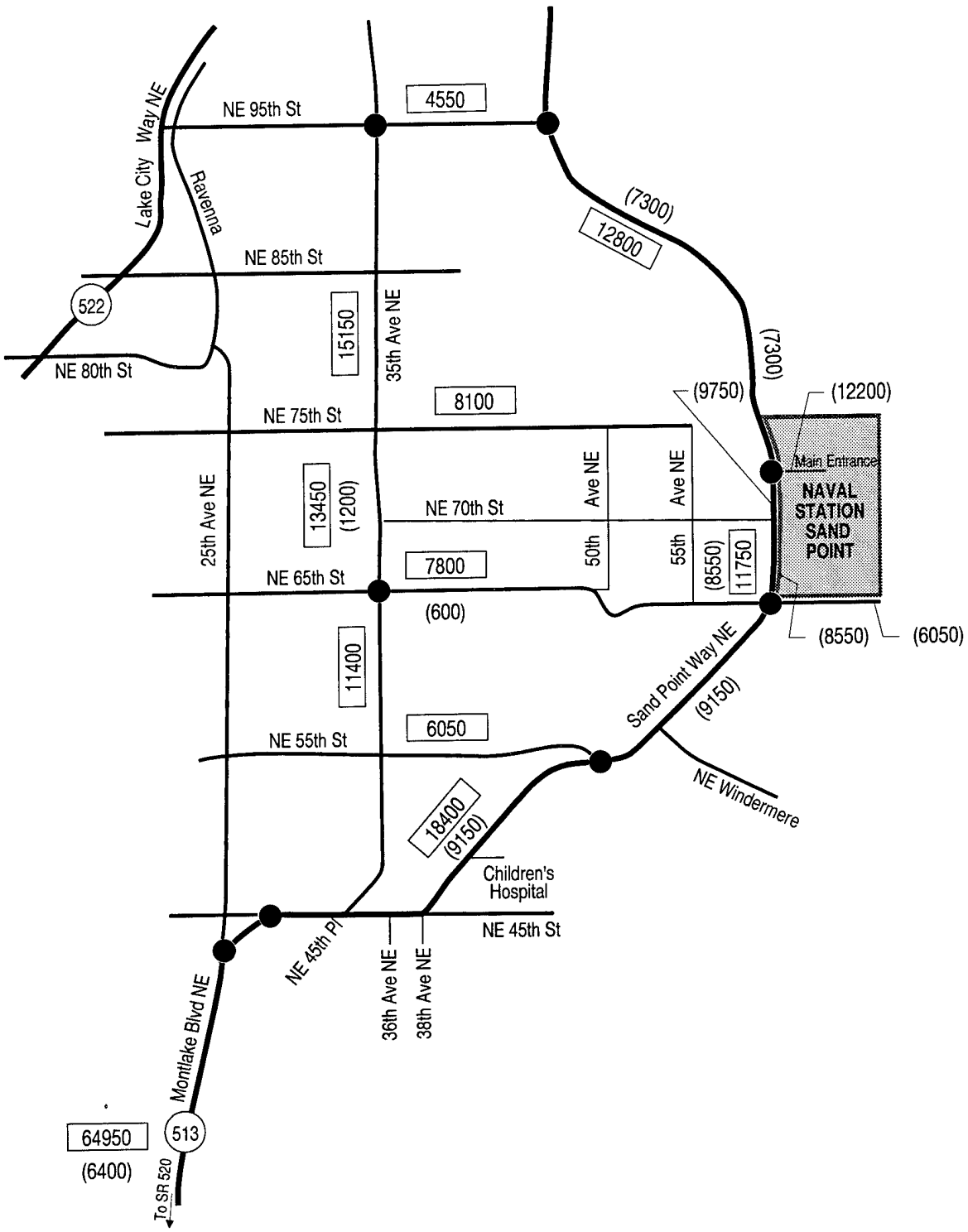


Figure 5
Forecasted Year 2000 Average Daily Traffic (ADT) Volumes
Muckleshoot Plan

NAVAL STATION
SAND POINT
Draft EIS
August 1996

533125808-5t-073196

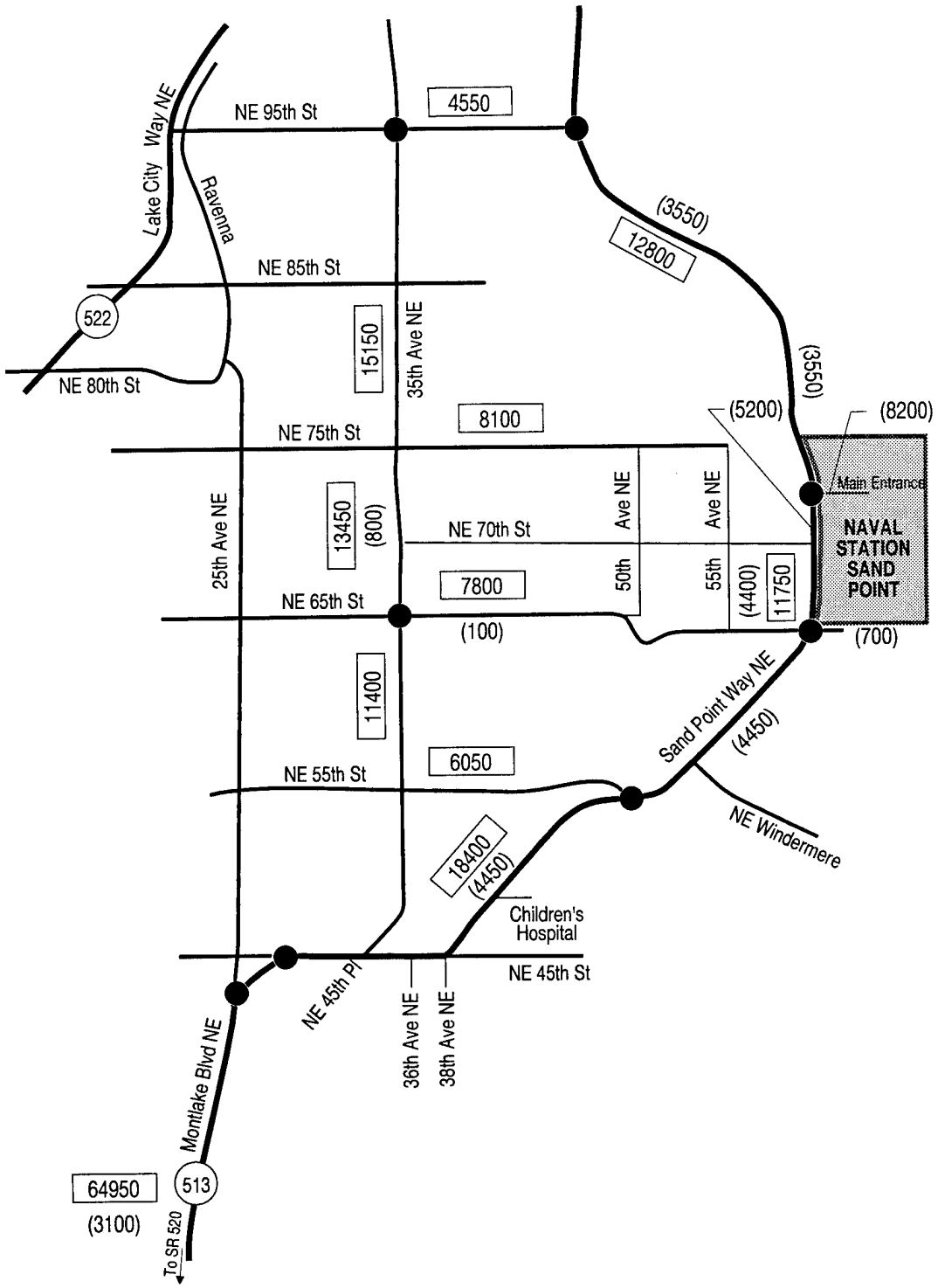


Figure 6
Forecasted Year 2000 Average Daily Traffic (ADT) Volumes
City Plan

NAVAL STATION
SAND POINT
Draft EIS
August 1996

533125808-6t-073196

- **Sand Point Way N.E. (N.E. 65th Street to N.E. 95th Street)—Minor Arterial.** Minor Arterials usually consist of a two to four lane section. This roadway is currently a four lane to two lane section.

- **Sand Point Way N.E. (N.E. 95th Street to N.E. 45th Street)—Principal Arterial.** Principal arterials usually are a four to six lane section, two to three lanes per direction. Roadway section currently consists of four lanes with center median.

- **Montlake Boulevard (N.E. 45th Street to Montlake Bridge)—Principal Arterial.** Currently the roadway is four lanes plus a center median.

- **35th Avenue N.E. (N.E. 45th Street to N.E. 125th Street)—Minor Arterial.** The road currently is a two lane section.

- **N.E. 95th Street (Lake City Way N.E. to Sand Point Way N.E.)—Minor Arterial.** Currently this is a two lane section.

- **N.E. 75th Street (25th Avenue N.E. to 35th Avenue N.E.)—Collector Arterial.** Collector arterials generally have two lanes. Currently, N.E. 75th Street has two lanes.

- **N.E. 65th Street (N.E. Ravenna Blvd. to Sand Point Way N.E.)—Minor Arterial.** This roadway section is currently a two lanes.

- **N.E. 45th Street (25th Avenue N.E. to Sand Point Way N.E.)—Principal Arterial.** Currently this roadway section consists of two or three lanes each direction with a center dual left turn lane.

Generally most of these roadways are expected to have their capacities increased in the future. Even without these improvements, the existing roadways can accommodate the new traffic generated by both Sand Point reuse plans. The planned capacity improvements will only improve overall expected operations.

5.2 INTERSECTION

Intersection capacity was evaluated using the Highway Capacity Manual methodologies. The roadway and intersection configurations were assumed to be the same as existing. Resulting PM peak hour levels of service (LOS) for the two reuse plans, "no action", and existing conditions, are shown below in Table 3. "No action" assumes there is no redevelopment at Sand Point - it generates no traffic. A LOS of A, B, C or D is considered acceptable.

Table 3
PM Peak Hour Levels of Service

Intersection	Existing Yr. 1993	City Yr. 2000	Muckleshoot Yr. 2000	No Action Yr. 2000
NE 95th St./35th Ave. NE	B	B	B	B
*NE 95th St./Sand Point Way	D	F	F	F
NE 65th St./35th Ave. NE	C	B	B	B
NE 65th St./Sand Point Way	B	C	C	B
Main Access/Sand Point Way	B	B	B	-
Sand Point Way/Princeton Ave	B	B	B	B
Montlake Blvd./NE 45th St.	C	B	B	B
Montlake Blvd./25th Ave. NE	B	B	B	B

*Unsignalized

It should be noted that, with the exception of N.E. 95th Street/Sand Point Way N.E., all intersections are signalized and were analyzed operating at a 100 second cycle length. Currently the N.E. 95th Street/Sand Point Way N.E. intersection is not signalized and operates at a LOS of "D". Vehicles attempting to turn left onto Sand Point Way N.E. from N.E. 95th Street have difficulty finding gaps in the traffic stream allowing them to make their movement. This problem is expected to become more severe in the future, operating at a LOS of "F" for all scenarios. Signalization would help alleviate this problem in all cases, resulting in a LOS of B. Appendix B contains the capacity analysis worksheets of these signalized and unsignalized intersections.

5.3 ROADWAY VOLUME-TO-CAPACITY

In 1994, the City of Seattle passed a concurrency ordinance to comply with the State Growth Management Act. Concurrency requires the City to monitor projected growth from new development and have adequate transportation facilities to accommodate new growth. The City uses aggregate volume-to-capacity (V/C) ratios as a level-of-service measure for concurrency. Table 4 denotes the expected V/C ratios for the three alternatives within the traffic analysis area and the maximum allowed V/C ratios.

None of the three alternatives violate the concurrency ordinance.

An estimate of the amount of traffic that each reuse plan is expected to contribute to the Montlake Bridge is shown in Table 5. Each plan is estimated to contribute a significant number of trips onto the Montlake Bridge. These values were determined by using ADT counts that were taken on the bridge in October of 1993. These counts include an hourly volume breakdown. Each hour's percentage of the ADT was determined and

Table 4
Traffic Volume-to-Capacity Ratio Comparisons in Transportation Study Area

Location	Direction	Peak-hour Capacity	Maximum V/C	City Plan V/C	Muckleshoot Plan V/C	No Action V/C
Montlake Bridge and University Bridge	NB	4,300	1.2	0.98	1.01	0.94
	SB	4,300	1.2	0.95	0.98	0.89
North-South Routes (South of NE 75th St.)	NB	4,300	1.0	0.66	0.71	0.61
	SB	4,300	1.0	0.42	0.46	0.33
East-West Routes (between NE 65th St. and NE 80th St.)	EB	5,540	1.0	0.40	0.41	0.38
	WB	5,540	1.0	0.38	0.39	0.36
East-West Routes (between NE Pacific and NE Ravenna Blvd.)	EB	6,760	1.0	N/A	N/A	0.53
	WB	6,760	1.0	N/A	N/A	0.65

Note:
N/A Not in analysis area

Table 5
Forecast of Montlake Bridge Peak-Period Volumes Generated by Alternative

Alternative	A.M. Peak Period 7:00 - 9:00 a.m. Total (increase)	Afternoon Peak Period 1:00 - 6:00 p.m.
City	9,813 (414)	14,406 (641)
Muckleshoot	9,760 (856)	15,089 (1,324)
No-Action	8,904 (0)	13,765 (0)

Note:
Volumes reflect 1% growth per year

applied to the projected ADT volumes for each reuse plan, as shown in Table 6. These reuse plan volumes were totalled for each peak period. The peak periods for the bridge are 7:00-9:00 a.m. and 3:00 to 6:00 p.m.

As shown in Table 4, volumes on the bridge would begin to approach a V/C ratio of 1.0 under the no-action alternative. The reuse plans push the volumes even closer to V/C 1.0. The City Plan would increase traffic on the bridge by 5 percent over the future no action while the Muckleshoot Plan would increase traffic by 10 percent. However, these

Table 6
Forecast of Montlake Bridge Hourly Volumes Generated by Reuse Plan

Time Period	1993 Percentage of ADT	City Volume	Muckleshoot Volume
7:00-8:00 am	6.3	194	403
8:00-9:00 am	7.1	220	453
1:00-2:00 pm	6.2	192	397
2:00-3:00 pm	6.4	198	403
3:00-4:00 pm	6.5	201	422
4:00-5:00 pm	6.9	214	441
5:00-6:00 pm	7.3	226	467

volumes do not exceed the maximum allowed V/C ratios and, therefore, are not considered significant.

6.0 CONCLUSIONS

Based on the analysis performed for this study, the following conclusions can be made.

- The unsignalized N.E. 95th Street/Sand Point Way N.E. intersection currently operates at barely acceptable levels, and is expected to operate poorly in the future under all scenarios. It is recommended that this intersection be signalized in the future for safety and operational reasons.

- Approximately 8950 trips per day are expected to be generated by the City's reuse plan. These volumes are probably higher, but similar to existing volumes. All analyzed intersections are expected to operate at acceptable levels except for the N.E. 95th Street/Sand Point Way N.E. intersection.

- The land use of the Muckleshoot Plan results in approximately 18,250 vehicle trips per day. Even though these volumes are probably close to twice the existing volumes, the intersections analyzed (with the exception of the N.E. 95th Street/Sand Point Way N.E. intersection) are still expected to operate at acceptable levels.

- Both reuse plans increase traffic on the Montlake Bridge. However, since these increases do not violate since these increases do not violate the City-adopted V/C criteria, the increases are not considered significant impacts.

APPENDIX A
Trip Distribution

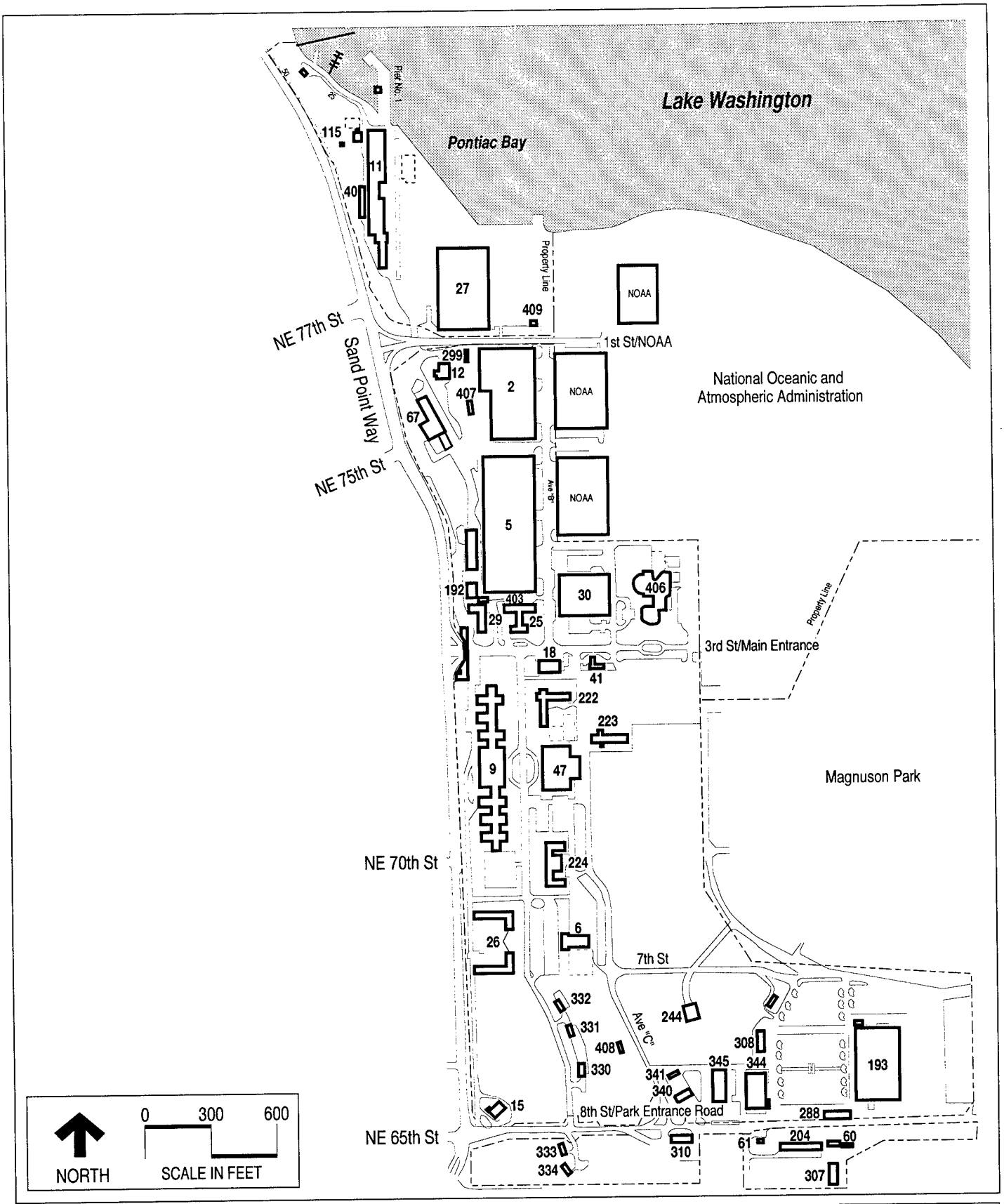


Figure A-1
Building Location Map

NAVAL STATION
SAND POINT
Draft EIS
August 1996

53312580808-1-073196

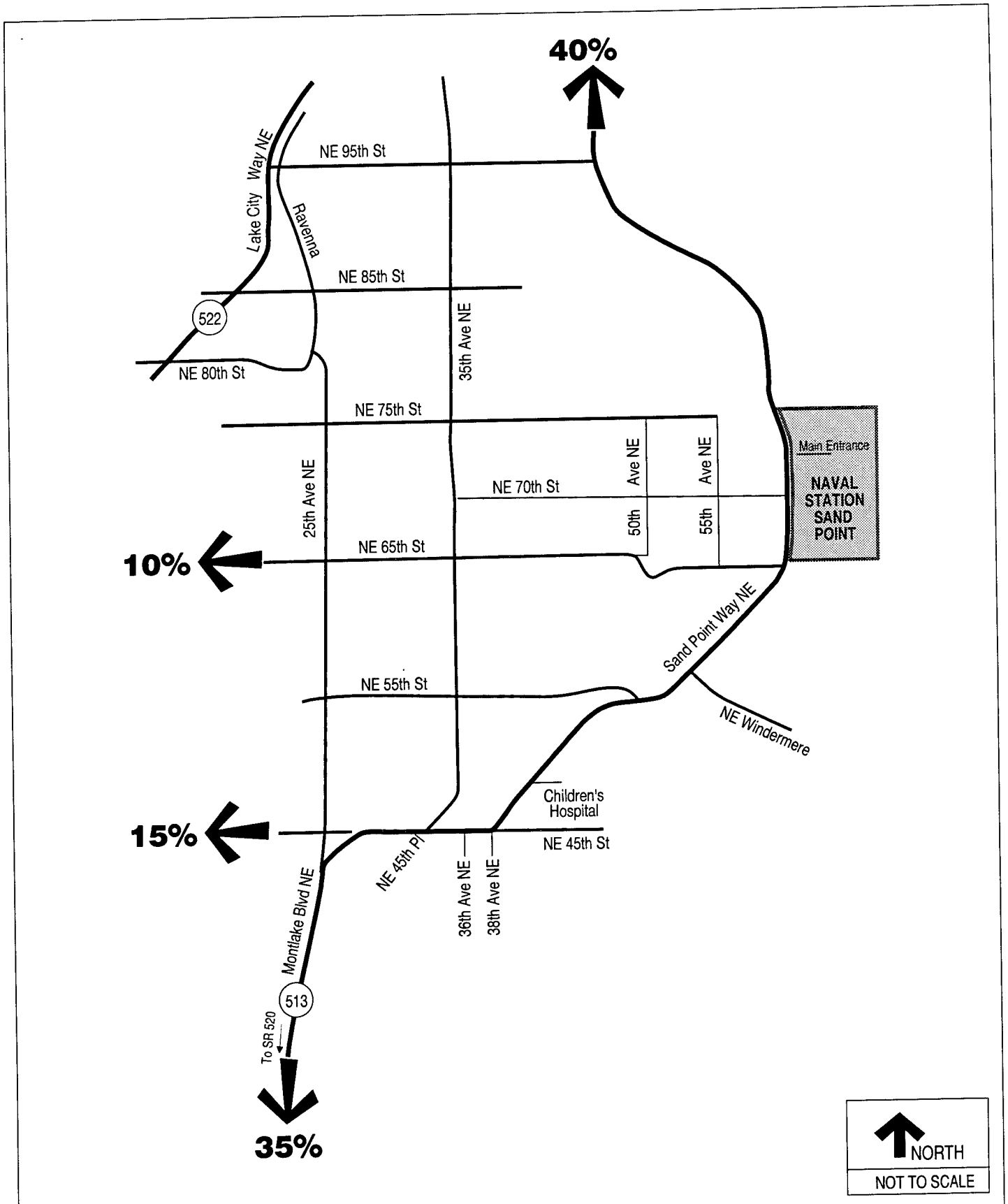


Figure A-2
Trip Distribution

NAVAL STATION
SAND POINT
Draft EIS
August 1996

533125808-3ta-073196

APPENDIX B
Capacity Analysis Worksheets

MUCKLESHO OT PLAN 6/9/94

TOTAL OF BLDGS VIA 1ST STREET/NOAA ENTRANCE

USE CATEGORY	LAND USE	BUILDINGS	UNIT	DAILY VOLUME	IN 50 %	OUT 50 %	AM PK VOL	AM IN	AM OUT	PM PK VOL	PM IN	PM OUT
				0	0	0	0	0	0	0	0	0
			EXISTING								N/A	N/A

TOTAL OF BLDGS VIA MAIN ENTRANCE

USE CATEGORY	LAND USE	BUILDINGS	UNIT	DAILY VOLUME	IN 50 %	OUT 50 %	AM PK VOL	AM IN	AM OUT	PM PK VOL	PM IN	PM OUT
EDUCATION	TECHNICAL SCHOOL		3400 STUDENTS	4433	2217	2217	533	517	16	400	300	100
ADMIN/OFFICE	HEALTH CLINIC	29	67 EMPLOYEES	395	197	197	36	28	8	76	27	50
	ADMINISTRATION	25,30,192	564 EMPLOYEES	1235	618	618	262	243	18	251	28	223
INSTITUTIONAL	JAIL	406	59 EMPLOYEES	106	53	53	25	16	8	14	4	10
	OTHER	18,41	32 EMPLOYEES	58	29	29	13	9	5	7	2	5
WARE/INDUST	WARE/LT.INDUSTRIAL	2,5	723 EMPLOYEES	2183	1092	1092	266	221	45	265	32	233
	OTHER	27,67,299	321 EMPLOYEES	969	485	485	157	130	27	150	18	132
REC/COMMER.	REC./PAVILLION	410	1760 SQ FT	13	7	7	2	1	1	2	1	2
	RESTAURANT	11	15000 SQ FT	1448	724	724	14	13	1	115	80	34
	COMMERCIAL	11	44206 SQ FT	1351	675	675	87	59	29	140	66	74
			TOTAL	12191	6096	6096	1395	1237	158	1420	557	863
			EXISTING								50	230
			DIFFERENCE								507	633

TOTAL OF BLDGS VIA PARK/65TH ST. ENTRANCE

USE CATEGORY	LAND USE	BUILDINGS	UNIT	DAILY VOLUME	IN 50 %	OUT 50 %	AM PK VOL	AM IN	AM OUT	PM PK VOL	PM IN	PM OUT
EDUCATION	TECHNICAL SCHOOL		1600 STUDENTS	2217	1108	1108	267	259	8	200	150	50
PARKS/REC.	COMMERCIAL	15,193,301,334	121304 SQ FT	3707	1854	1854	232	155	77	377	177	200
	GROUP HOME	330-2	20 UNITS	132	66	66	9	2	8	12	8	4
INSTITUTIONAL	FISH & WILDLIFE LAB	204	5 EMPLOYEES	13	7	7	2	2	0	2	0	2
			TOTAL	6069	3034	3034	510	418	92	591	335	258
			EXISTING								135	225
			DIFFERENCE								200	31

PROJECT TOTALS	18260	9130	9130	1905	1655	250	2011	892	1119

CITY PLAN 6/8/94

USE CATEGORY	LAND USE	BUILDINGS	UNIT	DAILY VOLUME	IN 50%	OUT 50%	AM PK TRIPS	AM IN	AM OUT	PM PK TRIPS	PM IN	PM OUT
INSTITUTIONAL	NOAA STOR/RESEARCH	27	20 EMPLOYEE	53	27	27	9	7	1	8	1	7
			TOTALS	53	27	27	9	7	1	8	1	7
			EXISTING								N/A	N/A

BUILDINGS	LAND USE	BUILDINGS	UNIT	DAILY VOLUME	IN 50%	OUT 50%	AM PK TRIPS	AM IN	AM OUT	PM PK TRIPS	PM IN	PM OUT
EDUC/COMMUNITY	MEDICAL CLINIC	29,192	38544 SQ FT	917	458	458	104	80	24	150	45	105
	EDUCATION	5,25,67,299	480199 SQ FT	3680	1840	1840	818	605	213	520	177	343
RECREATIONAL	SAILING CTR	11	19000 SQ FT	140	70	70	21	13	8	26	7	19
EDUC/COMMUNITY	FILM STUDIO	2	144232 SQ FT	555	278	278	113	61	52	108	57	51
CULT/COMM	ARTS & CULTURE CTR	18,30,41,406	125503 SQ FT	927	464	461	136	84	52	173	48	125
OPEN SPACE	MAGNUSON PARK		50 ACRES	957	479	479	29	20	9	60	29	31
	TENNIS CTR		8 COURTS	267	133	133	13	7	7	23	11	11
	RECREATION CTR	47	50060 SQ FT	370	185	185	54	34	21	69	19	50
RESIDENTIAL	LOW RISE HOUSING	9	175 UNITS	376	188	188	10	6	4	30	17	13
			TOTALS	8190	4095	4095	1296	909	388	1159	411	748
			EXISTING								50	230
			DIFFERENCE								361	518

BUILDINGS	LAND USE	BUILDINGS	UNIT	DAILY VOLUME	IN 50%	OUT 50%	AM PK TRIPS	AM IN	AM OUT	PM PK TRIPS	PM IN	PM OUT
RESIDENTIAL	LOW RISE HOUSING	26,224,330-2	75 UNITS	162	81	81	5	3	2	13	7	6
	UNIV OF WASHINGTON	333,334	80 UNITS	527	264	264	38	8	30	46	31	16
INSTITUTIONAL	FISH & WILDLIFE LAB	204	4 ACRES	13	7	7	2	1	0	2	0	1
			TOTALS	702	351	351	44	12	32	61	38	23
			EXISTING								135	225
			DIFFERENCE								-97	-202

			PLAN TOTALS	8945	4473	4473	1349	928	421	1228	450	778

References: *ITE Trip Generation, 1991

Streets: (E-W) 25th Ave. (N-S) Montlake
Analyst: JFV File Name: 25M.HC9
Area Type: Other 4-19-94 PM Peak
Comment: No Action Year 2000

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes				2	1	<		2	2		2	
Volumes				825	1	5		960	1445		545	
Lane Width				12.0	12.0			12.0	12.0		12.0	
RTOR Vols						0			0			0

Signal Operations

Phase Combination	1	2	3	4		5	6	7	8
EB Left					NB Left				
Thru					Thru	*			
Right					Right	*			
Peds					Peds				
WB Left	*				SB Left				
Thru	*				Thru	*			
Right	*				Right				
Peds					Peds				
NB Right	*				EB Right				
SB Right					WB Right				
Green	52P				Green	40P			
Yellow/A-R	4				Yellow/A-R	4			
Lost Time	3.0				Lost Time	3.0			

Cycle Length: 100 secs Phase combination order: #1 #5

Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
WB	L	1738	3279	0.50	0.53	11.6	B	11.6	B
	TR	826	1559	0.01	0.53	8.4	B		
NB	T	1461	3564	0.73	0.41	20.1	C	8.4	B
	R	2673	2673	0.57	1.00	0.2	A		
SB	T	1461	3564	0.41	0.41	16.0	C	16.0	C

Intersection Delay = 10.2 sec/veh Intersection LOS = B

Lost Time/Cycle, L = 0.0 sec Critical v/c(x) = 0.569

Center For Microcomputers In Transportation

Streets: (E-W) 25th Ave. (N-S) Montlake
Analyst: JFV File Name: 25MM.HC9
Area Type: Other 6-9-94 PM Peak
Comment: Muckleshoot Year 2000

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes				2	1	<		2	2		2	
Volumes				1215	1	5		960	1755		545	
Lane Width				12.0	12.0			12.0	12.0		12.0	
RTOR Vols						0			0			0

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left			
Thru					Thru	*		
Right					Right	*		
Peds					Peds			
WB Left	*				SB Left			
Thru	*				Thru	*		
Right	*				Right			
Peds					Peds			
NB Right	*				EB Right			
SB Right					WB Right			
Green	50P				Green	42P		
Yellow/A-R	4				Yellow/A-R	4		
Lost Time	3.0				Lost Time	3.0		

Cycle Length: 100 secs Phase combination order: #1 #5

Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
WB	L	1672	3279	0.76	0.51	16.5	C	16.4	C
	TR	796	1560	0.01	0.51	9.2	B		
NB	T	1533	3564	0.69	0.43	18.5	C	7.1	B
	R	2673	2673	0.69	1.00	0.5	A		
SB	T	1533	3564	0.39	0.43	15.0	B	15.0	B

Intersection Delay = 10.6 sec/veh Intersection LOS = B

Lost Time/Cycle, L = 0.0 sec Critical v/c(x) = 0.691

Center for Microcomputers in Transportation

Streets: (E-W) 25th Ave. (N-S) Montlake
Analyst: JFV File Name: 25MC.HC9
Area Type: Other 4-4-94 PM Peak
Comment: Community Year 2000

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes				2	1	<		2	2		2	
Volumes				1095	1	5		960	1600		545	
Lane Width				12.0	12.0			12.0	12.0		12.0	
RTOR Vols						0			0			0

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left			
Thru					Thru	*		
Right					Right	*		
Peds					Peds			
WB Left	*				SB Left			
Thru	*				Thru	*		
Right	*				Right			
Peds					Peds			
NB Right	*				EB Right			
SB Right					WB Right			
Green	52P				Green	40P		
Yellow/A-R	4				Yellow/A-R	4		
Lost Time	3.0				Lost Time	3.0		

Cycle Length: 100 secs Phase combination order: #1 #5

Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
WB	L	1738	3279	0.66	0.53	13.6	B	13.6	B
	TR	826	1559	0.01	0.53	8.4	B		
NB	T	1461	3564	0.73	0.41	20.1	C	8.0	B
	R	2673	2673	0.63	1.00	0.3	A		
SB	T	1461	3564	0.41	0.41	16.0	C	16.0	C

Intersection Delay = 10.5 sec/veh Intersection LOS = B

Lost Time/Cycle, L = 6.0 sec Critical v/c(x) = 0.691

Streets: (E-W) 45th St. (N-S) Montlake
Analyst: JFV File Name: 45MC.HC9
Area Type: Other 4-4-94 PM Peak
Comment: Community Year 2000

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes		2	<	2	1		1		2			
Volumes		605	5	975	725		250		1820			
Lane Width		12.0		12.0	12.0		12.0		12.0			
RTOR Vols			0			0			0			

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left *			
Thru		*			Thru			
Right		*			Right *			
Peds					Peds			
WB Left	*	*			SB Left			
Thru	*	*			Thru			
Right					Right			
Peds					Peds			
NB Right	*	*			EB Right			
SB Right					WB Right			
Green	34P	29P			Green 27P			
Yellow/A-R	2	4			Yellow/A-R 4			
Lost Time	3.0	3.0			Lost Time 3.0			

Cycle Length: 100 secs Phase combination order: #1 #2 #5

Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	TR	1068	3560	0.63	0.30	23.8	C	23.8	C
WB	L	1082	3279	0.89	0.66	17.5	C	13.7	B
	T	1176	1782	0.65	0.66	8.6	B		
NB	L	474	1693	0.55	0.28	24.4	C	3.8	A
	R	2593	2673	0.74	0.97	0.9	A		

Intersection Delay = 10.5 sec/veh Intersection LOS = B

Lost Time/Cycle, L = 0.0 sec Critical v/c(x) = 0.717

Streets: (E-W) 65th Street (N-S) 35th Avenue
Analyst: JFV File Name: 6535.HC9
Area Type: Other 4-19-94 PM Peak
Comment: No Action Year 2000

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes		> 2	<		> 2	<		> 2	<		> 2	<
Volumes	145	240	40	10	225	50	20	550	25	60	305	80
Lane Width		12.0			12.0			12.0			12.0	
RTOR Vols			0			0			0			0

Signal Operations

Phase Combination	1	2	3	4		5	6	7	8
EB Left	*	*			NB Left	*			
Thru	*	*			Thru	*			
Right	*	*			Right	*			
Peds					Peds				
WB Left		*			SB Left	*			
Thru		*			Thru	*			
Right		*			Right	*			
Peds					Peds				
NB Right					EB Right				
SB Right					WB Right				
Green	12P	32P			Green	46P			
Yellow/A-R	2	4			Yellow/A-R	4			
Lost Time	3.0	3.0			Lost Time	3.0			

Cycle Length: 100 secs Phase combination order: #1 #2 #5

Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	LTR	1483	3155	0.32	0.47	12.6	B	12.6	B
WB	LTR	1086	3292	0.29	0.33	18.9	C	18.9	C
NB	LTR	1609	3424	0.41	0.47	13.3	B	13.3	B
SB	LTR	1301	2769	0.38	0.47	13.1	B	13.1	B

Intersection Delay = 14.0 sec/veh Intersection LOS = B

Lost Time/Cycle, L = 6.0 sec Critical v/c(x) = 0.363

Center For Microcomputers In Transportation

Streets: (E-W) 65th Street (N-S) 35th Avenue
Analyst: JFV File Name: 6535M.HC9
Area Type: Other 6-9-94 PM Peak
Comment: Muckleshoot Year 2000

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes		> 2 <			> 2 <			> 2 <			> 2 <	
Volumes	200	275	40	10	250	50	20	550	25	60	305	165
Lane Width		12.0			12.0			12.0			12.0	
RTOR Vols			0			0			0			0

Signal Operations

Phase Combination	1	2	3	4		5	6	7	8
EB Left	*	*			NB Left	*			
Thru	*	*			Thru	*			
Right	*	*			Right	*			
Peds					Peds				
WB Left		*			SB Left	*			
Thru		*			Thru	*			
Right		*			Right	*			
Peds					Peds				
NB Right					EB Right				
SB Right					WB Right				
Green	12P	32P			Green	46P			
Yellow/A-R	2	4			Yellow/A-R	4			
Lost Time	3.0	3.0			Lost Time	3.0			

Cycle Length: 100 secs Phase combination order: #1 #2 #5

Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	DfL	197	1787	0.44	0.47	14.5	B	13.8	B
	TR	821	1747	0.40	0.47	13.4	B		
WB	LTR	1074	3256	0.32	0.33	19.1	C	19.1	C
NB	LTR	1579	3360	0.42	0.47	13.4	B	13.4	B
SB	LTR	1308	2782	0.45	0.47	13.7	B	13.7	B

Intersection Delay = 14.5 sec/veh Intersection LOS = B

Lost Time/Cycle, L = 6.0 sec Critical v/c(x) = 0.426

Streets: (E-W) 65th Street (N-S) 35th Avenue
Analyst: JFV File Name: 6535C.HC9
Area Type: Other 4-4-94 PM Peak
Comment: Community Year 2000

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes		> 2	<		> 2	<		> 2	<		> 2	<
Volumes	185	245	40	10	225	50	20	550	25	60	305	155
Lane Width		12.0			12.0			12.0			12.0	
RTOR Vols			0			0			0			0

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*				NB Left *			
Thru	*				Thru *			
Right	*				Right *			
Peds					Peds			
WB Left	*				SB Left *			
Thru	*				Thru *			
Right	*				Right *			
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	45P				Green 47P			
Yellow/A-R	4				Yellow/A-R 4			
Lost Time	3.0				Lost Time 3.0			

Cycle Length: 100 secs Phase combination order: #1 #5

Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	LTR	1328	2886	0.39	0.46	13.6	B	13.6	B
WB	LTR	1519	3302	0.21	0.46	12.3	B	12.3	B
NB	LTR	1619	3372	0.41	0.48	12.9	B	12.9	B
SB	LTR	1338	2788	0.43	0.48	13.1	B	13.1	B

Intersection Delay = 13.0 sec/veh Intersection LOS = B

Lost Time/Cycle, L = 6.0 sec Critical v/c(x) = 0.411

Streets: (E-W) 95th Street (N-S) 35th Avenue
Analyst: JFV File Name: 9535.HC9
Area Type: Other 4-4-94 PM Peak
Comment: No Action Year 2000

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes		> 2	<		> 2	<	1	2	<	1	2	<
Volumes	75	180	110	80	90	30	95	665	85	25	410	35
Lane Width		12.0			12.0		12.0	12.0		12.0	12.0	
RTOR Vols			0			0			0			0

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*				NB Left *			
Thru	*				Thru *			
Right	*				Right *			
Peds					Peds			
WB Left	*				SB Left *			
Thru	*				Thru *			
Right	*				Right *			
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	42P				Green 50P			
Yellow/A-R	4				Yellow/A-R 4			
Lost Time	3.0				Lost Time 3.0			

Cycle Length: 100 secs Phase combination order: #1 #5

Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	LTR	1335	3104	0.30	0.43	14.2	B	14.2	B
WB	LTR	1166	2712	0.19	0.43	13.5	B	13.5	B
NB	L	474	929	0.21	0.51	10.3	B	11.9	B
	TR	1787	3504	0.46	0.51	12.1	B		
SB	L	297	582	0.09	0.51	9.6	B	10.6	B
	TR	1796	3522	0.27	0.51	10.6	B		

Intersection Delay = 12.2 sec/veh Intersection LOS = B

Lost Time/Cycle, L = 6.0 sec Critical v/c(x) = 0.390

Streets: (E-W) 95th Street (N-S) 35th Avenue
Analyst: JFV File Name: 9535M.HC9
Area Type: Other 4-4-94 PM Peak
Comment: Muckleshoot Year 2000

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes		> 2	<		> 2	<	1	2	<	1	2	<
Volumes	75	180	110	80	90	30	95	665	85	25	410	35
Lane Width		12.0			12.0		12.0	12.0		12.0	12.0	
RTOR Vols			0			0			0			0

Signal Operations

Phase Combination	1	2	3	4		5	6	7	8
EB Left	*				NB Left	*			
Thru	*				Thru	*			
Right	*				Right	*			
Peds					Peds				
WB Left	*				SB Left	*			
Thru	*				Thru	*			
Right	*				Right	*			
Peds					Peds				
NB Right					EB Right				
SB Right					WB Right				
Green	42P				Green	50P			
Yellow/A-R	4				Yellow/A-R	4			
Lost Time	3.0				Lost Time	3.0			

Cycle Length: 100 secs Phase combination order: #1 #5

Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	LTR	1335	3104	0.30	0.43	14.2	B	14.2	B
WB	LTR	1166	2712	0.19	0.43	13.5	B	13.5	B
NB	L	474	929	0.21	0.51	10.3	B	11.9	B
	TR	1787	3504	0.46	0.51	12.1	B		
SB	L	297	582	0.09	0.51	9.6	B	10.6	B
	TR	1796	3522	0.27	0.51	10.6	B		

Intersection Delay = 12.2 sec/veh Intersection LOS = B

Lost Time/Cycle, L = 6.0 sec Critical v/c(x) = 0.390

Streets: (E-W) 95th Street (N-S) 35th Avenue
Analyst: JFV File Name: 9535C.HC9
Area Type: Other 4-4-94 PM Peak
Comment: Community Year 2000

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes		> 2	<		> 2	<	1	2	<	1	2	<
Volumes	75	180	110	80	90	30	95	665	85	25	410	35
Lane Width		12.0			12.0		12.0	12.0		12.0	12.0	
RTOR Vols			0			0			0			0

Signal Operations

Phase Combination	1	2	3	4		5	6	7	8
EB Left	*				NB Left	*			
Thru	*				Thru	*			
Right	*				Right	*			
Peds					Peds				
WB Left	*				SB Left	*			
Thru	*				Thru	*			
Right	*				Right	*			
Peds					Peds				
NB Right					EB Right				
SB Right					WB Right				
Green	42P				Green	50P			
Yellow/A-R	4				Yellow/A-R	4			
Lost Time	3.0				Lost Time	3.0			

Cycle Length: 100 secs Phase combination order: #1 #5

Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	LTR	1335	3104	0.30	0.43	14.2	B	14.2	B
WB	LTR	1166	2712	0.19	0.43	13.5	B	13.5	B
NB	L	474	929	0.21	0.51	10.3	B	11.9	B
	TR	1787	3504	0.46	0.51	12.1	B		
SB	L	297	582	0.09	0.51	9.6	B	10.6	B
	TR	1796	3522	0.27	0.51	10.6	B		

Intersection Delay = 12.2 sec/veh Intersection LOS = B

Lost Time/Cycle, L = 6.0 sec Critical v/c(x) = 0.390

Streets: (E-W) Sand Point Way (N-S) Princeton/55th St.
Analyst: JFV File Name: PSP.HC9
Area Type: Other 4-19-94 PM Peak
Comment: No Action Year 2000

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	2	<	1	2	<	>	1	<	>	1	<
Volumes	110	840	5	10	410	60	20	10	25	90	20	65
Lane Width	12.0	12.0		12.0	12.0			12.0			12.0	
RTOR Vols			0			0			0			0

Signal Operations

Phase Combination	1	2	3	4		5	6	7	8
EB Left	*	*			NB Left	*			
Thru	*	*			Thru	*			
Right	*	*			Right	*			
Peds					Peds				
WB Left		*			SB Left	*			
Thru		*			Thru	*			
Right		*			Right	*			
Peds					Peds				
NB Right					EB Right				
SB Right					WB Right				
Green	10P	48P			Green	32P			
Yellow/A-R	2	4			Yellow/A-R	4			
Lost Time	3.0	3.0			Lost Time	3.0			

Cycle Length: 100 secs Phase combination order: #1 #2 #5

Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	L	152	1693	0.22	0.61	6.8	B	7.8	B
	TR	2172	3561	0.43	0.61	7.9	B		
WB	L	235	479	0.05	0.49	10.1	B	11.6	B
	TR	1713	3496	0.30	0.49	11.6	B		
NB	LTR	453	1374	0.13	0.33	17.8	C	17.8	C
SB	LTR	467	1414	0.39	0.33	19.9	C	19.9	C

Intersection Delay = 10.5 sec/veh Intersection LOS = B

Lost Time/Cycle, L = 6.0 sec Critical v/c(x) = 0.417

Center For Microcomputers In Transportation

Streets: (E-W) Sand Point Way (N-S) Princeton/55th St.
Analyst: JFV File Name: PSPM.HC9
Area Type: Other 6-9-94 PM Peak
Comment: Muckleshoot Year 2000

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	2	<	1	2	<		> 1	<		> 1	<
Volumes	110	1285	5	10	970	60	20	10	25	90	20	65
Lane Width	12.0	12.0		12.0	12.0			12.0			12.0	
RTOR Vols			0			0			0			0

Signal Operations

Phase Combination	1	2	3	4		5	6	7	8
EB Left	*	*			NB Left	*			
Thru	*	*			Thru	*			
Right	*	*			Right	*			
Peds					Peds				
WB Left		*			SB Left	*			
Thru		*			Thru	*			
Right		*			Right	*			
Peds					Peds				
NB Right					EB Right				
SB Right					WB Right				
Green	9P	49P			Green	32P			
Yellow/A-R	2	4			Yellow/A-R	4			
Lost Time	3.0	3.0			Lost Time	3.0			

Cycle Length: 100 secs Phase combination order: #1 #2 #5

Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	L	135	1693	0.52	0.61	11.2	B	10.2	B
	TR	2173	3562	0.66	0.61	10.2	B		
WB	L	80	159	0.14	0.50	10.3	B	14.6	B
	TR	1766	3533	0.64	0.50	14.6	B		
NB	LTR	453	1374	0.13	0.33	17.8	C	17.8	C
SB	LTR	467	1414	0.39	0.33	19.9	C	19.9	C

Intersection Delay = 12.7 sec/veh Intersection LOS = B

Lost Time/Cycle, L = 6.0 sec Critical v/c(x) = 0.564

Streets: (E-W) Sand Point Way (N-S) Princeton/55th St.
Analyst: JFV File Name: PSPC.HC9
Area Type: Other 4-4-94 PM Peak
Comment: Community Year 2000

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	2	<	1	2	<		> 1	<		> 1	<
Volumes	110	1065	5	10	795	60	25	10	20	90	20	65
Lane Width	12.0	12.0		12.0	12.0			12.0			12.0	
RTOR Vols			0			0			0			0

Signal Operations

Phase Combination	1	2	3	4		5	6	7	8
EB Left	*	*			NB Left	*			
Thru	*	*			Thru	*			
Right	*	*			Right	*			
Peds					Peds				
WB Left		*			SB Left	*			
Thru		*			Thru	*			
Right		*			Right	*			
Peds					Peds				
NB Right					EB Right				
SB Right					WB Right				
Green	11P	47P			Green	32P			
Yellow/A-R	2	4			Yellow/A-R	4			
Lost Time	3.0	3.0			Lost Time	3.0			

Cycle Length: 100 secs Phase combination order: #1 #2 #5

Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	L	169	1693	0.36	0.61	8.0	B	8.8	B
	TR	2173	3562	0.54	0.61	8.9	B		
WB	L	137	286	0.08	0.48	10.7	B	14.3	B
	TR	1693	3527	0.56	0.48	14.4	B		
NB	LTR	446	1351	0.13	0.33	17.8	C	17.8	C
SB	LTR	469	1420	0.39	0.33	19.9	C	19.9	C

Intersection Delay = 11.9 sec/veh Intersection LOS = B

Lost Time/Cycle, L = 6.0 sec Critical v/c(x) = 0.491

Streets: (E-W) 65th St./Park (N-S) Sand Point Way
Analyst: JFV File Name: 65SP.HC9
Area Type: Other 4-19-94 PM Peak
Comment: No Action Year 2000

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes		> 2	<		> 2	<	1	2	<	1	2	<
Volumes	30	20	65	75	60	90	75	570	55	60	310	310
Lane Width		12.0			12.0		12.0	12.0		12.0	12.0	
RTOR Vols			0			0			0			0

Signal Operations

Phase Combination	1	2	3	4		5	6	7	8
EB Left	*				NB Left	*		*	
Thru	*				Thru			*	
Right	*				Right			*	
Peds					Peds				
WB Left	*				SB Left	*	*	*	
Thru	*				Thru		*	*	
Right	*				Right		*	*	
Peds					Peds				
NB Right					EB Right				
SB Right					WB Right				
Green	34P				Green	7P	9P	38A	
Yellow/A-R	4				Yellow/A-R	2	2	4	
Lost Time	3.0				Lost Time	3.0	3.0	0.0	

Cycle Length: 100 secs Phase combination order: #1 #5 #6 #7

Intersection Performance Summary

	Lane Group: Mvmts	Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	LTR	1005	2871	0.13	0.35	16.8	C	16.8	C
WB	LTR	1074	3070	0.23	0.35	17.5	C	17.5	C
NB	L	102	1693	0.14	0.48	11.0	B	15.6	C
	TR	1477	3517	0.47	0.42	16.1	C		
SB	L	288	1693	0.08	0.62	5.8	B	11.6	B
	TR	1648	3297	0.42	0.50	12.1	B		

Intersection Delay = 14.3 sec/veh Intersection LOS = B

Lost Time/Cycle, L = 6.0 sec Critical v/c(x) = 0.316

Center For Microcomputers In Transportation

Streets: (E-W) 65th St./Park (N-S) Sand Point Way
Analyst: JFV File Name: 65SPM.HC9
Area Type: Other 6-9-94 PM Peak
Comment: Muckleshoot Year 2000

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes		> 2	<		> 2	<	1	2	<	1	2	<
Volumes	30	55	65	205	85	190	75	850	220	195	740	310
Lane Width		12.0			12.0		12.0	12.0		12.0	12.0	
RTOR Vols			0			0			0			0

Signal Operations

Phase Combination	1	2	3	4		5	6	7	8
EB Left	*				NB Left	*		*	
Thru	*				Thru			*	
Right	*				Right			*	
Peds					Peds				
WB Left	*				SB Left	*	*	*	
Thru	*				Thru		*	*	
Right	*				Right		*	*	
Peds					Peds				
NB Right					EB Right				
SB Right					WB Right				
Green	34P				Green	7P	9P	38A	
Yellow/A-R	4				Yellow/A-R	2	2	4	
Lost Time	3.0				Lost Time	3.0	3.0	0.0	

Cycle Length: 100 secs Phase combination order: #1 #5 #6 #7

Intersection Performance Summary

	Lane Group: Mvmts	Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	LTR	942	2691	0.18	0.35	17.1	C	17.1	C
WB	DfL	460	1315	0.47	0.35	19.8	C	20.1	C
	TR	559	1597	0.52	0.35	20.3	C		
NB	L	102	1693	0.16	0.48	11.2	B	21.4	C
	TR	1451	3454	0.82	0.42	22.1	C		
SB	L	288	1693	0.30	0.62	6.9	B	14.0	B
	TR	1703	3406	0.68	0.50	15.2	C		

Intersection Delay = 17.9 sec/veh Intersection LOS = C

Lost Time/Cycle, L = 6.0 sec Critical v/c(x) = 0.610

treets: (E-W) 65th St./Park (N-S) Sand Point Way
nalyst: JFV File Name: 65SPC.HC9
rea Type: Other 4-4-94 PM Peak
omment: Community Year 2000

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
o. Lanes		> 2	<		> 2	<	1	2	<	1	2	<
olumes	30	25	65	85	60	100	75	775	75	80	685	310
ane Width		12.0			12.0		12.0	12.0		12.0	12.0	
TOR Vols			0			0			0			0

Signal Operations

hase Combination	1	2	3	4		5	6	7	8
B Left	*				NB Left	*	*		
Thru	*				Thru		*		
Right	*				Right		*		
Peds					Peds				
B Left	*				SB Left	*	*		
Thru	*				Thru		*		
Right	*				Right		*		
Peds					Peds				
B Right					EB Right				
B Right					WB Right				
reen	34P				Green	16P	40P		
ellow/A-R	4				Yellow/A-R	2	4		
ost Time	3.0				Lost Time	3.0	3.0		

ycle Length: 100 secs Phase combination order: #1 #5 #6

Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
B	LTR	1001	2860	0.13	0.35	16.8	C	16.8	C
B	LTR	1066	3046	0.25	0.35	17.6	C	17.6	C
B	L	254	1693	0.11	0.59	6.9	B	17.9	C
	TR	1442	3517	0.65	0.41	18.8	C		
B	L	254	1693	0.12	0.59	6.9	B	20.7	C
	TR	1393	3398	0.79	0.41	21.8	C		

Intersection Delay = 19.1 sec/veh Intersection LOS = C

ost Time/Cycle, L = 6.0 sec Critical v/c(x) = 0.457

Center For Microcomputers In Transportation

treets: (E-W) Main Entrance (N-S) Sand Point Way
nalyst: JFV File Name: MAINSPM.HC9
rea Type: Other 6-9-94 PM Peak
omment: Muckleshoot Year 2000

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
lo. Lanes				1		1		2	1		> 2	
olumes				515		345		705	335	225	420	
ane Width				12.0		12.0		12.0	12.0		12.0	
TOR Vols						0			0			0

Signal Operations

Phase Combination	1	2	3	4		5	6	7	8
EB Left					NB Left				
Thru					Thru		*		
Right					Right	*	*		
Peds					Peds				
WB Left	*				SB Left	*	*		
Thru					Thru	*	*		
Right	*				Right				
Peds					Peds				
NB Right	*				EB Right				
SB Right					WB Right	*	*		
Green	42P				Green	12P	36P		
Yellow/A-R	4				Yellow/A-R	2	4		
Lost Time	3.0				Lost Time	3.0	3.0		

Cycle Length: 100 secs Phase combination order: #1 #5 #6

Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
WB	L	728	1693	0.74	0.43	21.1	C	12.6	B
	R	1515	1515	0.24	1.00	0.0	A		
NB	T	1319	3564	0.59	0.37	19.8	C	13.6	B
	R	1515	1515	0.23	1.00	0.0	A		
SB	DfL	186	1693	0.48	0.51	13.6	B	12.9	B
	T	909	1782	0.49	0.51	12.5	B		

Intersection Delay = 13.1 sec/veh Intersection LOS = B

Lost Time/Cycle, L = 6.0 sec Critical v/c(x) = 0.629

Streets: (E-W) Main Entrance (N-S) Sand Point Way
Analyst: JFV File Name: MAINSPC.HC9
Area Type: Other 4-4-94 PM Peak
Comment: Community Year 2000

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes				1		1		2	1		> 2	
Volumes				450		300		615	245	165	300	
Lane Width				12.0		12.0		12.0	12.0		12.0	
RTOR Vols						0			0			0

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left			
Thru					Thru	*		
Right					Right	*	*	
Peds					Peds			
WB Left	*				SB Left	*	*	
Thru					Thru	*	*	
Right	*				Right			
Peds					Peds			
NB Right	*				EB Right			
SB Right					WB Right	*	*	
Green	36P				Green	12P	42P	
Yellow/A-R	4				Yellow/A-R	2	4	
Lost Time	3.0				Lost Time	3.0	3.0	

Cycle Length: 100 secs Phase combination order: #1 #5 #6

Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
WB	L	626	1693	0.76	0.37	24.6	C	14.8	B
	R	1515	1515	0.21	1.00	0.0	A		
NB	T	1533	3564	0.44	0.43	15.4	C	11.2	B
	R	1515	1515	0.17	1.00	0.0	A		
SB	LT	1400	2456	0.37	0.57	9.0	B	9.0	B

Intersection Delay = 11.9 sec/veh Intersection LOS = B

Lost Time/Cycle, L = 6.0 sec Critical v/c(x) = 0.520

Streets: (E-W) 95th Street (N-S) Sand Point Way
Analyst: JFV File Name: 95SP.HC9
Area Type: Other 4-19-94 PM Peak
Comment: No Action Year 2000 (Assumed Signalized)

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1		1				1	1			1	1
Volumes	145		25				110	710			90	130
Lane Width	12.0		12.0				12.0	12.0			12.0	12.0
RTOR Vols			0						0			0

Signal Operations

Phase Combination	1	2	3	4		5	6	7	8
EB Left	*				NB Left	*			
Thru					Thru	*			
Right	*				Right				
Peds					Peds				
WB Left					SB Left				
Thru					Thru	*			
Right					Right	*			
Peds					Peds				
NB Right					EB Right	*			
SB Right	*				WB Right				
Green	22P				Green	70P			
Yellow/A-R	4				Yellow/A-R	4			
Lost Time	3.0				Lost Time	3.0			

Cycle Length: 100 secs Phase combination order: #1 #5

Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	L	389	1693	0.39	0.23	25.1	D	21.5	C
	R	1515	1515	0.02	1.00	0.0	A		
NB	L	843	1187	0.14	0.71	3.5	A	5.7	B
	T	1265	1782	0.59	0.71	6.0	B		
SB	T	1265	1782	0.08	0.71	3.4	A	1.4	A
	R	1515	1515	0.09	1.00	0.0	A		

Intersection Delay = 7.1 sec/veh Intersection LOS = B

Lost Time/Cycle, L = 6.0 sec Critical v/c(x) = 0.542

Center For Microcomputers In Transportation

Streets: (E-W) 95th Street (N-S) Sand Point Way
Analyst: JFV File Name: 95SPM.HC9
Area Type: Other 6-9-94 PM Peak
Comment: Muckleshoot Year 2000 (Assumed Signalized)

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1		1				1	1			1	1
Volumes	145		25				110	1155			445	130
Lane Width	12.0		12.0				12.0	12.0			12.0	12.0
RTOR Vols			0						0			0

Signal Operations

Phase Combination	1	2	3	4		5	6	7	8
EB Left	*				NB Left	*			
Thru					Thru	*			
Right	*				Right				
Peds					Peds				
WB Left					SB Left				
Thru					Thru	*			
Right					Right	*			
Peds					Peds				
NB Right					EB Right	*			
SB Right	*				WB Right				
Green	20P				Green	72P			
Yellow/A-R	4				Yellow/A-R	4			
Lost Time	3.0				Lost Time	3.0			

Cycle Length: 100 secs Phase combination order: #1 #5

Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	L	356	1693	0.43	0.21	26.6	D	22.7	C
	R	1515	1515	0.02	1.00	0.0	A		
NB	L	538	737	0.22	0.73	3.3	A	16.6	C
	T	1301	1782	0.93	0.73	17.8	C		
SB	T	1301	1782	0.36	0.73	3.8	A	3.0	A
	R	1515	1515	0.09	1.00	0.0	A		

Intersection Delay = 13.2 sec/veh Intersection LOS = B

Lost Time/Cycle, L = 6.0 sec Critical v/c(x) = 0.822

Streets: (E-W) 95th Street (N-S) Sand Point Way
Analyst: JFV File Name: 95SPC.HC9
Area Type: Other 4-4-94 PM Peak
Comment: Community Year 2000 (Assumed Signalized)

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1		1				1	1			1	1
Volumes	145		25				110	1020			270	130
Lane Width	12.0		12.0				12.0	12.0			12.0	12.0
RTOR Vols			0						0			0

Signal Operations

Phase Combination	1	2	3	4		5	6	7	8
EB Left	*				NB Left	*			
Thru					Thru	*			
Right	*				Right				
Peds					Peds				
WB Left					SB Left				
Thru					Thru	*			
Right					Right	*			
Peds					Peds				
NB Right					EB Right	*			
SB Right	*				WB Right				
Green	25P				Green	67P			
Yellow/A-R	4				Yellow/A-R	4			
Lost Time	3.0				Lost Time	3.0			

Cycle Length: 100 secs Phase combination order: #1 #5

Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	L	440	1693	0.35	0.26	23.1	C	19.7	C
	R	1515	1515	0.02	1.00	0.0	A		
NB	L	636	935	0.18	0.68	4.5	A	14.6	B
	T	1212	1782	0.89	0.68	15.7	C		
SB	T	1212	1782	0.23	0.68	4.6	A	3.1	A
	R	1515	1515	0.09	1.00	0.0	A		

Intersection Delay = 12.4 sec/veh Intersection LOS = B

Lost Time/Cycle, L = 6.0 sec Critical v/c(x) = 0.737

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IDENTIFYING INFORMATION

AVERAGE RUNNING SPEED, MAJOR STREET.. 30

PEAK HOUR FACTOR..... .95

AREA POPULATION..... 150000

NAME OF THE EAST/WEST STREET..... 95th Street

NAME OF THE NORTH/SOUTH STREET..... Sand Point Way

NAME OF THE ANALYST..... jfv

DATE OF THE ANALYSIS (mm/dd/yy)..... 6-9-94

TIME PERIOD ANALYZED..... PM Peak - Yr 2000

OTHER INFORMATION.... Muckleshoot Plan

INTERSECTION TYPE AND CONTROL

INTERSECTION TYPE: T-INTERSECTION

MAJOR STREET DIRECTION: NORTH/SOUTH

CONTROL TYPE EASTBOUND: STOP SIGN

TRAFFIC VOLUMES

	EB	WB	NB	SB
LEFT	145	--	110	0
THRU	0	--	1155	445
RIGHT	25	--	0	130

NUMBER OF LANES

	EB	WB	NB	SB
LANES	2	--	2	2

ADJUSTMENT FACTORS

	PERCENT GRADE	RIGHT TURN ANGLE	CURB RADIUS (ft) FOR RIGHT TURNS	ACCELERATION LANE FOR RIGHT TURNS
EASTBOUND	0.00	90	30	N
WESTBOUND	-----	---	---	-
NORTHBOUND	0.00	90	20	N
SOUTHBOUND	0.00	90	20	N

VEHICLE COMPOSITION

	% SU TRUCKS AND RV'S	% COMBINATION VEHICLES	% MOTORCYCLES
EASTBOUND	0	0	0
WESTBOUND	---	---	---
NORTHBOUND	0	0	0
SOUTHBOUND	0	0	0

CRITICAL GAPS

		TABULAR VALUES (Table 10-2)	ADJUSTED VALUE	SIGHT DIST. ADJUSTMENT	FINAL CRITICAL GAP
MINOR RIGHTS	EB	5.50	5.50	0.00	5.50
MAJOR LEFTS	NB	5.50	5.50	0.00	5.50
MINOR LEFTS	EB	7.00	7.00	0.00	7.00

IDENTIFYING INFORMATION

NAME OF THE EAST/WEST STREET..... 95th Street
NAME OF THE NORTH/SOUTH STREET.... Sand Point Way
DATE AND TIME OF THE ANALYSIS..... 6-9-94 ; PM Peak - Yr 2000
OTHER INFORMATION.... Muckleshoot Plan

CAPACITY AND LEVEL-OF-SERVICE

MOVEMENT	FLOW-RATE v(pcph)	POTENTIAL CAPACITY c_p (pcph)	ACTUAL MOVEMENT CAPACITY c_M (pcph)	SHARED CAPACITY c_{SH} (pcph)	RESERVE CAPACITY $c_R = c_{SH} - v$	LOS
MINOR STREET						
EB LEFT	168	75	63	63	-105	F
RIGHT	29	788	788	788	759	A
MAJOR STREET						
NB LEFT	127	552	552	552	424	A

IDENTIFYING INFORMATION

NAME OF THE EAST/WEST STREET..... 95th Street
NAME OF THE NORTH/SOUTH STREET.... Sand Point Way
DATE AND TIME OF THE ANALYSIS..... 6-9-94 ; PM Peak - Yr 2000
OTHER INFORMATION.... Muckleshoot Plan

****

IDENTIFYING INFORMATION

AVERAGE RUNNING SPEED, MAJOR STREET.. 30

PEAK HOUR FACTOR..... .95

AREA POPULATION..... 150000

NAME OF THE EAST/WEST STREET..... 95th Street

NAME OF THE NORTH/SOUTH STREET..... Sand Point Way

NAME OF THE ANALYST..... jfv

DATE OF THE ANALYSIS (mm/dd/yy)..... 04-05-1994

TIME PERIOD ANALYZED..... PM Peak - Yr 2000

OTHER INFORMATION.... Community Plan

INTERSECTION TYPE AND CONTROL

INTERSECTION TYPE: T-INTERSECTION

MAJOR STREET DIRECTION: NORTH/SOUTH

CONTROL TYPE EASTBOUND: STOP SIGN

TRAFFIC VOLUMES

	EB	WB	NB	SB
LEFT	145	—	110	0
THRU	0	—	1015	275
RIGHT	25	—	0	130

NUMBER OF LANES

	EB	WB	NB	SB
LANES	2	—	2	2

ADJUSTMENT FACTORS

	PERCENT GRADE	RIGHT TURN ANGLE	CURB RADIUS (ft) FOR RIGHT TURNS	ACCELERATION LANE FOR RIGHT TURNS
EASTBOUND	0.00	90	30	N
WESTBOUND	———	---	---	-
NORTHBOUND	0.00	90	20	N
SOUTHBOUND	0.00	90	20	N

VEHICLE COMPOSITION

	% SU TRUCKS AND RV'S	% COMBINATION VEHICLES	% MOTORCYCLES
EASTBOUND	0	0	0
WESTBOUND	---	---	---
NORTHBOUND	0	0	0
SOUTHBOUND	0	0	0

CRITICAL GAPS

		TABULAR VALUES (Table 10-2)	ADJUSTED VALUE	SIGHT DIST. ADJUSTMENT	FINAL CRITICAL GAP
MINOR RIGHTS	EB	5.50	5.50	0.00	5.50
MAJOR LEFTS	NB	5.50	5.50	0.00	5.50
MINOR LEFTS	EB	7.00	7.00	0.00	7.00

IDENTIFYING INFORMATION

NAME OF THE EAST/WEST STREET..... 95th Street
NAME OF THE NORTH/SOUTH STREET.... Sand Point Way
DATE AND TIME OF THE ANALYSIS..... 04-05-1994 ; PM Peak - Yr 2000
OTHER INFORMATION.... Community Plan

MOVEMENT	FLOW-RATE v(pcph)	POTEN-TIAL CAPACITY c_p (pcph)	ACTUAL MOVEMENT CAPACITY c_M (pcph)	SHARED CAPACITY c_{SH} (pcph)	RESERVE CAPACITY $c_R = c_{SH} - v$	LOS
MINOR STREET						
EB LEFT	168	84	73	73	-95	F
RIGHT	29	877	877	877	848	A
MAJOR STREET						
NB LEFT	127	681	681	681	554	A

IDENTIFYING INFORMATION

NAME OF THE EAST/WEST STREET..... 95th Street
NAME OF THE NORTH/SOUTH STREET.... Sand Point Way
DATE AND TIME OF THE ANALYSIS..... 04-05-1994 ; PM Peak - Yr 2000
OTHER INFORMATION.... Community Plan

****

IDENTIFYING INFORMATION

AVERAGE RUNNING SPEED, MAJOR STREET.. 30

PEAK HOUR FACTOR..... .95

AREA POPULATION..... 150000

NAME OF THE EAST/WEST STREET..... 95th Street

NAME OF THE NORTH/SOUTH STREET..... Sand Point Way

NAME OF THE ANALYST..... jfv

DATE OF THE ANALYSIS (mm/dd/yy)..... 04-05-1994

TIME PERIOD ANALYZED..... PM Peak - Yr 2000

OTHER INFORMATION.... No Action

INTERSECTION TYPE AND CONTROL

INTERSECTION TYPE: T-INTERSECTION

MAJOR STREET DIRECTION: NORTH/SOUTH

CONTROL TYPE EASTBOUND: STOP SIGN

TRAFFIC VOLUMES

	EB	WB	NB	SB
LEFT	145	—	110	0
THRU	0	—	710	90
RIGHT	25	—	0	130

NUMBER OF LANES

	EB	WB	NB	SB
LANES	2	—	2	2

ADJUSTMENT FACTORS

	PERCENT GRADE	RIGHT TURN ANGLE	CURB RADIUS (ft) FOR RIGHT TURNS	ACCELERATION LANE FOR RIGHT TURNS
EASTBOUND	0.00	90	30	N
WESTBOUND	----	--	--	-
NORTHBOUND	0.00	90	20	N
SOUTHBOUND	0.00	90	20	N

VEHICLE COMPOSITION

	% SU TRUCKS AND RV'S	% COMBINATION VEHICLES	% MOTORCYCLES
EASTBOUND	0	0	0
WESTBOUND	--	--	--
NORTHBOUND	0	0	0
SOUTHBOUND	0	0	0

CRITICAL GAPS

		TABULAR VALUES (Table 10-2)	ADJUSTED VALUE	SIGHT DIST. ADJUSTMENT	FINAL CRITICAL GAP
MINOR RIGHTS	EB	5.50	5.50	0.00	5.50
MAJOR LEFTS	NB	5.50	5.50	0.00	5.50
MINOR LEFTS	EB	7.00	7.00	0.00	7.00

IDENTIFYING INFORMATION

NAME OF THE EAST/WEST STREET..... 95th Street
NAME OF THE NORTH/SOUTH STREET.... Sand Point Way
DATE AND TIME OF THE ANALYSIS..... 04-05-1994 ; PM Peak - Yr 2000
OTHER INFORMATION.... No Action

MOVEMENT	FLOW-RATE v(pcph)	POTENTIAL CAPACITY c_p (pcph)	ACTUAL MOVEMENT CAPACITY c_M (pcph)	SHARED CAPACITY c_{SH} (pcph)	RESERVE CAPACITY $c_R = c_{SH} - v$	LOS
MINOR STREET						
EB LEFT	168	183	165	165	-3	F
RIGHT	29	978	978	978	949	A
MAJOR STREET						
NB LEFT	127	858	858	858	731	A

IDENTIFYING INFORMATION

NAME OF THE EAST/WEST STREET..... 95th Street
NAME OF THE NORTH/SOUTH STREET.... Sand Point Way
DATE AND TIME OF THE ANALYSIS..... 04-05-1994 ; PM Peak - Yr 2000
OTHER INFORMATION.... No Action

Appendix I

TRANSPORTATION STUDY—KITTELSON & ASSOCIATES, INC.

SAND POINT EXISTING CONDITIONS STUDY
TRANSPORTATION ANALYSIS

PREPARED BY
KITTELSON & ASSOCIATES, INC.
BELLEVUE, WASHINGTON

DECEMBER 1993

3.1 TRANSPORTATION

Study Area

The study area for the existing conditions traffic analysis for the Sand Point Naval Station Reuse Environmental Impact Statement (EIS) includes the following intersections:

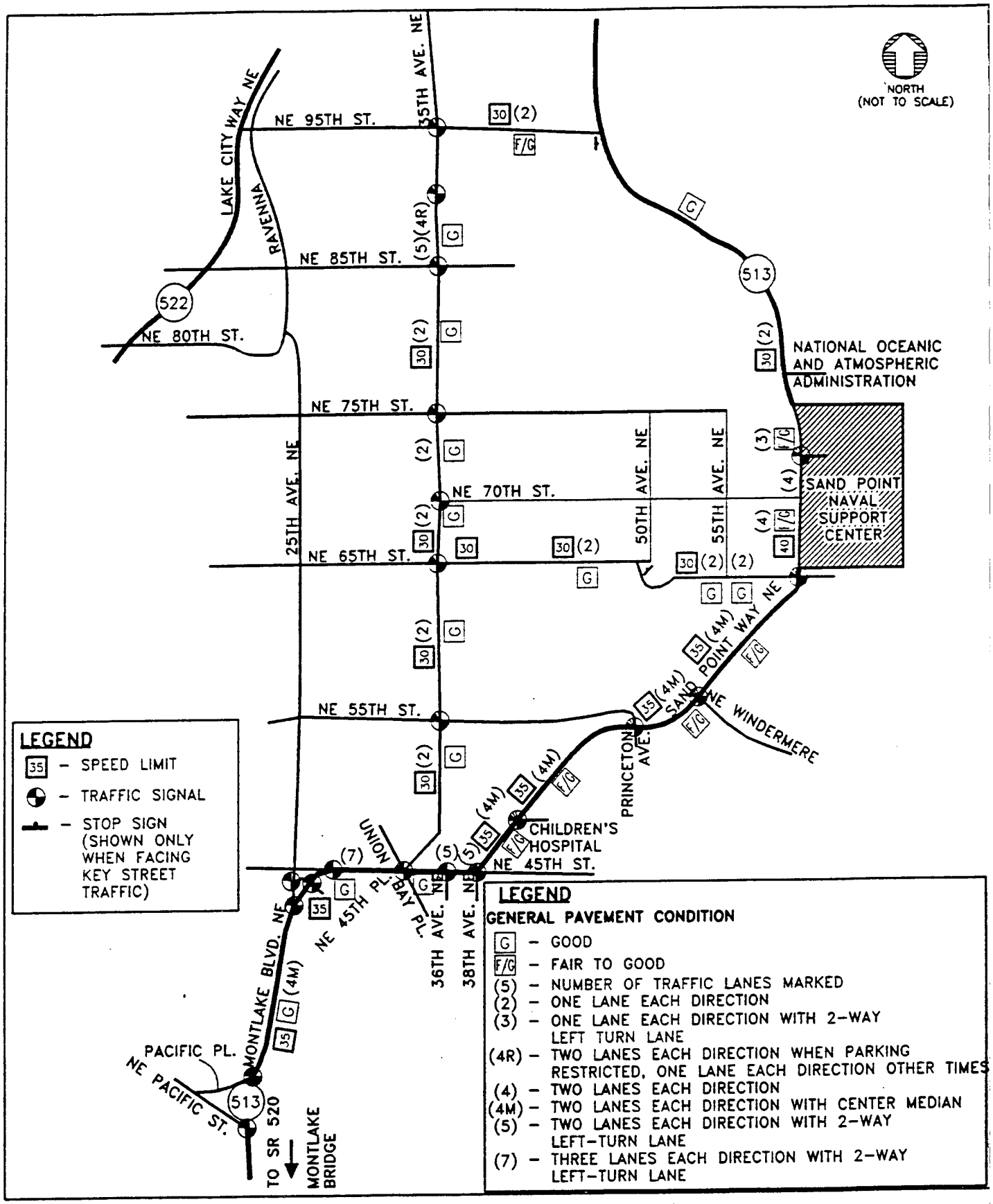
- N.E. 95th Street/35th Avenue N.E.
- N.E. 95th Street/Sand Point Way
- N.E. 65th Street/35th Avenue N.E.
- N.E. 65th Street/Sand Point Way
- Sand Point Way/Main Naval Base Access
- Sand Point Way/Princeton Avenue N.E.
- Montlake Boulevard/N.E. 45th Street
- Montlake Boulevard/25th Avenue N.E.
- Montlake Bridge

3.1.1 Existing Conditions

Transportation Facilities

The primary arterial roadway in the vicinity of the site is Sand Point Way. Secondary roadways in the vicinity of the site include: N.E. 95th Street, 35th Avenue N.E., N.E. 65th Street, Princeton Avenue N.E., Montlake Boulevard, N.E. 45th Street, and 25th Avenue N.E. The existing Sand Point Naval Station is bounded by Lake Washington to the east, Sand Point Way to the west, N.E. 65th Street to the south, and the National Oceanic and Atmospheric Administration (NOAA) complex to the north. Figure 1 shows the existing roadway characteristics and type of traffic control in the site vicinity. As seen in the figure, traffic is controlled by signals at the identified study area intersections of:

- N.E. 95th Street/35th Avenue N.E.,
- N.E. 65th Street/35th Avenue N.E.,
- Sand Point Way/N.E. 65th Street,
- Sand Point Way/Main Naval Base Access,
- Sand Point Way/Princeton Avenue N.E.,
- Montlake Boulevard/N.E. 45th Street,
- Montlake Boulevard/25th Avenue N.E.



TRAFFIC CONTROL/ROADWAY CHARACTERISTICS

Sand Point Naval Station ReUse EIS Seattle, Washington	FIGURE 1	K
December 1993		1153F00

The only unsignalized intersection in the study area is at N.E. 95th Street/Sand Point Way. The following paragraphs provide a brief discussion of each main road in the study area.

Montlake Bridge - Montlake Boulevard

Montlake Boulevard provides access to the Sand Point Station from SR 520, through the University of Washington campus. The Montlake Bridge across the ship canal is a draw bridge that is frequently raised to allow for passage of ships, resulting in a blockage of traffic on Montlake Boulevard. The bridge is four lanes wide made of metal grating, with sidewalks on both sides. North of the Montlake Bridge, Montlake Boulevard is a four lane facility with a center median which accommodates left turn pockets at some locations to provide access to parking lots. The roadway consists of an asphalt overlay on concrete. Between Pacific Avenue and Pacific Place, there are sidewalks on both sides; however, between Pacific Place and NE 45th Street, the sidewalk is on the east side, only. The speed limit in this section of Montlake Boulevard is 35 mph, and the pavement condition is good. Montlake Boulevard is a through street with traffic signals at Pacific Avenue, Pacific Place, 25th Avenue NE, NE 44th Street, and NE 45th Street.

NE 45th Street

NE 45th Street is a continuation of Montlake Boulevard, east of 25th Avenue NE, providing a continuation of access between the Sand Point Station and SR 520. Between Montlake Boulevard and Union Bay Place, NE 45th Street is seven lanes wide, with three lanes in each direction and a center two-way left turn lane (2WLTL). In this section, there are sidewalks on both sides. Between Union Bay Place and 38th Avenue NE, NE 45th Street is a five lane facility, with two lanes in each direction and a center 2WLTL. Sidewalks are provided on both sides of the street in this section. Curb parking begins on both sides of the street, approximately 200 feet east of Union Bay Place and extends to 36th Avenue NE on the north side and to 38th Avenue NE on the south side. The speed limit on NE 45th Street is 45 mph and the asphalt overlay on concrete pavement is in good condition. NE 45th Street is a through street, with traffic signals at Montlake Boulevard, Union Bay Place, 36th Avenue NE (pedestrian only), and at 38th Avenue NE (Sand Point Way NE).

Sand Point Way

Sand Point Way NE begins at NE 45th Street and extends in a northerly direction to NE 95th Street, and beyond. It is a continuation of the Montlake Boulevard/NE 45th Street arterial facility that provides access between the Sand Point Station and SR 520. Traffic signals are provided on Sand Point Way NE at NE 45th Street, 41st Avenue NE (Children's Hospital), Princeton Avenue NE, NE Windemere, NE 65th Street, and at the Sand Point Station main access.

Between NE 45th Street and 40th Avenue NE, Sand Point Way is a five lane facility, with two lanes in each direction and a 2WLTL. In this section, there is a sidewalk on the east side and for approximately one block north of NE 45th Street on the west side. Some on-street parking is provided on the east side of Sand Point Way NE in curb cut-backs. The speed limit in this section is 35 mph and the pavement is fair to good (a concrete pavement that has some rough places).

Between 40th and 41st Avenues NE, Sand Point Way is a four lane facility with a raised center median that accommodates left turn pockets at some locations. A sidewalk is provided on the east side and parking in curb cut-backs is continued on the east side of the street. The concrete pavement in this section is in fair to good condition and the speed limit is 35 mph.

Between 41st Avenue NE and Princeton Avenue NE, the four lane with center median cross-section continues. A sidewalk is provided on the west side of the street, and there is some parking on the shoulder on the east side of the street. The speed limit is 35 mph and the concrete pavement is in fair to good condition.

Between Princeton Avenue NE and NE Windemere, the four lane with center median cross-section continues. A sidewalk and parking is provided on the east side of the street. The speed limit is 35 mph and the concrete pavement is in fair to good condition.

Between NE Windemere and NE 58th Street, the four lane with center median cross-section continues. The sidewalk and parking on the east side of the street continues. The speed limit increases to 40 mph, and the concrete roadway in fair to good condition.

Between NE 58th and NE 65th Streets, the four lane with center median cross-section continues. There are no sidewalks or parking in this section. The speed limit is 40 mph and the concrete is in fair to good condition.

Between NE 65th Street and the main entrance to the Sand Point Station, Sand Point Way NE has four lanes, with no center median. A sidewalk is provided on the east side of the street in this section and shoulder parking is available at some places on the east side of the street. The speed limit is 40 mph and the roadway concrete condition is fair to good.

Between the main entrance to the Sand Point Station and the entrance to the National Oceanic and Atmospheric Administration (NOAA) complex, Sand Point Way NE is a 3-lane facility, with one travel lane in each direction and a 2WLTL. The speed limit in this section is 30 mph and the concrete roadway condition is fair to good. Some shoulder parking is available on the east side of the street.

Between the NOAA complex and NE 95th Street, Sand Point Way NE is a 2-lane facility, with a speed limit of 30 mph. There is some shoulder parking on both sides of the street in this section. The asphalt roadway condition is fair to good from NOAA tc N.E. 95th Street.

NE 95th Street

NE 95th Street is a 2-lane facility between Sand Point Way and 35th Avenue NE. The speed limit is 30 mph and the concrete road condition is fair tc good. Eastbound traffic on NE 95th Street is controlled by a stop sign at Sand Point Way and there is a traffic signal at 35th Avenue NE. Between 35th and 40th Avenues NE, there is some shoulder parking. There are no sidewalks on this section of NE 95th Street.

NE 65th Street

NE 65th Street is a 2-lane facility between Sand Point Way NE and 35th Avenue NE. The speed limit is 35 mph and the pavement condition is good. Sidewalks are provided on both sides of the street and curb parking is available on both sides of the street, except through the curves in the vicinity of 45th and 50th Avenues NE. All traffic approaching the intersection of NE 65th Street and

49th Avenue NE is required to stop, except for eastbound traffic on NE 65th Street. There is a 4-way stop at the intersection of NE 65th Street and 40th Avenue NE and there is a traffic signal at the intersection of NE 65th Street and 35th Avenue NE.

From N.E. 35th Avenue NE to east of 50th Avenue NE, NE 65th Street is a concrete roadway, west of 50th Avenue NE, the roadway has an asphalt overlay on concrete.

NE 45th Place

NE 45th Place connects 35th Avenue NE with NE 45th Street at Union Bay Place. The speed limit is 30 mph and there are sidewalks on both sides of the street. Between NE 45th Street and NE Blakely Street, curb parking is available on the east side of the street. Curb parking is not available on the section of NE 45th Place, between NE Blakely Street and 35th Avenue NE. NE 45th Place is a concrete roadway in fair to good condition.

35th Avenue NE

Between NE 45th Place and NE 95th Street, 35th Avenue NE has 2 to 5 travel lanes, with a speed limit of 30 mph and sidewalks on both sides of the street. Traffic signals are in place at NE 55th, NE 65th, NE 70th, NE 85th, NE 89th, and NE 95th Streets. Between NE 45th Place and NE 85th Street, there are two marked traffic lanes (one in each direction), with curb parking available on the east side of the street, except between 4:00 and 6:00 p.m., and on the west side of the street, except from 7:00 to 9:00 a.m.

Between NE 85th and NE 87th Streets, there are five marked traffic lanes, two through lanes in each direction, plus a 2WLTL. The same peak hour parking restrictions are in effect in this section as south of NE 85th Street.

Between NE 87th and NE 94th Streets, there are four marked traffic lanes, two for each direction of travel. The same peak hour parking restrictions are in effect in this section as south of NE 85th Street.

Between NE 94th and NE 96th Streets, there are four marked traffic lanes, with added left-turn pockets at the intersection with NE 95th Street. No parking is available in this section of 35th Avenue NE.

35th Avenue is a concrete roadway with asphalt overlays from N.E. 85th Street to N.E. 65th Street. The roadway is in fair to good condition from NE 45th Place to N.E. 95th Street.

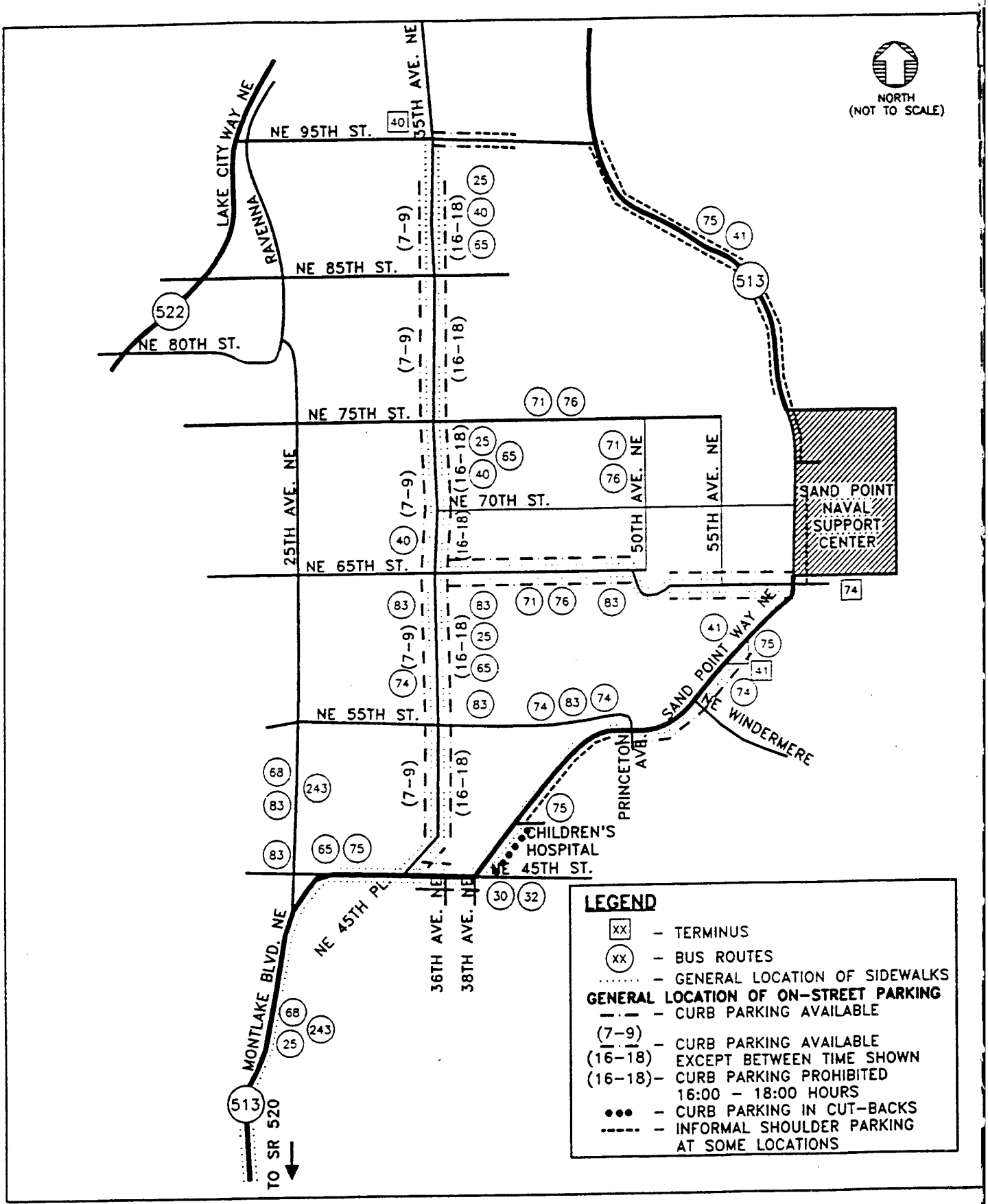
Transit Access

Figure 2 shows the current street parking and transit routes in the vicinity of the Sand Point Naval Station. Current transit access to the Sand Point Station is provided along Sand Point Way NE, by Metro Routes 41, 74, and 75. Metro Routes 71 and 76 provide service along 55th and 50th Avenues NE, directly west of the Sand Point Station. These routes provide service throughout the day at approximate 30 minute headways with closer to 15 to 20 minute headways during the a.m. (7:00 a.m. to 9:00 a.m.) and p.m. peak hours (3:30 p.m. to 6:30 p.m.). Although these routes are within normal acceptable walking distance of the Sand Point Naval Station, it is doubtful if significant use is made of these routes by Naval Station patrons, since there is a steep hill that has to be negotiated.

Traffic Volumes and Peak Hour Operations

Based on historical 24 hour traffic counts conducted by the Seattle Engineering Department, the weekday p.m. peak hour is the time period when the greatest total traffic demands are placed on the surrounding street system, and as such this was the time period used in all subsequent analyses. Thus, the traffic operations on the surrounding street system described in this analysis will likely be better during all other times of the day and days of the week.

Weekday evening peak hour traffic counts were conducted at all intersections in the study area on Tuesday November 16, Wednesday November 17, and Thursday November 18. The traffic counts were conducted by Traffic Count Consultants between the hours of 4:00 p.m. and 6:00 p.m. on a mid-week days. Figure 3 shows the weekday p.m. peak hour traffic volumes in the project vicinity. Based on the results of the manual turning movement counts, it was determined that the peak hour in the vicinity of the site generally occurs between 4:30 and 5:30 p.m.



STREET PARKING/BUS ROUTES

Sand Point Naval Station ReUse EIS Seattle, Washington December 1993	FIGURE 2

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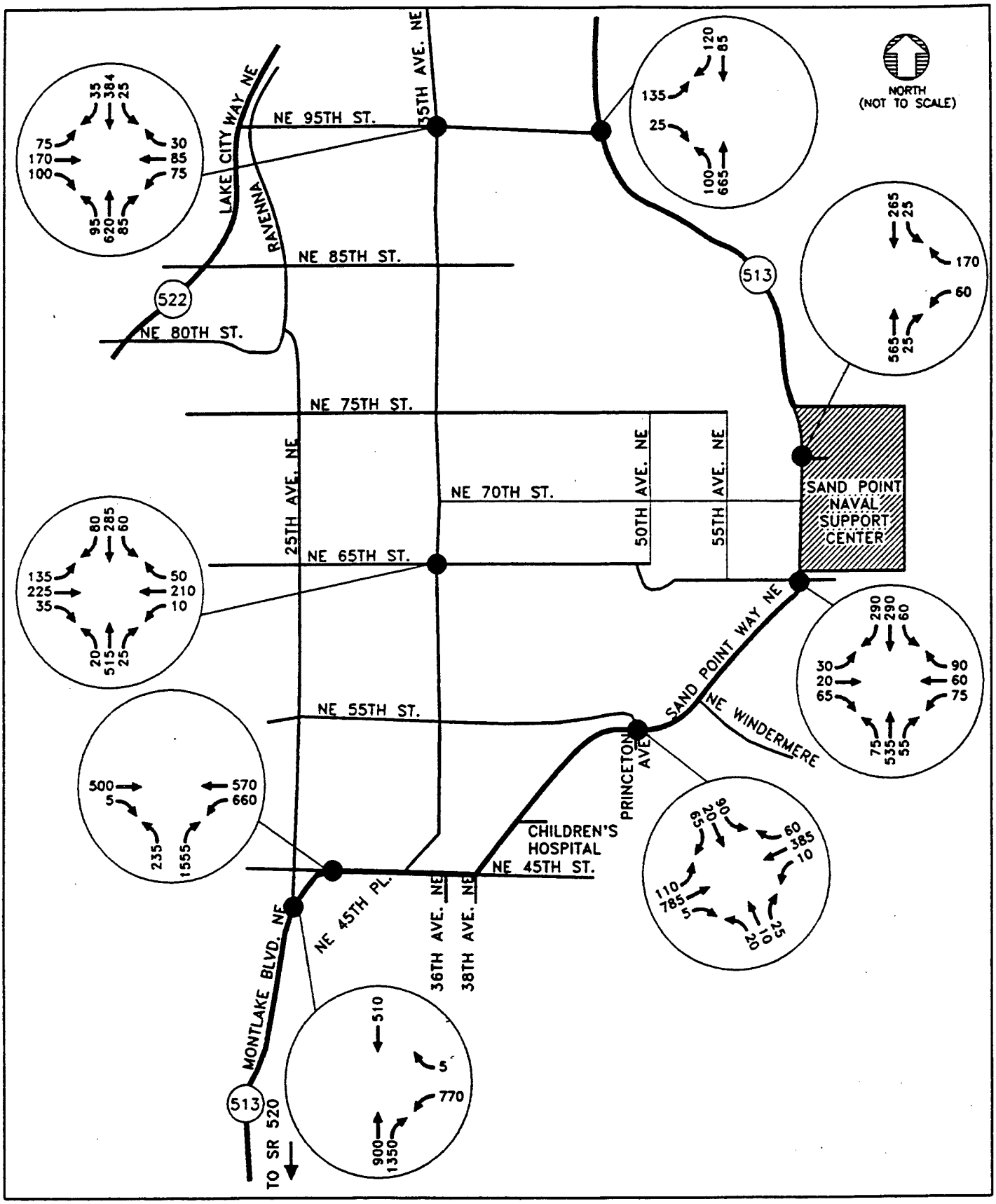

EXISTING WEEKDAY P.M. PEAK HOUR TRAFFIC VOLUMES

Sand Point Naval Station ReUse EIS Seattle, Washington	FIGURE 3	K
December 1993		

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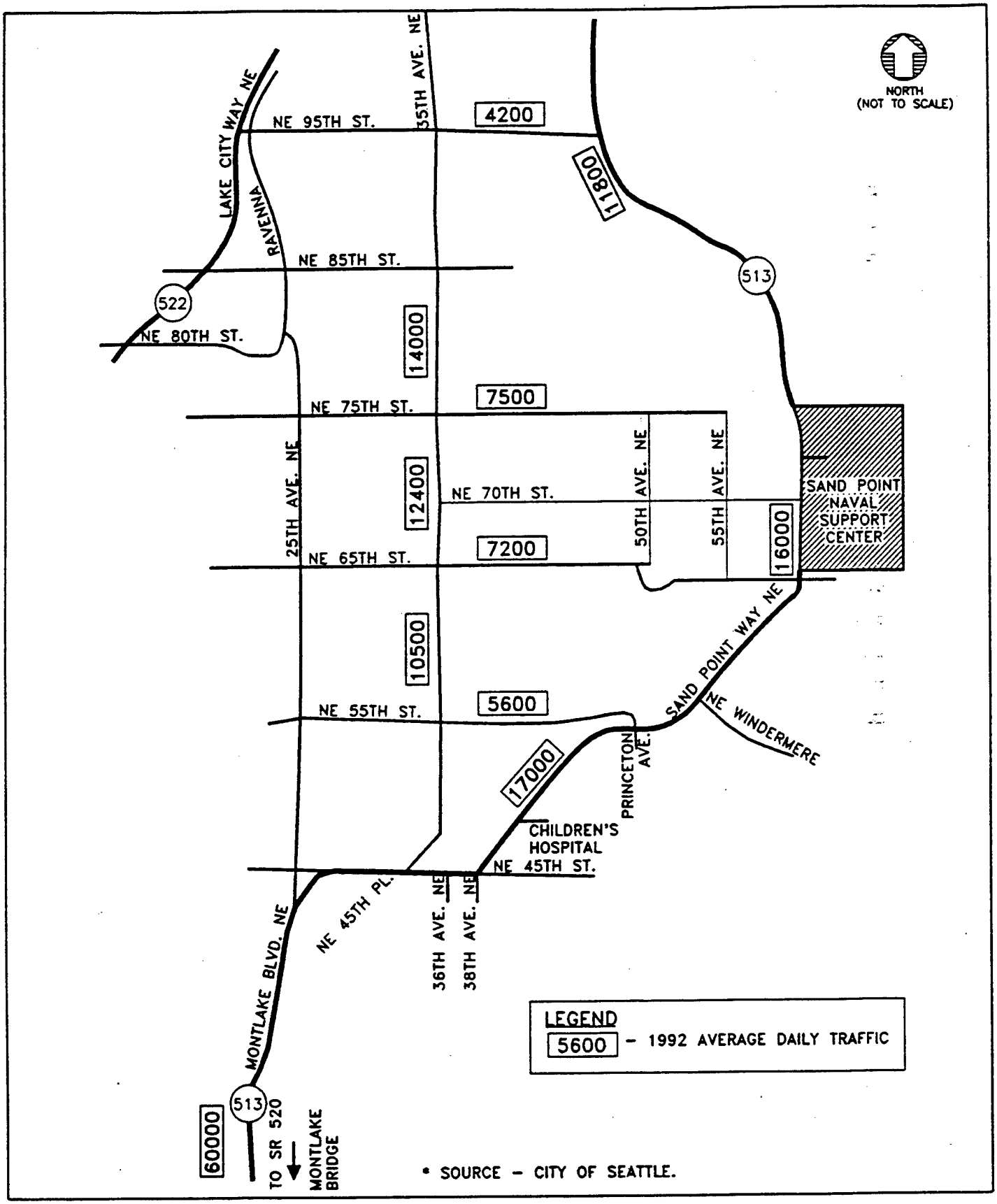
Figure 4 shows the 1992 average daily traffic (ADT) volumes on key streets in the study area. The ADT volumes were counted throughout the entire year by the Seattle Engineering Department. As shown in the figure, the Montlake Bridge carries approximately 60,000 vehicles per day while Sand Point Way ranges between 17,000 and 11,800 vehicles per day between N.E. 45th Street and N.E. 95th Street. 35th Avenue N.E. carries between 10,500 and 14,000 vehicles per day between N.E. 55th Street and N.E. 75th Street.

Existing Intersection Level of Service

To assess the traffic conditions at key intersections in the study area, capacity analyses were conducted using FHWA's Highway Capacity Software (HCS) programs that are based on the 1985 Highway Capacity Manual (Reference 1). This is an approved methodology by the Seattle Engineering Department. These HCS programs examine a roadway's and/or intersection's operational characteristics (e.g. number of lanes, green signal time) and then determine the traffic that can be accommodated for each movement at a specified level of service. The resulting values are then compared to the actual traffic demand. Based on the capacity analysis, a Level of Service (LOS) is derived for each movement that reflects how much traffic congestion or vehicle delay will result. Level of Service is a concept developed by the transportation profession to quantify the degree of comfort (including such elements as travel time, number of stops, total amount of stopped delay, and impediments caused by other vehicles) afforded to drivers as they travel through an intersection or roadway segment. LOS is expressed as a letter grade that ranges from "A" to "F". At signalized intersections, LOS "A" generally indicates that no vehicle waits longer than one red indication; LOS "B" typically means occasionally the green phase is fully utilized; LOS "C" means that occasionally there will be some back-up; LOS "D" typically means approaching instability, with substantial delays during short peaks within the rush hour; LOS "E" represents capacity, with full utilization of every green phase, long queues of waiting vehicles, and delays up to several cycles, and dependance on good coordination between adjacent signals; at signalized intersections, LOS "F" represents jammed conditions with long delays. For signalized intersections, LOS "D" is considered to be the minimum acceptable LOS grade.

At unsignalized intersections, level of service is defined using a concept referred to as "reserve capacity". The reserve capacity concept applies only to an individual traffic movement or to shared lane movements. Once the LOS, capacity, and expected delay of all the individual movements has been calculated, an overall evaluation of the intersection can be made. Normally, the movement having the worst LOS defines the overall evaluation, but this may be tempered by engineering judgement. An LOS "E" is considered to



1992 AVERAGE DAILY TRAFFIC VOLUMES (TOTAL BOTH DIRECTIONS)

Sand Point Naval Station ReUse EIS Seattle, Washington	FIGURE 4
December 1993	

1153F004

be the minimum acceptable LOS grade at unsignalized intersections. Past experience with the unsignalized analysis procedure indicates this methodology is very conservative in that it tends to over-estimate the magnitude of any potential problems that may exist. A detailed explanation of these LOS letter grades as well as the criteria used to establish them is presented in Appendix A. The results of all level of service analysis are provided in Appendix B.

Table 1 displays the level of service results for the weekday p.m. peak hour at each of the intersections included in this analysis.

Table 1 Existing 1993 Weekday PM Peak Hour, Level of Service Results

Intersection	Unsignalized Intersection		Signalized Intersection		
	Level of Service	Reserve Capacity	Level of Service	Volume/ Capacity Ratio	Average Delay (Sec)
N.E. 95th St./35th Ave. N.E.			B	0.52	10.1
N.E. 95th St./Sand Point Way	D	168			
N.E. 65th St./35th Ave N.E.			C	0.91	21.8
N.E. 65th St./Sand Point Way			B	0.35	7.7
Main Base Access/Sand Point Way			B	0.46	10.4
Sand Point Way/Princeton Av. N.E.			B	0.45	8.1
Montlake Blvd./N.E. 45th St.			C	0.80	15.2
Montlake Blvd./25th Av. N.E.			B	0.58	13.3

As seen in the table all intersections are operating at level of service "D" or better which is generally considered an acceptable level of service. The unsignalized intersection of N.E. 95th Street/Sand Point Way is currently operating at level of service "D" during the weekday p.m. peak hour which is the worst level of service at any of the study area intersections.

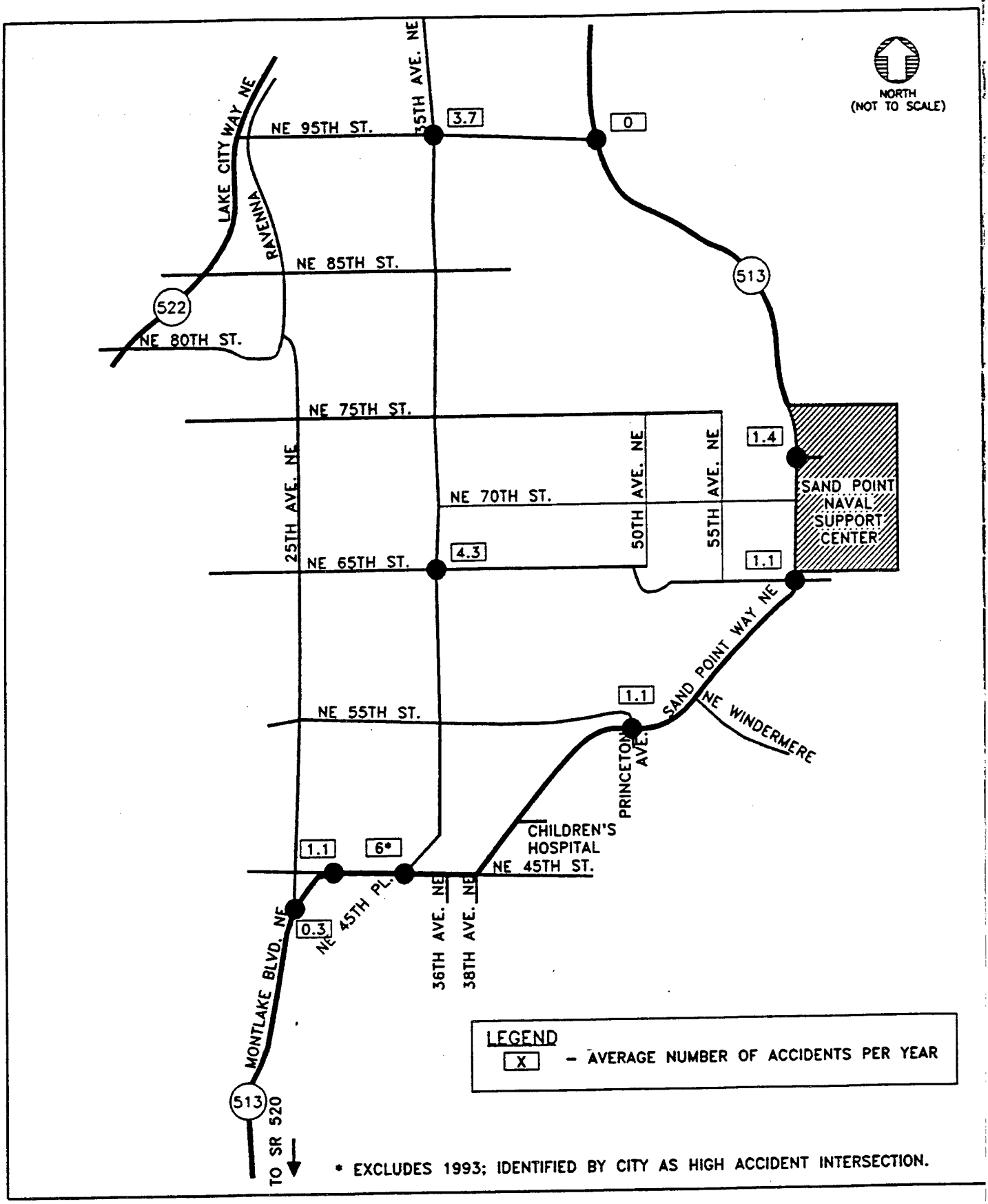
Traffic Safety Analysis

As a part of the traffic safety analysis, the most recent three and one-half year accident history was investigated for the surrounding street system, and the sight distance was examined at the proposed site driveways.

The most recent available three and one-half year (1/1/90 through 6/30/93) accident information was obtained from the City of Seattle Engineering Department for the key intersections in the site vicinity. Seattle Engineering Department (SED) defines a high accident location as a signalized intersection with ten or more accidents per year, or an unsignalized intersection with five accidents per year for the past three years. Figure 5 was prepared to shown the average number of accidents per year at the key intersections in the study area. As seen in the figure, all of the intersections in the study area are below the SED threshold for high accident locations with the exception of N.E. 45th Place/Montlake Boulevard which has already been identified by the City as a high accident location. It is also important to note that no fatalities occurred in the study area from the time period investigated (1/1/90 through 6/30/93).

3.1.2 Future Background Conditions

The year 2000 was chosen as the future year of analysis since it coincides with Puget Sound Regional Council forecasts and nearly full implementation of the City of Seattle and the Muckleshoot Tribe plans. Table 2 shows the historical growth rate of traffic volumes on roadways in the study area. As seen in the table, there has been virtually no growth, and in some instances a reduction in traffic volumes on study area roadways in the past five years (1988 through 1992). Nonetheless, Seattle Engineering Department policy is such that a one percent per year growth rate be applied to existing volumes to reflect any potential changes in land use and travel patterns to ensure that the analysis is conservative and identifies worst-case conditions. Thus, to be consistent with Seattle Engineering policy, the one percent per year growth was applied to those volumes and/or movements that reflect through traffic instead of local traffic. Figure 6 shows the estimated year 2000 weekday p.m. peak hour traffic volumes without the Sand Point Naval Base Re Use.



ACCIDENT HISTORY
JANUARY 1990 TO JUNE 1993

Sand Point Naval Station ReUse EIS Seattle, Washington December 1993	FIGURE 5

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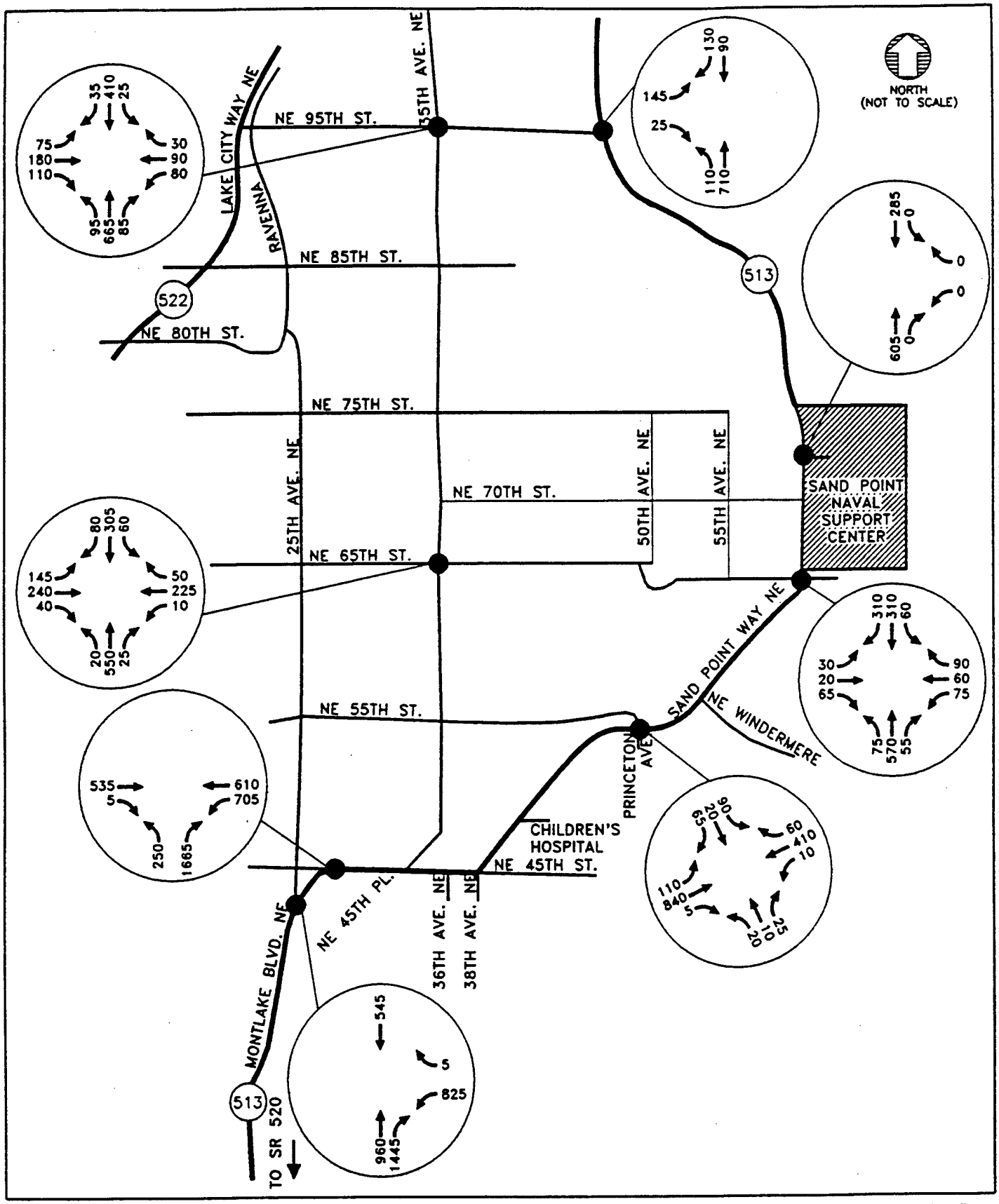

ESTIMATED YEAR 2000 BACKGROUND
WEEKDAY P.M. PEAK HOUR
TRAFFIC VOLUMES

Sand Point Naval Station ReUse EIS Seattle, Washington December 1993	FIGURE 6	K

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Table 2 Historical Traffic Volume Trends in the Study Area[1]

Street	Location	Dates (Mo./Yr.)	Annual Growth Rate (PM Peak Hr.)
Sand Point Way	N. of 65th St.	7/88 - 6/92	0.0%
Sand Point Way	N. of 74th St.	7/88 - 8/91	-0.2%
Sand Point Way	N. of 95th St.	5/88 - 11/92	0.6%
35th Ave. NE	N. of 75th St.	7/88 - 8/91	0.5%
35th Ave. NE	N. of 85th St.	1/88 - 8/91	0.3%
35th Ave. NE	N. of 95th St.	1/88 - 8/91	0.0%
55th Ave. NE	E. of 35th Ave.	3/89 - 10/92	-0.2%

[1] - Source: City of Seattle Engineering Department

As seen on Table 2, the growth rate in traffic volumes on the study area street was less than one percent per year with some streets experiencing a decrease in traffic volumes. These results are consistent with the mature built out land use characteristics of the surrounding area. Thus, the growth rate applied to the existing volumes of one percent per year is conservative and may in fact overestimate the year 2000 background traffic volumes.

Table 3 shows the level of service results for estimated year 2000 weekday p.m. peak hour conditions.

Table 3 Estimated Year 2000 Weekday PM Peak Hour, Level of Service Results

Intersection	Unsignalized Intersection		Signalized Intersection		
	Level of Service	Reserve Capacity	Level of Service	Volume/ Capacity Ratio	Average Delay (Sec)
N.E. 95th St./35th Ave. N.E.			B	0.56	10.5
N.E. 95th St./Sand Point Way	D	129			
N.E. 65th St./35th Ave N.E.			D	1.0	33.8
N.E. 65th St./Sand Point Way			B	0.37	7.7
Main Base Access/Sand Point Way*			n/a	n/a	n/a
Sand Point Way/Princeton Av. N.E.			B	0.47	7.8
Montlake Blvd./N.E. 45th St.			C	0.85	16.7
Montlake Blvd./25th Av. N.E.			B	0.62	13.9

* - Assumes No Base Operation (n/a - not applicable)

As seen on the table, all intersections are anticipated to operate at level of service "D" or better during estimated year 2000 weekday p.m. peak hour conditions which is considered acceptable.

References

1. Transportation Research Board. *Highway Capacity Manual.* Special Report No. 209 (1985).

APPENDIX A: DESCRIPTION OF LEVEL OF SERVICE METHODS AND CRITERIA

Level of Service (LOS) is a concept developed by the transportation profession to quantify the degree of comfort (including such elements as travel time, number of stops, total amount of stopped delay, and impediments caused by other vehicles) afforded to drivers as they travel through an intersection or roadway segment. As defined in the 1985 Highway Capacity Manual (Reference 1), six grades are used to denote the various LOS ranging from "A", which indicates little, if any, vehicle delay, to "F" which indicates significant vehicle delay and traffic congestion.

Recent research has determined that average stopped delay per vehicle is the best available measure of the LOS at a signalized intersection which are described in Table A.1. Additionally, Table A.2 identifies the relationship between level of service and average stopped delay per vehicle. Using this definition, a "D" LOS is generally considered to represent the minimum acceptable design standard for signalized intersections.

For signalized intersections, LOS defines the quality of the traffic flow, but does not necessarily describe the overall design adequacy of the intersection to accommodate the traffic volumes being analyzed. As an example, a good LOS can be achieved even when the volume/capacity ratio for the intersection exceeds 1.0. Similarly, there are conditions under which a poor LOS is achieved even though the volume/capacity ratio for the intersection is well below 1.0. Therefore, all signalized intersection summary tables contained in this report provide both the calculated LOS and the calculated volume/capacity ratio for each intersection. In this way, the reader is provided with a complete description of the expected operating conditions for each signalized intersection that was analyzed.

The calculation of LOS at an unsignalized intersection requires a different approach. The 1985 Highway Capacity Manual includes a method for calculating the LOS at two-way stop-controlled intersections. For these unsignalized intersections, LOS is defined differently than for signalized intersections in that it is based upon the concept of "Reserve Capacity" (i.e., that portion of available hourly capacity that is not used). A qualitative description of the various service levels associated with an unsignalized intersection is presented in Table A.3. A quantitative definition of LOS for an unsignalized intersection is presented in Table A.4.

The reserve capacity concept applies only to an individual traffic movement or to shared lane movements. Once the capacity of all the individual movements has been calculated and their LOS and expected delays determined, an overall evaluation of the intersection can be made. Normally, the movement having the worst LOS defines the overall evaluation, but this may be tempered by engineering judgement. An "E" LOS is generally considered to represent the minimum acceptable design standard.

Past experience with the unsignalized analysis procedure indicates this methodology is
very conservative in that it tends to overestimate the magnitude of any potential problems that might exist. This is especially true for minor street left turn movements. Therefore, the results of any unsignalized intersection analysis should be reviewed with this thought in mind.

All LOS analyses described in this report were performed in accordance with the procedures described above. Copies of the analysis forms are contained in Appendices C and D. As a final note, the HCM analysis procedures are based upon worst case conditions, the peak 15 minute period flow rate during the morning and evening peak hours was used in the evaluation of all intersection levels of service. Thus, the analysis reflects conditions that are only likely to occur for 15 minutes out of each average weekday. For the remainder of each weekday and throughout the weekends, traffic conditions within the study impact area are likely to be better than that described in this report.

Table A.1
GENERAL LEVEL OF SERVICE DESCRIPTIONS FOR SIGNALIZED INTERSECTIONS

Level-of-Service	Traffic Flow Characteristics
A	Very low average stopped delay, less than five seconds per vehicle. This occurs when progression is extremely favorable, and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.
B	Average stop delay is in the range of 5.1 to 15.0 seconds per vehicle. This generally occurs with good progression and/or short cycle lengths. More vehicles stop than for LOS A, causing higher levels of average delay.
C	Average stopped delay is in the range of 15.1 to 25.0 seconds per vehicle. These higher delays may result from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear in this level. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.
D	Average stopped delays are in the range of 25.1 to 40.0 seconds per vehicle. The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle length, or high volume/capacity ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	Average stopped delays are in the range of 40.1 to 60.0 seconds per vehicle. This is considered to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high volume/capacity ratios. Individual cycle failures are frequent occurrences.
F	Average stop delay is in excess of 60 seconds per vehicle. This is considered to be unacceptable to most drivers. This condition often occurs with oversaturation. It may also occur at high volume/capacity ratios below 1.00 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such high delay levels.
	Note: A signal cycle failure is considered to occur when one or more vehicles are forced to wait through more than one green signal indication for a particular approach.

LEVEL OF SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS

Level-of-Service	Stopped Delay per Vehicle (Sec)
A	<= 5.0
B	5.1 to 15.0
C	15.1 to 25.0
D	25.1 to 40.0
E	40.0 to 60.0
F	> 60.0

GENERAL LEVEL OF SERVICE DESCRIPTIONS FOR UNSIGNALIZED INTERSECTIONS

LOS	General Description
A	- Average delay per vehicle ranges between 0 and 10 seconds - Nearly all drivers find freedom of operation - Very seldom is there more than one vehicle in the queue
B	- Average delay per vehicle ranges between 10 and 20 seconds - Some drivers begin to consider the delay an inconvenience - Occasionally there is more than one vehicle in the queue
C	- Average delay per vehicle ranges between 20 and 30 seconds - Many times there is more than one vehicle in the queue - Most drivers feel restricted, but not objectionably so
D	- Average delay per vehicle ranges between 30 and 40 seconds - Often there is more than one vehicle in the queue - Drivers feel quite restricted
E	- Represents a condition in which the demand is near or equal to the probable maximum number of vehicles that can be accommodated by the movement - Average delay per vehicle ranges between 40 and 60 seconds - There is almost always more than one vehicle in the queue - Drivers find the delays to be approaching intolerable levels
F	- Forced flow - Represents an intersection failure condition that is caused by geometric and/or operational constraints external to the intersection

LEVEL OF SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS

Reserve Capacity (pcph)	Level of Service	Expected Delay to Minor Street Traffic
$\geq$ 400	A	Little or no delay
300-399	B	Short traffic delays
200-299	C	Average traffic delays
100-199	D	Long traffic delays
0-99	E	Very long traffic delays
*	F	*

* When demand volume exceeds the capacity of the lane, extreme delays will be encountered with queuing which may cause severe congestion affecting other traffic movements in the intersection. This condition usually warrants improvement to the intersection.

APPENDIX B: LEVEL OF SERVICE WORKSHEET RESULTS

Existing 1993 Weekday PM Peak Hour

Turning Movement Report

Volume Type	Northbound Left	Thru	Right	Southbound Left	Thru	Right	Eastbound Left	Thru	Right	Westbound Left	Thru	Right	Total Volume
#2 35th Ave/NE 95th St													
Base	95	619	84	23	384	35	76	171	100	73	87	30	1777
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	95	619	84	23	384	35	76	171	100	73	87	30	1777
#8 35th Ave/NE 65th St													
Base	21	515	23	58	283	82	134	227	33	11	212	52	1651
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	21	515	23	58	283	82	134	227	33	11	212	52	1651
#18 Sand Pt Way/NE 95th St													
Base	99	667	0	0	83	122	135	0	26	0	0	0	1132
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	99	667	0	0	83	122	135	0	26	0	0	0	1132
#25 Sand Pt Way/Navy Base Entry													
Base	0	564	27	23	264	0	0	0	0	61	0	171	1110
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	564	27	23	264	0	0	0	0	61	0	171	1110
#28 Sand Pt Way/NE 65th St													
Base	75	535	57	59	292	292	29	21	63	76	59	89	1647
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	75	535	57	59	292	292	29	21	63	76	59	89	1647
#33 Sand Pt Way/Princeton Ave													
Base	20	12	26	92	20	63	109	784	4	9	383	62	1584
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	20	12	26	92	20	63	109	784	4	9	383	62	1584
#41 NE 45th St/Montlake Blvd													
Base	236	0	1557	0	0	0	0	502	3	662	569	0	3529
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	236	0	1557	0	0	0	0	502	3	662	569	0	3529
#49 25th Ave/Montlake Blvd													
Base	0	901	1349	0	512	0	0	0	0	771	0	3	3536
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	901	1349	0	512	0	0	0	0	771	0	3	3536

Traffix System Version 6.6 (c) 1992 DA Licensed to Kittelson & Assoc.

Existing 1993 Weekday PM Peak Hour

Link Volume Report

Volume Type	NB Link In	Out	Total	SB Link In	Out	Total	EB Link In	Out	Total	WB Link In	Out	Total	Total Volume
#2 35th Ave/NE 95th St													
Base	798	557	1355	442	725	1167	347	217	564	190	278	468	3554
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	798	557	1355	442	725	1167	347	217	564	190	278	468	3554
#8 35th Ave/NE 65th St													
Base	559	327	886	423	701	1124	394	315	709	275	308	583	3302
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	559	327	886	423	701	1124	394	315	709	275	308	583	3302
#18 Sand Pt Way/NE 95th St													
Base	766	109	875	205	802	1007	161	221	382	0	0	0	2264
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	766	109	875	205	802	1007	161	221	382	0	0	0	2264
#25 Sand Pt Way/Navy Base Entry													
Base	591	325	916	287	735	1022	0	0	0	232	50	282	2220
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	591	325	916	287	735	1022	0	0	0	232	50	282	2220
#28 Sand Pt Way/NE 65th St													
Base	667	431	1098	643	653	1296	113	426	539	224	137	361	3294
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	667	431	1098	643	653	1296	113	426	539	224	137	361	3294
#33 Sand Pt Way/Princeton Ave													
Base	58	33	91	175	183	358	897	466	1363	454	902	1356	3168
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	58	33	91	175	183	358	897	466	1363	454	902	1356	3168
#41 NE 45th St/Montlake Blvd													
Base	1793	665	2458	0	0	0	505	805	1310	1231	2059	3290	7058
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1793	665	2458	0	0	0	505	805	1310	1231	2059	3290	7058
#49 25th Ave/Montlake Blvd													
Base	2250	1283	3533	512	904	1416	0	0	0	774	1349	2123	7072
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2250	1283	3533	512	904	1416	0	0	0	774	1349	2123	7072

Traffix System Version 6.6 (c) 1992 DA Licensed to Kittelson & Assoc.

Existing 1993 Weekday PM Peak Hour

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/Veh	Base V/C	Future LOS	Future Del/Veh	Future V/C	Change In
# 2 35th Ave/NE 95th St	B	10.1	0.519	B	10.1	0.519	+ 0.000 D/V
# 8 35th Ave/NE 65th St	C	21.8	0.911	C	21.8	0.911	+ 0.000 D/V
# 18 Sand Pt Way/NE 95th St	D	xxxxx	0.000	D	xxxxx	0.000	+ 0.000 V/C
# 25 Sand Pt Way/Navy Base Entry	B	10.4	0.463	B	10.4	0.463	+ 0.000 D/V
# 28 Sand Pt Way/NE 65th St	B	7.7	0.354	B	7.7	0.354	+ 0.000 D/V
# 33 Sand Pt Way/Princeton Ave	B	8.1	0.454	B	8.1	0.454	+ 0.000 D/V
# 41 NE 45th St/Montlake Blvd	C	15.2	0.797	C	15.2	0.797	+ 0.000 D/V
# 49 25th Ave/Montlake Blvd	B	13.3	0.578	B	13.3	0.578	+ 0.000 D/V

Arterial	Dir	Base Trvl LOS	Base Trvl Time	Base Avg. Speed	Future Trvl LOS	Future Trvl Time	Future Avg. Speed	Change in Avg. Speed

Existing 1993 Weekday PM Peak Hour

Level Of Service Computation Report
1985 HCM Operations Method
Base Volume Alternative

Intersection #2 35th Ave/NE 95th St

Cycle (sec): 90 Critical Vol./Cap. (X): 0.519
Loss Time (sec): 6 Average Delay (sec/veh): 10.1
Optimal Cycle: 28 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	5	5	5	5	5	5	5	5	5	5	5	5
Lanes:	1	0 1	1 0	1	1 1	1 0	0	1 0	0 1	0	1 0	0 1
Volume Module:												
Base Vol:	95	619	84	23	384	35	76	171	100	73	87	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	95	619	84	23	384	35	76	171	100	73	87	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.88	0.88	0.88	0.90	0.90	0.90	0.82	0.82	0.82
PHF Volume:	106	688	93	26	436	40	84	190	111	89	106	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	106	688	93	26	436	40	84	190	111	89	106	37
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.05	1.05	1.00	1.10	1.10	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	106	722	98	26	480	44	84	190	111	89	106	37
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.51	0.88	0.88	0.30	0.88	0.94	0.75	0.75	0.91	0.48	0.48	0.85
Lanes:	1.00	1.76	0.24	1.00	2.76	0.24	0.31	0.69	1.00	0.46	0.54	1.00
Final Sat.:	921	2796	379	545	4382	402	414	937	1637	393	468	1530
Capacity Analysis Module:												
Vol/Sat:	0.12	0.26	0.26	0.05	0.11	0.11	0.20	0.20	0.07	0.23	0.23	0.02
Crit Moves:		****									****	
Green/Cycle:	0.50	0.50	0.50	0.50	0.50	0.50	0.44	0.44	0.44	0.44	0.44	0.44
Volume/Cap:	0.23	0.52	0.52	0.10	0.22	0.22	0.47	0.47	0.16	0.52	0.52	0.06
Level Of Service Module:												
Delay/Veh:	9.8	11.9	11.9	9.1	9.7	9.7	14.1	14.1	11.7	15.1	15.1	11.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
AdjDel/Veh:	9.8	10.1	10.1	7.7	8.3	8.3	12.0	12.0	9.9	12.8	12.8	9.5
Queue:	2	14	14	7	8	8	5	5	2	4	4	1

Existing 1993 Weekday PM Peak Hour

Level Of Service Detailed Computation Report
1985 HCM Operations Method
Base Volume Alternative

Intersection #2 35th Ave/NE 95th St

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
HCM Ops Adjusted Lane Utilization Module:																								
Lanes:	1	0	1	1	0		1	0	2	1	0		0	1	0	0	1		0	1	0	0	1	
Lane Group:	L		RT		RT		L		RT		RT		LT		LT		R		LT		LT		R	
#LnsInGrps:	1		2		2		1		3		3		1		1		1		1		1		1	
HCM Ops Input Saturation Adj Module:																								
Lane Width:	12		12		12		12		12		12		12		12		12		12		12		12	
% Hev Veh:			0						0						0						0			
Grade:			0%						0%						0%						0%			
Parking/Hr:			No						No						No						No			
Bus Stp/Hr:			0						0						0						0			
Area Type:	< <

Level Of Service Detailed Computation Report
1985 HCM Operations Method
Base Volume Alternative

Intersection #8 35th Ave/NE 65th St

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
HCM Ops Adjusted Lane Utilization Module:																
Lanes:	0	1 0	0	1	0	1 0	0	1	0	1 0	0	1	0	1 0	0	1
Lane Group:	LT	LT	R		LT	LT	R		LT	LT	R		LT	LT	R	
#LnsInGrps:	1	1	1		1	1	1		1	1	1		1	1	1	
HCM Ops Input Saturation Adj Module:																
Lane Width:	12	12	12		12	12	12		12	12	12		12	12	12	
% Hev Veh:		0				0				0				0		
Grade:		0%				0%				0%				0%		
Parking/Hr:		No				No				No				No		
Bus Stp/Hr:		0				0				0				0		
Area Type:	< < < < < < < < < < < < < < < Other > > > > > > > > > > > > > > >															
Cnft Ped/Hr:		0				0				0				0		
ExclusiveRT:		Include				Include				Include				Include		
% RT Prtct:		0				0				0				0		
HCM Ops f(rt) and f(lt) Adj Case Module:																
f(rt) Case:	xxxx	xxxx	2		xxxx	xxxx	2		xxxx	xxxx	2		xxxx	xxxx	2	
f(lt) Case:	5	5	xxxx		5	5	xxxx		5	5	xxxx		5	5	xxxx	
HCM Ops Saturation Adj Module:																
Ln Wid Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Hev Veh Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Grade Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Parking Adj:	xxxx	xxxx	1.00		xxxx	xxxx	1.00		xxxx	xxxx	1.00		xxxx	xxxx	1.00	
Bus Stp Adj:	xxxx	xxxx	1.00		xxxx	xxxx	1.00		xxxx	xxxx	1.00		xxxx	xxxx	1.00	
Area Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
RT Adj:	xxxx	xxxx	0.85		xxxx	xxxx	0.85		xxxx	xxxx	0.85		xxxx	xxxx	0.85	
LT Adj:	0.92	0.92	xxxxx		0.60	0.60	xxxxx		0.70	0.70	xxxxx		0.89	0.89	xxxxx	
HCM Sat Adj:	0.92	0.92	0.85		0.60	0.60	0.85		0.70	0.70	0.85		0.89	0.89	0.85	
Usr Sat Adj:	0.82	0.82	0.87		0.82	0.82	0.90		0.79	0.79	0.78		0.74	0.74	0.74	0.76
MLF Sat Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Fnl Sat Adj:	0.75	0.75	0.74		0.49	0.49	0.77		0.55	0.55	0.66		0.66	0.66	0.65	
Progresssion Adjustment Factor Module:																
Signal Type:	< < < < < < < < < < < <						Actuated		> > > > > > > > > > > >							
Volume/Cap:	0.89	0.89	0.04		0.91	0.91	0.14		0.91	0.91	0.07		0.52	0.52	0.12	
ArrivalType:		3				3				3				3		
ProgAdjFctr:	0.85	0.85	0.85		0.85	0.85	0.85		0.85	0.85	0.85		0.85	0.85	0.85	

Level Of Service Computation Report
1985 HCM Unsignalized Method
Base Volume Alternative

Intersection #18 Sand Pt Way/NE 95th St

Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	1	0 0	1	0	0	0 1	0	1	0	1 0	0	1	0	0 1	0	0
Volume Module:																
Base Vol:	99	667	0		0	83	122		135	0	26		0	0	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	99	667	0		0	83	122		135	0	26		0	0	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	99	667	0		0	83	122		135	0	26		0	0	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol.:	99	667	0		0	83	122		135	0	26		0	0	0	
Adjusted Volume Module:																
Grade:		0%				0%				0%				0%		
% Cycle/Cars:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
% Truck/Comb:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
PCE Adj:	1.10	1.00	1.00		1.10	1.00	1.00		1.10	1.10	1.10		1.10	1.10	1.10	
Cycl/Car PCE:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
Trck/Cmb PCE:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
Adj Vol.:	109	667	0		0	83	122		149	0	29		0	0	0	
Critical Gap Module: >> Population: 0 << >> Run Speed(N/S): 35 MPH <<																
RT Rad/Ang:	20.0 ft/90.0 deg				20.0 ft/90.0 deg				20.0 ft/90.0 deg				20.0 ft/90.0 deg			
Critical Gp:	5.0	xxxx	xxxxx		5.6	xxxx	xxxxx		6.0	6.8	5.0		7.3	6.8	5.7	
Capacity Module:																
Cnflict Vol:	205	xxxx	xxxxx		667	xxxx	xxxxx		849	849	83		875	971	667	
Potent Cap.:	976	xxxx	xxxxx		508	xxxx	xxxxx		341	245	1000		208	199	508	
% Used Cap.:	11.2	xxxx	xxxxx		0.0	xxxx	xxxxx		43.6	0.0	2.9		0.0	0.0	0.0	
Impedance:	0.93	xxxx	xxxxx		1.00	xxxx	xxxxx		xxxx	1.00	0.98		xxxx	1.00	1.00	
Actual Cap.:	976	xxxx	xxxxx		508	xxxx	xxxxx		317	228	1000		190	185	508	
Level Of Service Module:																
Unused Cap.:	867	xxxx	xxxxx		508	xxxx	xxxxx		168	228	971		190	185	508	
LOS by Move:	A	*	*		*	*	*		*	*	A		*	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		317	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Unused Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		168	xxxx	xxxxx		xxxx	0	xxxxx	
Shared LOS:	*	*	*		*	*	*		D	*	*		*	*	*	

Existing 1993 Weekday PM Peak Hour

Level Of Service Computation Report
1985 HCM Operations Method
Base Volume Alternative

Intersection #25 Sand Pt Way/Navy Base Entry

Cycle (sec): 90 Critical Vol./Cap. (X): 0.463
Loss Time (sec): 6 Average Delay (sec/veh): 10.4
Optimal Cycle: 25 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	5	5	5	5	0	0	0	0	5	0	5
Lanes:	0 0	1	1 0	0	1	1 0 0	0 0	0	0 0	1	0 0	0 1
Volume Module:												
Base Vol:	0	564	27	23	264	0	0	0	0	61	0	171
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	564	27	23	264	0	0	0	0	61	0	171
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.92	0.92	0.92	1.00	1.00	1.00	0.56	0.56	0.56
PHF Volume:	0	606	29	25	287	0	0	0	0	109	0	305
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	606	29	25	287	0	0	0	0	109	0	305
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.05	1.05	1.05	1.05	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	637	30	26	301	0	0	0	0	109	0	305
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	1.00	0.85	0.85	0.75	0.75	1.00	1.00	1.00	1.00	0.81	1.00	0.79
Lanes:	0.00	1.91	0.09	0.16	1.84	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	2927	138	214	2479	0	0	0	0	1456	0	1423
Capacity Analysis Module:												
Vol/Sat:	0.00	0.22	0.22	0.12	0.12	0.00	0.00	0.00	0.00	0.07	0.00	0.21
Crit Moves:		****										****
Green/Cycle:	0.00	0.47	0.47	0.47	0.47	0.00	0.00	0.00	0.00	0.46	0.00	0.46
Volume/Cap:	0.00	0.46	0.46	0.26	0.26	0.00	0.00	0.00	0.00	0.16	0.00	0.46
Level Of Service Module:												
Delay/Veh:	0.0	12.4	12.4	11.0	11.0	0.0	0.0	0.0	0.0	10.7	0.0	12.9
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	0.85	0.85	0.85	0.85	0.85	1.00	0.85	0.85	1.00	0.85	0.85
AdjDel/Veh:	0.0	10.6	10.6	9.3	9.3	0.0	0.0	0.0	0.0	10.7	0.0	11.0
Queue:	0	11	11	5	5	0	0	0	0	2	0	5

Existing 1993 Weekday PM Peak Hour

Level Of Service Detailed Computation Report
1985 HCM Operations Method
Base Volume Alternative

Intersection #25 Sand Pt Way/Navy Base Entry

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
HCM Ops Adjusted Lane Utilization Module:												
Lanes:	0 0	1	1 0	0	1	1 0 0	0 0	0	0 0	1	0 0	0 1
Lane Group:	xxxx	RT	RT	LT	LT	xxxx	xxxx	xxxx	xxxx	L	xxxx	R
#LnsInGrps:	0	2	2	2	2	0	0	0	0	1	0	1
HCM Ops Input Saturation Adj Module:												
Lane Width:	12	12	12	12	12	12	12	12	12	12	12	12
% Hev Veh:	0			0			0			0		
Grade:	0%			0%			0%			0%		
Parking/Hr:	No			No			No			No		
Bus Stp/Hr:	0			0			0			0		
Area Type:	< < < < < < < < < < < < < < < < Other > > > > > > > > > > > > > > > >											
Cnft Pod/Hr:	0			0			0			0		
ExclusiveRT:	Include			Include			Include			Include		
% RT Prtct:	0			0			0			0		
HCM Ops f(rt) and f(lt) Adj Case Module:												
f(rt) Case:	xxxx	5	5	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	2
f(lt) Case:	xxxx	xxxx	xxxx	5	5	xxxx	xxxx	xxxx	xxxx	2	xxxx	xxxx
HCM Ops Saturation Adj Module:												
Ln Wid Adj:	xxxx	1.00	1.00	1.00	1.00	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	1.00
Hev Veh Adj:	xxxx	1.00	1.00	1.00	1.00	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	1.00
Grade Adj:	xxxx	1.00	1.00	1.00	1.00	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	1.00
Parking Adj:	xxxx	1.00	1.00	1.00	1.00	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	1.00
Bus Stp Adj:	xxxx	1.00	1.00	1.00	1.00	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	1.00
Area Adj:	xxxx	1.00	1.00	1.00	1.00	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	1.00
RT Adj:	xxxx	0.99	0.99	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0.85
LT Adj:	xxxx	xxxx	xxxxx	0.87	0.87	xxxxx	xxxx	xxxx	xxxxx	0.87	xxxx	xxxxx
HCM Sat Adj:	1.00	0.99	0.99	0.87	0.87	1.00	1.00	1.00	1.00	0.87	1.00	0.85
Usr Sat Adj:	1.00	0.86	0.86	0.86	0.86	1.00	1.00	1.00	1.00	0.93	1.00	0.93
MLF Sat Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fnl Sat Adj:	1.00	0.85	0.85	0.75	0.75	1.00	1.00	1.00	1.00	0.81	1.00	0.79
Progression Adjustment Factor Module:												
Signal Type:	< < < < < < < < < < < < Actuated > > > > > > > > > > > >											
Volume/Cap:	0.00	0.46	0.46	0.26	0.26	0.00	0.00	0.00	0.00	0.16	0.00	0.46
ArrivalType:		3			3			3			3	
ProgAdjFctr:	1.00	0.85	0.85	0.85	0.85	0.85	1.00	0.85	0.85	1.00	0.85	0.85

Existing 1993 Weekday PM Peak Hour

Level Of Service Computation Report
1985 HCM Operations Method
Base Volume Alternative

Intersection #28 Sand Pt Way/NE 65th St

Cycle (sec): 90 Critical Vol./Cap. (X): 0.354
Loss Time (sec): 6 Average Delay (sec/veh): 7.7
Optimal Cycle: 22 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	5	5	5	5	5	5	5	5	5	5	5	5
Lanes:	1	0 1	1 0	1	0 1	1 0	0	1 0	0 1	0	1 0	1 0
Volume Module:												
Base Vol:	75	535	57	59	292	292	29	21	63	76	59	89
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	75	535	57	59	292	292	29	21	63	76	59	89
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.91	0.91	0.91	0.88	0.88	0.88	0.79	0.79	0.79
PHF Volume:	77	552	59	65	321	321	33	24	72	96	75	113
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	77	552	59	65	321	321	33	24	72	96	75	113
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.05	1.05	1.00	1.05	1.05	1.00	1.00	1.00	1.05	1.05	1.05
Final Vol.:	77	579	62	65	337	337	33	24	72	101	78	118
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.43	0.96	0.96	0.41	0.85	0.90	0.69	0.69	0.83	0.70	0.70	0.72
Lanes:	1.00	1.81	0.19	1.00	1.03	0.97	0.58	0.42	1.00	0.69	0.53	0.78
Final Sat.:	768	3123	334	737	1572	1572	717	522	1499	869	671	1015
Capacity Analysis Module:												
Vol/Sat:	0.10	0.19	0.19	0.09	0.21	0.21	0.05	0.05	0.05	0.12	0.12	0.12
Crit Moves:					****						****	
Green/Cycle:	0.61	0.61	0.61	0.61	0.61	0.61	0.33	0.33	0.33	0.33	0.33	0.33
Volume/Cap:	0.17	0.31	0.31	0.15	0.35	0.35	0.14	0.14	0.15	0.35	0.35	0.35
Level Of Service Module:												
Delay/Veh:	5.9	6.6	6.6	5.9	6.8	6.8	16.2	16.2	16.2	17.6	17.6	17.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	0.85	0.85	1.00	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
AdjDel/Veh:	5.9	5.6	5.6	5.9	5.8	5.8	13.8	13.8	13.8	14.9	14.9	14.9
Queue:	1	8	8	1	9	9	1	1	1	6	6	6

Existing 1993 Weekday PM Peak Hour

Level Of Service Detailed Computation Report
1985 HCM Operations Method
Base Volume Alternative

Intersection #28 Sand Pt Way/NE 65th St

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
HCM Ops Adjusted Lane Utilization Module:												
Lanes:	1	0 1	1 0	1	0 1	1 0	0	1 0	0 1	0	1 0	1 0
Lane Group:	L	RT		RT	L	RT	RT	LT	LT	R	LTR	LTR	LTR
#LnsInGrps:	1	2		2	1	2	2	1	1	1	2	2	2
HCM Ops Input Saturation Adj Module:												
Lane Width:	12	12	12	12	12	12	12	12	12	12	12	12	12
% Hev Veh:		0			0			0			0		
Grade:		0%			0%			0%			0%		
Parking/Hr:		No			No			No			No		
Bus Stp/Hr:		0			0			0			0		
Area Type:	< < < < < < < < < < < < < < < <							Other		> > > > > > > > > > > > > > > >			
Cnft Ped/Hr:		0			0			0			0		
ExclusiveRT:		Include			Include			Include			Include		
% RT Prtct:		0			0			0			0		
HCM Ops f(rt) and f(lt) Adj Case Module:												
f(rt) Case:	xxxx	5	5	xxxx	5	5	xxxx	xxxx	2	5	5	5
f(lt) Case:	2	xxxx	xxxx	2	xxxx	xxxx	5	5	xxxx	5	5	5
HCM Ops Saturation Adj Module:												
Ln Wid Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hev Veh Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Grade Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Parking Adj:	xxxx	1.00	1.00	xxxx	1.00	1.00	xxxx	xxxx	1.00	1.00	1.00	1.00
Bus Stp Adj:	xxxx	1.00	1.00	xxxx	1.00	1.00	xxxx	xxxx	1.00	1.00	1.00	1.00
Area Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
RT Adj:	xxxx	0.99	0.99	xxxx	0.93	0.93	xxxx	xxxx	0.85	0.94	0.94	0.94
LT Adj:	0.44	xxxx	xxxxx	0.45	xxxx	xxxxx	0.74	0.74	xxxxx	0.86	0.86	0.86
HCM Sat Adj:	0.44	0.99	0.99	0.45	0.93	0.93	0.74	0.74	0.85	0.81	0.81	0.81
Usr Sat Adj:	0.97	0.97	0.97	0.91	0.91	0.97	0.93	0.93	0.98	0.87	0.87	0.89
MLF Sat Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fnl Sat Adj:	0.43	0.96	0.96	0.41	0.85	0.90	0.69	0.69	0.83	0.70	0.70	0.72
Progresssion Adjustment Factor Module:												
Signal Type:	< < < < < < < < < < < < <						Actuated			> > > > > > > > > > > >			
Volume/Cap:	0.17	0.31	0.31	0.15	0.35	0.35	0.14	0.14	0.15	0.35	0.35	0.35
ArrivalType:		3			3			3			3		
ProgAdjFctr:	1.00	0.85	0.85	1.00	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85

Level Of Service Computation Report
1985 HCM Operations Method
Base Volume Alternative

Intersection #33 Sand Pt Way/Princeton Ave

Cycle (sec): 90 Critical Vol./Cap. (X): 0.454
Loss Time (sec): 6 Average Delay (sec/veh): 8.1
Optimal Cycle: 25 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	5	5	5	5	5	5	5	5	5	5	5	5
Lanes:	0	0	1! 0	0	0	1! 0	0	1	0 1	1	0	1	0	1	1	0
Volume Module:												
Base Vol:	20	12	26	92	20	63	109	784	4	9	383	62
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	12	26	92	20	63	109	784	4	9	383	62
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.74	0.74	0.74	0.89	0.89	0.89	0.85	0.85	0.85
PHF Volume:	20	12	27	124	27	85	122	881	4	11	451	73
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	12	27	124	27	85	122	881	4	11	451	73
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.05	1.05	1.00	1.05	1.05
Final Vol.:	20	12	27	124	27	85	122	925	5	11	473	77
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.76	0.76	0.76	0.79	0.79	0.79	0.50	1.00	1.00	0.29	0.98	0.98
Lanes:	0.34	0.20	0.46	0.53	0.11	0.36	1.00	1.99	0.01	1.00	1.72	0.28
Final Sat.:	466	280	630	748	163	512	900	3581	19	522	3034	494
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.04	0.17	0.17	0.17	0.14	0.26	0.26	0.02	0.16	0.16
Crit Moves:					****			****				
Green/Cycle:	0.36	0.36	0.36	0.36	0.36	0.36	0.57	0.57	0.57	0.57	0.57	0.57
Volume/Cap:	0.12	0.12	0.12	0.45	0.45	0.45	0.24	0.45	0.45	0.04	0.27	0.27
Level Of Service Module:												
Delay/Veh:	14.4	14.4	14.4	17.0	17.0	17.0	7.4	8.7	8.7	6.5	7.6	7.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	0.85	0.85	0.85	0.85	0.85	0.85	1.00	0.85	0.85	1.00	0.85	0.85
AdjDel/Veh:	12.3	12.3	12.3	14.4	14.4	14.4	7.4	7.4	7.4	6.5	6.4	6.4
Queue:	1	1	1	5	5	5	2	14	14	0	7	7

Level Of Service Detailed Computation Report
1985 HCM Operations Method
Base Volume Alternative

Intersection #33 Sand Pt Way/Princeton Ave

Approach:	North Bound			South Bound			East Bound					West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
HCM Ops Adjusted Lane Utilization Module:																				
Lanes:	0	0	1! 0	0		0	0	1! 0	0		1	0	1	1	0	1	0	1	1	0
Lane Group:	LTR			LTR		LTR			LTR		L		RT			L		RT		
#LnsInGrps:	1			1		1			1		1		2			1		2		
HCM Ops Input Saturation Adj Module:																				
Lane Width:	12			12		12			12		12		12			12		12		
% Hev Veh:	0			0		0			0		0									
Grade:	0%			0%		0%			0%											
Parking/Hr:	No			No		No			No											
Bus Stp/Hr:	0			0		0			0											
Area Type:	< <

Existing 1993 Weekday PM Peak Hour

Level Of Service Computation Report
1985 HCM Operations Method
Base Volume Alternative

Intersection #41 NE 45th St/Montlake Blvd

Cycle (sec): 100 Critical Vol./Cap. (X): 0.797
Loss Time (sec): 6 Average Delay (sec/veh): 15.2
Optimal Cycle: 57 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	5	0	10	0	0	0	0	10	0	10	5	0
Lanes:	1	0 0	2	0	0 0	0 0	0	0 1	1 0	2	0 1	0 0
Volume Module:												
Base Vol:	236	0	1557	0	0	0	0	502	3	662	569	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	236	0	1557	0	0	0	0	502	3	662	569	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	1.00	1.00	1.00	0.85	0.85	0.85	0.87	0.87	0.87
PHF Volume:	257	0	1692	0	0	0	0	591	4	761	654	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	257	0	1692	0	0	0	0	591	4	761	654	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.05	1.00	1.00	1.00	1.00	1.05	1.05	1.05	1.00	1.00
Final Vol.:	257	0	1777	0	0	0	0	620	4	799	654	0
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.92	1.00	0.85	1.00	1.00	1.00	1.00	1.01	0.99	0.92	1.00	1.00
Lanes:	1.00	0.00	2.00	0.00	0.00	0.00	0.00	1.99	0.01	2.00	1.00	0.00
Final Sat.:	1659	0	3078	0	0	0	0	3612	23	3312	1800	0
Capacity Analysis Module:												
Vol/Sat:	0.15	0.00	0.58	0.00	0.00	0.00	0.00	0.17	0.17	0.24	0.36	0.00
Crit Moves:			****	****				****		****		
Green/Cycle:	0.42	0.00	0.72	0.00	0.00	0.00	0.00	0.22	0.22	0.30	0.52	0.00
Volume/Cap:	0.37	0.00	0.80	0.00	0.00	0.00	0.00	0.80	0.80	0.80	0.70	0.00
Level Of Service Module:												
Delay/Veh:	15.2	0.0	8.3	0.0	0.0	0.0	0.0	32.3	32.3	27.6	15.5	0.0
Delay Adj:	1.00	1.00	0.85	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	0.85	0.85	1.00	0.85	0.85	1.00	0.85	0.85	1.00	0.85	0.85
AdjDel/Veh:	15.2	0.0	6.0	0.0	0.0	0.0	0.0	27.4	27.4	27.6	13.2	0.0
Queue:	5	0	33	0	0	0	0	18	18	22	14	0

Existing 1993 Weekday PM Peak Hour

Level Of Service Detailed Computation Report
1985 HCM Operations Method
Base Volume Alternative

Intersection #41 NE 45th St/Montlake Blvd

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
HCM Ops Adjusted Lane Utilization Module:												
Lanes:	1	0 0	2	0	0 0	0 0	0	0 1	1 0	2	0 1	0 0
Lane Group:	L	xxxx	R	xxxx	xxxx	xxxx	xxxx	RT	RT	L	T	xxxx
#LnsInGrps:	1	0	2	0	0	0	0	2	2	2	1	0
HCM Ops Input Saturation Adj Module:												
Lane Width:	12	12	12	12	12	12	12	12	12	12	12	12
% Hev Veh:		0			0			0			0	
Grade:		0%			0%			0%			0%	
Parking/Hr:		No			No			No			No	
Bus Stp/Hr:		0			0			0			0	
Area Type:	< < < < < < < < < < < < < < <						Other		> > > > > > > > > > > > > > >			
Cnft Ped/Hr:		0			0			0			0	
ExclusiveRT:		Include			Include			Include			Include	
% RT Prtct:		0			0			0			0	
HCM Ops f(rt) and f(lt) Adj Case Module:												
f(rt) Case:	xxxx	xxxx	8	xxxx	xxxx	xxxx	xxxx	5	5	xxxx	xxxx	xxxx
f(lt) Case:	1	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	8	xxxx	xxxx
HCM Ops Saturation Adj Module:												
Ln Wid Adj:	1.00	xxxx	1.00	xxxx	xxxx	xxxxx	xxxx	1.00	1.00	1.00	1.00	xxxxx
Hev Veh Adj:	1.00	xxxx	1.00	xxxx	xxxx	xxxxx	xxxx	1.00	1.00	1.00	1.00	xxxxx
Grade Adj:	1.00	xxxx	1.00	xxxx	xxxx	xxxxx	xxxx	1.00	1.00	1.00	1.00	xxxxx
Parking Adj:	xxxx	xxxx	1.00	xxxx	xxxx	xxxxx	xxxx	1.00	1.00	xxxx	1.00	xxxxx
Bus Stp Adj:	xxxx	xxxx	1.00	xxxx	xxxx	xxxxx	xxxx	1.00	1.00	xxxx	1.00	xxxxx
Area Adj:	1.00	xxxx	1.00	xxxx	xxxx	xxxxx	xxxx	1.00	1.00	1.00	1.00	xxxxx
RT Adj:	xxxx	xxxx	0.75	xxxx	xxxx	xxxxx	xxxx	1.00	1.00	xxxx	xxxx	xxxxx
LT Adj:	0.95	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.92	xxxx	xxxxx
HCM Sat Adj:	0.95	1.00	0.75	1.00	1.00	1.00	1.00	1.00	1.00	0.92	1.00	1.00
Usr Sat Adj:	0.97	1.00	1.14	1.00	1.00	1.00	1.00	1.01	0.99	1.00	1.00	1.00
MLF Sat Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fnl Sat Adj:	0.92	1.00	0.85	1.00	1.00	1.00	1.00	1.01	0.99	0.92	1.00	1.00
Progresssion Adjustment Factor Module:												
Signal Type:	< < < < < < < < < < < <						Actuated		> > > > > > > > > > > >			
Volume/Cap:	0.37	0.00	0.80	0.00	0.00	0.00	0.00	0.80	0.80	0.80	0.70	0.00
ArrivalType:		3			3			3			3	
ProgAdjFctr:	1.00	0.85	0.85	1.00	0.85	0.85	1.00	0.85	0.85	1.00	0.85	0.85

Existing 1993 Weekday PM Peak Hour

Level Of Service Computation Report
1985 HCM Operations Method
Base Volume Alternative

Intersection #49 25th Ave/Montlake Blvd

Cycle (sec):	90	Critical Vol./Cap. (X):	0.578
Loss Time (sec):	6	Average Delay (sec/veh):	13.3
Optimal Cycle:	31	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Include			Include		
Min. Green:	5	5	5	5	5	5	5	5	5	5	5	5
Lanes:	0	0 2	0 2	0	0 2	0 0	0	0 0	0 0	1	0 1!	0 0
Volume Module:												
Base Vol:	0	901	1349	0	512	0	0	0	0	771	0	3
Growth Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	901	0	0	512	0	0	0	0	771	0	3
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.00	0.92	0.92	0.00	0.86	0.86	0.86	1.00	1.00	1.00
PHF Volume:	0	1001	0	0	557	0	0	0	0	771	0	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1001	0	0	557	0	0	0	0	771	0	3
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.05	0.00	1.00	1.05	0.00	1.00	1.00	1.00	1.05	1.00	1.00
Final Vol.:	0	1051	0	0	584	0	0	0	0	810	0	3
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	1.05	1.05	1.14	0.95	0.95	0.95	1.00	1.00	1.00	0.86	1.17	1.11
Lanes:	0.00	2.00	2.00	0.00	2.00	0.00	0.00	0.00	0.00	1.99	0.00	0.01
Final Sat.:	0	3780	4104	0	3420	0	0	0	0	3103	0	11
Capacity Analysis Module:												
Vol/Sat:	0.00	0.28	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.26	0.00	0.26
Crit Moves:		****			****			****			****	
Green/Cycle:	0.00	0.42	0.00	0.00	0.42	0.00	0.00	0.00	0.00	0.40	0.00	0.40
Volume/Cap:	0.00	0.66	0.00	0.00	0.40	0.00	0.00	0.00	0.00	0.66	0.00	0.66
Level Of Service Module:												
Delay/Veh:	0.0	16.4	0.0	0.0	13.8	0.0	0.0	0.0	0.0	17.7	0.0	17.7
Delay Adj:	1.00	1.00	0.85	1.00	0.85	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	0.85	0.85	1.00	0.85	0.85	1.00	0.85	0.85	0.85	0.85	0.85
AdjDel/Veh:	0.0	13.9	0.0	0.0	10.0	0.0	0.0	0.0	0.0	15.0	0.0	15.0
Queue:	0	21	0	0	10	0	0	0	0	17	0	17

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Existing 1993 Weekday PM Peak Hour

Level Of Service Detailed Computation Report
1985 HCM Operations Method
Base Volume Alternative

Intersection #49 25th Ave/Montlake Blvd

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
HCM Ops Adjusted Lane Utilization Module:												
Lanes:	0	0 2	0 2	0	0 2	0 0	0	0 0	0 0	1	0 1!	0 0
Lane Group:	xxxx	T	R	xxxx	T	xxxx	xxxx	xxxx	xxxx	LTR	LTR	LTR
#LnsInGrps:	0	2	2	0	2	0	0	0	0	2	1	1
HCM Ops Input Saturation Adj Module:												
Lane Width:	12	12	12	12	12	12	12	12	12	12	12	12
% Hev Veh:		0			0			0			0	
Grade:		0%			0%			0%			0%	
Parking/Hr:		No			No			No			No	
Bus Stp/Hr:		0			0			0			0	
Area Type:	< < < < < < < < < < < < < < < < Other > > > > > > > > > > > > > > > >											
Cnft Ped/Hr:		0			0			0			0	
ExclusiveRT:		Include			Include			Include			Include	
% RT Prtct:		0			0			0			0	
HCM Ops f(rt) and f(lt) Adj Case Module:												
f(rt) Case:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	5	xxxx	5
f(lt) Case:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	4	xxxx	4
HCM Ops Saturation Adj Module:												
Ln Wid Adj:	xxxx	1.00	xxxxx	xxxx	1.00	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	1.00
Hev Veh Adj:	xxxx	1.00	xxxxx	xxxx	1.00	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	1.00
Grade Adj:	xxxx	1.00	xxxxx	xxxx	1.00	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	1.00
Parking Adj:	xxxx	xxxx	xxxxx	xxxx	1.00	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	1.00
Bus Stp Adj:	xxxx	xxxx	xxxxx	xxxx	1.00	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	1.00
Area Adj:	xxxx	1.00	xxxxx	xxxx	1.00	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	1.00
RT Adj:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	1.00
LT Adj:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.95	xxxx	0.95
HCM Sat Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95
Usr Sat Adj:	1.05	1.05	1.14	0.95	0.95	0.95	1.00	1.00	1.00	0.91	1.17	1.17
MLF Sat Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fnl Sat Adj:	1.05	1.05	1.14	0.95	0.95	0.95	1.00	1.00	1.00	0.86	1.17	1.11
Progresssion Adjustment Factor Module:												
Signal Type:	< < < < < < < < < < < < Actuated > > > > > > > > > > > >											
Volume/Cap:	0.00	0.66	0.00	0.00	0.40	0.00	0.00	0.00	0.00	0.66	0.00	0.66
ArrivalType:		3			3			3			3	
ProgAdjFctr:	1.00	0.85	0.85	1.00	0.85	0.85	1.00	0.85	0.85	0.85	0.85	0.85

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Background Year 2000 Background Weekday PM Peak Hour

Turning Movement Report

Volume Type	Northbound Left	Northbound Thru	Northbound Right	Southbound Left	Southbound Thru	Southbound Right	Eastbound Left	Eastbound Thru	Eastbound Right	Westbound Left	Westbound Thru	Westbound Right	Total Volume
#2 35th Ave/NE 95th St													
Base	95	665	84	23	410	35	76	180	110	80	90	30	1878
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	95	665	84	23	410	35	76	180	110	80	90	30	1878
#8 35th Ave/NE 65th St													
Base	21	550	23	58	305	82	145	240	40	11	225	52	1752
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	21	550	23	58	305	82	145	240	40	11	225	52	1752
#18 Sand Pt Way/NE 95th St													
Base	110	710	0	0	90	130	145	0	26	0	0	0	1211
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	110	710	0	0	90	130	145	0	26	0	0	0	1211
#25 Sand Pt Way/Navy Base Entry													
Base	0	605	27	23	285	0	0	0	0	61	0	171	1172
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	605	27	23	285	0	0	0	0	61	0	171	1172
#28 Sand Pt Way/NE 65th St													
Base	75	570	57	59	310	310	29	21	63	76	59	89	1718
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	75	570	57	59	310	310	29	21	63	76	59	89	1718
#33 Sand Pt Way/Princeton Ave													
Base	20	12	26	92	20	63	109	840	4	9	410	62	1667
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	20	12	26	92	20	63	109	840	4	9	410	62	1667
#41 NE 45th St/Montlake Blvd													
Base	250	0	1665	0	0	0	0	535	3	705	610	0	3768
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	250	0	1665	0	0	0	0	535	3	705	610	0	3768
#49 25th Ave/Montlake Blvd													
Base	0	960	1445	0	545	0	0	0	0	825	0	3	3778
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	960	1445	0	545	0	0	0	0	825	0	3	3778

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Background Year 2000 Background Weekday PM Peak Hour

Link Volume Report

Volume Type	NB Link In	NB Link Out	NB Link Total	SB Link In	SB Link Out	SB Link Total	EB Link In	EB Link Out	EB Link Total	WB Link In	WB Link Out	WB Link Total	Total Volume
#2 35th Ave/NE 95th St													
Base	844	600	1444	468	771	1239	366	220	586	200	287	487	3756
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	844	600	1444	468	771	1239	366	220	586	200	287	487	3756
#8 35th Ave/NE 65th St													
Base	594	356	950	445	747	1192	425	328	753	288	321	609	3504
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	594	356	950	445	747	1192	425	328	753	288	321	609	3504
#18 Sand Pt Way/NE 95th St													
Base	820	116	936	220	855	1075	171	240	411	0	0	0	2422
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	820	116	936	220	855	1075	171	240	411	0	0	0	2422
#25 Sand Pt Way/Navy Base Entry													
Base	632	346	978	308	776	1084	0	0	0	232	50	282	2344
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	632	346	978	308	776	1084	0	0	0	232	50	282	2344
#28 Sand Pt Way/NE 65th St													
Base	702	449	1151	679	688	1367	113	444	557	224	137	361	3436
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	702	449	1151	679	688	1367	113	444	557	224	137	361	3436
#33 Sand Pt Way/Princeton Ave													
Base	58	33	91	175	183	358	953	493	1446	481	958	1439	3334
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	58	33	91	175	183	358	953	493	1446	481	958	1439	3334
#41 NE 45th St/Montlake Blvd													
Base	1915	708	2623	0	0	0	538	860	1398	1315	2200	3515	7536
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1915	708	2623	0	0	0	538	860	1398	1315	2200	3515	7536
#49 25th Ave/Montlake Blvd													
Base	2405	1370	3775	545	963	1508	0	0	0	828	1445	2273	7556
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2405	1370	3775	545	963	1508	0	0	0	828	1445	2273	7556

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Background Year 2000 Background Weekday PM Peak Hour

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/Veh	Base V/C	Future LOS	Future Del/Veh	Future V/C	Change in
# 2 35th Ave/NE 95th St	B	10.5	0.563	B	10.5	0.563	+ 0.000 D/V
# 8 35th Ave/NE 65th St	D	33.8	1.019	D	33.8	1.019	+ 0.000 D/V
# 18 Sand Pt Way/NE 95th St	D	xxxxx	0.000	D	xxxxx	0.000	+ 0.000 V/C
# 25 Sand Pt Way/Navy Base Entry	B	10.3	0.479	B	10.3	0.479	+ 0.000 D/V
# 28 Sand Pt Way/NE 65th St	B	7.6	0.369	B	7.6	0.369	+ 0.000 D/V
# 33 Sand Pt Way/Princeton Ave	B	7.8	0.472	B	7.8	0.472	+ 0.000 D/V
# 41 NE 45th St/Montlake Blvd	C	16.7	0.851	C	16.7	0.851	+ 0.000 D/V
# 49 25th Ave/Montlake Blvd	B	13.9	0.616	B	13.9	0.616	+ 0.000 D/V

Arterial	Dir	Base LOS	Base Trvl Time	Base Avg. Speed	Future LOS	Future Trvl Time	Future Avg. Speed	Change in Avg. Speed

Background Year 2000 Background Weekday PM Peak Hour

Level Of Service Computation Report
1985 HCM Operations Method
Base Volume Alternative

Intersection #2 35th Ave/NE 95th St

Cycle (sec): 90 Critical Vol./Cap. (X): 0.563
Loss Time (sec): 6 Average Delay (sec/veh): 10.5
Optimal Cycle: 30 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	5	5	5	5	5	5	5	5	5	5	5	5
Lanes:	1	0 1	1 0	1	1 1	1 0	0	1 0	0 1	0	1 0	0 1
Volume Module:												
Base Vol:	95	665	84	23	410	35	76	180	110	80	90	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	95	665	84	23	410	35	76	180	110	80	90	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.88	0.88	0.88	0.90	0.90	0.90	0.82	0.82	0.82
PHF Volume:	106	739	93	26	466	40	84	200	122	98	110	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	106	739	93	26	466	40	84	200	122	98	110	37
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.05	1.05	1.00	1.10	1.10	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	106	776	98	26	513	44	84	200	122	98	110	37
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.49	0.88	0.88	0.28	0.88	0.94	0.74	0.74	0.91	0.46	0.46	0.85
Lanes:	1.00	1.78	0.22	1.00	2.78	0.22	0.30	0.70	1.00	0.47	0.53	1.00
Final Sat.:	887	2819	356	497	4404	378	395	939	1637	391	439	1530
Capacity Analysis Module:												
Vol/Sat:	0.12	0.28	0.28	0.05	0.12	0.12	0.21	0.21	0.07	0.25	0.25	0.02
Crit Moves:		****									****	
Green/Cycle:	0.49	0.49	0.49	0.49	0.49	0.49	0.44	0.44	0.44	0.44	0.44	0.44
Volume/Cap:	0.24	0.56	0.56	0.11	0.24	0.24	0.48	0.48	0.17	0.56	0.56	0.05
Level Of Service Module:												
Delay/Veh:	10.2	12.7	12.7	9.4	10.1	10.1	13.9	13.9	11.4	15.6	15.6	10.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
AdjDel/Veh:	10.2	10.8	10.8	8.0	8.6	8.6	11.8	11.8	9.7	13.2	13.2	9.2
Queue:	2	16	16	8	8	8	5	5	2	4	4	1

Level Of Service Detailed Computation Report
1985 HCM Operations Method
Base Volume Alternative

Intersection #2 35th Ave/NE 95th St

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
HCM Ops Adjusted Lane Utilization Module:																
Lanes:	1	0 1	1	0	1	0 2	1	0	0	1 0	0	1	0	1 0	0	1
Lane Group:	L	RT	RT		L	RT	RT		LT	LT	R		LT	LT	R	
#LnsInGrps:	1	2	2		1	3	3		1	1	1		1	1	1	
HCM Ops Input Saturation Adj Module:																
Lane Width:	12	12	12		12	12	12		12	12	12		12	12	12	
% Hev Veh:		0				0				0				0		
Grade:		0%				0%				0%				0%		
Parking/Hr:		No				No				No				No		
Bus Stp/Hr:		0				0				0				0		
Area Type:	< < < < < < < < < < < < < < < Other > > > > > > > > > > > > > > >															
Cnft Ped/Hr:		0				0				0				0		
ExclusiveRT:		Include				Include				Include				Include		
% RT Prtct:		0				0				0				0		
HCM Ops f(rt) and f(lt) Adj Case Module:																
f(rt) Case:	xxxx	5	5		xxxx	5	5		xxxx	xxxx	2		xxxx	xxxx	2	
f(lt) Case:	2	xxxx	xxxx		2	xxxx	xxxx		5	5	xxxx		5	5	xxxx	
HCM Ops Saturation Adj Module:																
Ln Wid Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Hev Veh Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Grade Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Parking Adj:	xxxx	1.00	1.00		xxxx	1.00	1.00		xxxx	xxxx	1.00		xxxx	xxxx	1.00	
Bus Stp Adj:	xxxx	1.00	1.00		xxxx	1.00	1.00		xxxx	xxxx	1.00		xxxx	xxxx	1.00	
Area Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
RT Adj:	xxxx	0.98	0.98		xxxx	0.99	0.99		xxxx	xxxx	0.85		xxxx	xxxx	0.85	
LT Adj:	0.53	xxxx	xxxxx		0.31	xxxx	xxxxx		0.78	0.78	xxxxx		0.53	0.53	xxxxx	
HCM Sat Adj:	0.53	0.98	0.98		0.31	0.99	0.99		0.78	0.78	0.85		0.53	0.53	0.85	
Usr Sat Adj:	0.90	0.90	0.90		0.89	0.89	0.95		0.95	0.95	1.07		0.87	0.87	1.00	
MLF Sat Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Fnl Sat Adj:	0.49	0.88	0.88		0.28	0.88	0.94		0.74	0.74	0.91		0.46	0.46	0.85	
Progresssion Adjustment Factor Module:																
Signal Type:	< < < < < < < < < < < < <						Actuated		> > > > > > > > > > > > >							
Volume/Cap:	0.24	0.56	0.56		0.11	0.24	0.24		0.48	0.48	0.17		0.56	0.56	0.05	
ArrivalType:		3				3				3				3		
ProgAdjFctr:	1.00	0.85	0.85		0.85	0.85	0.85		0.85	0.85	0.85		0.85	0.85	0.85	

Level Of Service Computation Report
1985 HCM Operations Method
Base Volume Alternative

Intersection #8 35th Ave/NE 65th St

Cycle (sec):	90	Critical Vol./Cap. (X):	1.019	
Loss Time (sec):	6	Average Delay (sec/veh):	33.8	
Optimal Cycle:	180	Level Of Service:	D	

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Permitted				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	5	5	5		5	5	5		5	5	5		5	5	5	
Lanes:	0	1 0	0	1	0	1 0	0	1	0	1 0	0	1	0	1 0	0	1
Volume Module:																
Base Vol:	21	550	23		58	305	82		145	240	40		11	225	52	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	21	550	23		58	305	82		145	240	40		11	225	52	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.91	0.91	0.91		0.87	0.87	0.87		0.89	0.89	0.89		0.81	0.81	0.81	
PHF Volume:	23	604	25		67	351	94		163	270	45		14	278	64	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	23	604	25		67	351	94		163	270	45		14	278	64	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol.:	23	604	25		67	351	94		163	270	45		14	278	64	
Saturation Flow Module:																
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800	
Adjustment:	0.74	0.74	0.74		0.47	0.47	0.77		0.53	0.53	0.66		0.63	0.63	0.65	
Lanes:	0.04	0.96	1.00		0.16	0.84	1.00		0.38	0.62	1.00		0.05	0.95	1.00	
Final Sat.:	49	1280	1331		135	706	1377		359	594	1193		54	1078	1163	
Capacity Analysis Module:																
Vol/Sat:	0.47	0.47	0.02		0.50	0.50	0.07		0.45	0.45	0.04		0.26	0.26	0.06	
Crit Moves:						****				****						
Green/Cycle:	0.49	0.49	0.49		0.49	0.49	0.49		0.45	0.45	0.45		0.45	0.45	0.45	
Volume/Cap:	0.97	0.97	0.04		1.02	1.02	0.14		1.02	1.02	0.08		0.58	0.58	0.12	
Level Of Service Module:																
Delay/Veh:	37.5	37.5	9.2		57.3	57.3	9.6		58.1	58.1	10.9		15.4	15.4	11.1	
Delay Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
ProgAdjFctr:	0.85	0.85	0.85		0.85	0.85	0.85		0.85	0.85	0.85		0.85	0.85	0.85	
AdjDel/Veh:	31.9	31.9	7.8		48.7	48.7	8.2		49.4	49.4	9.3		13.1	13.1	9.5	
Queue:	20	20	0		16	16	1		17	17	1		6	6	1	

Level Of Service Detailed Computation Report
1985 HCM Operations Method
Base Volume Alternative

Intersection #8 35th Ave/NE 65th St

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
HCM Ops Adjusted Lane Utilization Module:																								
Lanes:	0	1	0	0	1		0	1	0	0	1		0	1	0	0	1		0	1	0	0	1	
Lane Group:	LT		LT		R		LT		LT		R		LT		LT		R		LT		LT		R	
#LnsInGrps:	1		1		1		1		1		1		1		1		1		1		1		1	
HCM Ops Input Saturation Adj Module:																								
Lane Width:	12		12		12		12		12		12		12		12		12		12		12		12	
% Hev Veh:			0						0						0						0			
Grade:			0%						0%						0%						0%			
Parking/Hr:			No						No						No						No			
Bus Stp/Hr:			0						0						0						0			
Area Type:	< < < < < < < < < < < < < < < Other > > > > > > > > > > > > > > >																							
Cnft Ped/Hr:			0						0						0						0			
ExclusiveRT:			Include						Include						Include						Include			
% RT Prtct:			0						0						0						0			
HCM Ops f(rt) and f(lt) Adj Case Module:																								
f(rt) Case:	xxxx	xxxx		2			xxxx	xxxx		2			xxxx	xxxx		2			xxxx	xxxx		2		
f(lt) Case:		5	5	xxxx				5	5	xxxx				5	5	xxxx				5	5	xxxx		
HCM Ops Saturation Adj Module:																								
Ln Wid Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
Hev Veh Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
Grade Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
Parking Adj:	xxxx	xxxx		1.00			xxxx	xxxx		1.00			xxxx	xxxx		1.00			xxxx	xxxx		1.00		
Bus Stp Adj:	xxxx	xxxx		1.00			xxxx	xxxx		1.00			xxxx	xxxx		1.00			xxxx	xxxx		1.00		
Area Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
RT Adj:	xxxx	xxxx		0.85			xxxx	xxxx		0.85			xxxx	xxxx		0.85			xxxx	xxxx		0.85		
LT Adj:	0.90	0.90		xxxxx			0.57	0.57		xxxxx			0.67	0.67		xxxxx			0.85	0.85		xxxxx		
HCM Sat Adj:	0.90	0.90		0.85			0.57	0.57		0.85			0.67	0.67		0.85			0.85	0.85		0.85		
Usr Sat Adj:	0.82	0.82		0.87			0.82	0.82		0.90			0.79	0.79		0.78			0.74	0.74		0.76		
MLF Sat Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
Fnl Sat Adj:	0.74	0.74		0.74			0.47	0.47		0.77			0.53	0.53		0.66			0.63	0.63		0.65		
Progresssion Adjustment Factor Module:																								
Signal Type:	< < < < < < < < < < < <						Actuated						> > > > > > > > > > > >											
Volume/Cap:	0.97	0.97		0.04			1.02	1.02		0.14			1.02	1.02		0.08			0.58	0.58		0.12		
ArrivalType:			3						3						3						3			
ProgAdjFctr:	0.85	0.85		0.85			0.85	0.85		0.85			0.85	0.85		0.85			0.85	0.85		0.85		

Level Of Service Computation Report
1985 HCM Unsignalized Method
Base Volume Alternative

Intersection #18 Sand Pt Way/NE 95th St

Level Of Service: D

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	1	0	0	1	0		0	0	1	0	1		0	1	0	0	1		0	0	1!	0	0	
Volume Module:																								
Base Vol:	110	710		0			0	90		130			145		0		26		0		0		0	
Growth Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	110	710		0			0	90		130			145		0		26		0		0		0	
User Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
PHF Volume:	110	710		0			0	90		130			145		0		26		0		0		0	
Reduct Vol:	0	0		0			0	0		0			0		0		0		0		0		0	
Final Vol.:	110	710		0			0	90		130			145		0		26		0		0		0	
Adjusted Volume Module:																								
Grade:			0%						0%						0%						0%			
% Cycle/Cars:	xxxx	xxxx					xxxx	xxxx					xxxx	xxxx					xxxx	xxxx				
% Truck/Comb:	xxxx	xxxx					xxxx	xxxx					xxxx	xxxx					xxxx	xxxx				
PCE Adj:	1.10	1.00		1.00			1.10	1.00		1.00			1.10	1.10		1.10			1.10	1.10		1.10		
Cycl/Car PCE:	xxxx	xxxx					xxxx	xxxx					xxxx	xxxx					xxxx	xxxx				
Trck/Cmb PCE:	xxxx	xxxx					xxxx	xxxx					xxxx	xxxx					xxxx	xxxx				
Adj Vol.:	121	710		0			0	90		130			160		0		29		0		0		0	
Critical Gap Module: >> Population: 0 << >> Run Speed(N/S): 35 MPH <<																								
RT Rad/Ang:	20.0	ft/90.0	deg	20.0	ft/90.0	deg	20.0	ft/90.0	deg	20.0	ft/90.0	deg	20.0	ft/90.0	deg	20.0	ft/90.0	deg						
Critical Gp:	5.0	xxxx	xxxxx		5.6	xxxx	xxxxx		6.0	6.8		5.0		7.3	6.8		5.7							
Capacity Module:																								
Cnflict Vol:	220	xxxx	xxxxx		710	xxxx	xxxxx		910	910		90		936	1040		710							
Potent Cap.:	964	xxxx	xxxxx		478	xxxx	xxxxx		314	225		1000		186	178		478							
% Used Cap.:	12.6	xxxx	xxxxx		0.0	xxxx	xxxxx		50.8	0.0		2.9		0.0	0.0		0.0							
Impedance:	0.92	xxxx	xxxxx		1.00	xxxx	xxxxx		xxxx	1.00		0.98		xxxx	1.00		1.00							
Actual Cap.:	964	xxxx	xxxxx		478	xxxx	xxxxx		289	207		1000		168	164		478							
Level Of Service Module:																								
Unused Cap.:	843	xxxx	xxxxx		478	xxxx	xxxxx		129	207		971		168	164		478							
LOS by Move:	A	*	*		*	*	*		*	*		A		*	*		*							
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT					LT - LTR - RT										
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		289	xxxx	xxxxx			xxxx	xxxx	xxxxx								
Unused Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		129	xxxx	xxxxx			xxxx	0	xxxxx								
Shared LOS:	*	*	*		*	*	*		D	*	*			*	*	*								

Level Of Service Computation Report
1985 HCM Operations Method
Base Volume Alternative

Intersection #25 Sand Pt Way/Navy Base Entry

Cycle (sec):	90	Critical Vol./Cap. (X):	0.479
Loss Time (sec):	6	Average Delay (sec/veh):	10.3
Optimal Cycle:	26	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	5	5	5	5	0	0	0	0	5	0	5
Lanes:	0 0	1	1 0	0	1	1 0 0	0 0	0	0 0 0	1	0 0	0 1
Volume Module:												
Base Vol:	0	605	27	23	285	0	0	6	0	61	0	171
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	605	27	23	285	0	0	0	0	61	0	171
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.92	0.92	0.92	1.00	1.00	1.00	0.56	0.56	0.56
PHF Volume:	0	651	29	25	310	0	0	0	0	109	0	305
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	651	29	25	310	0	0	0	0	109	0	305
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.05	1.05	1.05	1.05	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	683	30	26	325	0	0	0	0	109	0	305
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	1.00	0.85	0.85	0.75	0.75	1.00	1.00	1.00	1.00	0.82	1.00	0.79
Lanes:	0.00	1.92	0.08	0.15	1.85	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	2936	129	200	2494	0	0	0	0	1473	0	1423
Capacity Analysis Module:												
Vol/Sat:	0.00	0.23	0.23	0.13	0.13	0.00	0.00	0.00	0.00	0.07	0.00	0.21
Crit Moves:		****										****
Green/Cycle:	0.00	0.49	0.49	0.49	0.49	0.00	0.00	0.00	0.00	0.45	0.00	0.45
Volume/Cap:	0.00	0.48	0.48	0.27	0.27	0.00	0.00	0.00	0.00	0.17	0.00	0.48
Level Of Service Module:												
Delay/Veh:	0.0	12.0	12.0	10.4	10.4	0.0	0.0	0.0	0.0	11.3	0.0	13.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	0.85	0.85	0.85	0.85	0.85	1.00	0.85	0.85	1.00	0.85	0.85
AdjDel/Veh:	0.0	10.2	10.2	8.9	8.9	0.0	0.0	0.0	0.0	11.3	0.0	11.7
Queue:	0	12	12	5	5	0	0	0	0	2	0	5

Level Of Service Detailed Computation Report
1985 HCM Operations Method
Base Volume Alternative

Intersection #25 Sand Pt Way/Navy Base Entry

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
HCM Ops Adjusted Lane Utilization Module:												
Lanes:	0 0	1	1 0	0	1	1 0 0	0 0	0	0 0 0	1	0 0	0 1
Lane Group:	xxxx	RT	RT	LT	LT	xxxx	xxxx	xxxx	xxxx	L	xxxx	R
#LnsInGrps:	0	2	2	2	2	0	0	.0	0	1	0	1
HCM Ops Input Saturation Adj Module:												
Lane Width:	12	12	12	12	12	12	12	12	12	12	12	12
% Hev Veh:		0			0			0			0	
Grade:		0%			0%			0%			0%	
Parking/Hr:		No			No			No			No	
Bus Stp/Hr:		0			0			0			0	
Area Type:	< < < < < < < < < < < < < < <						Other > > > > > > > > > > > > > > >					
Cnft Ped/Hr:		0			0			0			0	
ExclusiveRT:		Include			Include			Include			Include	
% RT Prtct:		0			0			0			0	
HCM Ops f(rt) and f(lt) Adj Case Module:												
f(rt) Case:	xxxx	5	5	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	2
f(lt) Case:	xxxx	xxxx	xxxx	5	5	xxxx	xxxx	xxxx	xxxx	2	xxxx	xxxx
HCM Ops Saturation Adj Module:												
Ln Wid Adj:	xxxx	1.00	1.00	1.00	1.00	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	1.00
Hev Veh Adj:	xxxx	1.00	1.00	1.00	1.00	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	1.00
Grade Adj:	xxxx	1.00	1.00	1.00	1.00	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	1.00
Parking Adj:	xxxx	1.00	1.00	1.00	1.00	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	1.00
Bus Stp Adj:	xxxx	1.00	1.00	1.00	1.00	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	1.00
Area Adj:	xxxx	1.00	1.00	1.00	1.00	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	1.00
RT Adj:	xxxx	0.99	0.99	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0.85
LT Adj:	xxxx	xxxx	xxxxx	0.87	0.87	xxxxx	xxxx	xxxx	xxxxx	0.88	xxxx	xxxxx
HCM Sat Adj:	1.00	0.99	0.99	0.87	0.87	1.00	1.00	1.00	1.00	0.88	1.00	0.85
Usr Sat Adj:	1.00	0.86	0.86	0.86	0.86	1.00	1.00	1.00	1.00	0.93	1.00	0.93
MLF Sat Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fnl Sat Adj:	1.00	0.85	0.85	0.75	0.75	1.00	1.00	1.00	1.00	0.82	1.00	0.79
Progresssion Adjustment Factor Module:												
Signal Type:	< < < < < < < < < < <			Actuated > > > > > > > > > > > > >								
Volume/Cap:	0.00	0.48	0.48	0.27	0.27	0.00	0.00	0.00	0.00	0.17	0.00	0.48
ArrivalType:		3			3			3			3	
ProgAdjFctr:	1.00	0.85	0.85	0.85	0.85	0.85	1.00	0.85	0.85	1.00	0.85	0.85

Background Year 2000 Background Weekday PM Peak Hour

Level Of Service Computation Report
1985 HCM Operations Method
Base Volume Alternative

Intersection #28 Sand Pt Way/NE 65th St

Cycle (sec):	90						Critical Vol./Cap. (X):						0.369										
Loss Time (sec):	6						Average Delay (sec/veh):						7.6										
Optimal Cycle:	22						Level Of Service:						B										
Approach:	North Bound						South Bound						East Bound						West Bound				
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R
Control:	Permitted						Permitted						Permitted						Permitted				
Rights:	Include						Include						Include						Include				
Min. Green:	5		5		5		5		5		5		5		5		5		5		5		5
Lanes:	1	0	1	1	0		1	0	1	1	0		0	1	0	0	1		0	1	0	1	0
Volume Module:																							
Base Vol:	75	570		57			59	310		310			29	21		63			76	59		89	
Growth Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00	
Initial Bse:	75	570		57			59	310		310			29	21		63			76	59		89	
User Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00	
PHF Adj:	0.97	0.97		0.97			0.91	0.91		0.91			0.88	0.88		0.88			0.79	0.79		0.79	
PHF Volume:	77	588		59			65	341		341			33	24		72			96	75		113	
Reduct Vol:	0	0		0			0	0		0			0	0		0			0	0		0	
Reduced Vol:	77	588		59			65	341		341			33	24		72			96	75		113	
PCE Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00	
MLF Adj:	1.00	1.05		1.05			1.00	1.05		1.05			1.00	1.00		1.00			1.05	1.05		1.05	
Final Vol.:	77	617		62			65	358		358			33	24		72			101	78		118	
Saturation Flow Module:																							
Sat/Lane:	1800	1800		1800			1800	1800		1800			1800	1800		1800			1800	1800		1800	
Adjustment:	0.40	0.96		0.96			0.39	0.85		0.90			0.69	0.69		0.83			0.70	0.70		0.72	
Lanes:	1.00	1.82		0.18			1.00	1.03		0.97			0.58	0.42		1.00			0.69	0.53		0.78	
Final Sat.:	716	3141		316			704	1572		1572			717	522		1499			869	671		1015	
Capacity Analysis Module:																							
Vol/Sat:	0.11	0.20		0.20			0.09	0.23		0.23			0.05	0.05		0.05			0.12	0.12		0.12	
Crit Moves:								****												****			
Green/Cycle:	0.62	0.62		0.62			0.62	0.62		0.62			0.32	0.32		0.32			0.32	0.32		0.32	
Volume/Cap:	0.17	0.32		0.32			0.15	0.37		0.37			0.15	0.15		0.15			0.37	0.37		0.37	
Level Of Service Module:																							
Delay/Veh:	5.6	6.2		6.2			5.5	6.5		6.5			16.8	16.8		16.8			18.3	18.3		18.3	
Delay Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00	
ProgAdjFctr:	1.00	0.85		0.85			1.00	0.85		0.85			0.85	0.85		0.85			0.85	0.85		0.85	
AdjDel/Veh:	5.6	5.3		5.3			5.5	5.5		5.5			14.3	14.3		14.3			15.5	15.5		15.5	
Queue:	1	8		8			1	9		9			1	1		1			6	6		6	

Background Year 2000 Background Weekday PM Peak Hour

Level Of Service Detailed Computation Report
1985 HCM Operations Method
Base Volume Alternative

Intersection #28 Sand Pt Way/NE 65th St

Approach:	North Bound						South Bound						East Bound						West Bound				
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R
HCM Ops Adjusted Lane Utilization Module:																							
Lanes:	1	0	1	1	0		1	0	1	1	0		0	1	0	0	1		0	1	0	1	0
Lane Group:	L		RT		RT		L		RT		RT		LT		LT		R		LTR		LTR		LTR
#LnsInGrps:	1		2		2		1		2		2		1		1		1		2		2		2
HCM Ops Input Saturation Adj Module:																							
Lane Width:	12		12		12		12		12		12		12		12		12		12		12		12
% Hev Veh:			0						0						0						0		
Grade:			0%						0%						0%						0%		
Parking/Hr:			No						No						No						No		
Bus Stp/Hr:			0						0						0						0		
Area Type:	< <

Level Of Service Computation Report
1985 HCM Operations Method
Base Volume Alternative

Intersection #33 Sand Pt Way/Princeton Ave

Cycle (sec): 90 Critical Vol./Cap. (X): 0.472
Loss Time (sec): 6 Average Delay (sec/veh): 7.8
Optimal Cycle: 26 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	5	5	5	5	5	5	5	5	5	5	5	5
Lanes:	0	0	1! 0	0	0	1! 0	0	1	0 1	1	0	1 0
Volume Module:												
Base Vol:	20	12	26	92	20	63	109	840	4	9	410	62
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	12	26	92	20	63	109	840	4	9	410	62
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.74	0.74	0.74	0.89	0.89	0.89	0.85	0.85	0.85
PHF Volume:	20	12	27	124	27	85	122	944	4	11	482	73
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	12	27	124	27	85	122	944	4	11	482	73
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.05	1.05	1.00	1.05	1.05
Final Vol.:	20	12	27	124	27	85	122	991	5	11	506	77
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.76	0.76	0.76	0.80	0.80	0.80	0.48	1.00	1.00	0.26	0.98	0.98
Lanes:	0.34	0.20	0.46	0.53	0.11	0.36	1.00	1.99	0.01	1.00	1.74	0.26
Final Sat.:	466	280	630	756	165	518	864	3582	18	468	3062	466
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.04	0.16	0.16	0.16	0.14	0.28	0.28	0.02	0.17	0.17
Crit Moves:					****			****				
Green/Cycle:	0.35	0.35	0.35	0.35	0.35	0.35	0.59	0.59	0.59	0.59	0.59	0.59
Volume/Cap:	0.12	0.12	0.12	0.47	0.47	0.47	0.24	0.47	0.47	0.04	0.28	0.28
Level Of Service Module:												
Delay/Veh:	15.2	15.2	15.2	18.0	18.0	18.0	6.9	8.2	8.2	6.0	7.0	7.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	0.85	0.85	0.85	0.85	0.85	0.85	1.00	0.85	0.85	1.00	0.85	0.85
AdjDel/Veh:	12.9	12.9	12.9	15.3	15.3	15.3	6.9	7.0	7.0	6.0	6.0	6.0
Queue:	1	1	1	5	5	5	1	14	14	0	7	7

Level Of Service Detailed Computation Report
1985 HCM Operations Method
Base Volume Alternative

Intersection #33 Sand Pt Way/Princeton Ave

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
HCM Ops Adjusted Lane Utilization Module:												
Lanes:	0	0	1! 0	0	0	1! 0	0	1	0 1	1	0	1 0
Lane Group:	LTR			LTR			LTR			LTR		
#LnsInGrps:	1			1			1			1		
HCM Ops Input Saturation Adj Module:												
Lane Width:	12	12	12	12	12	12	12	12	12	12	12	12
% Hev Veh:	0			0			0			0		
Grade:	0%			0%			0%			0%		
Parking/Hr:	No			No			No			No		
Bus Stp/Hr:	0			0			0			0		
Area Type:	< < < < < < < < < < < < < < < <			Other > > > > > > > > > > > > > > > >								
Cnft Ped/Hr:	0			0			0			0		
ExclusiveRT:	Include			Include			Include			Include		
% RT Prtct:	0			0			0			0		
HCM Ops f(rt) and f(lt) Adj Case Module:												
f(rt) Case:	7	7	7	7	7	7	xxxx	5	5	xxxx	5	5
f(lt) Case:	7	7	7	7	7	7	2	xxxx	xxxx	2	xxxx	xxxx
HCM Ops Saturation Adj Module:												
Ln Wid Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hev Veh Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Grade Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Parking Adj:	1.00	1.00	1.00	1.00	1.00	1.00	xxxx	1.00	1.00	xxxx	1.00	1.00
Bus Stp Adj:	1.00	1.00	1.00	1.00	1.00	1.00	xxxx	1.00	1.00	xxxx	1.00	1.00
Area Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
RT Adj:	0.84	0.84	0.84	0.85	0.85	0.85	xxxx	1.00	1.00	xxxx	0.98	0.98
LT Adj:	0.91	0.91	0.91	0.94	0.94	0.94	0.48	xxxx	xxxxx	0.26	xxxx	xxxxx
HCM Sat Adj:	0.76	0.76	0.76	0.80	0.80	0.80	0.48	1.00	1.00	0.26	0.98	0.98
Usr Sat Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Sat Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fnl Sat Adj:	0.76	0.76	0.76	0.80	0.80	0.80	0.48	1.00	1.00	0.26	0.98	0.98
Progression Adjustment Factor Module:												
Signal Type:	< < < < < < < < < < < <			Actuated			> > > > > > > > > > > >					
Volume/Cap:	0.12	0.12	0.12	0.47	0.47	0.47	0.24	0.47	0.47	0.04	0.28	0.28
ArrivalType:		3			3			3			3	
ProgAdjFctr:	0.85	0.85	0.85	0.85	0.85	0.85	1.00	0.85	0.85	1.00	0.85	0.85

Level Of Service Computation Report
1985 HCM Operations Method
Base Volume Alternative

Intersection #41 NE 45th St/Montlake Blvd

Cycle (sec):	100						Critical Vol./Cap. (X):										0.851							
Loss Time (sec):	6						Average Delay (sec/veh):										16.7							
Optimal Cycle:	72						Level Of Service:										C							
Approach:	North Bound				South Bound				East Bound				West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R				
Control:	Protected				Protected				Protected				Protected											
Rights:	Ovl				Include				Include				Include											
Min. Green:	5	0	10		0	0	0		0	10	0		10	5	0									
Lanes:	1	0	0	0	2	0	0	0	0	0	0	0	1	1	0	2	0	1	0	0				
Volume Module:																								
Base Vol:	250	0	1665		0	0	0		0	535	3		705	610	0									
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00									
Initial Bse:	250	0	1665		0	0	0		0	535	3		705	610	0									
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00									
PHF Adj:	0.92	0.92	0.92		1.00	1.00	1.00		0.85	0.85	0.85		0.87	0.87	0.87									
PHF Volume:	272	0	1810		0	0	0		0	629	4		810	701	0									
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0									
Reduced Vol:	272	0	1810		0	0	0		0	629	4		810	701	0									
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00									
MLF Adj:	1.00	1.00	1.05		1.00	1.00	1.00		1.00	1.05	1.05		1.05	1.00	1.00									
Final Vol.:	272	0	1900		0	0	0		0	661	4		851	701	0									
Saturation Flow Module:																								
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800									
Adjustment:	0.92	1.00	0.85		1.00	1.00	1.00		1.00	1.01	0.99		0.92	1.00	1.00									
Lanes:	1.00	0.00	2.00		0.00	0.00	0.00		0.00	1.99	0.01		2.00	1.00	0.00									
Final Sat.:	1659	0	3078		0	0	0		0	3614	22		3312	1800	0									
Capacity Analysis Module:																								
Vol/Sat:	0.16	0.00	0.62		0.00	0.00	0.00		0.00	0.18	0.18		0.26	0.39	0.00									
Crit Moves:			****		****					****			****											
Green/Cycle:	0.42	0.00	0.73		0.00	0.00	0.00		0.00	0.21	0.21		0.30	0.52	0.00									
Volume/Cap:	0.39	0.00	0.85		0.00	0.00	0.00		0.00	0.85	0.85		0.85	0.75	0.00									
Level Of Service Module:																								
Delay/Veh:	15.3	0.0	9.9		0.0	0.0	0.0		0.0	35.0	35.0		30.0	17.0	0.0									
Delay Adj:	1.00	1.00	0.85		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00									
ProgAdjFctr:	1.00	0.85	0.85		1.00	0.85	0.85		1.00	0.85	0.85		1.00	0.85	0.85									
AdjDel/Veh:	15.3	0.0	7.2		0.0	0.0	0.0		0.0	29.7	29.7		30.0	14.4	0.0									
Queue:	5	0	40		0	0	0		0	20	20		24	16	0									

Level Of Service Detailed Computation Report
1985 HCM Operations Method
Base Volume Alternative

Intersection #41 NE 45th St/Montlake Blvd

Approach:	North Bound				South Bound				East Bound				West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R				
HCM Ops Adjusted Lane Utilization Module:																								
Lanes:	1	0	0	0	2	0	0	0	0	0	0	0	1	1	0	2	0	1	0	0				
Lane Group:	L	xxxx	R		xxxx	xxxx	xxxx		xxxx	RT	RT		L	T	xxxx									
#LnsInGrps:	1	0	2		0	0	0		0	2	2		2	1	0									
HCM Ops Input Saturation Adj Module:																								
Lane Width:	12	12	12		12	12	12		12	12	12		12	12	12									
% Hev Veh:		0				0				0				0										
Grade:		0%				0%				0%				0%										
Parking/Hr:		No				No				No				No										
Bus Stp/Hr:		0				0				0				0										
Area Type:	< < < < < < < < < < < < < < < < Other > > > > > > > > > > > > > > > >																							
Cnft Ped/Hr:		0				0				0				0										
ExclusiveRT:		Include				Include				Include				Include										
% RT Prtct:		0				0				0				0										
HCM Ops f(rt) and f(lt) Adj Case Module:																								
f(rt) Case:	xxxx	xxxx		8	xxxx	xxxx	xxxx		xxxx	5	5		xxxx	xxxx	xxxx									
f(lt) Case:		1	xxxx	xxxx	xxxx	xxxx	xxxx		xxxx	xxxx	xxxx			8	xxxx	xxxx								
HCM Ops Saturation Adj Module:																								
Ln Wid Adj:	1.00	xxxx	1.00		xxxx	xxxx	xxxxx		xxxx	1.00	1.00		1.00	1.00	xxxxx									
Hev Veh Adj:	1.00	xxxx	1.00		xxxx	xxxx	xxxxx		xxxx	1.00	1.00		1.00	1.00	xxxxx									
Grade Adj:	1.00	xxxx	1.00		xxxx	xxxx	xxxxx		xxxx	1.00	1.00		1.00	1.00	xxxxx									
Parking Adj:	xxxx	xxxx	1.00		xxxx	xxxx	xxxxx		xxxx	1.00	1.00		xxxx	1.00	xxxxx									
Bus Stp Adj:	xxxx	xxxx	1.00		xxxx	xxxx	xxxxx		xxxx	1.00	1.00		xxxx	1.00	xxxxx									
Area Adj:	1.00	xxxx	1.00		xxxx	xxxx	xxxxx		xxxx	1.00	1.00		1.00	1.00	xxxxx									
RT Adj:	xxxx	xxxx	0.75		xxxx	xxxx	xxxxx		xxxx	1.00	1.00		xxxx	xxxx	xxxxx									
LT Adj:	0.95	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.92	xxxx	xxxxx									
HCM Sat Adj:	0.95	1.00	0.75		1.00	1.00	1.00		1.00	1.00	1.00		0.92	1.00	1.00									
Usr Sat Adj:	0.97	1.00	1.14		1.00	1.00	1.00		1.00	1.01	0.99		1.00	1.00	1.00									
MLF Sat Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00									
Fnl Sat Adj:	0.92	1.00	0.85		1.00	1.00	1.00		1.00	1.01	0.99		0.92	1.00	1.00									
Progression Adjustment Factor Module:																								
Signal Type:	< < < < < < < < < < < < Actuated > > > > > > > > > > > >																							
Volume/Cap:	0.39	0.00	0.85		0.00	0.00	0.00		0.00	0.85	0.85		0.85	0.75	0.00									
ArrivalType:		3				3				3				3										
ProgAdjFctr:	1.00	0.85	0.85		1.00	0.85	0.85		1.00	0.85	0.85		1.00	0.85	0.85									

Level Of Service Computation Report
1985 HCM Operations Method
Base Volume Alternative

Intersection #49 25th Ave/Montlake Blvd

Cycle (sec): 90 Critical Vol./Cap. (X): 0.616
Loss Time (sec): 6 Average Delay (sec/veh): 13.9
Optimal Cycle: 34 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Include			Include		
Min. Green:	5	5	5	5	5	5	5	5	5	5	5	5
Lanes:	0	0 2	0 2	0	0 2	0 0	0	0 0	0 0	1	0 1!	0 0
Volume Module:												
Base Vol:	0	960	1445	0	545	0	0	0	0	825	0	3
Growth Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	960	0	0	545	0	0	0	0	825	0	3
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.00	0.92	0.92	0.00	0.86	0.86	0.86	1.00	1.00	1.00
PHF Volume:	0	1067	0	0	592	0	0	0	0	825	0	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1067	0	0	592	0	0	0	0	825	0	3
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.05	0.00	1.00	1.05	0.00	1.00	1.00	1.00	1.05	1.00	1.00
Final Vol.:	0	1120	0	0	622	0	0	0	0	866	0	3
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	1.05	1.05	1.14	0.95	0.95	0.95	1.00	1.00	1.00	0.86	1.17	1.11
Lanes:	0.00	2.00	2.00	0.00	2.00	0.00	0.00	0.00	0.00	1.99	0.00	0.01
Final Sat.:	0	3780	4104	0	3420	0	0	0	0	3104	0	11
Capacity Analysis Module:												
Vol/Sat:	0.00	0.30	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.28	0.00	0.28
Crit Moves:		****			****			****			****	
Green/Cycle:	0.00	0.42	0.00	0.00	0.42	0.00	0.00	0.00	0.00	0.40	0.00	0.40
Volume/Cap:	0.00	0.70	0.00	0.00	0.43	0.00	0.00	0.00	0.00	0.70	0.00	0.70
Level Of Service Module:												
Delay/Veh:	0.0	17.1	0.0	0.0	14.0	0.0	0.0	0.0	0.0	18.4	0.0	18.4
Delay Adj:	1.00	1.00	0.85	1.00	0.85	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	0.85	0.85	1.00	0.85	0.85	1.00	0.85	0.85	0.85	0.85	0.85
AdjDel/Veh:	0.0	14.6	0.0	0.0	10.1	0.0	0.0	0.0	0.0	15.6	0.0	15.6
Queue:	0	23	0	0	11	0	0	0	0	19	0	19

Level Of Service Detailed Computation Report
1985 HCM Operations Method
Base Volume Alternative

Intersection #49 25th Ave/Montlake Blvd

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
HCM Ops Adjusted Lane Utilization Module:												
Lanes:	0	0 2	0 2	0	0 2	0 0	0	0 0	0 0	1	0 1!	0 0
Lane Group:	xxxx	T	R	xxxx	T	xxxx	xxxx	xxxx	xxxx	LTR	LTR	LTR
#LnsInGrps:	0	2	2	0	2	0	0	0	0	2	1	1
HCM Ops Input Saturation Adj Module:												
Lane Width:	12	12	12	12	12	12	12	12	12	12	12	12
% Hev Veh:		0			0			0			0	
Grade:		0%			0%			0%			0%	
Parking/Hr:		No			No			No			No	
Bus Stp/Hr:		0			0			0			0	
Area Type:	< <

Appendix J

NOISE ASSESSMENT REPORT

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1.0 INTRODUCTION AND SUMMARY

This report is an analysis of the potential noise impact of alternative uses for the Naval Station Puget Sound property (Sand Point). Two reuse plans, produced by the City of Seattle and the Muckleshoot Indian Tribe, plus a "no action" alternative have been used as the basis of this noise assessment. Covered within this report are: the existing noise environment based on field measurements; predictions of future potential noise sources and their associated noise levels; the comparison of predicted noise levels with existing noise levels and current applicable ordinances and guidelines. Finally, mitigating measures and recommendations are given to reduce and limit the noise levels where required.

The predominant existing noise sources in the study area include local street traffic, occasional aircraft fly-overs, water craft noise, and crowd noise when sport activities occur in the Magnuson Park. The street in the area with heaviest traffic is Sand Point Way N.E. High existing noise levels temper potential impacts for residential areas near Sand Point Way N.E. Residences further removed from Sand Point Way N.E. have quieter existing noise levels and a corresponding greater potential for impact.

Key findings of the noise analysis are as follows:

1. The "no-action" plan will produce no impact.

2. The City Reuse Plan will likely produce the following significant or serious impacts:

Significant Impacts	Serious Impacts
Small musical groups during daytime, or amplified speech at night, in amphitheater.	Rock concerts at amphitheater or 1500 seat indoor theater.
Public address system for ball fields at night.	Small musical groups using amphitheater at night.

3. The Muckleshoot Reuse Plan will not likely produce serious impacts. Significant impacts associated with its plan are likely from the following sources:

Significant Impacts	Serious Impacts
Public address system for ball fields at night.	None
Commercial fishing	
Traffic on Sand Point Way N.E.	

4. Mitigation measures can reduce impacts for ball field public address systems, the amphitheater, and indoor 1500 seat theater, and commercial fishing. Although impacts from the amphitheater can be reduced, they remain serious for some activities.

2.0 AFFECTED ENVIRONMENT

2.1 Site Description

Sand Point is located in a primarily residential neighborhood, characterized by a mixture of single-family homes and multifamily buildings. Magnuson Park, located on the eastern portion of the site, provides recreational facilities and open space. Access to Sand Point is provided along Sand Point Way N.E. The regional Burke-Gilman Trail (pedestrian and bicycle route near the base) lies west, and generally runs parallel to, Sand Point Way N.E. in the region of Sand Point.

2.2 Current Use

The current use of the Sand Point property is divided into three parts: (1) the National Oceanic and Atmospheric Administration (NOAA) including 100 acres and 3,500 feet of waterfront; (2) City of Seattle (Magnuson Park) including approximately 1 mile of waterfront; (3) the Navy (Naval Station Puget Sound). For this project the site is defined as the Naval Station portion of the Sand Point property.

Currently, there are no industrial operations or aviation support activities at Sand Point. The base's present functions include support and billeting facilities for the Northern Pacific Fleet.

2.3 Noise Environment Identification

2.3.1 *General Discussion of Noise and Noise Descriptors*

Noise is defined as excessive or unwanted sound. It is a composition of the intensity, duration, and character of sounds from all sources.

Noise is measured in decibels (dB). Because the human ear responds differently to sound at different frequencies, a weighted scale is used to approximate the sensitivity of the human ear. The unit of measure for the decibel scale is decibels A-weighted (dBA). It significantly reduces the measured energy level for low-frequency sounds while slightly increasing the level of high-frequency sounds. The scale is logarithmic rather than linear (i.e., it is not directly proportional to the loudness of the noise). Regulatory agencies use the dBA scale to evaluate noise impacts.

Noise levels are decreased by distance, obstructions such as acoustical barriers, buildings, or hills, and by ground absorption, which includes vegetation. Noise levels can be increased from reflections off of hard surfaces such as paved ground or nearby buildings.

The effect of noise on people is determined by both the level and duration of the noise. Varying noise levels are often described in terms of the equivalent (constant) noise level (Leq). Equivalent noise levels are used to develop single-value descriptions of average noise exposure over various periods of time. The L_{eq} data used for these average noise exposure descriptors generally use A-weighted sound-level measurements.
The L_{dn}, or day-night equivalent sound level, is the L_{eq} measured over a 24 hour period, with a 10 dBA penalty applied to night-time levels (10:00 p.m. to 7:00 a.m.).

Sound levels from different sources combine logarithmically. For example, two noise sources each producing 50 dBA combine to produce a level of 53 dBA. The same is true for the number of noise sources. Doubling the amount of traffic on a street increases sound levels by 3 dBA, which is a 20

percent increase in loudness. The ear can detect a slight change in loudness between sounds that have a difference of 3 dBA. A 5 dBA difference is significant, and a sound that is 10 dBA more than another is twice as loud.

Measured noise levels may also be expressed as statistical descriptors L_{02}, L_{08}, L_{25}, and L_{95}, and descriptors L_{eq} and L_{dn}. Statistical descriptors are numbers representing sound pressure levels for a given period of elapsed time. The period of time is chosen to reflect the nature of the noise being measured. For example, statistical descriptor written L_{02} = 60 dBA indicates that the sampled sound pressure levels exceeded 60 dBA for 2.0% of the measurement period, L_{25} = 55 dBA means that a level of 55 dBA was exceeded 25% of the total measurement period.

2.3.2 Measurements of Existing Noise Levels

Noise levels were measured at five receiver locations surrounding Sand Point. Noise monitoring and analysis equipment was set up for a 24-hour continuous measurement at each of five locations. The measurement locations were chosen to characterize the existing noise environment around the site. Figure 1 depicts a graphical representation of measurement locations. While the noise level data were collected, the noise monitoring equipment automatically computed statistical noise descriptors, L_{02}, L_{08}, L_{25}, and L_{95}. The equipment also computed L_{eq} and L_{dn}. All measurements were conducted using a Larson/Davis 700 type 2 integrating sound level meter (modified with a Bruel & Kjaer 4176 microphone capsule). All measurements were calibrated prior to and following data acquisition, with a Bruel & Kjaer 4230 calibrator. The measurement results are represented in terms of L_{eq} of 1-hour period, L_{max}, and statistical descriptor L_{95} which for purpose of this study is used as a minimum noise level. L_{max} is a true maximum

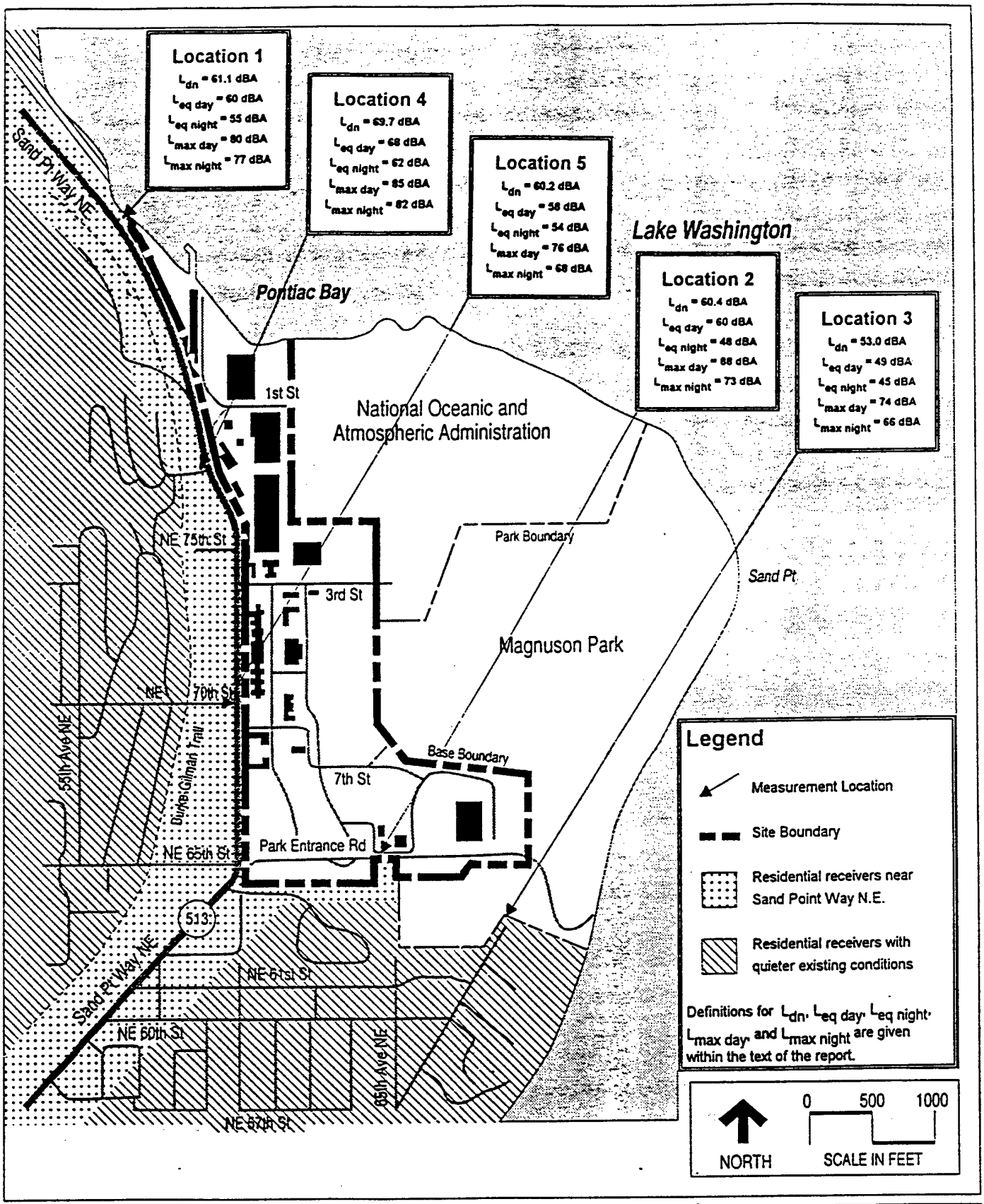
Location 1
L_{dn} = 61.1 dBA
$L_{eq\ day}$ = 60 dBA
$L_{eq\ night}$ = 55 dBA
$L_{max\ day}$ = 80 dBA
$L_{max\ night}$ = 77 dBA
Location 4
L_{dn} = 69.7 dBA
$L_{eq\ day}$ = 68 dBA
$L_{eq\ night}$ = 62 dBA
$L_{max\ day}$ = 85 dBA
$L_{max\ night}$ = 82 dBA
Location 5
L_{dn} = 60.2 dBA
$L_{eq\ day}$ = 58 dBA
$L_{eq\ night}$ = 54 dBA
$L_{max\ day}$ = 76 dBA
$L_{max\ night}$ = 68 dBA
Location 2
L_{dn} = 60.4 dBA
$L_{eq\ day}$ = 60 dBA
$L_{eq\ night}$ = 48 dBA
$L_{max\ day}$ = 88 dBA
$L_{max\ night}$ = 73 dBA
Location 3
L_{dn} = 53.0 dBA
$L_{eq\ day}$ = 49 dBA
$L_{eq\ night}$ = 45 dBA
$L_{max\ day}$ = 74 dBA
$L_{max\ night}$ = 66 dBA
Sand Pt Way NE
Pontiac Bay
Lake Washington
1st St
National Oceanic and Atmospheric Administration
NE 75th St
Park Boundary
Sand Pt
3rd St
Magnuson Park
NE 70th St
55th Ave NE
Burke-Gilman Trail
Base Boundary
7th St
NE 65th St
Park Entrance Rd
513
Sand Pt Way NE
NE 61st St
NE 60th St
65th Ave NE
NE 57th St
Legend
Measurement Location
Site Boundary
Residential receivers near Sand Point Way N.E.
Residential receivers with quieter existing conditions
Definitions for L_{dn}, $L_{eq\ day}$, $L_{eq\ night}$, $L_{max\ day}$, and $L_{max\ night}$ are given within the text of the report.
NORTH
0
500
1000
SCALE IN FEET

Figure 1

level which means it can occur for a very short period and could be caused by a truck, loud automobile or motorcycle driving on Sand Point Way N.E., but it might also be caused by an occurrence as brief as a door slamming. To get a sense of the typical maximum level at a particular location, an average of the measurement maximum levels should be taken. L_{dn}, L_{eq} day, L_{eq} night, L_{max} day, and L_{max} night are shown in the tables of existing noise levels for each measurement location (below). L_{eq} day and L_{max} day represent the average noise levels measured between the hours of 7:00 a.m. and 8:00 p.m. L_{eq} night and L_{max} night represent the average noise levels measured between the hours of 8:00 p.m. and 1:00 a.m. These averaging times were chosen to represent probable times of activity during day or evening hours.

Location 1.

Measurements of existing noise levels at location 1 were conducted on the 30th and 31st of March of 1994. The measurements were taken at the north boundary of the base which borders on the residential property. The microphone was placed at the east edge of Sand Point Way N.E., 50 feet from the road right-of-way, on a hill sloping down to the lake. The elevation of the microphone was nearly equal to the elevation of the road, which partially shielded the microphone from traffic noise on Sand Point Way N.E. The major noise source is traffic on Sand Point Way N.E. The noise levels for a typical receiver location (5 feet above the road elevation) are expected to be 3 dBA higher than the measured levels. Results of the measurements are documented in Table 1.

TABLE 1

Existing Ambient Noise Levels, (dBA), Location 1

Interval Start Time	L_{eq} *(1 hr. average.)*	L_{max} *(maximum)*	L_{95} *(minimum)*
00:00	50.5	77.5	32.0
01:00	45.0	73.0	30.0
02:00	45.5	71.5	30.0
03:00	43.0	71.0	29.0
04:00	45.0	73.0	30.0
05:00	53.0	73.5	31.0
06:00	58.5	76.0	40.0
07:00	60.0	79.0	43.0
08:00	60.5	80.5	44.5
09:00	60.0	75.5	47.0
10:00	59.0	78.0	44.0
11:00	59.5	75.0	46.0
12:00	60.0	75.0	45.5
13:00	60.0	80.0	44.0
14:00	60.5	80.5	45.5
15:00	61.5	80.0	47.0
16:00	61.5	76.0	48.0
17:00	61.5	82.0	48.0
18:00	60.5	86.0	46.5
19:00	58.0	73.0	42.5
20:00	57.5	76.0	41.5
21:00	56.0	73.5	37.0
22:00	54.5	76.5	36.5
23:00	53.5	80.5	34.0

L_{dn} = 61 dBA

$L_{eq\ day}$ = 60 dBA (7 a.m. - 8 p.m.)

$L_{eq\ night}$ = 55 dBA (8 p.m. - 1 a.m.)

$L_{max\ day}$ = 80 dBA (average, 7 a.m. - 8 p.m.)

$L_{max\ night}$ = 77 dBA (average, 8 p.m. - 1 a.m.)

Location 2.

Measurements of existing noise levels at location 2 were conducted on the 4th and 5th of April of 1994. The measurements were taken at the south boundary of the base at the entrance road to Magnuson Park and to the Commissary Exchange facility, which borders on the multifamily residential property. The microphone was placed at the south edge of the entrance road, 35 feet away from the road right-of-way, at a height of 5 feet above the ground. Major noise source is traffic on the entrance road and human

activity on the residential property. Results of the measurements are documented in Table 2.

TABLE 2
Existing Ambient Noise Levels (dBA), Location 2

Interval Start Time	L_{eq} *(1 hr average)*	L_{max} *(maximum)*	L_{95} *(minimum)*
00:00	45.5	72.5	37.5
01:00	42.0	69.5	37.0
02:00	41.5	70.0	37.5
03:00	39.0	67.0	37.0
04:00	43.5	73.5	37.0
05:00	53.0	74.0	39.0
06:00	58.5	82.5	42.0
07:00	61.5	84.5	43.0
08:00	57.0	75.5	45.5
09:00	59.5	84.0	45.5
10:00	61.5	86.0	46.5
11:00	60.0	86.5	46.5
12:00	63.0	96.0	46.0
13:00	61.5	92.0	47.5
14:00	61.0	89.0	44.5
15:00	60.0	79.0	42.5
16:00	60.0	89.5	41.5
17:00	55.5	75.5	41.0
18:00	53.0	81.5	40.0
19:00	51.0	82.5	39.5
20:00	51.0	76.0	39.0
21:00	50.5	73.0	38.5
22:00	46.5	71.5	37.5
23:00	45.5	72.5	37.0

L_{dn} = 60 dBA
$L_{eq\ day}$ = 60 dBA (7 a.m. - 8 p.m.)
$L_{eq\ night}$ = 48 dBA (8 p.m. - 1 a.m.)
$L_{max\ day}$ = 88 dBA (average, 7 a.m. - 8 p.m.)
$L_{max\ night}$ = 73 dBA (average, 8 p.m. - 1 a.m.)

Location 3.

Measurements of existing noise levels at location 3 were conducted on the 5th and 6th of April of 1994. The measurements were taken at the south boundary of Magnuson Park which borders on the residential property. The microphone was placed at a height of 5 feet above the ground. The major noise sources are traffic in the park,

bird singing, dog barking, occasional aircraft fly-overs, water craft noise. The results of the measurements are documented in Table 3.

TABLE 3
Existing Ambient Noise Levels (dBA), Location 3

Interval Start Time	L_{eq} *(1 hr average)*	L_{max} *(maximum)*	L_{95} *(minimum)*
00:00	45.5	58.5	44.0
01:00	44.0	63.0	44.0
02:00	45.5	52.5	39.5
03:00	45.0	53.5	42.0
04:00	46.0	55.5	40.0
05:00	48.5	67.5	42.0
06:00	48.5	74.0	39.5
07:00	47.5	64.0	39.0
08:00	49.5	75.5	48.0
09:00	52.0	74.0	44.5
10:00	50.5	75.0	43.5
11:00	50.5	75.0	42.5
12:00	51.5	75.5	44.5
13:00	47.0	77.5	42.0
14:00	45.5	68.0	39.0
15:00	46.0	61.0	40.5
16:00	45.5	70.5	42.0
17:00	49.0	75.0	41.5
18:00	47.0	71.0	40.5
19:00	46.0	73.5	40.5
20:00	46.5	66.5	40.0
21:00	44.5	58.5	40.0
22:00	43.0	69.5	41.5
23:00	43.5	68.0	44.0

L_{dn} = 53 dBA
$L_{eq\ day}$ = 49 dBA (7 a.m. - 8 p.m.)
$L_{eq\ night}$ = 45 dBA (8 p.m. - 1 a.m.)
$L_{max\ day}$ = 74 dBA (average, 7 a.m. - 8 p.m.)
$L_{max\ night}$ = 66 dBA (average, 8 p.m. - 1 a.m.)

Location 4.

Measurements of existing noise levels at location 4 were conducted on the 6th and 7th of April of 1994. The measurements were taken at the west boundary of the base. The microphone was placed at the west edge of Sand Point Way N.E. south of the entrance to NOAA, at a distance of 50 feet

away from the road right-of-way and at a height of 5 feet above the ground. The major noise source is traffic on Sand Point Way N.E. The measured noise levels are slightly higher due to accelerating vehicles turning from the NOAA entrance. Results of the measurements are documented in Table 4.

TABLE 4
Existing Ambient Noise Levels (dBA), Location 4

Interval Start Time	L_{eq} *(1 hr. average.)*	L_{max} *(maximum)*	L_{95} *(minimum)*
00:00	56.0	77.0	40.0
01:00	56.5	82.5	43.0
02:00	52.5	77.0	43.0
03:00	53.5	75.0	45.5
04:00	59.0	79.0	41.0
05:00	64.5	84.0	42.5
06:00	68.0	80.5	49.5
07:00	69.0	84.0	51.5
08:00	68.5	86.0	51.0
09:00	68.5	91.0	49.5
10:00	68.0	81.5	51.5
11:00	68.0	86.0	51.0
12:00	68.5	88.0	51.5
13:00	68.0	80.5	51.0
14:00	68.5	82.0	51.5
15:00	68.5	82.5	51.5
16:00	69.0	84.0	52.0
17:00	69.5	87.0	50.5
18:00	67.5	84.0	47.5
19:00	65.5	78.5	45.0
20:00	65.0	82.5	45.0
21:00	65.0	86.0	45.0
22:00	62.5	79.5	38.5
23:00	61.0	79.0	43.0

L_{dn} = 70 dBA

$L_{eq\ day}$ = 68 dBA (7 a.m. - 8 p.m.)

$L_{eq\ night}$ = 62 dBA (8 p.m. - 1 a.m.)

$L_{max\ day}$ = 85 dBA (average, 7 a.m. - 8 p.m.)

$L_{max\ night}$ = 82 dBA (average, 8 p.m. - 1 a.m.)

Location 5.

Measurements of existing noise levels at location 5 were conducted on the 7th and 8th of April of 1994. The

measurements were taken at the west boundary of the base south of the main entrance to the base. The microphone was placed at the west edge of Sand Point Way N.E. at the intersection with 70th Street at a distance of 140 feet away from the Sand Point Way N.E. right-of-way, at a height of 5 feet above the ground. The major noise source is traffic on Sand Point Way N.E. Results of the measurements are documented in Table 5.

TABLE 5

Existing Ambient Noise Levels (dBA), Location 5

Interval Start Time	L_{eq} *(1 hr. average.)*	L_{max} *(maximum)*	L_{95} *(minimum)*
00:00	49.5	65.5	34.0
01:00	47.5	73.5	32.0
02:00	42.0	63.0	31.5
03:00	39.0	60.5	32.0
04:00	49.0	69.0	33.0
05:00	57.0	72.0	42.0
06:00	59.0	75.0	50.0
07:00	57.5	68.0	50.0
08:00	56.0	70.0	49.5
09:00	55.0	68.5	46.5
10:00	55.0	74.5	46.0
11:00	56.0	76.5	47.5
12:00	55.0	71.0	46.5
13:00	59.5	71.0	46.5
14:00	57.5	69.5	49.5
15:00	58.0	69.5	50.5
16:00	59.5	70.0	51.0
17:00	61.0	86.0	52.0
18:00	58.0	71.0	49.0
19:00	58.0	70.5	46.0
20:00	57.5	68.0	42.5
21:00	55.5	72.0	36.0
22:00	53.5	66.5	35.5
23:00	51.5	67.0	34.0

L_{dn} = 60 dBA

$L_{eq\ day}$ = 58 dBA (7 a.m. - 8 p.m.)

$L_{eq\ night}$ = 54 dBA (8 p.m. - 1 a.m.)

$L_{max\ day}$ = 76 dBA (average, 7 a.m. - 8 p.m.)

$L_{max\ night}$ = 68 dBA (average, 8 p.m. - 1 a.m.)

The measurement at location 5 was taken at a distance of 140 feet away from the right-of-way of Sand Point Way N.E. which exceeds the typical home set-back distance and differs from the microphone placements at other measurement locations. The calculated levels for a location 50 feet away from the Sand Point Way N.E. right-of-way are as follows:

Table 6

Calculated Noise Levels, Location 5, @ 140 ft.

L_{dn} =	64 dBA
$L_{eq\ day}$ =	62 dBA (7 a.m. - 8 p.m.)
$L_{eq\ night}$ =	58 dBA (8 p.m. - 1 a.m.)
$L_{max\ day}$ =	80 dBA (average, 7 a.m. - 8 p.m.)
$L_{max\ night}$ =	72 dBA (average, 8 p.m. - 1 a.m.)

3.0 CRITERIA

Pertinent criteria for the evaluation of noise impacts associated with the project are the City of Seattle Noise Ordinance, Chapter 25.08 and the Environmental Protection Agency Region X Guidelines. These criteria are discussed in detail in Appendix 1, and are reviewed briefly in this section of the report.

City of Seattle Noise Ordinance, Chapter 25.08, regulates noise levels produced by construction activity, by on-site sources that travel to surrounding property, by vehicular traffic on public roadways, and by water craft. Most pertinent to this EIS is the regulation of maximum permissible noise levels produced on one property (Sand Point) and received by surrounding property. It is unclear as to what the zoning of the Sand Point property will be. Assuming it is commercial zone, the maximum permissible level between the Sand Point property and surrounding residential areas is 57 dBA during daytime hours and 47 dBA

at night. Other zoning classification would be limited by the noise levels given in the Appendix to this report. These levels can be increased slightly for noises of short duration and are decreased for noises with annoying characteristics, such as impulsive sounds or pure tones.

The Environmental Protection Agency Region X Guidelines helps evaluate noise impacts by assessing probable impacts for increase in projected noise levels over projected no-action noise levels. If the projected noise levels due to the project increase no-action noise levels by 0 to 5 dBA, the impact is expected to be slight. A 5 to 10 dB increase produces a significant impact, and an increase of over 10 dBA is considered a serious impact.

4.0 PROJECTED NOISE LEVELS AND RESULTING IMPACTS

4.1 On-Site Noise Sources and Project Sound Levels

Activities on the project site will create various noise levels and have the potential to create impacts at surrounding residential areas. On site activities can be broken down into four major categories: construction noise; traffic noise associated with the various uses of the property after construction; heating and ventilation equipment associated with each of the buildings on the site; and, people, activity, or equipment noise associated with the uses of the property (other than traffic). Construction noise, on-site traffic noise, and heating and ventilating noise are expected to be similar for both plans, and will be assessed in this section. Noise generated by people, activities, or equipment associated with the use of the property will be discussed separately for each alternative.

Construction Noise -- Construction noise levels are regulated by the City of Seattle Noise Ordinance (Reference 2). These levels are documented in the Criteria section of this noise assessment. Noise levels that are consistent with the maximum allowable noise levels permitted by the Seattle Noise Ordinance can still produce a significant to serious impact at times at the closest residential property. The construction planned for the Sand Point property is not unusual, and is typical for construction projects. Typical construction levels will be slightly audible at the closest residential areas but will not be intrusive, most of the time. For brief periods, the noise levels may increase (when construction activity is closest to the residential property or particularly noisy construction activities occur), and the resulting impact may be intrusive, and produce a serious impact. The primary mitigation for construction activity is its temporary nature, and that high noise levels do not occur for the majority of the construction process.

On Site Traffic -- Noise levels for traffic traveling to and from the Sand Point property are assessed in Section 4.4 of this noise assessment. Once on-site, the traffic will disperse to its various destinations on-site. Overall noise levels from traffic produced on-site will therefore be less concentrated than the traffic noise produced by the vehicles traveling to and from the site on public streets. Expected noise levels and impacts are therefore less than predicted in Section 4.4. Corresponding impacts are expected to be slight at most.

Assessment of maximum noise levels produced by potential truck traffic on-site produces a similar result. Using a reference level of 90 dBA as given in the Seattle Noise Ordinance, expected sound levels at the closest residential property is 80 dBA. This level exceeds the maximum

permissible sound level (per Seattle Noise Ordinance) of 72 dBA, but is consistent with existing maximum sound levels. Although the exact number of trucks, if any, that may be added to the site as a result of either proposal is not known, high existing sound levels produced by traffic on Sand Point Way N.E. will allow a moderate increase in on-site truck traffic before the impact is even slight. A significant impact would require either a 400% increase in on-site truck traffic, or truck activities between midnight and 5:00 a.m.

Heating and Ventilating Equipment Associated With Buildings on the Project Site -- The occupied buildings for both of the alternatives will require heating and ventilating equipment to provide tempered air for the occupants. This equipment will either be placed in mechanical rooms within buildings or on rooftops of buildings. Both configurations of equipment, for the size buildings that would be associated with these alternatives, produce approximately 60 dBA at 50 feet from the equipment, if the equipment is unmitigated. At a distance of 200 feet, which is the distance of the closest residential properties to the buildings on-site, the expected sound levels are 48 dBA. This is just above acceptable nighttime levels for noise generated by commercial property and received by residential property, according to the Seattle Noise Ordinance. It is therefore likely that mitigation for mechanical equipment in buildings located within 400 feet of Sand Point Way N.E. may be necessary. The design engineers for each project should calculate expected noise levels from the equipment, and project these noise levels to the distance of the closest residential property. Mitigation measures should be designed specifically to mitigate noise to not exceed 42 dBA. (42 dBA is used instead of the allowable 47 dBA, to account for noise levels from several buildings combining to

create a violation of the Seattle Noise Ordinance, although each individual building would be in compliance.)

4.2 Noise Levels and Associated Impacts Produced by the On-Site Activities of the City Reuse Plan

Most of the proposed uses of the City Reuse Plan will generate little or no noise by the time it reaches residential receivers. Examples of these types of activities are the North Shore Recreation Area which, among other things, proposes a sailing center for small boats; the film studio in the education and community activities area; the senior center or community center within the same activities area; and, the recreation center within the Magnuson Park recreation expansion area. Activities associated with these types of uses will be unamplified voices outside, and louder activities located within buildings, mitigated by the exterior shells of the buildings.

There are some proposed activities, however, that have the potential to create impact. These activities are listed below, along with their projected noise levels, and resulting potential impacts.

Educational and Community Activities Area

- Children's Playground
  Uses designated as Community and Social Services within the City Reuse Plan, as well as the Montessori School campus may have playgrounds for children. Children's noises on the playground produce roughly 60 dBA at 50 feet (30 children), according to a previous measurement conducted by Michael R. Yantis Associates, for an unrelated project (Reference 4). Assuming a distance of 200 feet to the closest residences, the expected

noise levels are 48 dBA at the closest residential community. This level meets the Seattle Noise Ordinance for daytime activities, and is less than existing noise levels. Expected impact is therefore slight at most.

- Fire Engine Movement

  It is expected that the training center run by the Seattle Fire Department would involve some movements of fire engines and related equipment. Using a reference sound level of 90 dBA at 50 feet for engine noise, expected sound levels at residential properties 200 feet removed is 78 dBA. This is a maximum sound level and compares to existing maximum levels of roughly 75 to 80 dB produced by traffic on Sand Point Way N.E. The resulting noise impact would therefore be slight. It should be noted, however, that 78 dBA exceeds the maximum permissible level according to the Seattle Noise Ordinance, which even for the shortest duration noise levels will be 72 dBA, produced by commercial property and received by residential. This excess could potentially be mitigated by moving the fire training facility so that it is sufficiently far away from the residential property to stay within the maximum 72 dBA limit in any one hour (as long as the sound was not produced for more than 1-1/2 minutes in any one hour). It is also likely to be mitigated by the short duration and infrequent occurrence of the activity. Our analysis did not assume the presence of a siren. If a siren is present, impacts will be greater, and likely significant for the duration of the activity.

Magnuson Park Arts, Culture, and Community Center

- Outdoor Amphitheater

It is not clear what types of performances may exist in the amphitheater, but an assumption has been made that three levels of events are possible. At a reference distance of 125 feet from the stage, a rock concert would produce approximately 100 dBA; a small musical group would produce approximately 85 dBA; and, an amplified voice would produce 80 dBA. Using the site plans produced by the City, the closest residential property to the stage of the amphitheater would be approximately 500 feet. Resulting sound levels at the residential areas are 88 dBA, 73 dBA, and 68 dBA, for the three different types of events, respectively. Sound from the amphitheater will travel beyond the residential community adjacent to Sand Point Way N.E., and into the residential area further removed, which experiences quieter existing sound levels. At 1000 feet from the stage, the expected noise levels are 74 dBA for a rock concert, 59 dBA for a small musical group, and 54 dBA for voice amplification. Comparing the expected sound levels to existing daytime sound levels, the voice amplification would produce a slight impact at both distances (500 feet and 1000 feet from the stage -- measurement Location 3 was used to represent the quietest residential areas east and west of Sand Point Way N.E.). Small music groups would produce a significant impact at residential areas close to Sand Point, and a slight impact at residential areas further removed. Rock concerts would produce a serious impact at all residential areas. Nighttime activity in the amphitheater would produce a serious impact at residential areas close to Sand Point for all three activity types, and would produce a significant impact at residential areas further removed from Sand Point for voice amplification, and a serious impact for any sort of musical performance.

The most obvious mitigation for the amphitheater is to orient it so that it is facing away from the residential area to the west. This mitigation, however, has the potential to create an impact at residential property across the lake. Nighttime performances of small musical groups or rock concerts would likely cause a significant to serious impact at shoreline property on the east side of Lake Washington. Amplified voices could cause a significant impact, but would depend on climatic conditions. Typical voice amplification, without temperature inversions that would increase propagated noise levels, would likely cause a slight impact. Temperature inversions, which could occur during warm summer nights, could increase noise levels dramatically to cause a serious impact from any amphitheater activity. Rock concerts could still produce a serious impact at the residential communities to the west of the project site, even if the amphitheater was oriented to face east.

The City of Seattle Noise Ordinance would likely be exceeded by small musical groups and rock concerts at the closest residential area during the daytime hours, and would be exceeded by any amplified activity (voice, small musical groups, or rock concerts) during nighttime as defined in the ordinance (after 10:00 p.m.). Orientation of the amphitheater away from the residential community would likely still not meet the Seattle Noise Ordinance for musical groups or rock concerts and would be marginal for voice amplification.

- 1500 Seat Indoor Theater

  Impacts from an indoor theater would be less those expected for the amphitheater, but would depend on the construction of the exterior shell. If existing building (Building 30) is used for the shell, the

attenuation may be as little as 10 dB overall from interior to exterior due to the light construction. Considering this worst case scenario, impacts from rock concerts would still be serious at residential areas west of Sand Point Way N.E., but impacts due to small musical groups or voice amplification would be slight. Sound levels for other than rock concerts are likely to meet the Seattle Noise Ordinance without additional mitigation. If a new skin is to be constructed on the theater exterior, the skin can be constructed in such a way as to allow rock concerts to occur without producing significant impact on the residential community.

Magnuson Park Open Space/Recreation Expansion Area

- Baseball/Softball Fields

  Crowd noise from baseball and softball fields will likely not impact residential areas surrounding the property, but use of a public address system could produce some impact. Using a distance of 1,000 feet to the closest residences to Sand Point Way N.E., and 1,500 feet to the residential area west of the Burke Gilman Trail, expected sound levels are roughly 64 dBA next to Sand Point Way N.E., and 50 dBA beyond the Burke Gilman Trail. Corresponding impacts are slight for daytime activity, and slight for nighttime activity at residential areas west of the Burke Gilman Trail, but could be significant for residential property between Sand Point Way N.E. and the Burke Gilman Trail. This impact can likely be mitigated by orienting speakers away from the residential area.

4.3 Noise Levels and Associated Impacts Produced by the On-Site Activities of the Muckleshoot Reuse Plan

The uses planned for the Muckleshoot Reuse Plan were not as clearly defined as were those for the City Reuse Plan. As a result, potential noise impacts cannot be defined as accurately. Any activities or uses that correspond with uses in the City Reuse Plan will likely have similar impacts, depending on the location of the activities.

As with the City Reuse Plan, most activities associated with the Muckleshoot Reuse Plan will produce little or no impact. The activities identified within the Muckleshoot Plan that have a potential to cause impact are described below.

- *Parks and Recreation*
  As discussed in the City Reuse Plan, the major potential for impacts due to parks and recreation is the use of a public address system. If such a system is planned for use, it has a potential to cause impacts that would likely be slight to significant, depending on orientation of the PA system and its location. Any PA system should be located as far away from the residential property surrounding the project site as possible, and be oriented away from these same properties.

- Warehouses and Light Industrial Use
  Although this category has the potential impact of manufacturing processes impacting residential communities (hammering, dust collectors, etc.), the site map included in the Muckleshoot Reuse Plan document indicates that most of the buildings in this area will be storage and that only one building might have light industrial use. Other documents within the

plan indicate that several existing buildings have proposed uses of light industrial. Assuming all industrial use would meet the City of Seattle Noise Ordinance requirements, potential impacts to the residential community closest to Sand Point Way N.E. would be slight at most, and the potential impact at residential areas west of the Burke Gilman Trail would also be slight at most.

- Commercial Fishing

  It is difficult to assess the noise impacts on residential property close to the Lake Washington expected from commercial fishing by the Tribe. The primary reason for the difficulty is the variability of type of operation and numbers of fishermen that may be present. Although the Muckleshoot Reuse Plan states that 120 licensed fishermen can store their boats at Sand Point, conversations with Tribe personnel (Reference 5), indicated that it is more likely that 30 boats will be stored at Sand Point, and that 10 boats will be in use at any one time. To try to get a sense for the potential impact from a single fishing boat, a reference level of 74 dBA at 50 feet was used to predict expected noise levels. 74 dBA corresponds with the maximum allowable level for water craft allowed by the City of Seattle Noise Ordinance. It should be noted that fishing vessels are exempt from this ordinance, so the 74 dBA is not a regulated maximum level, but rather it has been used as a typical maximum for water craft that would normally use Lake Washington. If the fishing boat produces this noise level (which assumes either a high rate of speed or acceleration), and is traveling 200 feet from the shore, the resulting sound level on the shore would be approximately 64 dBA. Times of fishing activity, according to Tribe personnel, are likely to be between

9:00 a.m. and dusk. The 64 dBA produced by the fishing boat would be clearly audible at the shoreline residential property. If approximately one boat passed by every five minutes for the hour between 9:00 a.m. and 10:00 a.m., the combined noise levels produced by the boats would produce a significant impact on the property ($L_{eq(1hr)}$ of 58 dBA vs. existing daytime noise levels of 50 dBA L_{eq}). Traveling closer to shore, or more boats departing in a shorter overall time could produce a significant impact. These impacts may be mitigated by operation of the fishing boats in such a way as to produce less than the maximum sound level typical for these types of boats (slower speeds, greater distances from shore).

Taking into account all of these factors, it is likely that the impact from the fishing activity on the property bordering the lake would range from slight to significant, depending upon the manner of operation of the boats.

4.4 Summary of On-Site Impacts

Table 7 summarizes expected noise levels and impacts from each alternative, produced by on-site sources.

Table 7

Projected Noise Levels and Resulting Impacts

Noise Sources	*Maximum Allowable Noise Levels per City Ordinance (dBA)*	*Existing Noise Levels (1) (dBA)*	*City Plan* Projected Impacts Levels (dBA)		*Muckleshoot Plan* Projected Impacts Levels (dBA)	
Construction	L_{eq} 90	$L_{eq\ day}$ 62		Serious		Serious
On-Site Traffic (day)	$L_{max\ day}$ 72	$L_{max\ day}$ 80	80	Slight	80	Slight
On-Site Traffic (night)	$L_{max\ night}$ 62	$L_{max\ night}$ 77	80	Slight	80	Slight
Heating and Ventilating Equipment	L_{eq} 47	$L_{eq\ night}$ 58	48	Slight	48	Slight
Children's Playground	L_{eq} 57	$L_{eq\ day}$ 62	48	Slight		
Fire Engine Movements	$L_{2.5}$ 72	$L_{max\ day}$ 80	78	Slight		Slight
Outdoor Amphitheater (day)	$L_{eq\ day}$ 57	$L_{eq\ day}$ 62	88 (rock)	Serious		
			73 (small music group)	Significant		
			68 (amplified speech)	Slight		
Outdoor Amphitheater (night)	$L_{eq\ night}$ 47	$L_{eq\ night}$ 58	88 (rock)	Serious		
			73 (small music group)	Serious		
			68 (amplified speech)	Significant		
1500 Seat Theater (day) (assuming 10 dBA noise reduction due to existing exterior construction	$L_{eq\ day}$ 57	$L_{eq\ day}$ 62	78 (rock)	Serious		
			63 (small music group)	Slight		
			58 (amplified speech)	Slight		

Table 7, Continued
Projected Noise Levels and Resulting Impacts

1500 Seat Theater (night) (assuming 10 dBA noise reduction due to existing exterior construction	L_{eq} night 47	L_{eq} night 58	78 (rock)	Serious		
			63 (small music group)	Slight		
			58 (amplified speech)	Slight		
Baseball/Softball Fields						
Crowd Noise	L_{eq} 57			No Impact		No Impact
Public Address System	L_{eq} day 57	L_{eq} day 62	64	Slight	64	Slight
	L_{eq} night 47	L_{eq} night 58	64	Significant	64	Significan
Warehouses and Light Industry	L_{eq} 57					Slight
Commercial Fishing		L_{eq} 50			58	Slight to significan

Notes:

1. Existing levels are measured, as reported earlier, and correspond to locations pertinent to represent the potential impact from each source. L_{eq} day = L_{eq}(13 hrs) from 7:00 a.m. to 8:00 p.m. L_{eq} night = L_{eq}(5 hrs) from 8:00 p.m. to 1:00 a.m. L_{max} day is an arithmetic average of L_{max} for each hour between 7:00 a.m. and 8:00 p.m. L_{max} night is an arithmetic average of L_{max} for each hour between 8:00 p.m. and 1:00 a.m.

4.5 Prediction of Traffic Noise Increase on Sand Point Way N.E. due to City and Muckleshoot Reuse Plans

An increase in general traffic along Sand Point Way N.E. will occur as a result of the operation of either the City or Muckleshoot Reuse Plans. Predictions of the expected

traffic noise for the proposed two alternatives were made based on the information submitted by the URS Consultants, Inc. A noise prediction accounts for noise created by all the traffic on all streets in the vicinity of the prediction location, but is usually dominated by the traffic on the closest street. Predictions were made using Federal Highway Administration STAMINA 2.0 noise simulation package (Reference 1). To calibrate the prediction model, existing noise levels were predicted and compared to measured levels. Predictions, based on existing traffic levels, were within 2 dBA of measured noise levels, which suggests excellent agreement between predicted and measured noise levels. Predictions were made for existing weekday conditions (evening peak hour traffic volumes) and for estimated year 2000 for the same conditions (weekday evening peak hour) for each of the two alternatives. Prediction locations were chosen to represent the typical home set-back distance from the right-of-way of Sand Point Way N.E.

The predictions of existing and future noise levels were made based on assumptions regarding the definitions of medium and heavy trucks, and the percentage of each type of vehicle in the total traffic volume. Medium trucks were assumed to have two axles and six wheels; heavy trucks were assumed to have three or more axles.

Based on information provided by the URS Consultants, Inc. and the City of Seattle Traffic Department (Reference 6), the following assumptions (Table 8) were taken into account regarding the percentage of heavy and medium trucks in the total traffic volume on Sand Point Way N.E. during evening peak hour for existing traffic and for both reuse plans. The increase in percentage of heavy and medium trucks for the Muckleshoot Reuse Plan reflects consideration of the potential industrial and commercial use of the project site.

TABLE 8

Percentage of Heavy and Medium Trucks in Traffic Volume

Road Section	Existing Traffic	City Plan	Muckleshoot Plan
Sand Point WY north of NOAA entrance			
Heavy Trucks	1%	1%	1.5%
Medium Trucks	5%	5%	7%
Sand Point WY north of base entrance			
Heavy Trucks	2%	2%	3%
Medium Trucks	7%	7%	10%
Sand Point WY intersection w/65th St.			
Heavy Trucks	2%	2%	3%
Medium Trucks	2%	7%	10%

Predicted levels for existing traffic and for each alternative are summarized in Table 9.

TABLE 9

Predicted Noise Levels from Traffic, L_{eq}, dBA

Road Section	Existing Traffic	City Plan	Muckleshoot Plan
Sand Point WY north of NOAA entrance	63	65	67
Sand Point WY north of base entrance	67	70	72
Sand Point WY, intersection w/65th St.	68	68	71

At most locations impact due to traffic increase is expected to be slight. The largest increase due to traffic is expected for Muckleshoot Reuse Plan on the section of Sand Point south of the base entrance. The impact would be characterized as significant by EPA Region X Guidelines (EPA, 1980). It should be noted that actual truck increases projected for the Muckleshoot Reuse Plan are not known. The projected impacts are valid if a significant increase in existing truck traffic occurs as a result of the Muckleshoot Reuse Plan.

5.0 MITIGATION MEASURES

5.1 Mitigation Measures: Both Alternatives

1. Prohibit movement of heavy trucks (with large diesel engines) on the Sand Point site between 12:00 a.m. (midnight) and 5:00 a.m.

2. Mechanical equipment used for heating and ventilating buildings on-site should have an acoustical analysis performed (for new equipment) that verifies compliance with the Seattle Noise Ordinance. Since multiple buildings are possible, the noise level from any one building mechanical system should not exceed 42 dBA at the closest residential property.

5.2 Mitigation Measures: City Reuse Plan

1. Noise levels produced by the amphitheater should not exceed 85 dBA (L_{01}) at the furthest seating locations in the amphitheater itself.

2. Orient the amphitheater to face east, rather than west.

3. Sound levels immediately outside the exterior shell of the theater should not exceed 80 dBA (L_{01}).

4. If public address speakers are used in association with athletic fields, orient them facing east.

5.3 Mitigation Measures: Muckleshoot Reuse Plan

1. If public address speakers are used in association with athletic fields, orient them facing east.

2. Fishing boats departing from or arriving at the Sand Point property should use speeds of not more than 5 miles per hour within distances of 400 feet from the shore, unless they can demonstrate that faster speeds do not produce more than 50 dBA at the closest shoreline property. (The 50 dBA allows for the operation of multiple fishing boats at the same time, with their total noise not exceeding a slight impact at the shoreline properties.)

APPENDIX: APPLICABLE CRITERIA

1.0 City of Seattle Noise Control Ordinance

The City of Seattle noise ordinance establishes in Subchapter III, section 25.08.410 the maximum permissible levels at the property line between the noise source property and receiving property. These maximum noise levels are summarized in the table below:

Maximum Noise Levels per the City of Seattle Noise Ordinance

District of Sound Source	District of Receiving Property Within the City of Seattle		
	Residential	Commercial	Industrial
Rural	52 dBA	55	57
Residential	55 dBA	57	60
Commercial	57 dBA	60	65
Industrial	60 dBA	65	70

Subchapter III, Section 25.08.420 establishes the following modifications to maximum permissible sound levels:

1. Reduce the noise limitations by 10 dBA between the hours of 10:00 p.m. and 7:00 a.m. during weekdays, and between the hours of 10:00 p.m. and 9:00 a.m. on weekends where the receiving property lies within a residential district of the City.

2. Reduce by 5 dBA for any source of sound which is periodic, which has a pure tone component, or which is impulsive and is not measured with an impulse sound level meter for any receiving property at any time.

3. Increase for short duration for any receiving property any time:

   (a) Increase by 5 dBA for 15 minutes in any one-hour period; or

   (b) Increase by 10 dBA for 5 minutes in any one-hour period; or

   (c) Increase by 15 dBA for 1.5 minutes in any one-hour period.

Subchapter III, Section 25.08.425 establishes permissible levels for construction and equipment operation:

A. The maximum permissible levels established by Sections 25.08.410 and 25.08.420 may be exceeded between the hours of 7:00 a.m. and 10: p.m. on weekdays and between the hours of 9:00 a.m. and 10:00 p.m. on weekends by no more than the following dBA's for the following types of equipment:

(a) 25 dBA for equipment on construction sites.

(b) 20 dBA for portable powered equipment used in temporary locations in support of construction activities or used in the maintenance of public facilities.

(c) 15 dBA for powered equipment used in temporary or periodic maintenance or repair of the grounds and appurtenances of residential property.

B. Sound created by impact types of construction equipment may exceed the maximum permissible sound levels established in subsection (A) of section 25.08.425 in any one hour period of 8:00 a.m. and 5:00 p.m. on weekdays and 9:00 a.m. and 5:00 p.m. on weekends, but in no event to exceed the following:

1. L_{eq} 90 dBA continuously;

2. L_{eq} 93 dBA for thirty minutes;

3. L_{eq} 96 dBA for fifteen minutes;

4. L_{eq} 99 dBA for seven and one-half minutes.

C. Construction activity that exceeds the maximum permissible sound levels established by Section 25.08.410 of the City of Seattle noise control ordinance, when measured from the interior of buildings within the commercial district, is prohibited between the hours of 8:00 a.m. and 5:00 p.m.

Subchapter IV, Section 25.08.430 establishes limits for sounds created by operation of motor vehicles on public roads for the category of vehicle, as measured at a distance of 50 feet from the center of the lane of travel within the speed limits specified:

Vehicle Category	35 mph or less (dBA)	Over 35 mph (dBA)
Motor vehicles over 10,000 pounds	86	90
Motorcycles	80	84
All other motor vehicles	76	80

Subchapter IV, Section 25.08.485 establishes limits for sounds created by water craft when measured within 50 feet of the shoreline or anywhere within a receiving property. These maximum noise levels are summarized below:

1. 74 dBA for any receiving property at any hour of the day or night, except the hours between 10:00 p.m. and 7:00 a.m.

2. 64 dBA for any receiving property within a residential or rural district for the hours between 10:00 p.m. and 7:00 a.m.

The following exemption shall apply to sounds created by water craft or water craft operation:

1. Normal docking, undocking, and water-skier pick-up and drop-off operations.

2. Sounds created by the operation of commercial, non-recreational water craft. The commercial activities include, but are not limited to, fishing boats.

3. Sounds created by boat races and regattas and trials.

2.0 EPA Region Ten Guidelines

EPA Region X Guidelines classify impacts for noise increases over present ambient noise levels. These classifications can be used to assess the impact from noise level increases due to the project. The classifications are as follows:

0 - 5 dBA	Slight Impact
5 - 10 dBA	Significant Impact
over 10 dBA	Serious Impact

For slight impacts, mitigation is not typically required. Mitigation is frequently recommended for significant impacts, and required for serious impacts.

REFERENCES

1. FHWA Highway Traffic Noise Prediction Model. 1979. User's Manual. SNAP 1.0 FHWA-RD-78-139.
2. City of Seattle Noise Control Ordinance.
3. United States Environmental Protection Agency (U.S. EPA). 1972. *EPA Region Ten Guidelines.*
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Appendix K

1994 AND 1996 CRIME STUDIES

CRIME IMPACT AND TECHNICAL REPORT
APRIL 1994

CRIME IMPACT TECHNICAL REPORT

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CRIME IMPACT TECHNICAL REPORT
EXECUTIVE SUMMARY

Scope of Work

The scope of work on this contract included discussing crime-related impacts of alternative uses for the Naval Station Puget Sound at Sand Point. This report includes: a literature review, an update of crime statistics in the Sand Point Background Report, a projection of locating either public housing of 250 units or a vocational college serving 5,000-7,000 students, and an identification of measures to mitigate crime-related impacts of alternative uses.

Methodology

The consultants adopted a "components of change" model to base projections of serious crime, given the significant change of land use being anticipated with the base closure. This approach requires an analysis of crime rates by factors (components) that influence crime, e.g., type of land use and population composition. The following steps were used to develop projections:

- Review research literature on environmental factors influencing crime;
- Analyze historic crime and population data for the Sand Point and adjacent census tracts to determine baseline trends;
- Analyze crime and population data in other census tracts in Seattle which include public housing and college/vocational facilities;
- Compile expert opinion from public housing and higher education officials;
- Develop crime projection assumptions based on the information above; and
- Associate assumptions with numeric crime volumes to arrive at estimated crime levels for the Sand Point area, with a high and low range provided to indicate the degree to which mitigating factors are implemented.

Findings and Conclusions

- An analysis of crime trends city-wide and in the census tracts adjacent to the Naval Station reveal that serious crime (referred to as Part I offenses, which include murder, rape, robbery, assault, burglary of a home or business, vehicle theft, theft, and arson) has remained fairly constant over the past ten years. During the past ten years, decreases have been evidenced for property crimes, with violent offenses (which constitute a much smaller proportion of total crime) showing greater variation. In the census tracts adjacent to Sand Point, the number of reported offenses is comparatively very low and stable.

- The analysis of comparable housing projects and educational facilities in other census tracts in Seattle suggests that there is no empirical basis to believe that serious crime will significantly increase in the census tracts adjacent to Sand Point due to public housing or educational uses alone. The neighborhoods surrounding Sand Point exhibit characteristics resistant to high crime levels, which should not be jeopardized by well managed educational or housing programs.

- Mitigation factors can have a positive influence in reducing the likelihood of crime. Among the mitigation factors identified are: providing appropriate levels of law enforcement services on site (particularly, community policing), availability of appropriate social and health services, sound management, and, of considerable significance, applying "Crime Prevention Through Environmental Design" techniques in land use plans for the site.

BACKGROUND

As a result of the base closure and realignment initiatives, Naval Station Puget Sound, Sand Point, is designated for closure and the Navy's assets are to be excessed. The proposed reuse of this land and facilities must be analyzed under the National Environmental Policy Act (NEPA) for environmental impacts.

The preliminary portion of the Environmental Impact Statement (EIS) involved preparing a draft background study which described existing conditions on the base and in the vicinity. This study, prepared by URS Consultants, Inc., has been completed. On December 16, 1993, the Navy held a public scoping meeting to obtain comments on the scope of the EIS. Written comments were due to the Navy by January 14, 1994. The next phase is evaluation of environmental impacts and determination of appropriate mitigation measures. The draft background study is to be used as the basis for the "existing conditions" sections of the EIS.

The alternatives to be addressed in the EIS are:

1) City of Seattle Community Reuse Plan

The City's plan calls for a multipurpose regional center with expanded recreational, educational, and cultural facilities, and affordable housing. The plan includes expansion of Magnuson Park with restoration of an original wetlands area called Mud Lake; a new indoor tennis center; a public park with a sailing center and access to Pontiac Bay on Lake Washington; and education and community activities area; an arts center with performing, studio and classroom spaces; up to 250 unites of housing including housing for homeless persons and families in transition; allowance for future expansion of University of Washington student housing; and use of existing facilities by two federal agencies (NOAA and U.S. Fish and Wildlife Service).

2) Muckleshoot Indian Tribe Reuse Plan

The Muckleshoot's plan calls for a Native American vocational college (5,000-7,000 students); marina with general public recreational access; fisheries enhancement facility; restaurant; light industry spaces; and use of existing facilities by two federal agencies (NOAA and U.S. Fish and Wildlife Service).

3) No action

The no action alternative would leave the base in Navy ownership, in caretaker status.

SCOPE OF WORK

During the scoping process and other public meetings, a number of issues were raised that URS Consultants decided would require the assistance of subconsultants. One of these issues is the impact of the alternative uses on crime in the Sand Point area. Some citizens expressed fear that proposed uses, including housing for homeless persons, at Sand Point would lead to a general increase in crime in that area and surrounding neighborhoods. It was decided that the EIS should discuss the crime-related impacts in the neighborhoods around Sand Point of each alternative, including the establishing of up to 250 units of housing for the homeless.

URS Consulting, Inc., contracted with Larry M. Fehr, M.P.A., who has collaborated with Claus D. Tjaden, Ph.D., to prepare a "Crime Impact Technical Report."

It is anticipated that this technical report will serve as an appendix to the EIS. URS staff will summarize the findings and conclusions of this report within a section of the EIS.

Consistent with the work plan previously identified, this report includes:

- a literature review on environmental factors influencing the level of crime, with special attention to public housing and higher education issues;
- an update of crime statistics contained in the Sand Point Background Report to include crimes in the neighborhoods surrounding Sand Point (including Magnuson Park);
- an analysis of crime-related issues associated with the placement of either public housing of 250 units or a vocational college serving 5,000 - 7,000 students;
- a projection of crime rates following full implementation of each of these alternatives; and
- an identification of certain measures to mitigate the crime-related impacts of the alternative reuses.

DESCRIPTION AND COMPARISON OF ALTERNATIVES

METHODOLOGY: DETERMINING CRIME IMPACT

The task of determining future human behavior is far from being purely technical activity. Since human beings exercise free will, their individual decisions remain largely unpredictable. Yet, while we cannot predict what any one individual will do, we make probability statements regarding the actions of a group of people in a given situation. To do so requires that we make a series of assumptions regarding the topic of interest.

For example, projecting population levels require the demographer to make assumptions regarding birth rates, mortality rates and migration rates. The skill needed in making appropriate assumptions guarantees that the development of projections will continue to be more an art than a science. However, technical methodology also is applied to the projection task.

A wide variety of technical methods are available to criminal justice planners in determining future levels of crime in a given area. Among the more common methods are the calculation of moving averages, exponential smoothing or regression analysis. What these methods all share is the use of historical data to determine patterns and trends, and projecting these into the future. These methods all require, to varying degrees, the assumption of a status quo. That is, they require us to assume that the conditions resulting in the historical patterns or trends will not change in the future. Such assumptions are not appropriate in this situation.

Projection methods developed to assess proposed policy changes have fewer assumptions regarding continuity. A components of change model is more applicable in the current situation, where we want to project crime rates given varying land use plans. This approach requires that we break down crime rates by factors (components) that influence the level of crime (e.g., type of land use or population composition). Based on assumptions made regarding the proposed land use plans, the selected factors are combined to develop projections.

Although the development of projections relies on using various technical methods, a good understanding of the environmental

aspects of crime is essential to the development of accurate projections. To bring this knowledge to bear on the technical elements of the projection task, the following steps were used in developing the projections:

1. Review recent literature on environmental factors influencing levels of crime.

2. Analyze crime and population data historically for the Sand Point and adjacent census tracts to determine baseline trends.

3. Analyze crime and population data in census tracts which include:
   a. housing projects
   b. college and vocational institutions

4. Compile historical and issue related information from housing officials and college officials.

5. Develop projection assumptions based on the above.

6. Associate assumptions with numeric crime volume values to arrive at probable crime rates for the Sand Point area. Begin with a base rate for the number of crimes and adjust up or down depending on the assumptions made.

CRIME AND ENVIRONMENT

Most studies of crime focus on psycho-social aspects of the offender and victim. However, a sizable number of studies examine environmental factors which are associated with high crime rates (environmental criminology). Of those studies examining the social environment, many find an association between crime and poverty. Examining data from both police offense reports and victimization surveys, studies find that in most instances, serious violent crimes (homicide, rape, robbery, and aggravated assault) occur with greater frequency in areas where income levels are low (Harris, 1976; Miadenka and Hill, 1976; Decker, 1980: Sampson and Castellano, 1982; Williams, 1984; Loftin and Parker, 1985: Messner and Tardiff, 1986; Sampson, 1986; Patterson, 1991; Hale, 1992; Neopolitan, 1992). Studies of property crimes (burglary and theft) consistently demonstrate an association between crime rates and levels of

poverty (Miadenka and Hill, 1976; Crutchfield et al, 1982; Sampson, 1986).

Crime is a behavior engaged in primarily by young people. Thus, it is understandable that studies find that as the proportion of young people living in a giving area increases, crime rates increase (Booth et al, 1977; Osborn et al, 1992; Title and Ward; 1993). This is especially true of property crimes (Joubert and Forsyth, 1989).

Because crime rates are generally high in urban areas, studies have examined the influence of density on crime rates. Some studies have found structural density associated with criminal victimization (Sampson, 1983) and population density associated with crime level (Osborn et al., 1992).

Social integration also is a significant ecological construct in understanding levels of crime. Family disorganization as measured by family structure is found to be a contributor to higher crime rates. One study found that higher structural density, increased residential mobility and a greater number of female-headed families are associated with higher levels of crime (Sampson, 1985). When studies simultaneously consider factors of income, age, and family disorganization, they find that ethnicity is not generally a significant predictor of crime, based on victimization survey rates (Sampson, 1985), robbery and homicide offense rates (Chamlin, 1989), or arrests for property crimes (Hale, 1992).

Attempts in placing findings, such as those above, in a logical framework fostered the development of opportunity models.[1] Acknowledging the importance of demographic characteristics of offenders and high crime areas, such models attempt to explain further variations in crime rates due to neighborhood characteristics. When tested on burglary and household larceny, one study found that indications of neighborhood disorganization (trash and litter) were associated with greater levels of crime. Indicators of cohesion (neighbors watching houses) lessened the rates of burglary. The

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[1] Such models assume that criminal events occur in relation to the: (a) availability of a suitable crime target, (b) absence of a capable guardian, (c) attractiveness of the target, and (d) physical distance between potential targets and offenders (Cohen et al., 1981).

presence of commercial establishments was associated with larceny, but was found to impact burglary rates only in neighborhoods considered dangerous. The predominant type of housing unit also did not have an effect on crime (Lynch and Cantor, 1992).

Fewer studies directly address issues of land use and their impact on crime rates. Among those addressing factors relevant to the proposed uses of Sand Point, is one which investigates the effects of temporary strangers on crime rates in an area. The study assesses the intrusion of tourists, college students and shoppers into an area. Overall results show that a greater number of strangers may increase burglary, larceny and robbery arrests, but has little impact on assault, murder and rape. More specifically, however, the results indicate that the presence of a college may increase the number of assaults between and among students. The number of retail establishments does not appear to influence the rate of any crime type (Jarrell and Howsen, 1990). The impact of higher education on levels of crime in the community in which the campus is located has not been investigated directly (but see the section on "Issues of Higher Education and Crime" below for key informant perspectives).

Other physical characteristics of urban neighborhoods also have been examined to assess their impact on crime. Comparing adjacent high and low crime neighborhoods, one study finds that neighborhoods with lower crime appear to be able to inhibit the flow of outsiders into and out of their neighborhoods. Traffic is inhibited because land use is more homogeneously residential, there are fewer major arteries, and boundary streets are less traveled (Greenberg et al., 1982).

HOUSING ISSUES RELATED TO CRIME

The issue of crime and public housing has had a long history in the United States, and continues to be a matter of concern. On February 4, 1994, Vice President Albert Gore announced "Operation Safe Home," an interagency, administration-wide approach designed to make housing more safe in this country (Gore 1994).

The perception that crime is a leading social problem associated with public housing predates today's concern over drugs. Much of the literature analyzing public housing crime assumes that it is excessive (Huth 1981, Keyes 1992, Perglut 1981, Rouse and Rubenstein 1978,

and Weisel 1990); however, in only a few cases were measurements actually undertaken to substantiate this view (Keyes, 1992, Farley 1982), and attention is solely focused on very large housing projects.

During the 1970's, the relationship between crime and the physical layout of public housing complexes was emphasized (Newman 1972, Brill 1973). Newman's concept of "defensible space," suggests that specific physical features of housing complexes can enhance residents' security by permitting them to conduct informal surveillance during the course of their everyday activities and easily identify strangers who do not belong. While the concept of "defensible space" has been widely accepted (Dunworth and Saiger 1994), many public housing developments incorporate relatively few "defensible" features (Annan and Skogan 1992).

Scholars have also associated social, as well as architectural, features of public housing with crime. Poverty, unemployment, the growth of single-parent families, and weak informal social controls have all been cited as factors that make criminal activity more likely in public housing than in other areas (Huth 1981, Annan and Skogan 1992).

It is often suggested that the emergence in the mid-1980's of drugs and drug markets, particularly for crack cocaine, greatly increased public housing's crime problems (Senate Committee on Banking, Housing, and Urban Affairs 1989). Many researchers and public housing officials have found that drug markets attract non-resident buyers and sellers (Frady 1990, Webster and Connors 1992).

In an environment of increasing concern about drug problems, in 1988 Congress authorized the Public Housing Drug Elimination Program (PHDEP), which awards drug control grants to housing authorities (P.L. 100-690). The scholarly evaluation of these efforts are still in their infancy, however, two recent case studies are of interest. An evaluation sponsored by the National Institute of Justice reviews promising security and eviction programs undertaken in Alexandria, Virginia; Chicago, Illinois; Baltimore City, Maryland; and Orlando, Florida (Webster and Connors, 1992). The report emphasizes the importance of cooperation between housing authorities, city police, and public officials in its description of the implementation of these programs. In an ambitious second report, published by the Urban Institute, Langley Keyes uses case studies in seven different communities to develop an "ideal strategy" for public

housing crime control (Keyes 1992). He emphasizes the need for a coordinated drug control strategy that includes police, treatment, and social service initiatives.

In the City of Seattle, housing for low income individuals falls into several categories. The Seattle Housing Authority manages certain housing units which it classifies as units for elderly persons and persons with disabilities. Families are housed primarily in four large sites with a total of 1254 residents in 472 units and four small sites with a total of 610 residents in 134 units. The large sites, garden communities, were constructed in the early 1940's. The smaller sites are townhouses constructed in the late 1960's and early 1970's. More recent expansion of housing has been through scattered sites and certificates or vouchers (Seattle Housing Authority Annual Report 1992 and SHA statistics).

Private organizations also provide housing for homeless persons. These units vary in purpose ranging from shelters to transitional housing for homeless individuals or families. The size of these programs vary from 200+ bed shelter facilities to shelter and transitional programs serving fewer than ten people (Seattle-King County Coalition for the Homeless 1993).

The "Seattle Proposed Reuse Plan" specifies the use of existing buildings for up to 250 units of housing for homeless and low income persons and families. University of Washington student family housing is possible in the future. The Muckleshoot Proposed Reuse Plan leaves open the option of using existing buildings for 200 housing units for the homeless. The Muckleshoot Reuse Plan seeks to use other buildings for college dormitories and the brig as a temporary lock-up facility. The Seattle Reuse Plan states that the city will work cooperatively with the Coalition's proposal (At Home at Sand Point, 1993). That plan calls for a total population of 553 people, including 492 family members, 37 single adults and 24 youths. Since the Muckleshoot plan does not detail housing options for the homeless, eventual use under their plan could be similar to or different from that proposed by the Coalition.

There are no current housing sites in Seattle for families of a size or function comparable to the Sand Point proposals. Sites owned by the Seattle Housing Authority are either the larger garden communities (481 to 873 units) or the smaller townhouses (15 to 59 units). Seattle Housing Authority facilities with 100 to 300 units serve only

elderly persons or persons with disabilities. Large facilities operated by private agencies for homeless people are emergency shelter programs housing up to 230 adults. Transitional facilities range from about 65 to smaller units serving fewer than ten people. Thus, there are no programs in the city which serve the same function and are the same size as proposed in the reuse plan.

ISSUES OF HIGHER EDUCATION AND CRIME

Very little, if any, research exists concerning the impact to crime in a community due to an institution of higher education locating in that area. Previous research has tended to focus on crime, fear of crime, security, and prevention issues on college campuses (Fisher, 1992). The underestimation of certain crimes on campuses, such as sexual assault, has been noted (Bohmer and Parrot 1993). Physical features of campuses that contribute to students' fear of crime have been identified (Fisher and Nasar 1992). Others have analyzed the U.S. federal "Crime Awareness and Campus Security Act of 1990," which attempts to: (1) encourage the development of security policies and procedures on all campuses; (2) provide uniformity and consistency in reporting of crimes on campus; and (3) foster the creation of policies and procedures to prevent sexual assaults and racial violence on college campuses (Seng and Koehler, 1993). Scant attention has been paid to the crime impact of locating a new educational facility.

In interviews conducted with local representatives of higher education and law enforcement, crime-related concerns tended to focus on how crime in various communities impact institutions of higher education, rather than the reverse.

Michael G. Shanahan, Chief of Police of the University of Washington Police Department, reported that persons associated with the university are more generally seen as victims of crime than they are seen as suspects. Census tract #5302, which largely consists of the University of Washington, has one of the lowest crime rates in the city (212.08 per year), and interestingly enough, since 1990 there has been a 38% *decrease* in the total number of arrests by the University of Washington Police Department (University of Washington Police Department 1994).

The University of Washington's main campus is 694 acres and has 128 major structures. The total 1993 academic year population was

51,067, with 4,067 faculty, 13,000 staff, and 34,000 students. This university is generally a commuter campus with only 15% of the student population living on-campus (University of Washington Police Department 1994).

One specific program that the University of Washington Police Department believes to be a success in preventing crime is the "Blue Blazer Patrol," which assigns police officers to residence halls, clothed in blue sport coats rather than uniforms. The program was cited for outstanding achievement by the International Association of Chiefs of Police, and received recognition from former President Nixon (Shanahan 1973).

Chief Shanahan also noted that a college's impact on crime is likely to reflect the type of community in which the facility is located. For example, he noted that in Pullman, Washington, the Washington State University Police Department report that 85% of their criminal activity involves university students as suspects, whereas, at the University of Washington, the opposite is true, 85% of suspects on campus are not affiliated with the university (Shanahan 1994).

Census tract 86, which includes Seattle University, had a significantly higher rate of Part 1 crimes[1] reported in 1993 (2010), than census tract 5302, which includes the University of Washington (212). Undoubtedly, the difference, at least in part, reflects variation in crime rates in the communities in which the two universities are located. Seattle University's metropolitan campus is located at Broadway and Madison, and accommodates approximately 6,000 students, faculty, and staff. It is interesting to note that total Part 1 crimes reported taking place on the campus of Seattle University account for less than one-third of the Part 1 crimes for this census tract. In addition, during 1992, there were no murders, rapes, robberies, or 1st Degree assaults reported on campus, and major property crimes decreased compared to 1991 (Seattle University Safety and Security Services 1992 Annual Report).

Michael Sletten, Manager of Safety and Security Services at Seattle University, believes that the crime impact of siting a higher education facility on surrounding neighborhoods is minimal (Sletten

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[1]These are the most serious crimes reported to the F.B.I. through the Uniform Crime Reports, including: homicide, rape, robbery, aggravated assault, arson, theft of a vehicle, burglary of a home or business, and theft.

1994). Further, he reported that criminal activity on the campus itself can be mitigated through facility planning, crime risk management approaches and professional security. His force includes 13 uniformed officers, two administrative positions, and 12-18 part-time staff. Similar to the University of Washington's program, the part-time staff are deployed directly inside the residence halls.

James St. Germain, Vice-President of Administrative Services at Seattle Central Community College, reported similar observations, namely, those associated with the college are primarily seen as victims of crime, the suspects come from the community onto the campus (St. Germain 1994). This view was also confirmed by LeRoy Drake, President of Seattle Vocational Institute, located at 22nd and Jackson, who reported no grafitti and very little problem with crime at his institution, which he attributes to close working relationships between the community, the police and the vocational institute (Drake 1994).

Finally, recognizing the importance of security services on college campuses was the theme of an interview conducted with Robert L. Brown, Security Director for the Seattle Community College District. He noted that community colleges have recently realized how important professional security is for their campuses. He highly recommends that any institution of higher education being planned conduct a complete assessment for security needs at that facility (Brown 1994). Michael Sletten, at Seattle University, also suggested that any new campus security force being formed should consider joining the Western Campus Law Enforcement Association, which is composed of security departments from college campuses across the Pacific Northwest (Sletten 1994).

As a centerpiece of their *Proposed Reuse Plan for the Naval Station Puget Sound, Sand Point,* the Muckleshoot Indian Tribe proposes to develop a technical institute to provide post-secondary educational opportunities, including both vocational programming and college level credit programs. Their proposed reuse plan focuses on creating a college campus for 5,000 to 7,000 students. Their plan suggests that: "The Muckleshoot Indian Tribe believes that it has an obligation to provide culturally sensitive higher education and training to its membership and other Native people in the surrounding area" (p. 9).

According to the Muckleshoot proposed reuse plan, "the institute will operate under the auspices of the sovereign tribal government" (p. 10). As such, it is presumed that the tribal government will have the primary responsibility for providing law enforcement and security services to the campus.

Although the plan does not detail the level of law enforcement services to be provided, it does propose that Building #138 (12,806 square feet) and Building #41 (2,030 square feet), which are currently used for security purposes, would continue to be used for that function. The existing "Brig," Building #406 (29,270 square feet), would be used an an interim jail facility for Native Americans. It is also suggested that the jail would operate in conjunction with the Counseling Program associated with the College Campus and the proposed Alcohol and Drug Program (15). Finally, the plan notes that "if the entire facility is not utilized, it could be leased out to other entities to generate revenue for operation and maintenance" (16).

ENVIRONMENTAL CONSEQUENCES

CRIME TREND ANALYSIS

A review of crime levels in past years is one element in determining future levels of crime. To identify recent trends, this report presents crime data from the Seattle Police Department for the past ten years, from 1984 through 1993. Data presented in Table 1a provide information on reported offenses for the city as a whole. Table 1b presents the same data for the census tract encompassing Sand Point (#23). The four census tracts adjacent to the naval base (#22, #40, #41, and #42) are identified in Map 1 and have crime trend data displayed in Tables 1c, 1d, 1e, and 1f. Map 1, which was generated by the Seattle Police Department, presents 1992 Part I offense data for each census tract in the city and specifically identifies the tracts that report the highest and lowest number of offenses per year.

Reviewing reported offenses city wide, Table 1a shows that during the past 10 years, Part I offenses increased through 1987, and decreased through 1990. The years 1991 and 1992 again reported slight increases.

Property crimes demonstrate trends that are generally similar to the total of all Part I offenses. Theft and burglary, which comprise 77 percent of the Part I offenses for 1993, peaked in 1987 and have

since shown a downward trend. The number of burglaries in 1993 were almost one half of the number reported in 1987. The trend for auto theft is an exception to the property crime trend. Barring 1993, the number of vehicle thefts has increased each year since 1984.

Trends for person crimes are not as evident. The lowest number of homicides reported (38 and 43) were in the years 1989 and 1991 respectively. The highest number of homicides in this ten year period was in 1993, in which 65 were reported. The previous high in this period was 61 in 1985. Rape offenses demonstrate a downward trend since 1987. The highest number of robberies reported was in 1987. The numbers since then have been lower but fluctuate from year to year. The number of aggravated assaults reached a high in 1990, but have been generally lower since. The number of arson offenses indicate no pattern. They range from 269 in 1990 to 432 in 1987.

Census tract 23 includes the Naval Station and Magnuson Park. Because the naval station is a federal facility, crimes occurring there are not reported to the Seattle Police Department. Thus, the offenses presented in Table 1b are only those occurring in the park or on property under Seattle Police Department jurisdiction. As a result, the number of offenses shown is very low. A total of 67 Part I offenses were reported in 1993. The majority of these were for crime of theft. The number of offenses reported has doubled since 1987. Again, this is due to a doubling of the number of thefts in the census tract. Very few person offenses are recorded.

Tables 1c through 1f presents information on the census tracts adjacent to the naval station. Census tract 22 lies across Sand Point Way northwest of tract 23. The total Part I number of offenses has remained fairly consistent over the past ten years. The Table 1c shows a decline in the number of residential burglaries reported and a corresponding increase in the number of thefts.

Census tract 40 lies directly west of tract 23. As indicated in Table 1d, the total number of reported offenses appears to have decreased over the past ten years. This is primarily because the number of residential burglaries has dropped significantly.

Census tract 42 touches the southwest tip of tract 23. Table 1e shows that the total number of offenses is higher than in the previous two tracts and appears to be increasing. An increasing

number of thefts appear to be responsible for the increase in the total.

Census tract 41 adjoins the southern boundary of tract 23. Table 1f indicates that the total number of Part I offenses has remained fairly stable. The number of residential burglaries has decreased substantially. The number of thefts appears to have increased slightly.

To assess the impact of locating temporary transitional housing in the census tract, this study identified two programs which have some similarity in scope and size to the program proposed for Sand Point and were established within the past ten-year period. Trends in the census tracts with programs for temporary transitional housing are presented in Tables 1g and 1h. The program in tract 67 began approximately three years ago (1991), according to staff at the Aloha Inn. The program in tract 105 opened in November 1988, according to staff with the housing coalition. Tables 1g indicates a significant reduction in reported offenses in 1990 for tract 67. Subsequent years show that the number of offenses rose, but remained slightly lower than in 1988 and 1989. Table 1h for tract 105 also shows 1990 to be a year of fewer reported offenses. In the past three years, the number of crimes reported has declined each year. As in other areas of the city, burglaries have also decreased in recent years. Thus, these data provide no indication that transitional housing will have an adverse impact on crime rates.

A similar analysis of census tracts with college level educational programs was not performed since no comparable college program has begun in Seattle in the past ten years.

In summary, trend data for the past ten years show that the number of serious (Part I) offenses reported to the Seattle Police Department were at their highest point between 1986 and 1988. The vast majority of reported offenses were property crimes. Burglaries and thefts display a general downward trend during this ten year period, while auto thefts increased during the same period (see Graph 1). Violent offenses comprise a much lower number of reported offenses (see Graph 2). With the exception of aggravated assault, the number of person offenses (murder, rape and robbery) vary from year to year without displaying any significant trend. The number of aggravated assaults steadily increased through 1991.

Similar trends are evident in most of the census tracts adjacent to Sand Point. In only one adjacent tract (#42) is the number of reported offenses higher in 1993 than in any of the three years from 1986 through 1988 (see Graph 3). Violent person offenses are relatively rare occurrences in these census tracts.

In two census tracts with transitional housing programs for homeless persons, the trend in reported offenses is consistent with the census tracts adjacent to Sand Point and the city as a whole. Although the total number of reported offenses is higher for each year than in the tracts adjacent to Sand Point, there is no indication that the numbers increased after the homeless housing programs were established.

The conclusions drawn from these data are that the number of reported offenses in census tracts adjacent to Sand Point are low and relatively stable. Introducing transitional housing for homeless persons should not increase the number of offenses in these adjacent tracts.

FINDINGS BASED ON ANALYSIS OF RATES

The objective of this analysis is to identify possible crime-related effects of proposed land uses for the naval base property in the Sand Point neighborhood. Will a specific type of land use result in increased levels of crime in and around Sand Point? Planned use for this area include public housing, educational instruction, recreation, cultural activities, and light industrial and commercial use. However, it is the proposed use for public housing and educational instruction that most clearly characterize the plans submitted by the City of Seattle and the Muckleshoot Tribe. These two uses also appear to generate the greatest concern about possible increasing rates of crime. For this reason, we present comparative crime data by census tract for areas in Seattle which include various types of housing units and educational institutions.

In addition, we know from the studies cited above that crime tends to be more prevalent where residential population is young and poor. We also know that stability of the community may influence crime rates. Thus, in addition to comparing crime rates by land use, we also present information on the proportion of young people residing in the census tract, the per capita and median household income and the proportion of owner occupied housing.

Census tracts in any city vary by geographical size and by population. Thus, it is sometimes difficult to compare the volume of crime between two or more census tracts when using only raw numbers. To make offense comparisons across census tracts more meaningful, the number of offenses are often adjusted for the size of the population. The rates presented in this section are based on each 10,000 persons residing in the census tract.

Table 2 presents crime and population data for census tract 23, the tract that encompasses Sand Point. Also presented are the northeast sub-area of the city and the city of Seattle as a whole. The table presents 1993 crime data from the Seattle Police Department for serious crimes (Part I offenses). The table shows that the rate of Part I offenses for Seattle as a whole is 1209.51 offenses per year for every 10,000 residents. The rate of 761.95 for the entire northeast region, is comparatively very low. A rate is not calculated for census tract 23 for the following reason. The reported offenses for this tract include only those that occurred in or near the park on city property. Offenses occurring on the naval station are routinely dealt with by naval security personnel and are not reported to the city. The 160 residents in the tract are naval personnel living at the station, according to staff in the city's demographer's office.

Table 3 presents comparable data for the four census tracts adjacent to Sand Point. In these tracts, the annual Part I total crime rates range from 300.41 to 588.66 per 10,000 residents. These are exceptionally low rates and account for the low rate for the northeast subarea of the city. Note also that the residents in these tracts are affluent, the majority own their homes and the proportion of residents in the crime-prone age group (18-24) is low. Thus, from a criminological perspective, these areas have characteristics consistent with a low expected rate of crime.

Table 4 presents comparable crime and population data for census tracts with various types of public housing. These include census tracts with small public family housing sites in the north subarea of the city. Tract 1 includes Jackson Park Village with 41 family units and Lake City Village with 16 family units. These 57 units house approximately 259 residents. Tract 12 includes Cedarville Village with 24 family units, housing approximately 109 residents. These are the closest public family housing units to Sand Point. Also listed are census tracts with transitional housing units. Tract 67 includes a larger transitional facility with 66 beds and tract 105 includes a

medium size program for 9 families. Census tract 41 includes University of Washington family student housing and is adjacent to Sand Point. Map 2 presents the location of assisted housing units managed by the Seattle Housing Authority.

The crime rates for Part I offenses for the two tracts with public family housing ranges from 1114.29 to 2217.32 per 10,000 population. The city average is 1209.51. Note that the number of people living in the housing units is small compared to the overall population and is unlikely to be the determining factor for crime level in the tract. In fact, the tract with the larger number of units has a lower crime rate. Demographically the two tracts are similar, but tract 12 has a slightly lower per capita income, greater proportion of young adults and fewer owner occupied homes. The crime rates for Part 1 offenses for the two tracts with temporary housing ranges from 1032.59 to 1221.08 per 10,000 population. Census tract 41 which includes UW family housing has the lowest crime rate of 371.32.

Tables 5a and 5b present crime and population data for census tracts in which higher education programs are located. These tracts include three community colleges and associated vocational programs, the University of Washington and Seattle University. Census tract 109 reports the highest rate of crime. However, this is based on a large census tract with few residents and is inconsistent with other tracts. Rates for the remaining census tracts range from 212.08 to 2087.49 per 10,000 residents. The lowest rate is tract 5302 that includes the University of Washington. This is the only tract presented that serves almost exclusively educationally-related functions, including student housing. Census tract 86 includes Seattle University. The crime rate for this tract is 2010.10 per 10,000 population. Yet of the 597 offenses reported to the police, Seattle University records indicate that only 202 offenses occurred on university property in 1992. This suggests that the university is located in a higher crime neighborhood. The crime rates in which the community colleges are located are closer to the city average.

To summarize, the census tracts adjacent to Sand Point have exceptionally low rates of crime when compared to the city as a whole (see Graph 4). Demographically, these census tracts are characterized by affluence, single family home-ownership and a low proportion of residents in the high crime age category; all factors generally associated with low crime rates. In contrast, the census

tracts with public housing presented in this section had offense rates closer to the city average. Our analysis does not substantiate the conclusion that public housing results in higher crime rates. The analysis of trends showed that the establishment of two different housing programs did not increase the number of crimes in the census tracts where they located. It is more likely that housing programs are typically located in census tracts that are characterized by more diversity of income and age. For example, census tracts which include housing for the elderly will frequently have crime rates as high as the city average, yet it is improbable that the crime rate is attributable to these senior citizens.

Crime rates in census tracts with higher educational institutions exhibit extreme variation. Such variation, again, suggests that some educational programs are located in high crime neighborhoods. The exceptionally low rate of crime for the census tract that includes the University of Washington provides evidence that college students, despite their age, are not prone to be criminal offenders.

MITIGATING MEASURES

A number of mitigating measures should be incorporated into any reuse plan for the Sand Point area. Five significant issues should be addressed in any final use plan: police jurisdictional clarification, levels of law enforcement and security services, social and health programming, management practices, and crime prevention efforts, especially the use of Crime Prevention Through Environmental Design (CPTED).

The first two issues are the most obvious. Policing jurisdictional clarification especially pertains to the Muckleshoot proposal, which requests the property at Sand Point Naval Base "through their rights in Section 105(f) of Public Law 93-638 (Indian Self-Determination Act), as amended" (p. 4) and refers to its proposed operations as being under "the auspices of the sovereign tribal government" (p. 10). As such, it is presumed that tribal police would have jurisdiction on the acquired property, although such provisions are not specifically discussed in their reuse plan. Alternatively, the tribe could contract for police services with the Seattle Police Department, or even a private security firm. In any case, it would be important for the tribe to coordinate and negotiate their public safety plans with the Seattle Police Department. Not providing for

adequate security would not be an option since the federal "Crime Awareness and Campus Security Act" would appear to require police services, and reporting of crimes on campus, in order for any institution of higher education to receive federal financial assistance.

The second issue is also clear and related to the law enforcement jurisdictional clarification. It has to do with providing adequate levels of law enforcement and security services to this area. This issue pertains to both reuse plans, yet neither plan specifically addresses the increased level of law enforcement that would be needed. For example, under the City of Seattle's plan, it is not clear if law enforcement services would continue to be sent directly from the North Precinct station, whose jurisdiction includes all of Seattle north of the water boundary of Lake Washington-Portage Bay-Salmon Bay, or a separate police sub-station located at the Sand Point site (see Map 4 of Seattle Police precincts). The city may want to establish a baseline of information concerning calls for assistance, etc., prior to making a decision on possibly locating a police sub-station on site.

Whether or not a police facility is included on site, an inevitable increase in police activity should be anticipated, given the departure of the navy's law enforcement personnel (military police and shore patrol) who were previously responsible for the site. It can reasonably be assumed that impact on police services will fall into six major areas: (1) patrol and response to calls for assistance, (2) traffic enforcement, (3) investigation and apprehension of suspects for serious crimes, (4) community policing, (5) crime prevention activities, and (6) necessary support services.

The importance of community policing, and other more traditional crime prevention activities, including such as "target hardening" (reducing opportunities for criminal victimization), block watch and business watch, "Operation Identification" (marking property), establishing "drug-free zones," etc., in terms of mitigating potential crime impact in this community, cannot be overemphasized.

Community policing emphasizes the "importance of police-citizen interaction in controlling crime, maintaining order, and empowering citizens for the purpose of improving the quality of life in neighborhoods" (National Institute of Justice 1993). There is a wide-spread belief in the efficacy of this non-traditional law enforcement approach. As one review recently put it: "the concept of community policing has become the goal, method, and guiding principle for

police" (Alpert and Moore 1993). It is notable that Seattle has been cited as a national model for community policing, showing "what can happen when citizens work in partnership with the police to prevent crime and create safer neighborhoods" (National Institute of Justice 1992).

Recent findings from evaluations of crime-fighting tactics in public housing sites should also be considered, such as: (1) "sweeping" public housing developments for drug dealers and persons not listed on resident leases, (2) restricting access to developments using electronic ID systems, (3) establishing mini-precinct stations on development grounds, (4) housing police officers in public housing units, (5) improving tenant screening by incorporating checks of criminal records into the screening process, (6) adopting "community policing" approaches, including foot patrols and the appointment of resident/police liaisons, and (7) streamlining eviction procedures (Dunworth and Saiger 1994).

Social and health service programming should also be recognized as a mitigating measure, for any population that resides or spends considerable time at this location. For example, within research on crime and public housing, the benefits of coordinating law enforcement efforts with "programs that provide social, vocational, drug prevention, and educational services to public housing residents," has been recently confirmed (Dunworth and Saiger 1994).

Similar to the availability of social and health services, the quality of management overseeing whatever activities take place on the site will have a significant bearing on the success of reducing the likelihood of criminal victimization. The crime prevention literature is replete with references to the importance of sound program management, including planning, implementation and evaluation activities (Angel 1969, Crowe 1991, Liechenstein 1971, Reppetto 1974, Voss 1971,Wallis and Ford 1980).

CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN

One particular aspect of implementing crime prevention practices which holds particular promise for the planning at this site deserves special attention. "Crime Prevention Through Environmental Design" (CPTED) is discussed in some detail below.

Interest in environmental approaches to crime prevention is reflected in the writings of the influential urban planner, Jane Jacobs. In *The Death and Life of Great American Cities,* Jacobs argued that the basis for community security is a strong sense of social cohesion and a feeling of control over one's "home turf." Conversely, she suggested, an area is less attractive to criminals when the streets are bustling with activity and opportunities for surveillance (1961). It was Oscar Newman, however, in his book *Defensible Spaces: Crime Prevention Through Urban Design,* who made environmental approaches to crime prevention and security popular. Newman suggested that physical design can encourage residents to assume the behavior necessary for deterring crime, and he coined the term "defensible space" to describe this phenomenon. He found that defensible space features, such as relatively small buildings, decentralized lawns and play areas, well-located windows, entryways and hallways that terminate in a small number of units, lighting, etc., were rare in many older public housing developments (Newman 1972).

The phrase, "crime prevention through environmental design," was coined by C. Ray Jeffery in his book by the same title, in which he argues that the "proper design and effective use of the built environment can lead to a reduction in the fear of crime and the incidence of crime, and to an improvement in the quality of life" (Jeffery 1977).

The authors of a special research report on "Crime Prevention Through Environmental Design" for the National Institute of Justice defined CPTED as "an attempt to reduce crime and fear in a target setting by 1) reducing criminal opportunity and 2) fostering social interaction among the legitimate users of that setting" (Wallis and Ford 1980:2).

Three overlapping CPTED strategies have been identified: (1) natural access control, (2) natural surveillance, and (3) territorial reinforcement (Crowe 1991).

Access control strategies are typically classified as organized (e.g., guards), mechanical (e.g., locks), and natural (e.g., spatial definition). The primary thrust of an access control strategy is to deny access to a crime target and to create a perception of risk in offenders.

Surveillance is a design concept directed at keeping intruders under observation. Surveillance strategies are typically classified as organized (e.g., police patrol), mechanical (e.g., lighting), and natural (e.g., windows).

The concept of territoriality suggests that physical design can create or extend a sphere of influence so that users develop a sense of "ownership" and territorial influence, which is also perceived by potential offenders.

There are hundreds of examples of CPTED strategies in practice which apply the three strategies to particular settings. Some examples of CPTED strategy activities are:

- Providing clear border definition of controlled space,
- Providing clearly marked transitional zones that indicate movement from public to semi-public to private space,
- Relocating gathering areas to locations with natural surveillance and access control,
- Redesignating the use of space to provide natural barriers to activities,
- Improving scheduling of space to allow for effective use,
- Redesigning space to increase the perception or reality of natural surveillance, and
- Overcoming distance and isolation through improved communications and design efficiencies.

A number of phases in designing a CPTED project have been identified (Wallis and Ford 1980):

1) **The initiation phase**, in which the decision is made that the CPTED approach is appropriate to the setting,
2) **The analysis phase**, in which local resources and potential problems are subject to rigorous study,
3) **The planning phase**, in which appropriate CPTED strategies and tactics are selected, funding sources identified, and personnel recruited to carry out the project,
4) **The implementation phase**, which is the culmination of the entire process, and
5) **The evaluation phase**, which assesses implementation and impact of the project.

It is recommended that whichever jurisdiction receives the site, a comprehensive CPTED project be designed for its specific use. Although incorporating CPTED strategies into specific land use projects may still be the exception rather than the rule, project

managers and architects can contract with CPTED specialists, if necessary, to insure these techniques are properly employed.

CONCLUSION

The research and analysis presented above confirm that multiple factors interacting dynamically, determine the level of crime in a certain area. Among the factors identified are the area's demographics, environmental characteristics and primary use activities. These factors form the bases for the projections presented in this section. Other influences on crime levels such as social and health service programming, environmental design, and the levels of law enforcement, security, and community policing, have mitigating influences on the level of crime. The land use plans do not directly address such influences. They are, however, incorporated into the projections by use of high and low ranges.

The proposed land use of the naval base will be mixed according to both submitted plans. However, certain uses have been emphasized. Table 6 presents the number of projected offenses. (Rates are used only for analysis and to calculate the level of crime.) The table provides a range of crime levels for three primary uses of the naval base: no new use, emphasis on educational use and inclusion of public housing use. The range reflects the presence or absence of mitigating influences. If programming, environmental design and management issues are addressed, the expected levels of crime will correspond to the low level of the projection. If they are absent crime levels at the higher level can be expected.

No New Use

The majority of activity in census tract 23 occurs at the naval base. This is a secure area where access is limited by a fence and the visitors are controlled by special security provisions. The crimes reported to the Seattle Police Department are only those that occur in Magnuson Park or other property under city jurisdiction. If the naval station were closed and the same type and intensity of security were maintained, the number of criminal offenses in census tract 23 would in all likelihood change little. Crime in the remaining area of the census tract, including Magnuson Park, can be expected to vary in proportion to the number of people using the area. The projection

in Table 6 for "No New Use" assumes that use of the park area would remain unchanged.

Security and facility maintenance at the naval base are mitigating influences, that if eliminated, can have a negative impact on the level of crime. Without Naval security and well maintained fences and buildings, the area has the potential to develop an abandoned or neglected appearance, and become more attractive as a target for crime, especially burglary and arson. While the level of eventual crime in such situations can not be objectively quantified, the projection for a high crime level in Table 6 assumes a doubling of the number of offenses.

Emphasis on Higher Educational Use

There are few indications that the development of an educational institution will increase offense rates. The possibility for crime exists, as any increased number of people in an area will consist of both potential victims and offenders. Further, a youthful population is generally more crime-prone. However, it appears that from data of the security offices of both the University of Washington and Seattle University that young people engaged in educational activities are not associated with high levels of Part I crime. Census tract 5302, that includes the University of Washington campus, reports only 99 offenses. This campus provides educational instruction to 34,000 students and housing for almost 5,000 individuals. Census tract 86 in which Seattle University is located, reports a crime rate of just over 2,000 per 10,000 population. Yet of the 597 offenses reported to the police, Seattle University records indicate that only 202 offenses occurred on University property in 1992. The school has about 5,000 students.

Incorporating this information into the projections, Table 6 indicates a range in offenses from a low of 100 to a high of 267 if the land use includes higher educational instruction. The data from University of Washington census tract (5203) confirms that over 4,000 students can live in a census tract that reports only 99 offenses. 200 reported offenses may be more indicative of a campus that has less control over non-students moving through campus property. The projected high range of offenses consists of 200 offenses for the campus activities in addition to the current (1993) level of 67 offenses.

Emphasis on Public Housing Use

There are also few indications that the introduction of housing units will increase offense rates substantially. We know that crime-prone areas generally include a high proportion of residents who are young and who are poor. Public housing residents fit this description almost by definition. Yet, the national concern over crime in public housing facilities focuses primarily on large ill-designed projects. Examples of Seattle census tracts with smaller townhouse facilities do not indicate high crime rates. Further, census tracts with more recently sited programs for temporary housing do not indicate that the level of crime has increased.

The crime projections relating to public housing use at the naval base are also presented in Table 6. The projections are based on offense rates for tracts with public housing. Depending on the programs made available to residents, the offense rate should be between approximately 1000 and 2500 Part I offenses per 10,000 residents. With adequate programming the lower rate applied to 553 residents results in 55 offenses. Added to the current base number of 67 offenses, the lower number of projected offenses is 122. The higher rate applied to the same number of residents results is 134 offenses. Adding the existing number of offenses results in an upper range of 201 offenses where few programs are provided to residents.

Crime in Adjacent Neighborhoods

The residential areas adjacent to Sand Point are stable communities. The level of crime in the census tracts adjacent to Sand Point are currently very low when compared to the remainder of the city. These levels of crime have been uniformly low for at least the past ten years. There is no indication that the proposed land uses for census tract 23 analyzed in this study would significantly increase the comparatively low rates of serious crime enjoyed in these areas. There are several reasons for this conclusion:

•Indicators of neighborhood cohesion are high. The area is homogeneously residential. A very high percentage of the housing units are owner-occupied. In all demographic respects, the adjacent census tracts have the characteristics of neighborhoods that are resistant to higher levels of serious crime. In such neighborhoods, residents know each other and are well aware of strangers in their midst. Such neighborhoods are not attractive targets for offenders.

•Currently, vehicular and pedestrian traffic into and through the residential area adjacent to Sand Point is relatively light. The proposed uses of the Naval Station should have minimal impact on traffic flow through adjacent residential neighborhoods. In addition, Sand Point Way NE serves as a natural barrier between the residential neighborhoods and the naval base area. Thus, it is unlikely that people who are not residents of the neighborhood would routinely have reason to pass through the residential areas.

•There is no evidence that either a well-managed educational institution or public housing program will have negative impacts on the level of crime in adjacent neighborhoods. As analyzed in this study, the introduction of housing programs resulted in no increase in crime for the census tracts in which they were located. Likewise, data presented earlier demonstrate that even areas with a high concentration of students can exhibit very low levels of crime.

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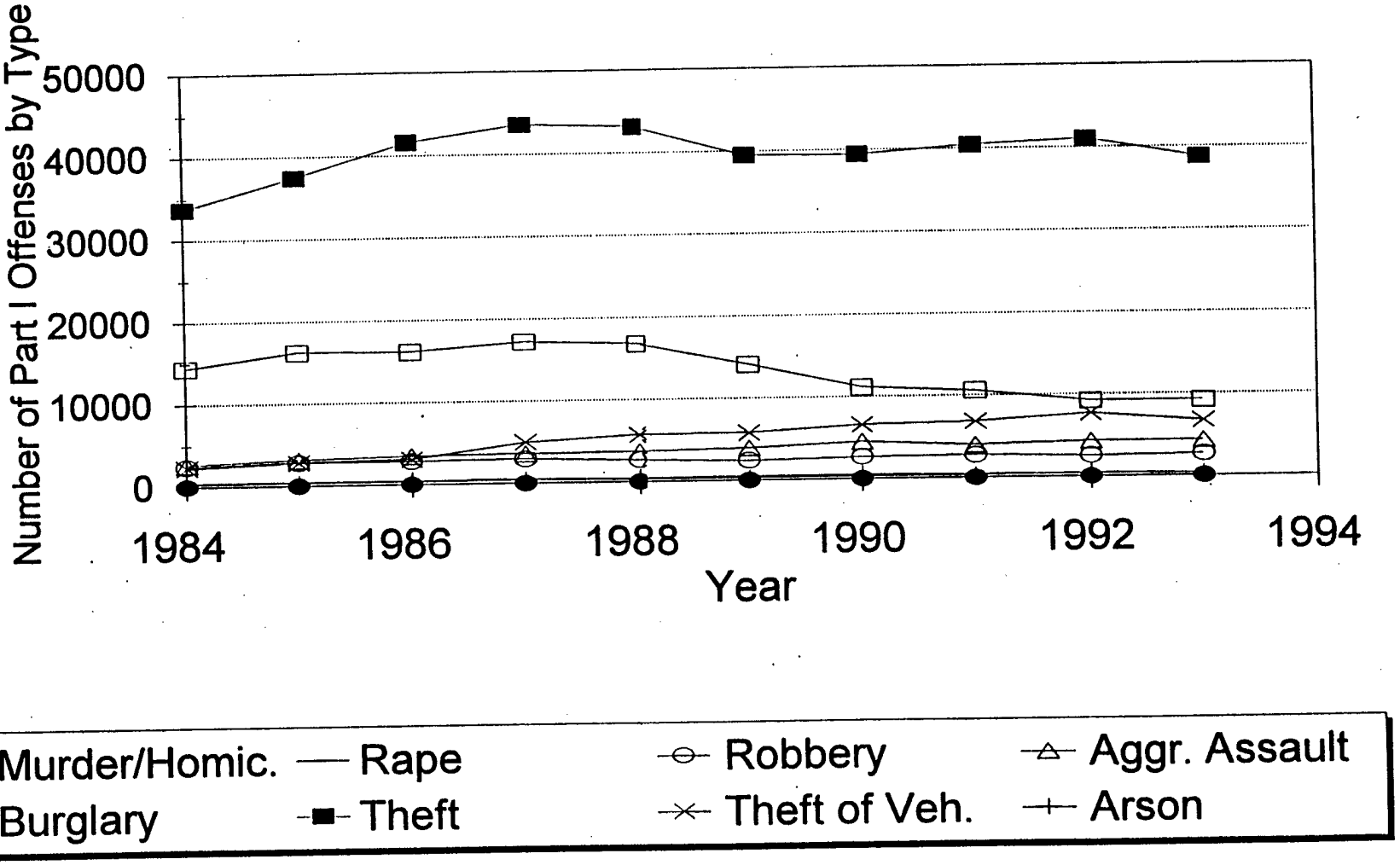
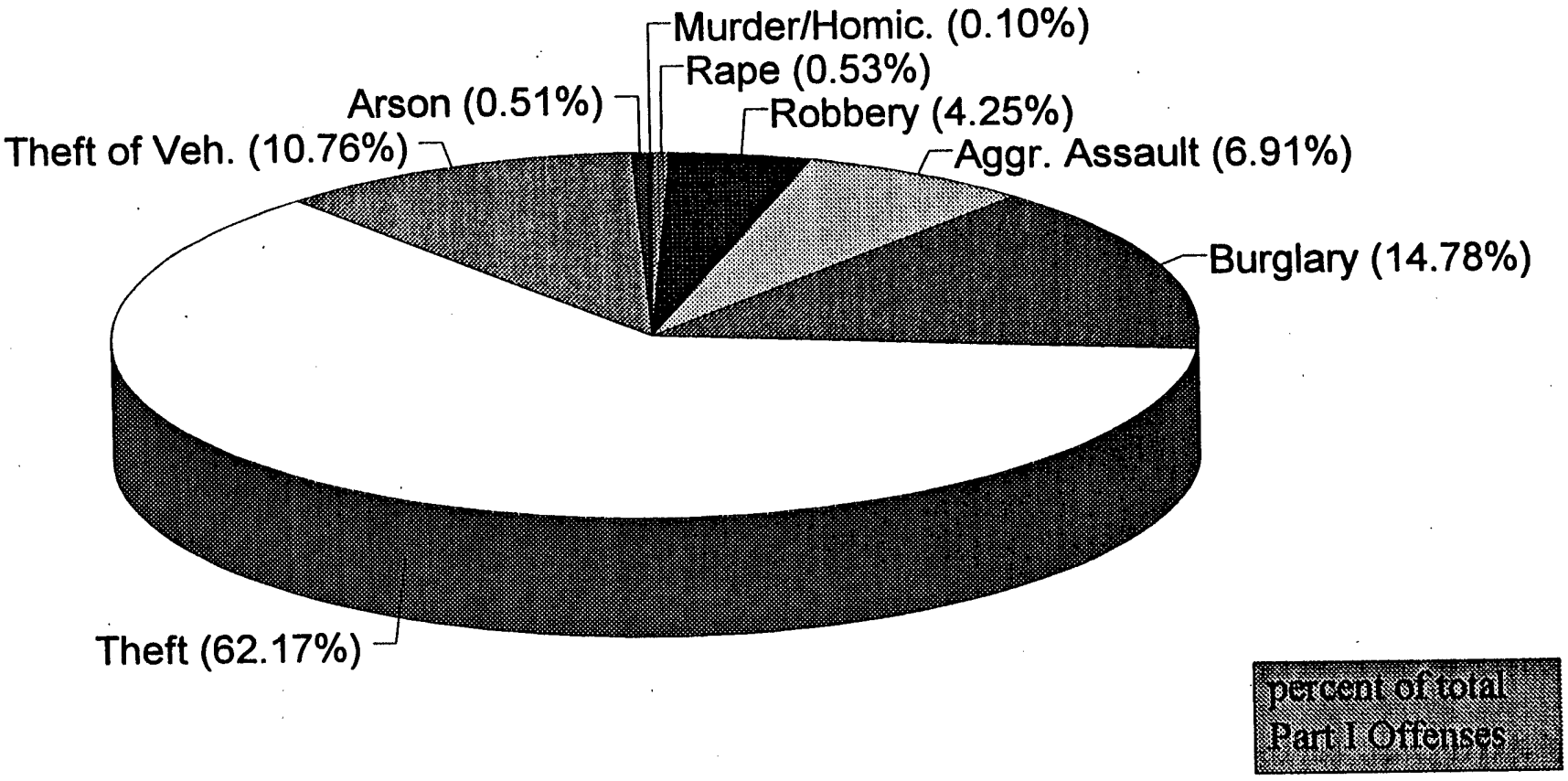
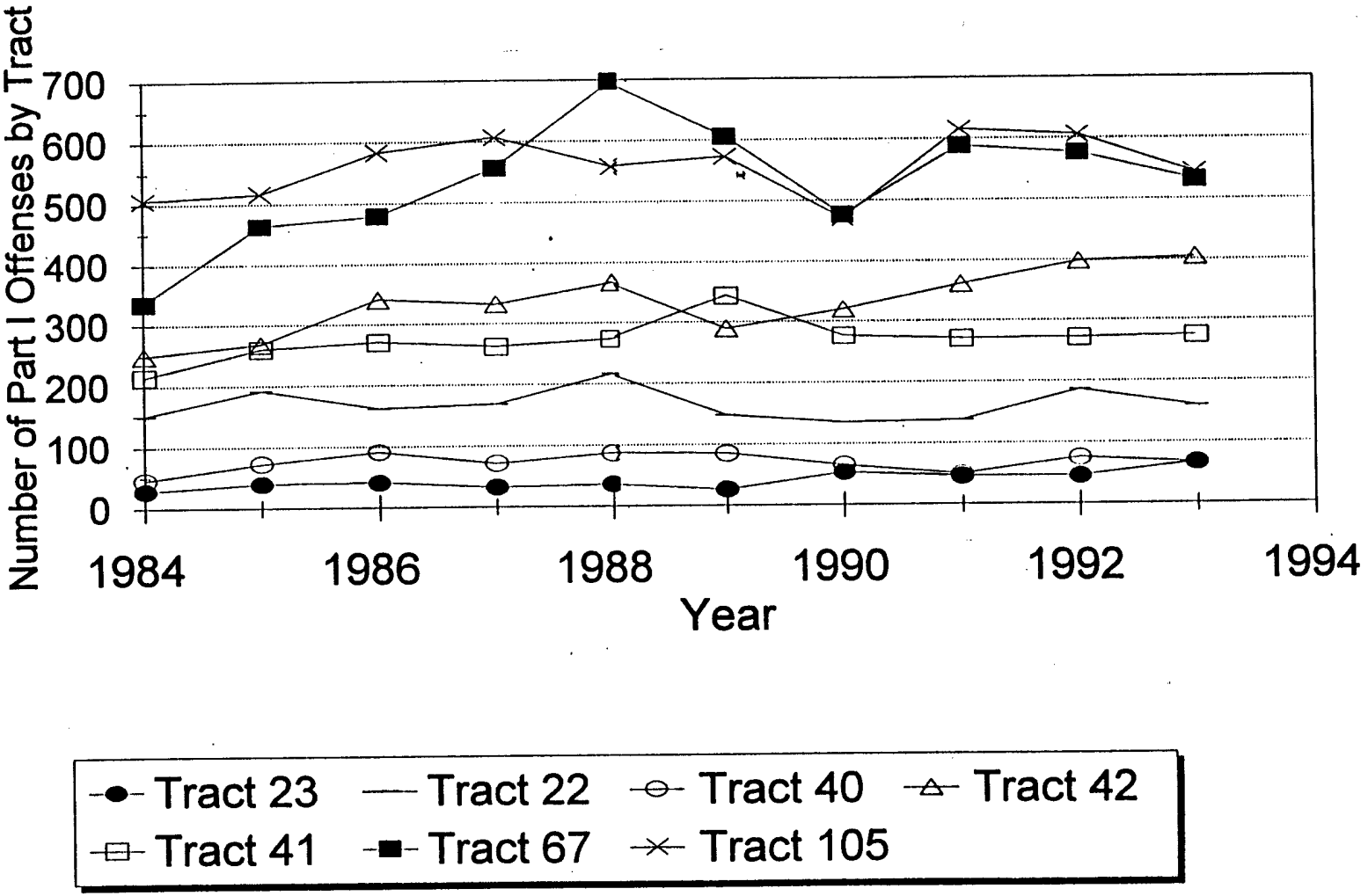
Graph 1
Offenses Reported in Seattle per Year



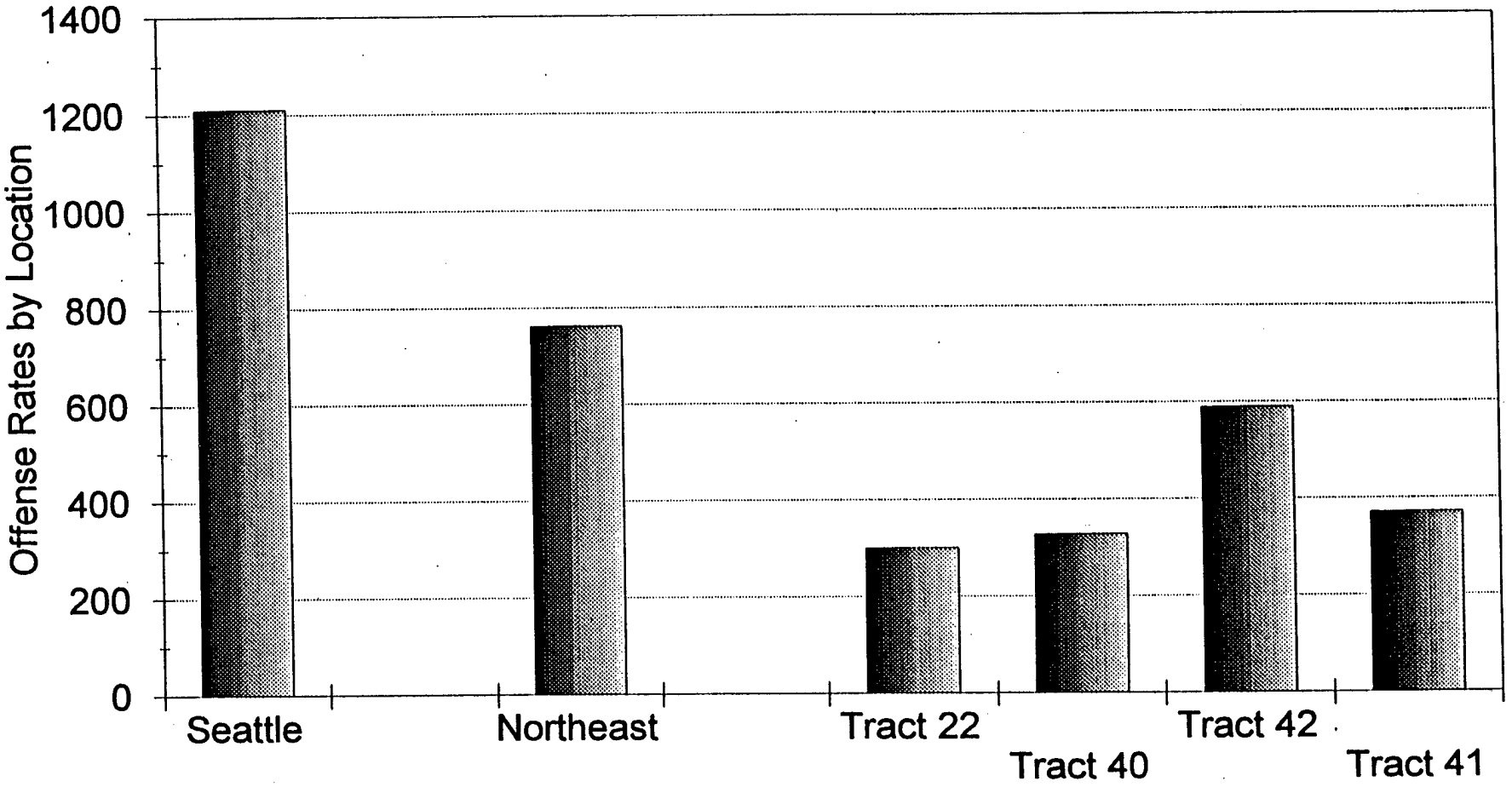
Graph 2
1993 Reported Offenses in Seattle



Graph 3
Offenses Reported per Year by Tract



Graph 4
1993 Offense Rates per 10,000 Pop.



Graph 5
Projected Number of Offenses- Tract 23

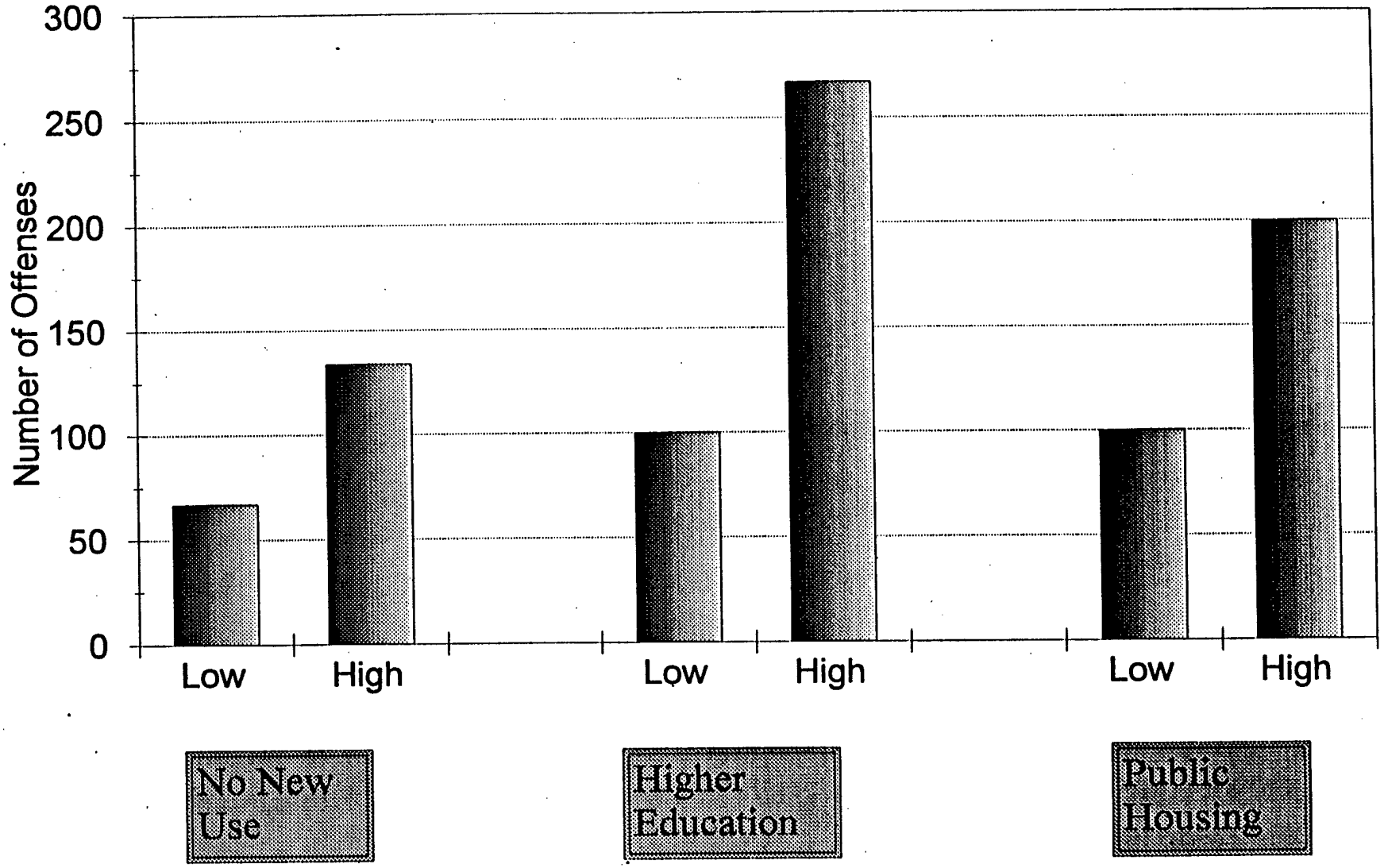


Table 1a
Ten Year Trend Crime Data
Citywide 1984-1993

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
OFFENSE	N	N	N	N	N	N	N	N	N	N
Murder/Homic.	50	61	50	54	56	38	53	43	60	65
Rape	448	441	443	465	439	489	481	398	353	328
Robbery	2386	2843	2792	2959	2709	2448	2695	2761	2577	2653
Aggr. Assault	2669	3178	3505	3618	3675	3914	4551	4017	4337	4313
Burglary	14406	16262	16215	17254	16880	14162	11181	10640	9250	9230
Theft	33771	37534	41625	43586	43196	39540	39522	40502	41125	38818
Theft of Veh.	2289	2783	3110	5001	5739	5816	6570	6842	7698	6718
Arson	309	360	351	432	295	305	269	285	424	317
Part I Total	56328	63462	68091	73369	72989	65395	65322	65488	65824	62442

Table 1b
Ten Year Trend Crime Data
Census Tract 23 1984-1993

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
OFFENSE	N	N	N	N	N	N	N	N	N	N
Murder/Homic.	0	0	0	0	0	0	0	0	0	0
Rape	0	0	0	0	0	0	1	0	0	0
Robbery	1	1	1	2	1	0	0	0	0	1
Aggr. Assault	0	1	1	2	0	2	1	1	2	7
Res. Burglary	1	5	3	4	2	1	1	3	0	1
NonRes. Burg.	2	2	0	0	0	1	0	1	1	2
Theft	22	27	35	23	33	22	47	40	41	55
Theft of Veh.	2	3	1	2	1	0	2	1	2	1
Arson	0	0	0	0	0	0	1	0	0	0
Part I Total	28	39	41	33	37	26	53	46	46	67

Table 1c
Ten Year Trend Crime Data
Census Tract 22 1984-1993

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
OFFENSE	N	N	N	N	N	N	N	N	N	N
Murder/Homic.	0	0	1	0	0	0	0	0	0	0
Rape	0	2	0	1	2	0	1	2	1	1
Robbery	4	4	2	5	3	5	2	1	4	1
Aggr. Assault	1	4	6	4	5	1	4	5	4	4
Res. Burglary	59	66	47	52	91	42	30	17	27	38
NonRes. Burg.	10	8	10	12	12	9	6	11	8	4
Theft	72	90	88	80	92	81	78	83	119	97
Theft of Veh.	6	13	10	13	13	11	14	20	23	14
Arson	0	5	0	2	0	0	1	0	1	1
Part I Total	152	192	163	169	218	149	136	139	187	160

Table 1d
Ten Year Trend Crime Data
Census Tract 40 1984-1993

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
OFFENSE	N	N	N	N	N	N	N	N	N	N
Murder/Homic.	0	0	0	0	0	0	0	0	0	0
Rape	0	0	0	0	1	0	0	1	0	1
Robbery	1	1	0	0	0	2	1	0	2	0
Aggr. Assault	0	0	5	0	1	2	3	0	1	2
Res. Burglary	15	21	11	14	19	14	9	3	6	4
NonRes. Burg.	2	2	7	1	3	4	2	3	5	3
Theft	27	45	64	49	60	53	46	35	47	50
Theft of Veh.	1	4	4	7	4	9	4	8	15	6
Arson	0	0	0	1	0	2	0	0	0	1
Part I Total	46	73	91	72	88	86	65	50	76	67

Table 1e
Ten Year Trend Crime Data
Census Tract 42 1984-1993

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
OFFENSE	N	N	N	N	N	N	N	N	N	N
Murder/Homic.	0	0	0	0	0	0	1	0	0	0
Rape	2	0	2	0	1	1	2	1	0	1
Robbery	2	6	10	10	7	3	3	12	7	6
Aggr. Assault	14	5	4	3	7	8	7	9	2	14
Res. Burglary	72	78	100	111	122	88	76	75	51	72
NonRes. Burg.	11	15	18	25	29	9	16	22	12	20
Theft	145	149	192	164	183	157	186	210	278	259
Theft of Veh.	5	16	16	17	19	23	29	31	47	29
Arson	0	0	0	3	0	2	1	1	1	4
Part I Total	251	269	342	333	368	291	321	361	398	405

Table 1f
Ten Year Trend Crime Data
Census Tract 41 1984-1993

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
OFFENSE	N	N	N	N	N	N	N	N	N	N
Murder/Homic.	2	1	0	0	0	0	0	0	0	0
Rape	5	0	0	1	1	1	1	1	1	0
Robbery	1	6	7	1	6	5	0	5	7	8
Aggr. Assault	8	5	2	4	6	5	10	6	5	7
Res. Burglary	58	33	30	59	60	99	38	22	23	20
NonRes. Burg.	17	20	19	30	28	27	27	19	15	12
Theft	121	182	205	154	149	183	183	198	205	210
Theft of Veh.	4	14	8	15	25	24	17	20	17	19
Arson	0	0	1	0	0	0	2	1	0	0
Part I Total	216	261	272	264	275	344	278	272	273	276

Table 1g
Ten Year Trend Crime Data
Census Tract 67 1984-1993

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
OFFENSE	N	N	N	N	N	N	N	N	N	N
Murder/Homic.	0	0	0	1	0	0	1	1	0	0
Rape	1	1	0	2	2	6	2	2	5	5
Robbery	10	5	9	5	9	11	11	19	11	12
Aggr. Assault	15	11	18	7	12	7	8	14	20	10
Res. Burglary	94	115	94	105	138	118	62	70	43	55
NonRes. Burg.	27	32	66	59	78	66	54	55	42	53
Theft	170	268	260	325	398	339	280	355	369	32
Theft of Veh.	18	31	31	52	59	59	58	70	84	77
Arson	1	1	2	2	2	1	1	3	3	1
Part I Total	336	464	480	558	698	607	477	589	577	533

Table 1h
Ten Year Trend Crime Data
Census Tract 105 1984-1993

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
OFFENSE	N	N	N	N	N	N	N	N	N	N
Murder/Homic.	0	2	0	0	0	0	0	0	0	0
Rape	3	3	3	2	0	3	1	1	1	2
Robbery	16	17	16	23	26	26	23	20	24	30
Aggr. Assault	16	22	34	17	30	23	29	38	41	42
Res. Burglary	106	122	173	127	103	107	65	57	35	35
NonRes. Burg.	48	56	56	51	30	39	30	43	44	37
Theft	292	268	275	330	334	324	260	375	360	341
Theft of Veh.	24	27	27	55	36	49	59	81	99	59
Arson	2	0	0	3	0	2	4	1	3	1
Part I Total	507	517	584	608	559	573	471	616	607	545

Table 2
Crime Rates for Seattle and the Northeast Area
1993 Crime and 1990 Census Data

	Citywide		Northeast		Tract 23
OFFENSE	N	Rate	N	Rate	N
Murder/Homic.	65	1.26	2	0.29	0
Rape	328	6.35	16	2.35	0
Robbery	2653	51.39	149	21.87	1
Aggr. Assault	4313	83.54	239	35.09	7
Res. Burglary	5649	109.42	637	93.52	1
NonRes. Burg.	3581	69.36	223	32.74	2
Theft	38818	751.91	3401	499.30	55
Theft of Veh.	6718	130.13	491	72.08	1
Arson	317	6.14	32	4.70	0
Part I Total	62442	1209.51	5190	761.95	67

POPULATION	N	%	N	%	N	%
total	516259		68115		175	
5-17	55252	10.70			0	0.00
18-24	61403	11.89			106	60.57
per cap. income	18308				14997	
household inc.	29353				48750	

Table 3
Crime Rates for Census Tracts Adjacent to Sand Point
1993 Crime and 1990 Census Data

	Tract 22		Tract 40		Tract 42		Tract 41	
OFFENSE	N	Rate	N	Rate	N	Rate	N	Rate
Murder/Homic.	0	0.00	0	0.00	0	0.00	0	0.00
Rape	1	1.88	1	4.88	1	1.45	0	0.00
Robbery	1	1.88	0	0.00	6	8.72	8	10.76
Aggr. Assault	4	7.51	2	9.75	14	20.35	7	9.42
Res. Burglary	38	71.35	4	19.50	72	104.65	20	26.91
NonRes. Burg.	4	7.51	3	14.63	20	29.07	12	16.14
Theft	97	182.13	50	243.78	259	376.45	210	282.52
Theft of Veh.	14	26.29	6	29.25	29	42.15	19	25.56
Arson	1	1.88	1	4.88	4	5.81	0	0.00
Part I Total	160	300.41	67	326.67	405	588.66	276	371.32

POPULATION	N	%	N	%	N	%	N	%
total	5326		2051		6880		7433	
5-17	635	11.92	190	9.26	728	10.58	1180	15.88
18-24	358	6.72	106	5.17	553	8.04	431	5.80
per cap. income	27428		30030		22405		35318	
household inc.	50268		42763		39417		52137	
owner occupied		82.40		68.90		67.10		71.30

Table 4
Crime Rates for Census Tracts With Selected Housing Units
1993 Crime and 1990 Census Data

	Tract 01 includes Jackson & Lake City 41 & 16 Fam. Units		Tract 12 includes Cedar Village 24 Fam. Units		Tract 41 includes UW housing		Tract 67 includes Aloha Inn 66 Adults		Tract 105 includes Hickman House 9 Families	
OFFENSE	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Murder/Homic.	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Rape	6	12.27	3	5.59	0	0.00	5	11.45	2	3.79
Robbery	16	32.71	32	59.62	8	10.76	12	27.49	30	56.84
Aggr. Assault	41	83.83	28	52.17	7	9.42	10	22.91	42	79.58
Res. Burglary	58	118.59	56	104.34	20	26.91	55	126.00	35	66.31
NonRes. Burg.	28	57.25	37	68.94	12	16.14	53	121.42	37	70.10
Theft	334	682.89	951	1771.94	210	282.52	32	73.31	341	646.08
Theft of Veh.	60	122.67	83	154.65	19	25.56	77	176.40	59	111.78
Arson	2	4.09	0	0.00	0	0.00	1	2.29	1	1.89
Part I Total	545	1114.29	1190	2217.25	276	371.32	533	1221.08	545	1032.59

POPULATION	N	%	N	%	N	%	N	%	N	%
total	4891		5367		7433		4365		5278	
5-17	503	10.28	417	7.77	1180	15.88	198	4.54	444	8.41
18-24	691	14.13	813	15.15	431	5.80	445	10.19	474	8.98
per cap. income	17509		15079		35318		26885		17469	
household inc.	23782		23825		52137		32000		30477	
owner occupied		33.30		25.30		71.30		28.90		46.80

Table 5a
Crime Rates for Census Tracts With Selected Higher Educational Facilities
1993 Crime and 1990 Census Data

	Tract 13 includes North Com. College		Tract 74 includes Central Com. Colleg		Tract 107 includes South Com. College		Tract 47 includes Maritime Training Center		Tract 89 includes Wood Construction Training Center	
OFFENSE	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Murder/Homic.	0	0.00	0	0.00	2	3.62	0	0.00	3	7.11
Rape	5	12.91	5	6.45	0	0.00	5	11.33	9	21.34
Robbery	14	36.16	39	50.33	36	65.13	31	70.26	36	85.35
Aggr. Assault	34	87.81	82	105.82	104	188.17	49	111.06	70	165.96
Res. Burglary	26	67.15	122	157.44	116	209.88	49	111.06	79	187.29
NonRes. Burg.	20	51.65	42	54.20	15	27.14	80	181.32	29	68.75
Theft	261	674.07	781	1007.87	311	562.69	621	1407.52	364	862.97
Theft of Veh.	42	108.47	88	113.56	118	213.50	83	188.12	89	211.00
Arson	2	5.17	9	11.61	8	14.47	3	6.80	1	2.37
Part I Total	414	1069.21	1168	1507.29	710	1284.60	921	2087.49	680	1612.14

POPULATION	N	%	N	%	N	%	N	%	N	%
total	3872		7749		5527		4412		4218	
5-17	242	6.25	84	1.08	1412	25.55	163	3.69	691	16.38
18-24	544	14.05	1611	20.79	601	10.87	526	11.92	368	8.72
per cap. income	14432		16709		7988		14364		15384	
household inc.	24929		19035		17393		19408		28941	
owner occupied		34.10		11.90		28.40		19.20		43.90

Table 5b
Crime Rates for Census Tracts With Selected Higher Educational Facilities
1993 Crime and 1990 Census Data

	Tract 109 includes Duwamish Apprent. Training Center		Tract 5302 includes University of Washington		Tract 86 includes Seattle University	
OFFENSE	N	Rate	N	Rate	N	Rate
Murder/Homic.	0	0.00	0	0.00	2	6.73
Rape	3	24.79	1	2.14	4	13.47
Robbery	28	231.40	8	17.14	36	121.21
Aggr. Assault	58	479.34	13	27.85	77	259.26
Res. Burglary	44	363.64	4	8.57	67	225.59
NonRes. Burg.	105	867.77	3	6.43	28	94.28
Theft	392	3239.67	61	130.68	323	1087.54
Theft of Veh.	79	652.89	9	19.28	59	198.65
Arson	2	16.53	0	0.00	1	3.37
Part I Total	711	5876.03	99	212.08	597	2010.10

POPULATION	N	%	N	%	N	%
total	1210		4668		2970	
5-17	169	13.97	70	1.50	315	10.61
18-24	139	11.49	3602	77.16	963	32.42
per cap. income	11485		5208		8029	
household inc.	21023		10110		12564	
owner occupied		29.90		0.00		5.10

Table 6
Projected Number of Offenses per Year for Census Tract 23 by Primary Use **

	No New Use		Higher Education		Public Housing	
OFFENSE	Mitigating* Measures	Without Mitigation	Mitigating Measures	Without Mitigation	Mitigating Measures	Without Mitigation
Murder/Homic.	0	0	0	0	0	0
Rape	0	0	0	1	0	1
Robbery	2	4	3	8	4	6
Aggr. Assault	3	6	5	12	6	9
Res. Burglary	8	16	12	33	15	25
NonRes. Burg.	3	6	4	11	5	9
Theft	44	88	66	175	81	131
Theft of Veh.	6	13	9	25	11	19
Arson	0	1	1	2	1	1
Part I Total	67	134	100	267	122	200

* The projected number of offenses reflecting the use of mitigating measures for "No New Use" is equal to the existing number of total offenses reported to Seattle Police in census tract 23 (in Magnuson Park) for 1993.

** Educational use is based on the Muckleshoot plan for 5,000 to 7,000 students. Housing use is based on the Seattle and housing coalition plan for 553 residents. Total Part I offenses are projected. Individual offenses are a proportion of the total based on the proportions for the Northeast subarea of the city.

TOTAL PART I OFFENSES

Federal Census Tract Of Occurrence

■ 815 OR MORE
Considerably Above The Median

□ 185 - 814
Average Occurrence

□ 0 - 184
Considerably Below The Median

MEDIAN = 416

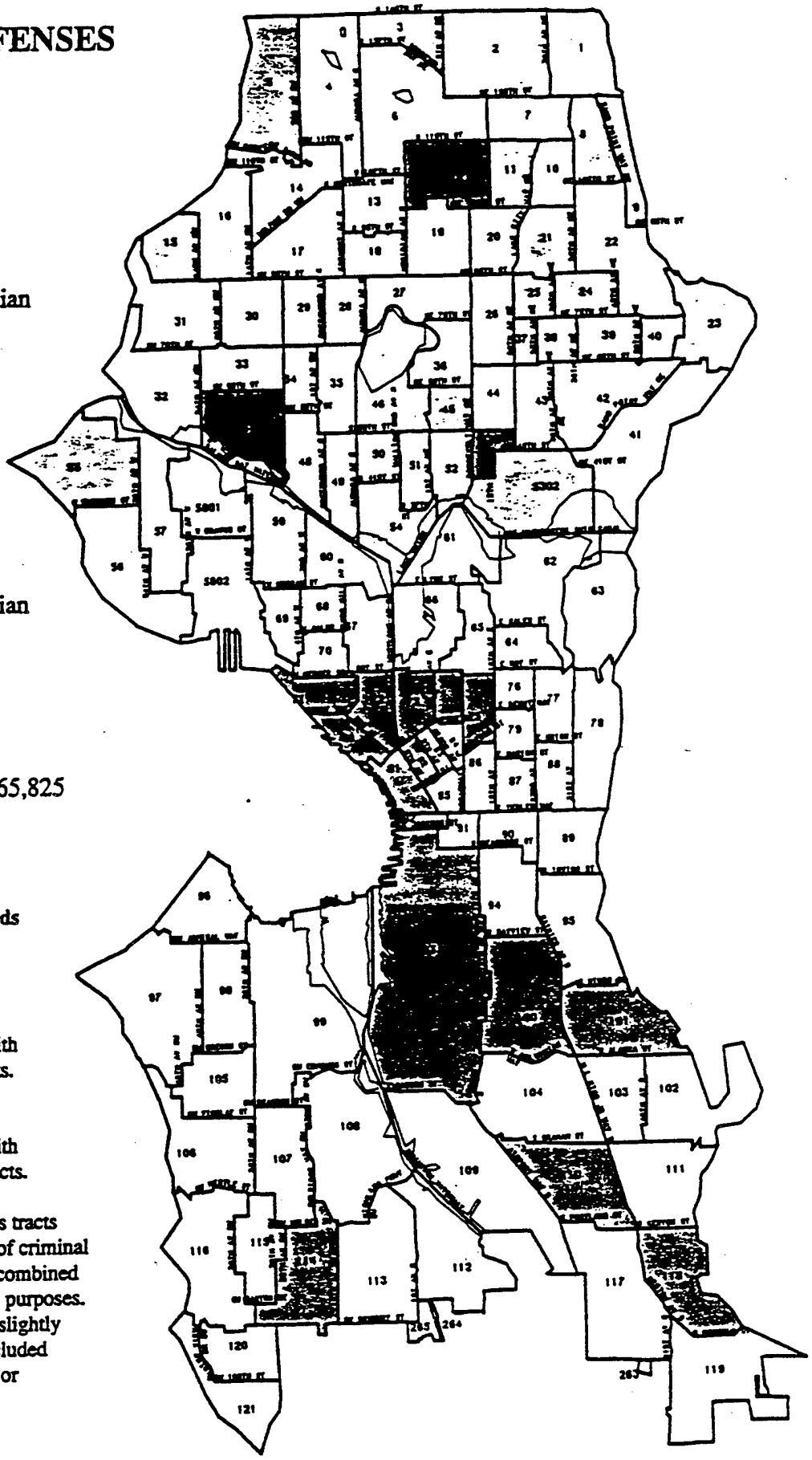
Total Number of Incidents = 65,825
(including 522 for which census tracts are unknown)

LEGEND - The following standards apply to all "Offense Rate Maps" on pages 34-41 and page 43:

"Considerably Above The Median" includes the 15% of census tracts with the most offenses, equalling 18 tracts.

"Considerably Below The Median" includes the 15% of census tracts with the fewest offenses, equalling 18 tracts.

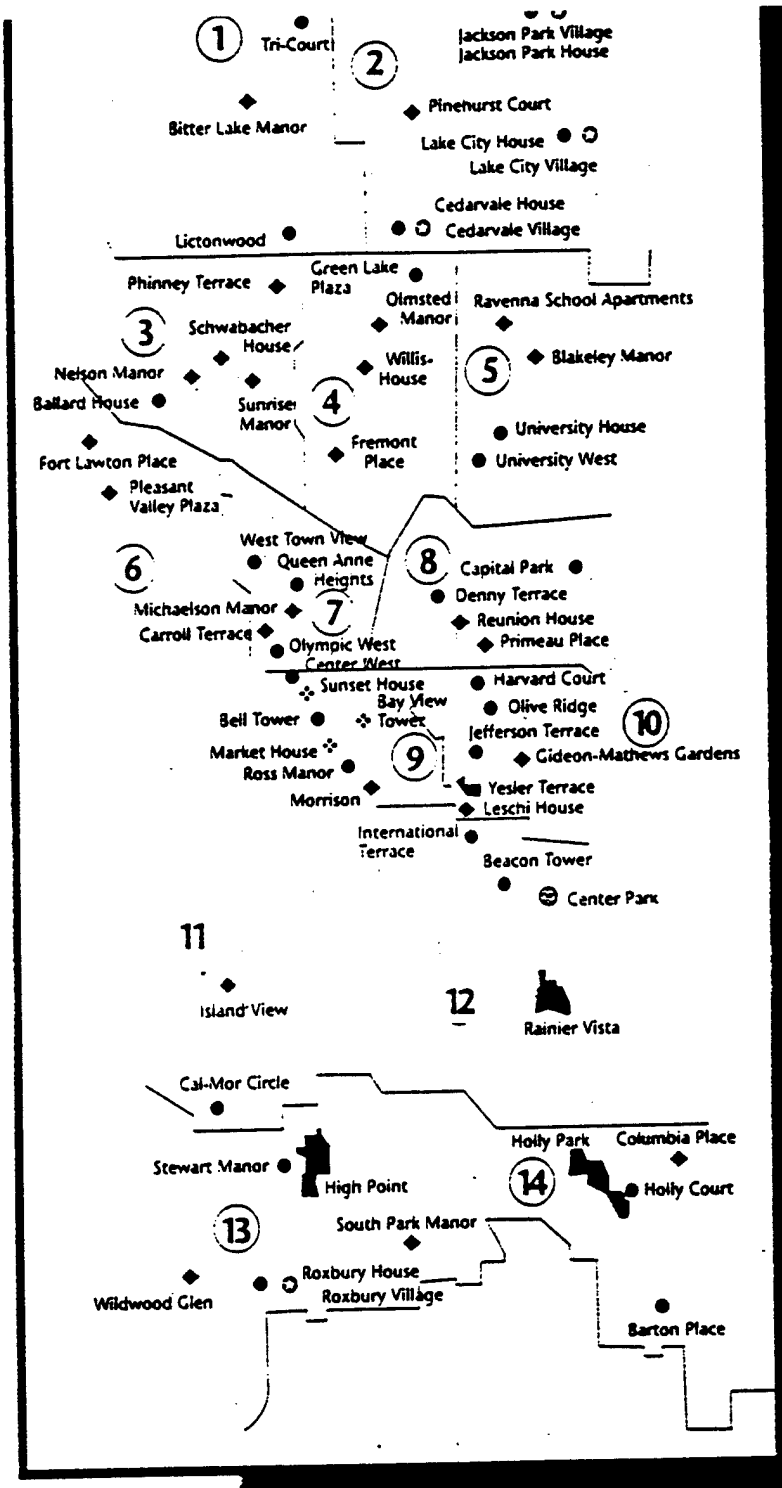
Several offenses had multiple census tracts with identical high or low numbers of criminal incidents, so these tracts have been combined into the same category for statistical purposes. Thus, occasionally slightly more or slightly fewer than 18 census tracts were included within some "Considerably Above" or "Considerably Below" categories.



MAP 2

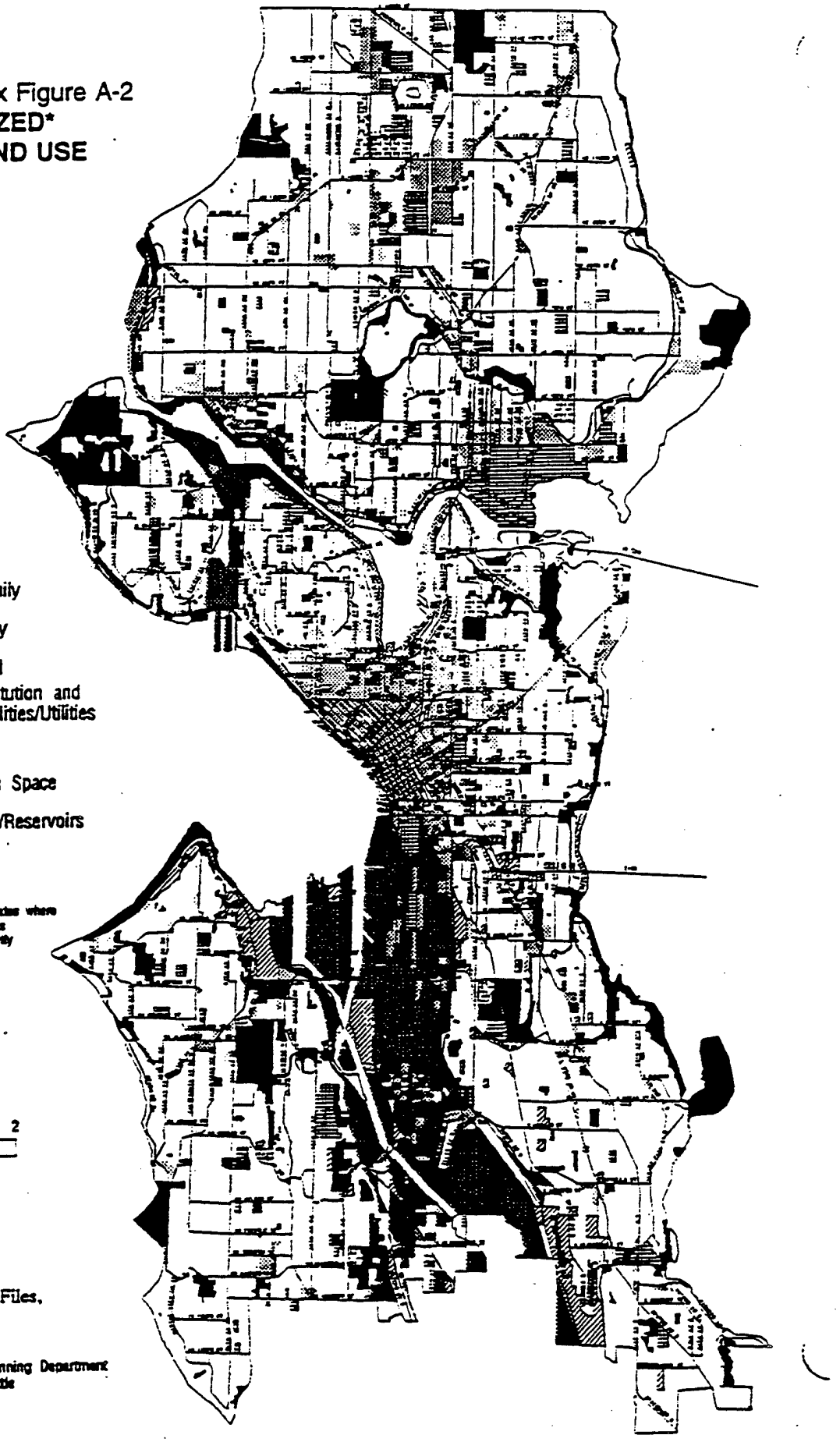
Existing Public Housing in Seattle

Source: Seattle Housing Authority, 1992 Annual Report



- Federally Subsidized High-rises for elderly, handicapped and disabled
- Federally Subsidized Townhouses for families
- Federally Subsidized Garden Communities for elderly, handicapped, disabled and families
- Federally Subsidized High-rise for the physically challenged
- Local Bond issue Senior Housing High-rises for elderly, handicapped and disabled
- Section 8 New Construction High-rises for elderly, handcapped and disabled.

Land Use Appendix Figure A-2
GENERALIZED*
EXISTING LAND USE

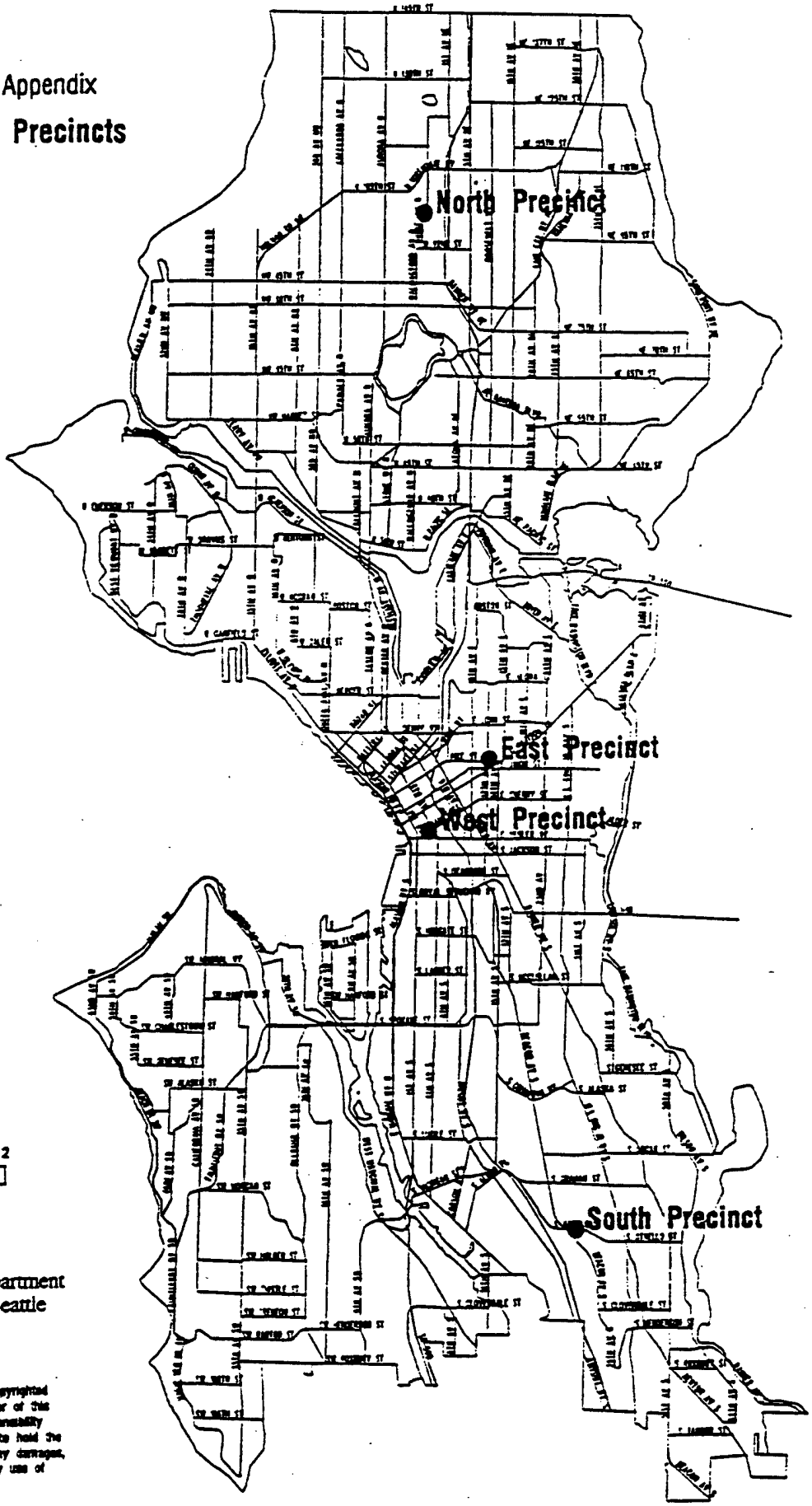


Source: King County Files, March 1991

Produced by the Planning Department
c. 1993 City of Seattle
March 17, 1993

Capital Facilities Appendix

Seattle Police Precincts



0 0.5 1 1.5 2

MILES

Prepared by:
The Planning Department
c. 1994 City of Seattle
January 25, 1994

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LARRY MICHAEL FEHR

PII Redacted [redacted]

EDUCATION

1983 — UNIVERSITY OF WASHINGTON
Graduate School of Public Affairs, Master of Public Administration (M.P.A.)

1978 — UNIVERSITY OF SOUTHERN CALIFORNIA
School of Public Administration, Certificate in Planning

1970-74 — WASHINGTON STATE UNIVERSITY
Phi Beta Kappa graduate in Political Science (B.A.) and Sociology (B.A.)

1972-73 — UNIVERSITY OF WALES
Selected as WSU Honor Program's exchangee to the University of Wales

WORK EXPERIENCE

1981-Present — **EXECUTIVE DIRECTOR**
WASHINGTON COUNCIL ON CRIME AND DELINQUENCY; Seattle, WA
Provides leadership to a statewide private, non-profit organization that seeks to promote public safety and justice in Washington. Agency activities focus on public education, policy analysis, planning, advocacy and research. Specific responsibilities include program and policy development and implementation, financial management, personnel supervision, public relations, research, fund development, media coordination, school-based programs, publication preparation, legislative advocacy and Board relations.

1987-Present — **ADJUNCT FACULTY**
SEATTLE UNIVERSITY; DEPARTMENT OF CRIMINAL JUSTICE (Undergraduate)
and INSTITUTE FOR PUBLIC SERVICE (Graduate); Seattle, WA
Teaching responsibilities include: "Juvenile Offenders," "Society and Justice," "Criminal Justice Public Policies," "Criminal Justice Planning," and "Management of Criminal Justice Agencies." Courseload has included three quarters per year.

1985-Present — **CONSULTANT**
NATIONAL INSTITUTE OF CORRECTIONS; Washington, D.C. and Boulder, CO
Provided periodic consulting services on planning new facilities and special offenders.

1978-81 — **PLANNING COORDINATOR**
NORTHWEST REGIONAL COUNCIL OF GOVERNMENTS; Bellingham, WA
Duties included providing agency-wide administrative, planning, budgeting, and research services to a multi-purpose regional Council of Governments with an annual budget in excess of $3 million. Programs included: (1) Area Agency on Aging, (2) Law and Justice Planning, (3) Public Safety Communications Network, (4) Research and Evaluation, and (5) Tourism Development, 1978-80. Helped coordinate planning for three new county jails.

1976-78 — **LAW AND JUSTICE PLANNER**
NORTHWEST REGIONAL COUNCIL OF GOVERNMENTS; Bellingham, WA
Duties included conducting regional planning process with local elected and appointed officials, securing federal and state grants, implementing decision-making models for advisory boards, and supervising research and evaluation activities.

1975-76 **RESEARCH ANALYST**
INSTITUTE OF GOVERNMENTAL RESEARCH, UNIVERSITY OF WASHINGTON; Seattle, WA
Authored *The Legislative Empowering Provisions of the Washington State Constitution*

1974-76 **TEACHING ASSISTANT**
SOCIETY AND JUSTICE PROGRAM, UNIVERSITY OF WASHINGTON; and LAW AND JUSTICE PROGRAM AND SOCIOLOGY DEPARTMENT, CENTRAL WASHINGTON UNIVERSITY
Course responsibilities included: "Case Study in the System of Justice," "Field Experience in Society and Justice," "Criminal Law," "Law of Evidence and Arrest," and "Criminology."

CIVIC AND PROFESSIONAL ASSOCIATIONS

Current
- Correctional Mental Health Collaboration Advisory Committee
- Executive Directors' Coalition of Seattle/King County (United Way Agencies)
- Governor's Interagency Criminal Justice Work Group (ex-officio)
- King County Executive's Public Safety Taskforce
- King County Regional Law, Safety and Justice Committee; Steering Committee
- "Think Children Coalition" Board Member
- University of Washington, Department of Sociology, Visiting Committee
- Washington State Partnerships Advisory Board (DOC)
- Washington State "Kids Count" Advisory Board (University of Washington)
- Washington State Stop Youth Violence Advisory Committee; Executive Committee
  --Chair., Public Policy Subcommittee
- Washington State Children and Families Advisory Committee (DSHS)
  --Division of Juvenile Rehabilitation Subcommittee
- Washington State Center for Law-Related Education, Board of Trustees
- Washington State Minority and Justice Commission (Supreme Court), Consultant

Former
- Seattle/King County Leadership Tomorrow; Chair., Alumni Association
- Seattle/King County Private Industry Council, Planning Advisory Committee
- Founding Member, Northwest Youth Services
- Founding Member, Washington Public Interest Research Group
- Governor's Committee on Law and Justice
- Elected to Group Health Cooperative's Eastside Regional Council
- King County Children and Families Task Force, Legal Issues Consultant
- Washington State Family Violence Project Advisory Committee
- King County Executive's Use of Deadly Force Taskforce
- Washington State Blue-Ribbon Panel on Sex Offender Sentencing Alternatives
- Chair., Senate Children and Family Services' "At-Risk Youth" Study Group
- Member, Courts and Community Committee, Washington State Supreme Court
- President, Washington State Law and Justice Planning Association

SPECIAL HONORS

- *Phi Beta Kappa*
- Selected for inclusion in *Who's Who in America* and *Who's Who in American Education*
- Selected for Rotary International Group Study Exchange Program to Japan, 1988
- Awarded the 1987 "Professional Award" from the Washington Correctional Association
- Presented the 1987 Award from Catholic Archdiocese of Seattle, Detention Ministry
- Presented with Special Achievement Award from United Way of Whatcom County

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PII Redacted

PII Redacted

CLAUS D. TJADEN

[redacted]

EDUCATION

University of Colorado - Boulder

1989	Doctor of Philosophy in Sociology
1973	Master of Arts in Sociology
1970	Bachelor of Arts in Psychology

PROFESSIONAL EXPERIENCE

1992-1994 President - Toucan Research and Computer Solutions

Clients: OMNI Research and Training, Inc. - Littleton, CO
MJM Consulting - Boulder, CO
Rebound Corporation - Denver, CO
Northwest Washington Intertribal Board - Darrington, WA
North Dakota Division of Youth Services - Bismarck, ND

1980-1992 Colorado Division of Youth Services - Denver, CO

Director of Evaluation and Information Systems - Supervised a staff of seven with responsibilities for policy analysis, program evaluation, client data system, and telecommunications. (1990-92, 1984-86)

Consultant - Developed a strategy for addressing the overcrowded conditions in detention facilities. Coordinated the development of a community based statewide detention services plan. (1988-90)

Detention Services Coordinator - Coordinated the development of detention programs to operate in compliance with ACA standards. Coordinated the design of four new detention facilities with architects and administration. (1986-87)

Special Projects Coordinator - Did planning, training and evaluation for new programs. Programs included detention intake screening, deinstitutionalization of status offenders, jail removal of juveniles, and diversion. Developed a management information system. (1981-84)

Research Coordinator - Evaluated a project which removed inappropriately held juveniles from detention. Developed an automated client data system used by all detention centers in the state. (1980)

1977-1979 Colorado Division of Criminal Justice - Denver, CO

Evaluation Specialist - Reviewed grants to determine compliance with federal and state evaluation requirements. Developed special grant conditions and monitored projects and contract evaluators. Wrote summary evaluations for federal government and state legislature.

Director, Offender Based Transactional Statistics Study - Reviewed all major areas of the Colorado criminal justice system and quantified the offender flow process. (1977-78)

1977 Denver Housing Authority - Denver, CO

Systems Analyst - Developed and analyzed surveys. Designed automated system for handling resident complaints. Reviewed record keeping procedures.

1977 Poly Drug Abuse Program - Denver, CO

Evaluation Consultant - Compiled available data to evaluate drug counseling program.

1975-1977 North Denver Youth Services - Denver, CO

Systems Analyst - Designed and coordinated client tracking and program evaluation data system for a consortium of programs providing educational, drug abuse, counseling, and residential treatment services. Evaluated program goals, management, and treatment effectiveness.

1973-1974 University of Colorado - Regensburg, Germany

Study Abroad Resident Director - Coordinated program with Universität Regensburg and allocated program funds. Served as academic advisor and selected German students to study in the United States.

1972-1973 Denver Anti-Crime Council - Denver, CO

Research Assistant - Wrote components of the agency's crime reduction plan. Designed criminal justice data collection system which coordinates data sources from the Denver Police Department, District Court, District Attorney, and District Court Probation Department.

PROFESSIONAL ORGANIZATIONS

Society for Applied Sociology
American Society of Criminology
Academy of Criminal Justice Sciences
Colorado Juvenile Council

ADDITIONAL ACTIVITIES

1989-1990	Taught "Deviance in U.S. Society" and "Juvenile Delinquency" at the University of Colorado in Boulder.
1984	Consulted with the Montana Department of Crime Control in establishing a juvenile jail removal initiative.
1984	Appeared in the Public Broadcasting Service television documentary, Old Enough to do Time.
1984-1985	Presented workshops on "The Legal Rights of Juveniles" at the annual meetings of the Colorado Juvenile Council.
1983-1987	Served on the Colorado Placement Alternatives Commission's (PAC) Interagency Review Committee.
1979	Consulted with Youthwork, Incorporated of Washington, D.C. to evaluate projects to reduce female sex stereotyping in Las Vegas, Nevada, Salt Lake City, Utah, and Denver, Colorado.
1979	Lectured in Sociology classes at Loretto Heights College in Denver, Colorado.
1976	Taught "Criminal Justice Management" at Metropolitan State College in Denver, Colorado.
1976	Wrote final evaluation report for Mi Casita Group Home of Denver, Colorado.
1976	Developed evaluation design to determine effectiveness of state funded youth service agencies for Youth Service Division, Department of Institutions.
1975-1976	Established and operated in partnership the Muddy Waters of the Platte Coffee House of Denver, Colorado.

[redacted]

PII Redacted [redacted]

RESEARCH AND PUBLICATIONS

Senate Bill 94 Demonstration Projects; Denver: Colorado Department of Institutions, 1992.

Edited and coauthored, Preparing for the 90's: Assessing the Development of a Balanced Juvenile Corrections System, (a series of eight reports); Denver: Colorado Department of Institutions, 1990.

"The Relationship Between Physical and Sexual Abuse and Drug Use in a Sample of Juvenile Detainees in Florida and a Sample of Committed Youthful Offenders in Colorado" with Richard Dembo, Max Dertke, Carol Garrett, and Kenneth W. Wanberg in American Journal of Criminal Justice, 12:198-218, 1988. Also presented at the 1987 annual meeting of the Academy of Criminal Justice Sciences in St. Louis, Missouri.

The Relationship Between Drug Use, Delinquency, and Behavioral Adjustment Problems Among Committed Juvenile Offenders, with Carol J. Garrett, Kenneth W. Wanberg, and Jan Embree; Denver: Colorado Division of Youth Services, 1986.

"The Effects of Crowding in Juvenile Facilities" presented at the 1985 annual meeting of the Society of Criminology in San Diego, California.

"Jail Removal and Juvenile Detention: Interactive Effects" with Elizabeth Wilderman presented at the 1985 annual meeting of the Academy of Criminal Justice Sciences in Las Vegas, Nevada.

"The Detention of Juveniles: Legal Issues to Consider" presented at the 1984 annual meeting of the Colorado Juvenile Council in Steamboat Springs, Colorado

"Limiting Discretion in Juvenile Detention: The Balloon Effect" presented at the 1984 annual meeting of the American Society of Criminology in Cincinnati, Ohio.

"Differential Treatment of the Female Felon: Myth or Reality?" with Patricia Tjaden in Comparing Female and Male Offenders, Marguerite Q. Warren (ed.) Sage Publications, Beverly Hills, California, 1981.

"The Arapahoe Detention Program" with Jack Phelan, Diane Clancy, and Walter Hammons in Pretrial Services Annual Journal vol. IV, Washington, D.C. 1981.

"Assessing the Effectiveness of Juvenile Detention: An Experiment With Intake Criteria" presented at the 1980 annual meeting of the American Society of Criminology in San Francisco, California.

"Alternatives to Juvenile Detention" presented at the 1980 National Symposium on Pretrial Services in Denver, Colorado.

"Imposing the Sentence: Variables Affecting the Decision" presented at the 1979 annual meeting of the American Society of Criminology in Philadelphia, Pennsylvania.

Analysis of Crime in Colorado - Offender Based Transactional Statistics, Colorado Division of Criminal Justice, 1978.

Analysis of Crime in Colorado - A Statistical Report 1976-77, Colorado Division of Criminal Justice, 1978.

"Rape Reduction: A Citywide Program" with David J. Sheppard and Thomas A. Giacinti in Sexual Assault, Marcia J. Walker and Stanley L. Brodskey (ed.) Lexington Books, Lexington, Massachusetts, 1976.

"Youth Service Bureaus: Do They Reduce Crime?," 1976 (unpublished).

The Crime of Rape in Denver, with Thomas A. Giacinti; Denver High Impact Anti-Crime Program, 1973.

Characteristics of a Sample of Arrested Denver Opiate Addicts, with Paul L. Katsampes, Thomas A. Giacinti, and James C. Weissman; Denver High Impact Anti-Crime Program, 1973.

CRIME IMPACT ANALYSIS
OPTIONS TO THE CITY PLAN FOR SAND POINT
APRIL 8, 1996

CRIME IMPACT ANALYSIS

OPTIONS TO THE CITY PLAN FOR SAND POINT

submitted to

URS Consultants, Inc.

prepared by

Larry M. Fehr, M.P.A. and Claus Tjaden, Ph.D.

April 8, 1996

CRIME IMPACT ANALYSIS
OF OPTIONS TO THE CITY PLAN

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SAND POINT CITY PLAN OPTIONS
CRIME IMPACT ANALYSIS

I. Introduction

This report provides crime-related impact information associated with proposed options to the "City Plan" for the Naval Station Puget Sound at Sand Point in Seattle, Washington. This project supplements the crime impact analyses provided previously (Fehr and Tjaden, 1994). The current analysis utilizes the same technical projection methodology ("components of change" model) as employed in the earlier report. The analysis of options to the "City Plan" is provided in two sections, with and without the temporary relocationof Ballard High School. The analysis compares the three alternatives described in the Preliminary Draft Environmental Impact Statement; namely, the City Plan, the Muckleshoot Plan, and the No-Action Alternative. Information from the report is presented in the following outline for both of the sections: direct and indirect impacts, mitigating measures, unadvoidable impacts, and cumulative impacts.

II. Proposed Changes, Excluding High School Relocation

A. Revised Crime Impact Analysis

Issues of higher education and crime are discussed in the "Crime Impact Technical Report" prepared by Fehr and Tjaden in April 1994. The issues and methodological discussion ("components of change" model) in that report are not repeated here, but they are applicable. Location of North Seattle Community College at Sand Point would result in an impact similar to that of the Muckleshoot Plan, but to a lesser degree due to a fewer students. While the Muckleshoot plan projected 5,000 to 7,000 students, the North Seattle Community College plan anticipates 420 to 750 students with dormitories for 100 to 200 students. The projected crime impact of

this proposal will be only about 10 percent of that identified for the Muckleshoot plan.

The crime analysis, research and interviews presented in the initial report all suggested that locating an institution of higher learning at Sand Point will have a minimal impact on crime rates. Similar to people going to work at jobs, students arrive for classes and leave the location when they are done. Thus, crime opportunity is restricted.

Incidents of crime, however, do increase almost anywhere there are people. Students are not only potential crime perpetrators, but crime victims as well. In the same fashion, school assets can become the target of property crimes.

The initial "Crime Impact Report" documented that the yearly number of crimes at the larger higher education institutions varied from 99 per year at the University of Washington to 202 at Seattle University. The characteristics of neighborhoods in which these schools are located vary dramatically. The crime rates for census tracts in which the Seattle Community Colleges are located fall between the rates for the University of Washington (212 for tract 5302) and Seattle University (2010 for tract 86). As shown in *Table A,* the rate for tract 13, in which the North Seattle Community College is located, is 1069 Part I offenses per 10,000 population. This rate is less than the city average.

1. Direct and Indirect Impacts

Given the relatively low number of community college students anticipated for the Sand Point location, the crime impact will be minimal. Since the proposed student population is about ten percent of the Muckleshoot plan, the projected impact at Sand Point will be proportionate, between about 10 and 20 additional offenses per year. *Table B* presents this projected impact by adding the impact to the initial offense projections for City Plan. The projected total impact is allocated to specific crimes according to the proportion of occurrence in the Northeast sector of the city.

2. Mitigating Measures

Same as Muckleshoot Plan. (See extended discussion in Fehr and Tjaden, 1994).

3. Unavoidable Adverse Impacts

Incidents of crime increase almost anywhere there are people. In educational settings, students are not only potential crime perpetrators, but crime victims as well. In the same fashion, school assets can become the target of property crimes. However, the relatively small number of students anticipated at the site suggests that the impact will be restricted.

4. Cumulative Impacts

None

B. Comparison to Other Options

1. City Plan

Crime is projected to increase by 10 to 20 offenses beyond that anticipated for the initial city plan.

2. Muckleshoot Plan

Given the lower number of students in this option, the number of additional offenses is projected at about ten percent of the projection for the Muckleshoot plan.

3. No-Action Alternative

Crime is projected to increase by 10 to 20 offenses in addition to the anticipated increase for the initial city plan.

III. Ballard High School Temporary Relocation

A. Revised Crime Impact Analysis

Ballard High School is located in census tract 33 bordered by NW 60th and NW 70th Streets to the north and south and 8th Ave. NW

and 24th Ave. NW to the east and west. As shown in *Table A*, crime rates in this tract are more reflective of the Northeast sector of the city. The Northeast area has crime rates about one half of the city rate. Crimes typically associated with young offenders, such as burglary and theft, are lower in tract 33 than the Northeast. The total Part I offenses also are lower. This suggests that the presence of high school students in a given location do not necessarily result in higher crime rates.

Such findings should not be unexpected. Teens are more crime prone than adults, but young people who are committed to academic work, and actively involved in related school activities, are less likely to be engaged in criminal activity. In addition, offenses are most frequently committed during leisure time, rather than during school hours (Kratcoski and Kratcoski, 1996). Indeed, there appears to be a growing literature that challenges the media and electoral imagery of schools terrorized by crime and violence (McLean, 1996).

Ballard High School reports to the school district "criminal offenses" occuring on school property. In the 1994-95 school year, there were 104 such incidents. These incidents ranged from assault to theft, but most frequently reports were for alcohol and drug possession. We do not know how many, if any, of these incidents were reported to police.

While there is a great deal of research literature available regarding high school aged youths and crime, very little explores the location of offenses in relation to the school. Only one study completed a decade ago assessed the effect of high schools on crime in the surrounding neighborhoods. That study found that increases in crime are limited to city blocks immediately adjacent to high schools (Roncek and Faggiani, 1985).

Other studies cover a wide range of issues that have some relevance to the discussion of mitigating factors. They suggest that schools can have an influence on the criminal behavior of their students. For example, Jenkins' (1995) work reinforces the belief that keeping students motivated and committed to school has a positive effect on their noninvolvement in delinquent activities. High risk students may have more success in alternative schools (Cox, Davidson and Bynum, 1995). Other research demonstrates

the importance of controlling weapons, especially guns, in preventing aggressive behavior (Webster, Gainer and Champion, 1993) and violent outcomes (Sheley, McGee and Wright, 1992).

Analysis of crime rates and research literature suggest that the temporary relocation of Ballard High School to Sand Point will have little effect on crime rates at the site and minute impact on the adjacent neighborhoods. A comparison of crime rates for the tract where Ballard High School is currently located with tracts containing colleges, show that the rates are not dissimilar. Therefore, the crime impact of relocating the high school is projected to be similar to accommodating a community college, but adjusted for differences in the size of the student populations.

As a final note, it is important to remember that the crime analysis in these documents is limited to Part I offenses as reported to the Seattle Police Department. These are the serious crimes about which citizens are most concerned. Local reactions to high school students, especially among merchants located close to a school, often relate to petty or nuisance offenses such shoplifting, loitering, parking violvations, and traffic infractions. While these types of behaviors are not the subject of this report, when they are of concern, they are typically limited to commercial establishments and thoroughfares immediately adjacent to a school.

1. Direct and Indirect Impacts

The anticipated crime impact of relocating Ballard High School to the Sand Point location should be minimal. Since the proposed high school student population is about twice at of the community college option, the projected impact at Sand Point will be proportionate, between about 20 and 40 additional offenses per year. *Table B* presents this projected impact by adding the impact to the initial offense projections for City Plan. The projected total impact is allocated to specific crimes according to the proportion of occurrence in the Northeast sector of the city.

2. Mitigating Measures

Mitigating measures can reduce the projected crime impact to the lower end of the range. Such measures are already being used, to some extent, at the current Ballard High School location. Examples of mitigating measures include weapons control practices, crime prevention education and service learning activities (e.g., implementing the nationally recognized *Teens, Crime and the Community* curriculum), conflict resolution training, violence reduction curricula, establishing a strong security and police presence (including the possiblity of a sub-station on campus), considering educational policies such as creating a "closed campus," alternative programs for high risk students, and consideration of principles and techniques of Crime Prevention Through Environmental Design (see extended discussion in Fehr and Tjaden, 1994).

Research has found a significant positive relationship between the level of deterrents and school campus crime rates (Morriss, 1993). School facility planners have long recognized the importance of safety considerations in locating and relocating high school facilities (Castaldi, 1994).

The U.S. Department of Education has identified six key characteristics of safe, disciplined and drug-free schools: (1) recognizing, assessing, and monitoring drug and safety problems, (2) setting, implementing and enforcing a clear disciplinary policy, (3) developing and implementing a substance abuse education and prevention program, (4) educating and training staff in safety, (5) promoting parent involvement and providing parent education, and (6) interacting and networking with community groups and agencies (U.S. Department of Education, 1995).

In Washington, an evaluation of the state's "School Safety Enhancement Program," the goal of which was to improve safety and security in schools, found that in all fifteen school districts in which the program was implemented during the 1991-93 biennium, the current school year was safer than the preceding years (Yap, 1994).

Implementing mitigating measures such as those identified above would have a salutory impact on criminal incidents should the high school be temporarily relocated to the Sand Point site.

3. Unavoidable Adverse Impacts

Incidents of crime increase almost anywhere there are people. In educational settings, students are not only potential crime perpetrators, but crime victims as well. In the same fashion, school assets can become the target of property crimes. However, the anticipated impact will be minimal.

4. Cumulative Impacts

None

B. Comparison to Other Options

1. City Plan

Crime is projected to increase by 20 to 40 offenses beyond that anticipated for the initial city plan.

2. Muckleshoot Plan

Given the lower number of students in this option, the number of additional offenses is projected at about twenty percent of the projection for the Muckleshoot plan.

3. No-Action Alternative

Crime is projected to increase by 20 to 40 offenses in addition to the anticipated increase for the initial city plan.

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Table A

Crime Rates for Seattle, the Northeast Area and Tract 33 (Ballard High School)

(1993 Crime and 1990 Census Data)

	Citywide		Northeast		Tract 13 North Seattle CC		Tract 33 Ballard HS	
OFFENSE	N	Rate / 10,000	N	Rate / 10,000	N	Rate / 10,000	N	Rate / 10,000
Murder/Homic.	65	1.26	2	0.29	0	0	1	1.76
Rape	328	6.35	16	2.35	5	12.91	2	3.52
Robbery	2653	51.39	149	21.87	14	36.16	8	14.10
Aggr. Assault	4313	83.54	239	35.09	34	87.81	22	38.77
Res. Burglary	5649	109.42	637	93.52	26	67.15	44	77.55
NonRes. Burg.	3581	69.36	223	32.74	20	51.65	17	29.96
Theft	38818	751.91	3401	499.30	261	674.07	211	371.87
Theft of Veh.	6718	130.13	491	72.08	42	108.47	44	77.55
Arson	317	6.14	32	4.70	2	5.17	3	5.29
Part I Total	62442	1209.51	5190	761.95	414	1069.21	352	620.37

POPULATION	N	%	N	%	N	%	N	%
Total	516259		68115		387		5674	
5-17	55252	10.70			242		589	10.38
18-24	61403	11.89			544		466	8.21
per cap. income	$18,318				$14,432		$15,726	
household inc.	$28,353				$24,929		$27,521	
owner occupied housing		46.46				34.00		37.00

Table B

Projected Number of Offenses per year for Census Tract 23 for Proposed Plans and Options

	No New Use[1]		Muckle-shoot Plan[2]		Original City Plan[3]		Options to City Plan Without High School[4]		Options to City Plan With High School[5]	
OFFENSE	Mitigating Measures	Without Mitigation	Mitigating Measures	Without Mitigation	Mitigating Measures	Without Mitigation	Mitigating Measures	Without Mitigation	Mitigating Measures	Without Mitigation
Murder/Homic.	0	0	0	0	0	0	0	0	0	0
Rape	0	0	0	1	0	1	0	0	0	0
Robbery	2	4	3	8	4	6	4	7	4	7
Aggr. Assault	3	6	5	12	6	9	7	11	7	12
Res. Burglary	8	16	12	33	15	25	16	26	17	29
NonRes. Burg.	3	6	4	11	5	9	5	9	6	10
Theft	44	88	66	175	81	131	87	145	94	158
Theft of Veh.	6	13	9	25	11	19	12	20	13	22
Arson	0	1	1	2	1	1	1	2	1	2
Part I Total	67	134	100	267	122	200	132	220	142	240

Total Part I offenses are projected.
Individual offenses are proportioned based on proportions for the Northeast area of the city.

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[1] Projections for no new use reflects the number of offenses currently reported with a doubling without mitigation.
[2] Projections for the Muckleshoot plan is primarily based on the addition of 5,000 to 7,000 college students.
[3] Projections for the original city plan is primarily based on the addition of 553 new residents
[4] Projections for this option is based on the addition of 500 community college students
[5] Projections for the Ballard HS option is based on the addition of 1000 high school students.

Appendix L

LISTS OF WILDLIFE IN THE SEATTLE AREA

Table L-1
Mammals Observed in the City of Seattle

Common Name	Scientific Name
Brush rabbit	*Sylvilagus bachmani*
Bushy-tailed woodrat	*Neotoma cinerea*
California redback vole	*Clethrionomys occidentalis*
Chickaree	*Tamiasciurus douglasi*
Coyote	*Canis latrans*
Deer mouse	*Peromyscus maniculatus*
Dusky shrew	*Sorex obscurus*
European rabbit	*Oryctolagus cuniculus*
Feral cat	*Felis silvestris*
Feral dog	*Canis familiaris*
House mouse	*Mus musculus*
Little brown myotis	*Myotis lucifugus*
Long-tailed vole	*Microtus longicaudus*
Long-tailed weasel	*Mustela frenata*
Mountain beaver	*Aplodontia rufa*
Muskrat	*Ondatra zibethicus*
Norway rat	*Rattus norvegicus*
Oregon vole	*Microtus oregoni*
Pacific mole	*Scapanus orarius*
Raccoon	*Procyon lotor*
River otter	*Lutra canadensis*
Shortail weasel	*Mustela erminea*
Spotted skunk	*Spilogale putorius*
Striped skunk	*Mephitis mephitis*
Townsend's chipmunk	*Tamias townsendii*
Townsend's mole	*Scapanus townsendii*
Vagrant shrew	*Sorex vagrans*
Virginia opossum	*Didelphis marsupialis*
Western gray squirrel	*Sciurus griseus*

Table L-2
Species of Birds Sighted in Lake Washington, Magnuson Park, and the NOAA Western Regional Center Near NSPS Sand Point as Compiled by Employees of NOAA Through 1991

Common Name	Scientific Name
American coot	*Fulica americana*
American crow	*Corvus brachyrhynchos*
American goldfinch	*Carduelis tristis*
American kestrel	*Falco sparverius*
American pipit	*Anthus rubescens*
American robin	*Turdus migratorius*
American widgeon	*Anas americana*
Bald eagle	*Haliaeetus leucocephalus*
Barn owl	*Tyota alba*
Barn swallow	*Hirundo rustica*
Barrow's goldeneye	*Bucephala islandrica*
Belted kingfisher	*Ceryle alcyon*
Bewick's wren	*Thryomanes bewickii*
Black swift	*Cypseloides niger*
Black-capped chickadee	*Parus atricapillus*
Blue-winged teal	*Anas discors*
Bohemian waxwing	*Bobycilla garrulus*
Bonaparte's gull	*Larus philadelphia*
Brown-headed cowbird	*Molothrus ater*
Bufflehead	*Bucephala albeola*
Burrowing owl	*Athene cunicularia*
Bushtit	*Psaltriparus minimus*
California gull	*Larus californicus*
California quail	*Callipepla californica*
Canada goose	*Branta canadensis*
Canvasback	*Aythya valisineria*
Caspian tern	*Sterna caspia*
Cedar waxwing	*Bombycilla cedrorum*
Cinnamon teal	*Anas cyanoptea*
Cliff swallow	*Hirundo pyrrhonota*
Common goldeneye	*Bucephala clangula*
Common loon	*Gavia immer*
Common merganser	*Mergus merganser*
Common nighthawk	*Chordeiles minor*
Common snipe	*Gallinago gallinago*
Common tern	*Sterna hirundo*

Table L-2 (Continued)
Species of Birds Sighted in Lake Washington, Magnuson Park, and the NOAA Western Regional Center Near NSPS Sand Point as Compiled by Employees of NOAA Through 1991

Common Name	Scientific Name
Common yellowthroat	*Geothylpis trichas*
Cooper's hawk	*Accipiter cooperii*
Dark-eyed junco	*Junco hyemalis*
Double-crested cormorant	*Phalacrocorax auritus*
Downy woodpecker	*Picoides pubescens*
Dunlin	*Calidris alpina*
Eared grebe	*Podiceps nigricollis*
European starling	*Sturnus vulgaris*
Evening grosbeak	*Coccothraustes vespertina*
Fox sparrow	*Passerella iliaca*
Gadwall	*Anas strepera*
Glaucous-winged gull	*Larus glaucescens*
Golden-crowned kinglet	*Regulus satrapa*
Golden-crowned sparrow	*Zonotrichia atricapilla*
Great blue heron	*Ardea herodias*
Greater scaup	*Aythya marila*
Green-winged teal	*Anas crecca*
Herring gull	*Larus argentatus*
Hooded merganser	*Lophodytes cucullatus*
Horned grebe	*Podiceps auritus*
House finch	*Carpodacus mexicanus*
House sparrow	*Passer domesticus*
Hutton's vireo	*Vireo huttoni*
Killdeer	*Charadrius vociferus*
Lapland longspur	*Calcarius lapponicus*
Least sandpiper	*Calidris minutilla*
Lesser scaup	*Aythya affinis*
Lincoln's sparrow	*Melospiza lincolnii*
Long-billed dowitcher	*Limnodromus scolopaceus*
Mallard	*Anas platyrhynchos*
Merlin	*Falco columbarius*
Mew gull	*Larus canus*
Mourning dove	*Zenaidura macroura*
Northern flicker	*Colaptus auratus*
Northern harrier	*Circus cyaneus*
Northern pintail	*Anas acuta*

Table L-2 (Continued)
Species of Birds Sighted in Lake Washington, Magnuson Park, and the NOAA Western Regional Center Near NSPS Sand Point as Compiled by Employees of NOAA Through 1991

Common Name	Scientific Name
Northern rough-winged swallow	*Stelgidopteryx serripennis*
Northern shoveler	*Anas clypeata*
Northern shrike	*Lanius excubitor*
Olive-sided flycatcher	*Contopus borealis*
Orange-crowned warbler	*Vermivora celata*
Osprey	*Pandion haliaetus*
Palm warbler	*Dendroica palmarum*
Peregrine falcon	*Falco peregrinus*
Pied-billed grebe	*Podilymbus podiceps*
Pine siskin	*Carduelis pinus*
Red-breasted merganser	*Mergus serrator*
Red-breasted nuthatch	*Sitta canadensis*
Red-eyed vireo	*Vireo olivaceus*
Red-necked grebe	*Podiceps grisegena*
Red-tailed hawk	*Buteo jamaicensis*
Red-throated loon	*Gavia stellata*
Red-winged blackbird	*Agelaius phoeniceus*
Ring-billed gull	*Larus delawarensis*
Ring-necked duck	*Aythya collaris*
Ring-necked pheasant	*Phasianus colchicus*
Rock dove	*Columba livia*
Rough-legged hawk	*Buteo lagopus*
Ruby-crowned kinglet	*Regulus calendula*
Ruddy duck	*Oxyura jamaicensis*
Rufous hummingbird	*Selasphorus rufus*
Rufous-sided towhee	*Pipilo erythrophthalmus*
Sandhill crane	*Grus canadensis*
Savannah sparrow	*Passerculus sandwichensis*
Sharp-shinned hawk	*Accipiter striatus*
Short-eared owl	*Asio flammeus*
Snow bunting	*Plectrophenax nivalis*
Snow goose	*Chen caerulescens*
Snowy owl	*Nyctea scandiaca*
Song sparrow	*Melospiza melodia*
Spotted sandpiper	*Actitus macularia*
Steller's jay	*Cyanocitta stelleri*

Table L-2 (Continued)
Species of Birds Sighted in Lake Washington, Magnuson Park, and the NOAA Western Regional Center Near NSPS Sand Point as Compiled by Employees of NOAA Through 1991

Common Name	Scientific Name
Thayer's gull	*Larus thayeri*
Tundra swan	*Cygnus columbianus*
Vaux's swift	*Chaetura vauxi*
Vesper sparrow	*Pooecetes gramineus*
Violet-green swallow	*Tachycineta thalassina*
Western grebe	*Aechmophorus occidentalis*
Western meadowlark	*Sturnella neglecta*
Western sandpiper	*Calidris mauri*
Western tanager	*Piranga ludoviciana*
White-crowned sparrow	*Zonotrichia leucophrys*
White-fronted goose	*Anser albifrons*
White-winged scoter	*Melanitta fusca*
Winter wren	*Troglodytes troglodytes*
Yellow-headed blackbird	*Xanthocephalus xanthocephalus*
Yellow-rumped warbler	*Dendroica coronata*

Table L-3
Fish Species Inhabiting Lake Washington

Common name	Scientific Name
Black crappie	*Pomoxis nigromaculatus*
Brown bullhead	*Ameiurus nebulosus*
Carp	*Cyprinus carpio*
Chinook salmon	*Oncorhynchus tshawytscha*
Coho salmon	*Oncorhynchus kisutch*
Crayfish	*Pacifastacus* sp.
Cutthroat trout	*Oncorhynchus clarki*
Goldfish	*Carassius auratus*
Largemouth bass	*Micropterus salmoides*
Longfin smelt	*Spirinchus thaleichthys*
Longnose dace	*Rhinichthys cataractae*
Northern squawfish	*Ptychocheilus oregonensis*
Peamouth	*Mylocheilus caurinus*
Rainbow trout	*Oncorhynchus mykiss*
Redside shiner	*Richardsonius balteatus*
Sculpin	*Cottus* spp.
Smallmouth bass	*Micropterus dolomieui*
Sockeye salmon	*Oncorhynchus nerka*
Tench	*Tinca Tinca*
White sturgeon	*Acipenser transmontanus*
Yellow perch	*Perca flavescens*

Table L-4
Amphibians and Reptiles That May Inhabit the Seattle Area

Common Name	Scientific Name
Northwestern salamander	*Ambystoma gracile*
Western redback salamander	*Plethodon vehiculum*
Pacific tree frog	*Hyla regilla*
Red-legged frog	*Rana aurora*
Bullfrog	*Rana catesbeiana*
Painted turtle	*Chrysemys picta*
Western fence lizard	*Sceloporus occidentalis*
Common garter snake	*Thamnophis sirtalis*
Northwestern garter snake	*Thamnophis ordinoides*
Night snake	*Hypsiglena torquata*
Western terrestrial garter snake	*Thamnophis elegans*

Appendix M

LETTER FROM BUREAU OF INDIAN AFFAIRS

United States Department of the Interior

OFFICE OF THE SECRETARY
Washington, D.C. 20240

SEP 07 1995

The Honorable John H. Dalton
Secretary of the Navy
1000 Navy Pentagon
Washington, D.C. 20350-1000

Dear Mr. Secretary:

In my letter of July 26, 1993, to Frederick S. Sterns, then-Acting Assistant Secretary of the Navy (Installations and Environment), I submitted the Bureau of Indian Affairs' (BIA's) request for the transfer of property located on Naval Station Puget Sound at Sand Point in Seattle, Washington. I am writing now to withdraw that request.

The Naval Station at Sand Point was designated for closure by the 1991 Defense Base Closure and Realignment process, and the property was determined to be excess to the Department of Defense's needs. Under Federal excess property screening procedures, BIA sought 84.8 acres of land and 37 buildings on the Naval Station, without 100 percent fair market value reimbursement for the Department of the Navy, in order to advance the economic development of the Muckleshoot Indian Tribe.

In my letter, I acknowledged the previous planning undertaken by the City of Seattle, reflected in its comprehensive proposal for reuse of the Naval Station property, and I resolved to work with the City in the community reuse process. During the past year, we have been engaged in that endeavor.

The Muckleshoot Tribe and the City of Seattle have entered into an agreement in principle in which the Tribe has agreed to recede from its request that the Department of the Interior sponsor the Tribe as an applicant to obtain land at the Naval Station at the excess level. In return, the City has agreed to provide other land to the Tribe for economic development, as well as providing the Tribe with certain other considerations. The agreement in principle is in the process of being finalized by the Tribal Council and the City of Seattle. I understand that the Department of the Navy will fully review the agreement in principle, and its implementation, during its decision-making process regarding the final disposal of the property. Accordingly, BIA's request for the Sand Point property is withdrawn.

I want to thank you for the consideration and cooperation that the Department of the Navy extended to the Department of the Interior, the City of Seattle, and the Muckleshoot Indian Tribe during the past year. The Department of the Navy's appreciation for the significance of these issues provided the opportunity for Interior, the City, and the Tribe to work together to achieve a mutually beneficial and productive result that will serve the Pacific Northwest for many years to come.

Sincerely,

Ada E. Deer

Ada E. Deer
Assistant Secretary - Indian Affairs