RESOLUTION NO. R-4377

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF KIRKLAND ADOPTING A MASTER PLAN FOR WAVERLY PARK.

WHEREAS, the City of Kirkland is interested in creating a diverse system of parks, recreational facilities, and open spaces that is attractive, safe, functional, and available to all segments of the population; and

WHEREAS, the City of Kirkland 2001 Comprehensive Park, Open Space and Recreation Plan identifies Waverly Park as a community park; and

WHEREAS, the City Council passed Ordinance 3852 on August 6, 2002 which in part provides for the review and approval of park master plans; and

WHEREAS, the Park Board and Department of Parks and Community Services organized and completed an extensive planning process to create a vision for the future of Waverly Park, involving important stakeholders and interested citizens; and

WHEREAS, the Department of Parks and Community Services has completed the Waverly Park Master Plan; and

WHEREAS, pursuant to public notice, the Park Board on December 18, 2002 conducted a public hearing for the purposes of soliciting public comment on the Waverly Park Master Plan; and

WHEREAS, the City Council has received from the Park Board a written report and recommendation on a proposed Waverly Park Master Plan; and

WHEREAS, in regular public meeting the City Council considered the written report and recommendation of the Park Board.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Kirkland adopts the Waverly Park Master Plan recommended by the Park Board and set forth in Exhibit A to this Resolution.

PASSED by majority vote of the Kirkland City Council on the 21st day of January, 2003.

SIGNED in authentication thereof on the 21st day of January, 2003.

Mayor

ATTEST:

City Clerk

R-4377

EXHIBIT A

Waverly Park Master Plan

January 2003

For City Council Approval

City of Kirkland
Department of Parks and Community Services

Barry Russell, Director
Michael Cogle, Park Planning Manager
Consultant: Barker Landscape Architects

Waverly Park Master Plan

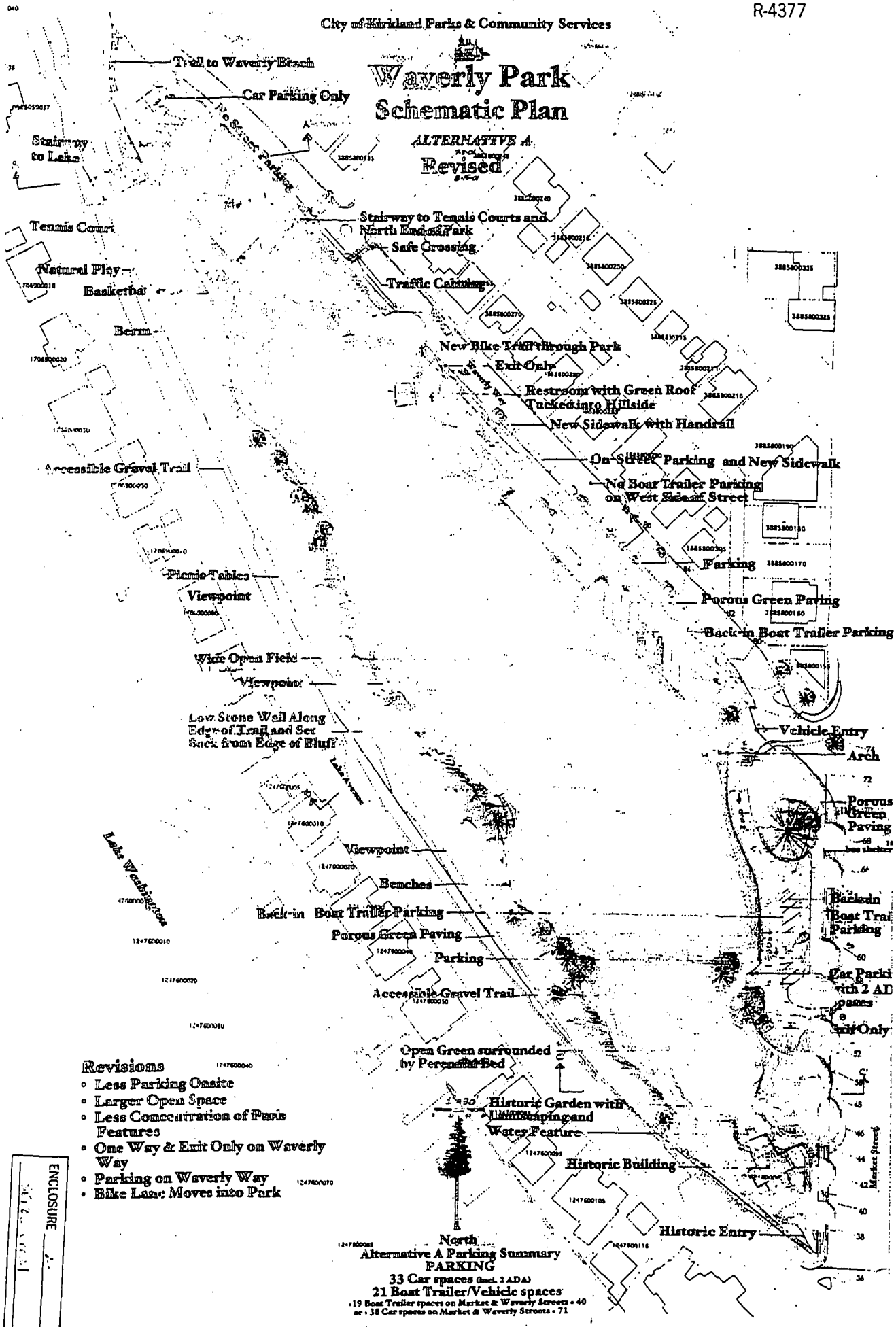
Contents

R-4377

City of Kirkland Parks & Community Services

Waverly Park
Schematic Plan

ALTERNATIVE A
Revised



Revisions

- Less Parking Onsite
- Larger Open Space
- Less Concentration of Park Features
- One Way & Exit Only on Waverly Way
- Parking on Waverly Way
- Bike Lane Moves into Park

Alternative A Parking Summary

PARKING

33 Car spaces (incl. 2 ADA)

21 Boat Trailer/Vehicle spaces

- 19 Boat Trailer spaces on Market & Waverly Streets = 40

or

- 38 Car spaces on Market & Waverly Streets = 71

ENCLOSURE

Waverly Site Design Program
Approved by City Council January 2, 2001

- **A Wide Open Field**

Character:
The existing field should remain green and wide open. It should be left natural and allow for informal, flexible, and unstructured use. Rolling topography may surround the green area which will be smoothed, leveled and irrigated. No buildings or structures shall be placed on site that are inconsistent with the recommended design program.

Criteria:
- Leave open and as large as possible.
- Maintain views and enhance where practical.
- No structures, asphalt field lighting or hardscape shall be included in this area.
- Enhance western edge for wildlife.

- **Native Northwest Landscaping**

Character:
The mature trees along the bluff will be maintained and native plants will help to enhance and reinforce the casual Pacific Northwest 'look'. The site will be softened by the added landscaping.

Criteria:
- Protect existing mature trees.
- Replace blackberries with low growing native plants.
- Keep people away from and maintain slope stability.
- Use native plantings to enhance the native wildlife habitat.
- Reduce the number of hiding places and balance vegetation and safety.

- **Seating and Viewpoints and Framed Views**

Character:
Seating and viewpoints should be positioned to take advantage of the great views. A diversity of seating and viewpoints will be provided. Views will be enhanced by 'opening up key view corridors.. The character of the seating will be in-keeping with a casual Northwest feel and may include logs, boulders and picnic benches. The historic character of the terraces will be preserved as much as possible.

Criteria:
- Protect existing trees.
- Existing views will not be obstructed.
- No hiding places will be created.
- Maintain historic character of terraces as much as possible.
- The seating should not overwhelm or distract from the natural beauty of the park.

- **Trails**

Character:
The trail system will be simple, unobtrusive, and built of natural materials. Trails will link the ends of the park and provide pedestrian connections to Marina and Waverly Beach Park. The trails will create several 'loop' systems in the park and will be located along the edges of the park. A trail along the bluff will provide views of Lake Washington, and stairs down the bluff will provide pedestrian access to the public property on the lake.

Criteria:
- Trails will be located on the edges of the park and have good drainage.
- They will be constructed of soft surface material and look as natural as possible.
- A small wall may be used to separate the trail from the steep bluff edge.
- Minimize privacy issues with residences below Park on Lake Ave. W.
- Research and possibly enhance the historic WPA trail.
- Non-motorized connections will be made to all nearby pedestrian and bike systems.

- **Gardens**

Character:
Native gardens will border the park edges, along trails and be used to screen parking. A historic garden may be located behind the historic building. Gardens may also include wildlife enhancement and perennial gardens. Water may be incorporated in appropriate ways.

Criteria:
- The native gardens will be low and massed.
- Gardens will not block existing views.
- Gardens will enhance edges and connections.
- Gardens will be used to highlight and provide a natural native NW character to the site

- **Restrooms**

Character:
The restrooms will be unobtrusive in architectural style, location, and character. They will be accessible to all users. Restrooms will be enhanced by the addition of a drinking fountain, benches and interpretive signage.

Criteria:
- Located on the edge of the Park
- Possibility of more than one if necessary for accessibility.
- The historic building will have restrooms for visitors.
- Small garden size restrooms could serve users when building closed.

- **Tennis Courts**

Character:
Tennis courts are to remain unobtrusive, and fencing will be minimized.

Criteria:
- Maintain two tennis courts.
- Location may move, but limit new paving as much as possible.
- Possible half-court basketball hoop in an appropriate unobtrusive location.

- **Car & Boat Trailer Parking**

Character:
Car and boat trailer parking will be designed to be screened from view as much as possible. It will not bisect or sever the park or occupy any prime view areas.

Criteria:
- Accommodate 20-25 boat trailer and 30-40 cars if parking is above ground.
- Accommodate 40-50 boat trailer and 100 (or more) cars if parking is below ground.
- The lot will be located as close as reasonable to boat launch and downtown.
- Porous and green paving should be strongly considered to reduce the impact of surface parking.

Additional information to consider is that boat users want a minimum of 40 surface parking spaces.

- **Art**

Character:
Art elements should be well integrated into the park. It should be natural in style and in keeping with the northwest character. It may function as a play element or site furnishing such as a bench or trash receptacle. Temporary art installations may be considered.

Criteria:
- Art elements should not dominate the site.
- They may relate to functional elements such as the restroom, drinking fountain, play sculpture, a bench etc.

- **Natural Play Area**

Character:
The play area should be unobtrusive, 'natural' and integrated into the site. It should be constructed of natural materials such as boulders, logs, and native landscaping and possibly artistic elements.

Criteria:
- No large structures.
- No swinging or catalogue play structures.
- Activities to be designed for include running, jumping, climbing, and sliding.

- **Entries & Edges**

Character:
The entries and edges of the park should be casual, inviting and distinctly northwest in character. Native trees and plants may be used to mark the entrance and the edges. Sidewalks and native landscaping will be used to buffer the park from cars and traffic.

Criteria:
- Incorporate the historic school arch into an entrance.
- Edges will be designed to help screen cars and traffic.
- Entries to provide park access from points north, south, east, and west.
- Entries should provide a sequential approach into the park.

- **Historic Building & Grounds**

Character:
The Historic building grounds should be developed in a style that is consistent and complimentary to the building. This historic portion of the site should be inviting from the street and serve as the southern entrance to the park.

Criteria:
- The building should house the Kirkland Heritage Society Resource Center.
- It should serve as a Kirkland community meeting hall.
- Restrooms will be available to the public when the building is open.

Waverly Park Master Plan
Public Process

The following is a synopsis of the public process used to create the conceptual design for the Waverly Park Site:

- DESIGN PROGRAM PHASE (Fall of 2000)

This portion of the process began in the fall of last year with the creation of a City Council-appointed Waverly Advisory Group. Members included representatives from several key stakeholder groups. Individuals on the committee were:

John Hurney, Boating Community	Chuck Bartlett, Market Neighborhood Assoc.
Margaret Carnegie, KAN	Bob Montgomery, Sports organizations
Michael Radcliff, Heritage Society	Garin Wedeking, Youth Council
Reed Walton, Youth Council	Merrily Dicks, Kirkland Arts Center
Karen Lightfelt, KDA	Cindy Zech, Park Board
Dwight Altenburg, Citizen-at-Large	Rick Seim, Lake Avenue West Residents

The Advisory Group met six times (6) over a three-month span. Each of the Advisory Group's working meetings was open to the public. In addition, the Advisory Group hosted two (2) public workshops. Nearly 100 people attended the first workshop, with nearly two-thirds of attendees being residents of the Market Neighborhood. The second workshop was attended by nearly 50 people. Meetings were advertised widely, including via news releases, the City web page, and about a dozen public notice signs placed strategically in parks throughout Kirkland. In addition, a newsletter was distributed to all interested parties (and placed on our web page) which provided regular updates regarding meetings and progress towards the creation of the park's design program.

This process resulted in a unanimous adoption of the design program by both the Park Board and City Council (January 2001)

- CONCEPTUAL DESIGN PHASE (2001)

The Park Board, with continual participation of Advisory Group members, oversaw the Conceptual Design Phase. The Park Board hosted two (2) public workshops and one (1) open house, advertised in a manner similar to the earlier meetings. Each of these meetings was attended by 40 – 60 people. In addition, the Park Board held two working meetings with Advisory Group members to work on the design. These meetings were open to, and attended by, the public. The Conceptual Design was approved by the City Council in November of 2001.

All told, the Waverly Park process involved:

Four (4) public workshops;
One (1) open house;
Eight (8) separate working meetings held by the Advisory Group and/or Park Board, each of which were open to (and attended by) citizens interested in the project;
Two (2) separate meetings (once during the Design Program phase, and once during the Conceptual Design phase) with residents living on or near Waverly Way to listen to and respond to their ideas and concerns.

Waverly Park Master Plan
Summary and Evaluation of Public Comments on Plan

The following is a summary of the four primary issues raised by the public on the Waverly Park plan: parking, loss of green space, relocation of the tennis courts, and the proposed stairway to Lake Avenue West:

- **Parking**

Comments:

Too much parking is being provided on the site.
Alternatively, not enough boat trailer parking is being provided on the site.

Evaluation:

What is the existing parking capacity?
Presently parking on the Waverly Park Site is provided for in three distinct areas: 1) the gravel terrace lot, 2) the old school driveway paralleling Waverly Way, and 3) the north gravel lot. Boat trailers are not permitted to use the driveway, and seldom utilize the north lot.

Due to the informality of parking as presently exists on the site, the exact number of spaces that the site can accommodate for cars and boat trailers varies. For example, how and where boat trailers are parked on the gravel terrace lot early in the morning can dictate how many subsequent trailers can be parked for the remainder of the day.

All told, it is estimated that the existing parking capacity for boat trailers is 20-25 spaces, and the existing capacity for cars is 50-60 spaces. Note that boat trailer spaces can be used by cars during the non-boating season.

What are the parking requirements for a community park?
Parking for community parks is determined on a case-by-case basis, depending upon the program elements that are proposed. There are no explicit standards for the number of parking spaces in community parks. Kirkland has three other community parks, with the following parking capacities:

1. Peter Kirk Park (shared use of 400+ stall Municipal Parking Garage)
2. Everest Park (202 spaces)
3. Crestwoods Park (116 spaces)

For the Waverly Park Site, parking is needed for general park users as well as for the historic building. Parking is also being proposed on the site to partially serve the parking needs for the downtown boat launch, which is separate from the parking requirements of the park itself.

What is being proposed?
The proposed Plan would accommodate 33 car spaces and 21 boat trailer spaces. In addition, the Park Board has recommended that street parking adjacent to the park on Market Street and Waverly Way be utilized for up to 19 boat trailers or up to 38 car spaces.

Conclusions:

A parking study completed as part of the project's traffic analysis shows that there is adequate parking availability to meet the demand generated by on-site activities.

- **Usable Green Space**

Typical Comments:

The plan provides for insufficient green space on the site.

Evaluation:

What is the net gain or loss of open space in the park with the proposed design?
Currently, parking/traffic circulation areas comprise about 13% of the park property. With the proposed plan, parking/traffic circulation areas would comprise about 15% of the park property. These changes result in a net loss of approximately one-third of an acre in a total usable green space in the park design proposal. The existing parking on the site does not meet code requirements; development of the site will bring parking lots in to code compliance.

Conclusion:

The parking study did not show that an overabundance of parking is being provided on site, and use of Waverly Way and Market Street will allow for more green space in the park. The plan improves and expands the "wide open field" which currently exists.

- **Tennis Courts**

Comments:

The tennis courts on the site should remain in their current location rather than being relocated on the site.

Evaluation:

Why are the tennis courts proposed to be moved?
The tennis courts are proposed to be relocated for two primary reasons. First, the Park Board, staff, and project architect believe that the proposed historic garden is a better fit for the area just north of the historic building, and the overall park design is improved by relocating the tennis courts. Second, relocating the courts to the north end of the park keeps the active uses of the park close together, including the natural play area, basketball area, picnicking, restroom, etc. This has been found to be a common element in community park design, and you will find the clustering of active park elements (playgrounds with sports courts, for example) in Kirkland's other community parks – Peter Kirk, Everest, and Crestwoods. The site elevation will be lowered by up to four feet to minimize view blockage. The tennis courts will not be lighted for evening use.

Will the recently replaced sewer line in Waverly Park prevent the elevation of the proposed tennis courts from being lowered?

The Public Works Department states that the plan to lower the elevation of the tennis courts in the proposed location by three or four feet will not be hindered by the depth of the new sewer line.

Conclusion:

Relocation of the tennis courts is consistent with the design vision for the site and will not have an adverse impact on adjacent residential properties.

- **Stairway to the Lakefront**

Comments:

Development of a stairway on the slope on the west side of the Waverly Park site will threaten the slope's stability.

Evaluation:

A preliminary Geotechnical Engineering Study was completed by HartCrowser and provides recommendations for implementation of the stairway.

Conclusion:

A full geotechnical report meeting the requirements of Chapter 85 of the Zoning Code will be required prior to any work occurring on or atop the west slope. Full compliance with all codes and implementation of the engineering evaluation will result in maintaining the integrity of the slope.

Waverly Park Master Plan

Compliance with 2001 Comprehensive Park, Open Space and Recreation Plan

Goals (Section 1, Page 5)

"Goal 1: Acquire, develop, and renovate a system of parks, recreational facilities, and open spaces that are attractive, safe, functional, an available to all segments of the population."

Conclusion: The goal of the Waverly Park Master Plan is to develop the City-owned property into an attractive, safe, and functional community park available to all Kirkland residents and is in compliance with this goal.

Recommendations for Major Issues and Opportunities (Section 2, Page 17)

"The opportunity for developing other forms of community parks such as the Waverly Park site is important. The eventual development of the Waverly Park site will provide a city-wide park resource, given its prominence and proximity to the downtown and the lake. Features in this park may include formal gardens, picnic shelters, trails, viewpoints, informal recreational open spaces, public meeting space at the historic church building, and unique and creative landscapes."

Conclusion: The Waverly Park Master Plan is consistent with the vision for the site described in the Comprehensive Park Plan.

Recommendations for Major Issues and Opportunities (Section 2, Page 21)

"Street ends are wonderful opportunities to expand the public's access to the waterfront." "The Plan recommends that all waterfront street ends be retained in public ownership for open space purposes."

Conclusion: The Waverly Park Master Plan provides access to the Waverly Tract (off of Lake Avenue West) via development of a stairway down the west slope of the site. The Master Plan is in compliance with this identified opportunity.

Capital Recommendations (Section 2, Page 33)

"Development: Waverly Park Site"

Conclusion: The Waverly Park site is identified as a top priority for development in the Comprehensive Park Plan. Completion of the Master Plan is consistent with achieving this priority.

Market Neighborhood Recommendations (Section 3, Page 90)

"Recommendations: Development of the Waverly Park Site"

Conclusion: Completion of the Waverly Park Master Plan will lead to implementation of this recommendation of the Comprehensive Park Plan.

Waverly Park Master Plan

Park Lighting Plan

Goal: It is the intent of these standards to insure that lighting in Waverly Park is adequate to ensure public safety while minimizing adverse impacts upon adjacent residential uses. It is also the intent of these standards to minimize light pollution which has a detrimental effect on astronomical observations.

Parking areas:

- Area of lighting: Parking areas along Market Street and Waverly Way, except the northern-most park parking lot, which shall not be lighted. Uniformity ratio no greater than 4:1, average to minimum footcandles over the entire parking lot.
- Hours of illumination: Dusk to 11:00 p.m., except for security lighting.
- Lighting intensity: Not greater than 4.0 horizontal footcandles, average maintained, nor less than 0.2 horizontal footcandles, average maintained.
- Height of light standards: Not greater than 20-feet.
- Industry Standards: Parking lot shall be lighted in accordance with the *Illuminating Engineering Society of North America (I.E.S.) Lighting Handbook* (most recent edition), except as required by Kirkland regulations.

Pathway lighting:

- Area of Lighting: Pathway (bike trail) running parallel to Waverly Way only (pathway along bluff will not be lighted).
- Hours of illumination: Dusk to dawn
- Lighting intensity: Minimum footcandles on Pavement: 0.2 fc, maximum footcandles on Pavement: 4.0 fc; Metal halide lamp
- Height of light standards: Bollard type, maximum 48" in height
- Industry Standards: Pathway shall be lighted in accordance with *the Illuminating Engineering Society of North America (I.E.S.) Lighting Handbook* (most recent edition), except as required by Kirkland regulations.

Other Lighting:

Activity areas of the park will not be lighted, including any tennis court or other sport court amenity.

CITY OF KIRKLAND
Planning and Community Development Department
123 Fifth Avenue, Kirkland, WA 98033 425.828.1257
www.ci.kirkland.wa.us

MEMORANDUM

To: Barry Russell, Director of Parks & Community Services
Michael Cogle, Parks Planning & Development Director

From: Stacy Clauson, Planner
Eric Shields, AICP, Planning Director

Date: December 10, 2002

Subject: WAVERLY PARK MASTER PLAN, Analysis of compliance with Comprehensive Plan, Development Regulations, and Environmental Record

The City of Kirkland Department of Parks and Community Services has prepared plans to develop the existing Waverly Park Site, located along the west side of Market Street between Lake Avenue West and Waverly Way (see Attachment 1). The property is located within the Park/Public Use (P) Zone. Development or use of a park in this zone generally requires the preparation of a master plan, which is reviewed through a Community Review Process, as established by the Parks and Community Services Director. In this review process, the Parks Board conducts a public hearing and makes a recommendation to the City Council, which makes a final decision.

The written report that is forwarded from the Parks Board to the City Council should contain at least the following:

1. A description of the proposal;
2. An analysis of the consistency of the proposal with adopted Comprehensive Plan policies, including the pertinent Park and Recreation Comprehensive Plan policies;
3. An analysis of the consistency of the proposal with applicable development regulations, if any;
4. A copy of the environmental record, if the proposal is subject to the State Environmental Policy Act;
5. A summary and evaluation of issues raised and comments received on the proposed master plan; and
6. A recommended action by the City Council.

Below you will find an analysis of the consistency of the proposal with adopted Comprehensive Plan policies (but not including pertinent Park and Recreation Comprehensive Plan policies) (see Section II.E), an analysis of the consistency of the proposal with applicable development regulations (see Section II.D), and a copy of the environmental record (see Section II.B).

Based on Statements of Fact and Conclusions (Sections I and II), and Attachments in this report, the Planning and Community Development Department has determined that the Waverly Park Master Plan is consistent with adopted Comprehensive Plan policies and applicable development regulations. As part of the development of the approved master plan, the Planning and Community Development Department will require the following:

1. Development on the property is subject to the applicable requirements contained in the Kirkland Municipal Code, Zoning Code, and Building and Fire Code. It is the responsibility of the applicant to ensure compliance with the various provisions contained in these ordinances. Attachment 3, Development Standards, is provided in this report to familiarize the applicant with some of the additional development regulations. This attachment does not include all of the additional regulations.

2. Installation of the required improvements as described in Attachment 3. Prior to installing these improvements, plans must be submitted for approval by the Department of Public Works (see Conclusion II.D.1.f).

3. As part of the grading permit to install the proposed parking lots, the Parks Department shall demonstrate that the project is consistent with the maximum allowable grade established in KZC 105.12. (see Conclusion II.D.1.d.iv).

4. Prior to issuance of a Certificate of Occupancy, covered bicycle parking shall be provided within 50 feet of the entrance to Heritage Hall (see Conclusion II.D.1.d.x).

5. Prior to issuance of a building permit for the restroom facility, the Parks Department shall demonstrate that the facility includes overhead weather protection along any portion of the restroom that adjoins the pedestrian walkway (see Conclusion II.D.1.d.vi).

6. Prior to issuance of a grading permit to install the parking lots, the Parks Department shall demonstrate that the parking lot design is consistent with the standards outlined in Attachment 3. Specifically, the parking lot shall be revised so that no more than 8 contiguous spaces are provided in each row of spaces, unless a modification to the parking lot landscaping is granted subject to compliance with the criteria set forth in KZC 105.103.e. Further, the parking lot shall be surfaced with asphalt or superior material. In order for the porous green paving to be used, it must be found consistent with the criteria set forth in KZC 105.103.h. (see Conclusion II.D.1.e)

7. Before any work occurs on or atop the west slope (e.g. grading, installation of proposed irrigation system, the proposed low stone wall, an accessible gravel trail along the west edge of the open field, and seating and viewpoint areas along the gravel trail, as well as landscaping on the slope face) a geotechnical report meeting the requirements of Chapter 85 of the Zoning Code shall be completed and submitted for review (see Conclusion II.D.1.g.ii).

8. Prior to issuance of any grading or building permits for construction of new structures or expansion of existing structures, the Parks Department shall submit a tree retention plan showing significant trees on the subject property and identifying trees that can be retained with development of the proposed park for review and approval by the Planning Department (see Conclusion II.D.1.h.ii).

9. Prior to any land surface modification or development of any areas for passive or active recreational space within the shoreline jurisdiction, the applicant shall obtain approval of a Substantial Development Permit (see Conclusion II.H.2).

10. The project shall comply with the mitigation measures outlined in Attachment 4 (see Conclusion II.B).

I. INTRODUCTION

A. PROPOSAL

Develop the existing Waverly Park Site as follows: a) grading and irrigating the wide open field to be used for informal recreational use; b) installing native landscaping along the bluff and removing blackberries; c) installing a low stone wall to limit access to the bluff; d) installing an accessible gravel trail along the west edge of the open field; e) installing a new bike trail through the park on the east edge of the open field; f) providing seating and viewpoint areas along the gravel trail; g) planting a native garden and installing a water feature north of the existing historic building at the southern corner of the property and completing other plantings throughout the park; h) constructing a restroom; i) creating a community park at the northern portion of the property by relocating the tennis courts and installing a basketball hoop and a natural play area; j) creating parking areas along the Market Street and Waverly Way frontages containing 33 vehicle parking spaces and 21 boat trailer/vehicle spaces; k) constructing a stairway along the northern portion of the site down the west slope to Lake Avenue W; l) relocating the arch; m) and opening Heritage Hall to use with the bottom floor housing the Kirkland Heritage Society Resource Center and the upper floor used as a community meeting hall. (see Attachment 2)

The park is proposed to be developed in phases as funding sources for development and maintenance of the park become available. The first phase would involve opening the Heritage Hall to use. The remainder of the site would be developed sequentially as funding becomes available.

II. FINDINGS OF FACT AND CONCLUSIONS

A. SITE DESCRIPTION

1. Site Development and Zoning:

   a. Facts:

      (1) Size: According to the King County Assessor Maps, the current size of the site is approximately 449,623 square feet (10.32 acres).

      (2) Land Use: The site contains Heritage Hall, a 2,260 square foot building. The site is also developed with tennis courts, several gravel parking areas, and a paved parking area at the northern portion of the property. The site currently contains a gravel pathway that runs along the west edge of the open field.

B. STATE ENVIRONMENTAL POLICY ACT (SEPA)

Facts: A Determination of Nonsignificance (DNS) was issued on November 21, 2002. The Environmental Checklist, Determination, and additional environmental information are included as Attachment 4. The appeal period for the determination expired on December 5, 2002 and no appeals were filed.

C. CONCURRENCY

Facts: The Public Works Department has reviewed the application for concurrency. A concurrency test was passed for water, sewer and traffic on April 8, 2002.

D. APPLICABLE DEVELOPMENT REGULATIONS

1. Zoning Code. The property is located within the Park/Public Use (P) Zone

   a. Development regulations for Public Parks

      i. Fact: The fundamental site development standards pertaining to public parks in the P zone are set forth in Section 65.15. A summary of those regulations and the relationship of the proposal to them is contained in Attachment 5.

      ii. Conclusion: The proposal complies with the regulations for the P zone as set forth in Section 65.15.

   b. Special Regulations for Parks

      i. Fact: Zoning Code Section 65.15.010, Special Regulation 1 establishes that any development or use of a park must be consistent with a master plan. A master plan shall be reviewed through a community review process, established by the Parks and Community Services Director, which shall include at a minimum:

         - One formal hearing conducted by the Parks Board, preceded by appropriate public notice.
         - The submittal of a written report on the proposed master plan from the Parks Board to the City Council, containing information described in subsection i) through vi) ; and
         - City Council review and approval.

         The Master Plan shall identify the following information: placement, dimensions, and uses of all structures as well as streets and other areas used for vehicular circulation; location, dimensions, and uses of all active and passive recreation areas; potential users and hours of use; lighting, including location, hours of illumination, lighting intensity, and height of light standards; landscaping; and other features as appropriate due to the character of the neighborhood or characteristics of the subject property.

      ii. Fact: A public hearing before the Parks Board is scheduled for December 18, 2002. Notice for the public hearing was 1) sent to the owners of all property within 300 feet of the property, 2) sent to residents of property located adjacent to or directly across the street from the property, 3) posted on notice boards located on the site, and 4) published in the newspaper.

      iii. Fact: The scaled site plan showing the Master Plan layout (see Attachment 2) shows placement and uses of all structures as well as streets and other areas used for vehicular circulation. The site plan also depicts the location

and uses of all active and passive recreation areas. The existing Heritage Hall measures 46 feet x 46 feet, with a height of approximately 21 feet. The proposed restroom facility is proposed to have a maximum dimension of 22 feet by 22 feet (484 square feet), with a maximum height of 14 feet at the peak of the roof.

iv. Fact: The lighting proposed for the park will be security lighting for the restroom and parking areas, and security lighting for the pedestrian walkway/bicycle path located along the east edge of the open field. The Parks Department will be presenting details on the parking lot lighting (including location, hours of illumination, lighting intensity, and height of light standards) in a separate memo. The Parks Department has provided the following details regarding the proposed lighting along the pedestrian walkway:

- Bollard type, maximum 48" in height
- Metal halide lamp
- Minimum Footcandles on Pavement: 0.2 fc
- Maximum Footcandles on Pavement: 4.0 fc
- Standards: Pathway shall be lighted in accordance with the *Illuminating Engineering Society of North America (I.E.S.) Lighting Handbook* (most recent edition), except as required by Kirkland regulations.

v. Fact: Waverly Park is a community park serving the adjacent neighborhood and downtown Kirkland. It also provides boat-trailer parking for boaters launching their boats at the nearby Marina Park. It is anticipated that the large open field will be used for youth sport teams for practice. The Kirkland Historic & Preservation Society will use the lower floor of Heritage Hall as an archive office and the upper half will be managed by the Parks Department and available as a banquet, meeting, and party facility.

The hours of use are different depending on the activity. The meeting facility in Heritage Hall will be used on a per demand basis but will be most used during the evenings (after 6 PM) and weekends. During peak boating season (May through August), boaters will use the boat-trailer parking areas between 4PM and 7PM. The tennis courts and open field will generally be used on weekends or weekday evenings from approximately 4PM to 7PM. The park is proposed to operate within the typical hours established by KMC 11.80.250, with the park being closed between the hours of 11 p.m. and dawn.

vi. Conclusions: The proposal provides the information required by section 65.15.010, Special Regulation 1. It is consistent with all applicable development regulations (see Sections II.D) and the Comprehensive Plan (see Section II.E). In addition, it is consistent with the public health, safety, and welfare because it permits development of a public park to serve the recreational needs of the community consistent with the established policies and regulations for public parks.

c. Neighboring Development and Zoning:

i. Facts: The subject property is surrounded by the following zones and uses:

North: Waverly Way. To the north of Waverly Way the property is zoned RS 7.2 and the lots contain single family residences.

South: Lake Avenue W. To the south of Lake Avenue W are properties zoned either WDI or WDII containing single family or multifamily residences.

East: Market Street. To the east of Market Street are properties zoned either CBD 8 or PR 3.6, developed with a mix of office buildings, multifamily residential buildings, and single family residences.

West: To the west of Lake Avenue are properties zoned either WDI or WDII containing single family or multifamily residences.

ii. Conclusion: The neighborhood development and zoning are not constraining factors in this application.

d. Parking Requirements.

i. Facts: The P zone does not specify a parking space requirement for Public Parks. As a result, pursuant to KZC 105.25, the parking requirement is determined on a case-by-case basis, based on the actual parking demand of existing uses similar to the proposed use. The applicants have completed a parking analysis as part of the traffic report on the site (see Attachment 4, Enclosures 6 and 7). In this parking analysis, the current peak parking demand is identified to occur in the summer on weekdays, from the hours of 4:00 to 7:00 pm. This is based upon a parking count conducted at the Waverly Park site in July, 2002. During this time the park is used by boaters, youth sport teams and various other park users (tennis, informal play, strolling, etc.).

In addition to the existing activities, the master plan proposes use of Waverly Hall as a Heritage Resource Center and community meeting hall. The Heritage Resource Center is expected to have a parking ratio similar to an office use, generating the need for 4 additional parking spaces during the peak parking demand time. The community meeting hall would generally operate outside of the peak parking demand time, on weekends and after 6:00 pm on weekdays. The parking demand for the meeting hall was based on the occupancy of the upper floor of Heritage Hall, which has a maximum occupancy of 73 people. A ratio of 1 stall for every four persons (similar to the ratio used for a church) was used to determine parking demand for the facility, estimated to be 19 stalls.

The future parking demand for park users during the weekday peak hours of use is expected to increase from 21 to 25 stalls, with the four additional stalls being need to serve the Heritage Resource Center. The weekend need for parking would increase in the future from 12 to 32 stalls, with the additional 20 spaces being provided to meet anticipated events within the community meeting hall.

ii. Conclusion: Based on the analysis of the parking demand, it appears that there is sufficient parking availability to meet the demand generated by on-site activities.

iii. Facts: Pursuant to KZC 105.12, the slope of entrance and exit driveways shall not exceed six percent for the first 20 feet from the face of the abutting right-of-way curb. Thereafter, the slope shall not exceed 15 percent. The proposal includes a slope to exit from the parking lot along Waverly Way to Waverly Way.

iv. Conclusion: As part of the grading permit to install the proposed parking lots, the applicant shall demonstrate that the project is consistent with the maximum allowable grade established in KZC 105.12.

v. Facts: Pursuant to KZC 105.18, the park is required to provide the following features:

1. Pedestrian walkways designed to minimize walking distances from the building entrance to the right-of-way and adjacent transit facilities.

   Staff Analysis: The proposed park design contains an extensive pedestrian walkway system, including walkways from building entrances to the public right-of-way. Sidewalks in the public right-of-way lead pedestrians to the transit stop located along the site frontage on Market Street.

2. Covered bicycle parking within 50 feet of an entrance to a building.

   Staff Analysis: Covered bicycle parking should be provided within 50 feet of the entrance to Heritage Hall. No bicycle parking facilities are currently shown on the site plan.

3. Pedestrian walkways between principal entrances to all uses on the subject property.

   Staff Analysis: The pedestrian walkway system has two main north-south connections, connecting Heritage Hall to the parking lots, the restroom facility, and to the active recreation facilities located at the north end of the park. The pedestrian walkway system also has two east-west connections to facilitate better access.

4. Pedestrian walkways connecting to adjacent properties.

   Staff Analysis: The proposal includes future development of a stairway to Lake Avenue West along the north portion of the site in order to improve pedestrian connectivity. The proposal also shows the pedestrian walkways connecting to the sidewalk system in the adjoining public rights-of-way.

5. Locate service bays away from pedestrian areas.

Staff analysis: No service bays are proposed.

6. Provide overhead weather protection along any portion of the building which is adjacent to a pedestrian walkway.

   Staff analysis: The design plans for the restroom facility shall include overhead weather protection along the portion of the restroom that adjoins the pedestrian walkway.

vi. Conclusion: The proposal is consistent with the pedestrian, bicycle, and transit facility requirements with the following additions:

   a. Covered bicycle parking should be provided within 50 feet of the entrance to Heritage Hall.

   b. The design plans for the restroom facility shall include overhead weather protection along the portion of the restroom that adjoins the pedestrian walkway.

vii. Fact: KZC 105.50 indicates that parking areas for uses other than detached dwelling units shall be located as far as possible from any adjoining low density zone, or existing low density permitted use.

   The site adjoins low density uses and zones along a portion of the Waverly Way and Lake Avenue West frontage.

   The applicant has proposed to arrange the parking lots on the perimeter of the site in order to preserve the large open green field for passive recreational space. As a result, the parking lots along Waverly Way would be located within 100 feet of the adjoining low density zone, though separated by Waverly Way, a collector street.

   In order to minimize potential impacts to adjoining low-density residential uses, the applicant has designed the parking lot to be vertically separated from the residences, sited at a lower elevation that Waverly Way (see Attachment 6). In this way, views from the adjoining residences would not be interrupted by the parking lot.

viii. Conclusion: The location of the parking area in proximity to adjoining low-density uses is appropriate.

e. Parking Area Design

   i. Facts: Pursuant to KZC 105.75 the parking lot shall be arranged so that no more than 8 contiguous spaces are provided in each row of spaces. An island or peninsula of the same dimensions as the adjacent parking spaces must separate adjacent groups of spaces from one another and each row of spaces from any adjacent driveway which runs perpendicular to the row.

   In the proposed parking plan, there are some rows that contain more than eight contiguous spaces.

ii. Pursuant to KZC 105.100, the applicant is required to surface the parking area and driveway with a material comparable or superior to the right-of-way providing direct vehicular access to the parking area. Grass grid pavers may be used for emergency access areas that are not used in required permanent circulation and parking areas.

The applicant has proposed to surface the parking lots with porous green paving. The specifics concerning this porous green paving have not been provided.

iii. The applicant has proposed to phase development of the proposed park, with the development of the parking areas occurring in the second phase, after occupation of Heritage Hall is scheduled to occur and after funding becomes available. Until funding becomes available, the applicant proposes that the users of Heritage Hall park vehicles in the existing gravel parking lots located on the site.

The existing parking lots do not meet several of the parking area design requirements established in KZC Sections 105.60 through 105.102, including parking area landscaping and surface materials.

iv. KZC 105.103.h allows the surface material requirement for parking areas to be modified if:

- The surfacing material will not enter into the drainage system, or onto public or private property; and
- The material will provide a parking surface which is usable on a year-round basis.

The existing parking lots are developed with compacted gravel. The parking lots are currently used year-round and can continue to provide a usable parking surface, provided that appropriate periodic maintenance is completed (e.g. removal of potholes). There is no evidence that the gravel drains into the City's drainage system or onto private property.

v. Conclusions:

1. The proposed final parking design is consistent with the requirements for parking lots established in Chapter 105 with the following revisions:

   a. The parking lot should be designed consistent with the standards outlined in Attachment 3.

   b. The parking lot should be revised so that no more than 8 contiguous spaces are provided in each row of spaces, unless a modification to the parking lot landscaping is granted subject to compliance with the criteria set forth in KZC 105.103.e.

c. The parking lot should be surfaced with asphalt or superior material. In order for the porous green paving to be used, it must be found consistent with the criteria set forth in KZC 105.103.h.

d. The temporary use of the existing gravel parking lots is consistent with the modification criteria established in KZC 105.103.h and should be permitted until such time as funding sources for the development of the remaining portions of the public park become available, provided that appropriate periodic maintenance of the parking lots is completed (e.g. removal of potholes).

f. Right-of-Way Improvements

Zoning Code Chapter 110 establishes right-of-way improvement requirements. The Public Works Department has outlined the required half-street improvements for the adjoining right-of-ways in Attachment 3.

g. Geologically Hazardous Areas

i. The Kirkland Sensitive Area Maps show the slope on the west side of the site as a High Landslide Hazard Area and Seismic Hazard Area. Therefore, any development must comply with Chapter 85 of the Zoning Code. This Chapter requires a geotechnical evaluation. Depending on the results of the soils report, the City may require buffers, setbacks or other methods for protection of the hazard area.

The applicant has submitted a Geotechnical Engineering Study completed by HartCrowser (see Attachment 4, Enclosure 5) that presents the preliminary results on a geotechnical engineering study completed for the installation of the stairway proposed along the northern portion of the site down the west slope to Lake Avenue W.

ii. Conclusions: Before any work occurs on or atop the west slope (e.g. grading, installation of proposed irrigation system, the proposed low stone wall, an accessible gravel trail along the west edge of the open field, and seating and viewpoint areas along the gravel trail, as well as landscaping on the slope face) a geotechnical report meeting the requirements of Chapter 85 of the Zoning Code should be completed and submitted for review.

h. Natural Features - Significant Vegetation

i. Facts: Zoning Code section 95.15 states that the applicant shall retain significant trees on the subject property to the maximum extent possible. The City may require minor alterations in the arrangement of buildings and other elements of the proposed development in order to achieve maximum retention of significant trees.

The site contains several significant trees, both on the forested bluff and in the green open field. Some existing trees in the open field may need to be removed in order to permit proposed grading and infrastructure improvements. A tree retention plan has not been prepared at this time.

ii. Conclusion: Prior to issuance of any grading or building permits for construction of new structures, the Parks Department should submit a tree retention plan showing significant trees on the subject property and identifying trees that can be retained with development of the proposed park for review and approval by the Planning Department.

2. Shoreline Master Program (SMP)

a. Facts: A portion of the property is located within the shoreline jurisdiction (200 feet from the ordinary high water mark, which is typically demarked by bulkheads along the lake). That portion is located within the Suburban Residential and Urban Mixed 1 Shoreline Environments.

Section 24.05.110 establishes that public parks and land surface modifications within the Suburban Residential and Urban Mixed 1 Shoreline Environments require approval of a Substantial Development Permit (SDP).

b. Conclusion: Prior to any land surface modification or development of any areas for passive or active recreational space within the shoreline jurisdiction, the applicant shall obtain approval of a Substantial Development Permit.

E. COMPREHENSIVE PLAN

1. Fact: The subject property is located within the Market neighborhood. The City of Kirkland Comprehensive Land Use Map on page VI-3 designates the subject property for Park/Open Space (see Attachment 7).

2. Conclusion: The proposed development of a public park at the site is consistent with the land use designation of the property.

3. Facts: Within the Market Neighborhood, the Neighborhood Plan indicates that the public lands do not adequately meet the park and open space needs of Market area residents (see Attachment 8).

4. Conclusion: The Waverly Park site is largely being retained as an open field to help serve park and open space functions. In addition, the proposal includes development of some community park facilities, including tennis courts, a basketball hoop, and a natural play area in order to serve the needs of the Market area residents. These facilities have been located to the north of the site in order to locate in closer proximity to the residential neighborhood.

5. Facts: The Neighborhood Plan indicates that redevelopment of the subject site (identified as the Kirkland Junior High School site) must be compatible with nearby low-density residential uses (see Attachment 9).

6. Conclusion: As noted in the background discussion contained in Section F, the proposal includes substantial amounts of public open space. The two buildings proposed on-site would have a low-rise configuration to blend with nearby residential uses. The proposal is consistent with this section.

7. Fact: Market Neighborhood, Open Space/Parks: Within the Market Neighborhood, the Neighborhood Plan indicates that a pedestrian/bicycle pathway (perhaps with scenic view

stations overlooking Lake Washington) should be established along the west side of Waverly Way.

The proposal shows elimination of the existing bike lane along the west side of Waverly Way and replacement with a bike lane trail traveling through the park.

8. Conclusion: The pathway through the park will retain needed pedestrian and bicycle connections and meets the intent of the Comprehensive Plan.

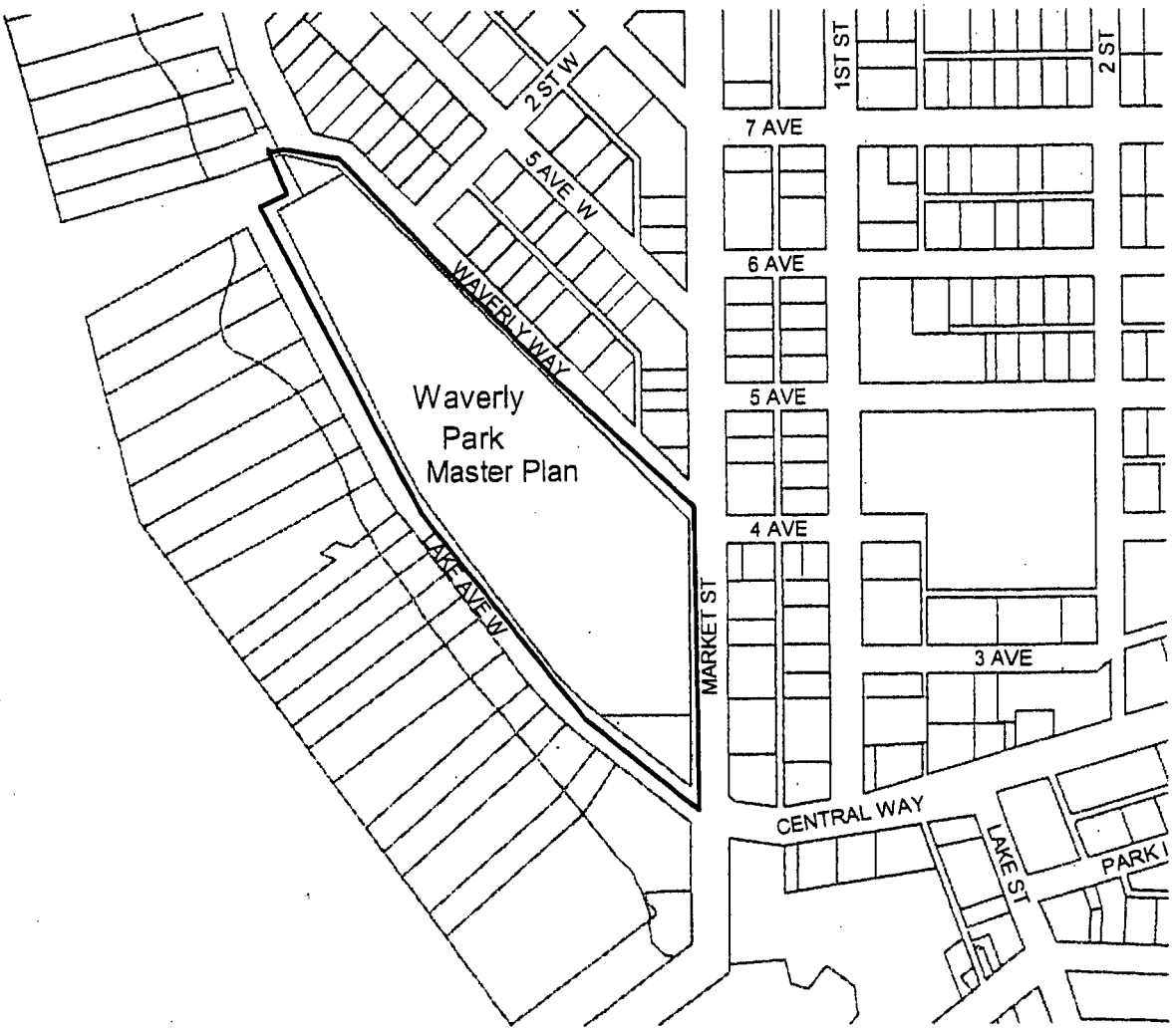
III. APPENDICES

Attachments 1 through 9 are attached.

1. Vicinity Map
2. Waverly Park Schematic Plan
3. Development Standards
4. SEPA Determination and Attachments
5. Use Zone Chart Compliance
6. Site Section through Waverly Park
7. Comprehensive Plan Land Use Map
8. Comprehensive Plan, Section E on page XV.J-11
9. Comprehensive Plan, Section F on page XV.J-12

R-4377

Waverly Park Master Plan



N

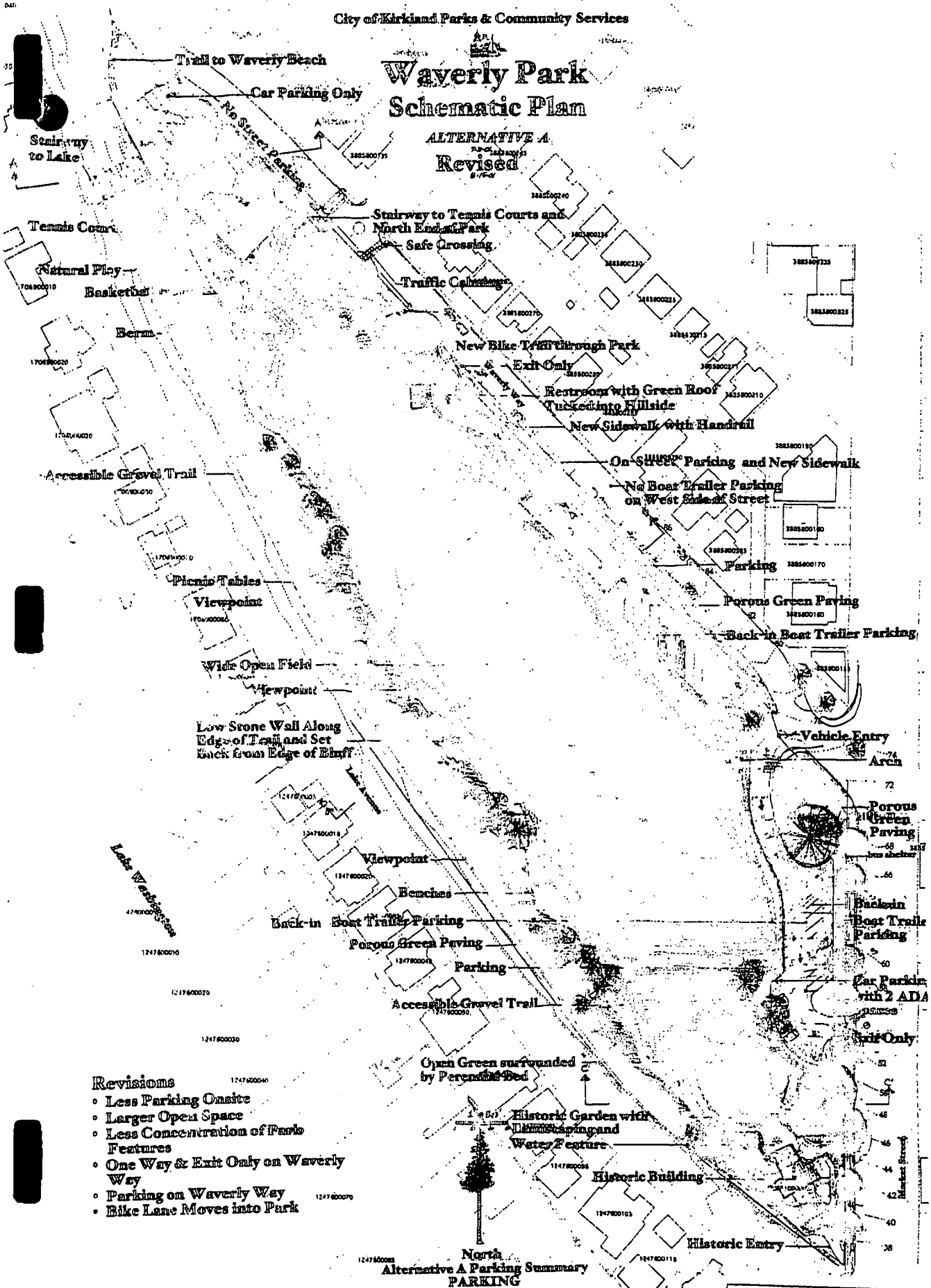
0 0.1 0.2 Miles

ATTACHMENT 1
Waverly Park Master Plan

City of Kirkland Parks & Community Services

Waverly Park
Schematic Plan

ALTERNATIVE A
Revised



Revisions

- Less Parking Onsite
- Larger Open Space
- Less Concentration of Park Features
- One Way & Exit Only on Waverly Way
- Parking on Waverly Way
- Bike Lane Moves into Park

Alternative A Parking Summary
PARKING
33 Car spaces (Incl. 2 ADA)
21 Boat Trailer/Vehicle spaces
- 19 Boat Trailer spaces on Market & Waverly Streets = 40
or - 38 Car spaces on Market & Waverly Streets = 71

ATTACHMENT 2
Waverly Park master Plan

CITY OF KIRKLAND
Planning and Community Development Department
123 Fifth Avenue, Kirkland, WA 98033 425.828.1257
www.ci.kirkland.wa.us

DEVELOPMENT STANDARDS LIST

File: Waverly Park Master Plan

Shoreline Master Program Standards

WAC173-14-120 Substantial development, conditional use, or variance permits. Construction pursuant to a substantial development, conditional use, or variance permit shall not begin and is not authorized until 30 days from the date of filing, or until all review proceedings initiated within 30 days from the date of filing have been terminated, except as provided in RCW90.58.140(5)(a)(b)(c).

Zoning Code Standards

85.25.1 Geotechnical Report Recommendations. The geotechnical recommendations contained in the report by Hart Crowser dated April 5, 2001 shall be implemented.

85.25.3 Geotechnical Professional On-Site. A qualified geotechnical professional shall be present on site during land surface modification and foundation installation activities.

100.25 Sign Permits. Separate sign permit(s) are required.

105.18 Pedestrian Walkways. All uses, except single family dwelling units and duplex structures, must provide pedestrian walkways designed to minimize walking distances from the building entrance to the right of way and adjacent transit facilities.

105.18 Bicycle Parking. All uses, except single family dwelling units and duplex structures, must provide covered bicycle parking within 50 feet of an entrance to the building.

105.18 Entrance Walkways. All uses, except single family dwellings and duplex structures, must provide pedestrian walkways between the principal entrances to all businesses, uses, and/or buildings on the subject property.

105.18 Service Bay Locations. All uses, except single family dwellings and multifamily structures, must locate service bays away from pedestrian areas.

105.18 Overhead Weather Protection. All uses, except single family dwellings, multifamily, and industrial uses, must provide overhead weather protection along any portion of the building, which is adjacent to a pedestrian walkway.

105.18.2 Walkway Standards. Pedestrian walkways must be at least 5' wide; must be distinguishable from traffic lanes by pavement texture or elevation; must have adequate lighting for security and safety. Lights must be non-glare and mounted no more than 20' above the ground.

105.18.2 Weather Protection Standards. Overhead weather protection may be composed of awnings, marquees, canopies or building overhangs; must cover at least 3' of the width of the adjacent walkway; and must be at least 8 feet above the ground immediately below it.

ATTACHMENT 3
Waverly Park Master Plan

105.65 Compact Parking Stalls. Up to 50% of the number of parking spaces may be designated for compact cars.

105.60.2 Parking Area Driveways. Driveways which are not driving aisles within a parking area shall be a minimum width of 20 feet.

105.60.3 Wheelstops. Parking areas must be constructed so that car wheels are kept at least 2' from pedestrian and landscape areas.

105.60.4 Parking Lot Walkways. All parking lots which contain more than 25 stalls must include pedestrian walkways through the parking lot to the main building entrance or a central location.

105.75 Landscape Islands. Landscape islands must be included in parking areas as provided in this Section.

105.77 Parking Area Curbing. All parking areas and driveways, for uses other than detached dwelling units must be surrounded by a 6" high vertical concrete curb.

105.80 Parking Area Buffers. Applicant shall buffer all parking areas and driveways from the right-of-way and from adjacent property with a 5-foot wide strip as provided in this section.

110.60.8 Street Trees. All trees planted in the right-of-way must be approved as to species by the City. All trees must be two inches in diameter at the time of planting as measured using the standards of the American Association of Nurserymen with a canopy that starts at least six feet above finished grade and does not obstruct any adjoining sidewalks or driving lanes.

115.25 Work Hours. It is a violation of this Code to engage in any development activity or to operate any heavy equipment before 7:00 am. or after 8:00 pm Monday through Friday, or before 9:00 am or after 6:00 pm Saturday. No development activity or use of heavy equipment may occur on Sundays or on the following holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, and Christmas Day. The applicant will be required to comply with these regulations and any violation of this section will result in enforcement action, unless written permission is obtained from the Planning official.

115.75.2 Fill Material. All materials used as fill must be non-dissolving and non-decomposing. Fill material must not contain organic or inorganic material that would be detrimental to the water quality, or existing habitat, or create any other significant adverse impacts to the environment.

115.95 Noise Standards. The City of Kirkland adopts by reference the Maximum Environmental Noise Levels established pursuant to the Noise Control Act of 1974, RCW 70.107. See Chapter 173-60 WAC. Any noise, which injures, endangers the comfort, repose, health or safety of persons, or in any way renders persons insecure in life, or in the use of property is a violation of this Code.

115.115.3.g Rockeries and Retaining Walls. Rockeries and retaining walls are limited to a maximum height of four feet in a required yard unless certain modification criteria in this section are met. The combined height of fences and retaining walls within five feet of each other in a required yard is limited to a maximum height of 6 feet, unless certain modification criteria in this section are met.

115.115.5.c Driveway Setbacks. Parking areas and driveways for uses other than detached dwelling units and attached and stacked dwelling units in residential zones, may be located within required setback yards, but, except for the portion of any driveway which connects with an adjacent street, not closer than 5 feet to any property line.

115.120 Rooftop Appurtenance Screening. Vents, mechanical penthouses, elevator equipment and similar appurtenances that extend above the roofline must be surrounded by a solid sight obscuring screen, unless certain conditions are met.

115.135 Sight Distance at Intersection. Areas around all intersections, including the entrance of driveways onto streets, must be kept clear of sight obstruction as described in this section.

Prior to issuance of a grading *or building permit:*

85.25.1 Geotechnical Report Recommendations. A written acknowledgment must be added to the face of the plans signed by the architect, engineer, and/or designer that he/she has reviewed the geotechnical recommendations and incorporated these recommendations into the plans.

Prior to occupancy:

85.25.3 Geotechnical Professional On-Site. The geotechnical engineer shall submit a final report certifying substantial compliance with the geotechnical recommendations and geotechnical related permit requirements.

CITY OF KIRKLAND
123 FIFTH AVENUE, KIRKLAND, WASHINGTON 98033-6189 (425) 828-1257

Date:
12/7/2002

DEVELOPMENT STANDARDS
CASE NO.: ZON02-00013
PCD FILE NO.:IIB-02-39

PUBLIC WORKS CONDITIONS:

CERTIFICATE OF CONCURRENCY: This project has been reviewed and approved for water, sewer, and traffic concurrency. Any water and sewer mitigating conditions are listed within the conditions below. Any traffic mitigating conditions will be found in an attached memorandum from the Public Works Traffic Engineering Analyst to the Planning Department Project Planner. Upon issuance of this permit, this project shall have a valid Certificate of Concurrency and concurrency vesting until the permit expires. This condition shall constitute issuance of a Certificate of Concurrency pursuant to chapter 25.12 of the Kirkland Municipal Code.

All street improvements and underground utility improvements (storm, sewer, and water) must be designed by a Washington State Licensed Engineer; all drawings shall bear the engineers stamp.

All civil engineering plans which are submitted in conjunction with a building, grading, or right-of-way permit must conform to the Public Works Policy titled ENGINEERING PLAN REQUIREMENTS. This policy is contained in the Public Works Pre-Approved Plans and Policies manual.

All plans submitted in conjunction with a building, grading or right-of-way permit must have elevations which are based on the King County datum only (NAVD 88).

SANITARY SEWER CONDITIONS:

The existing sanitary sewer mains within Lake Ave. W., Market St., and Waverly Way are adequate to this project. The Historic Building has already been connected to the sainitary sewer. The proposed restrooms will need to be connected to the sewer main in Waverly Way using a grinder pump.

WATER SYSTEM CONDITIONS:

A water service has been provided to the Historical Building. A new water service, sized per the UPC, will need to be provided to the new restrooms.

Provide fire hydrants per the Fire Departments requirements.

STORM WATER CONDITIONS:

For all new impervious areas, (parking lots, roofs, tennis courts, etc.) provide temporaray and permanent storm water control and water quality treatment per the 1998 King County Surface Water Design Manual (or the manual adopted by the Public Works Department at the time of Building Permit application).

Provide an erosion control plan with Building or Land Surface Modification Permit application. The plan shall be in accordance with the 1998 King County Surface Water Design Manual (or the manual adopted by the City at the time of permit application).

Storm detention calculations for the entire site are required.

Provide a plan and profile design for the storm sewer system.

STREET IMPROVEMENT CONDITIONS:

The subject property abuts Market St. (arterial type street), Waverly Way (collector type street), and Lake Ave. West (neighborhood access type street). Zoning Code sections 110.10 and 110.25 require the applicant to make half-street improvements in rights-of-way abutting the subject property. Section 110.30-110.50 establishes that this street must be improved with the following:

Along Lake Ave. W.. this project is responsible for widening the street to 12 ft. from centerline to face of curb and installation of storm drainage, curb and gutter, a 4.5 ft. planter strip with street trees 30 ft. on-center, and a 5 ft. wide sidewalk along entire property frontage. Since the street only has homes on the south side of the street, it may be more beneficial for the City to construct the sidewalk on the south side in lieu of the north side. Also, some of the property owners on the south side of the street have Concomitant Agreements that obligates them to install half-street improvements. Thus, the entire street could possibly be improved with curb and gutter on both sides of the street and sidewalk on the south side only. The street improvements should be installed when the park undertakes it's largest infrastructure improvements, i.e., when the new parking lots are constructed.

Along Waverly Way, remove and replace any broken curb and gutter. A sidewalk and planterstrip with street trees would normally be required behind the curb however, due to the existing topography, it is recommended that a sidewalk, generally parallel to Waverly Way, be constructed inside the park. Street tree planting will be at the discretion of the Parks Department and their Landscape Architect.

The existing street improvements along Market Street are adequate however, any cracked curb and gutter or sidewalk should be replaced.

A barrier free parking stall for the historical building will be allowed temporarily in Market Street until the on-site parking is constructed and then it must be removed from Market Street.

"NO PARKING" signs related to boat trailer parking shall be installed per the traffic analysis.

It shall be the responsibility of the applicant to relocate any above-ground or below-ground utilities which conflict with the project associated street or utility improvements.

Underground all new and "existing" on-site utility lines and overhead transmission lines.

Zoning Code Section 110.60.9 establishes the requirement that existing utility and transmission (power, telephone, etc.) lines on-site and in rights-of-way adjacent to the site must be underground. The Public Works Director may determine if undergrounding transmission lines in the adjacent right-of-way is infeasible. If undergrounding is not feasible, the applicant is required to sign a concomitant agreement to underground the overhead lines at a future date. In this case, the Public Works Director has determined that undergrounding of existing overhead utility lines on Lake Ave. W. and Waverly Way is infeasible at this time and the undergrounding of off-site/frontage transmission lines should be deferred with a concomitant agreement. The applicant shall submit a signed and notarized concomitant agreement, as set forth in Attachment _____, to underground all existing utility lines bordering the subject property to be approved the the Department of Public Works and recorded with the King County Records and Elections Division.

This project is subject to the traffic impact fees per Chapter 27.04 of the Kirkland Municipal Code. The impact fees shall be paid prior to issuance of the Building Permit(s) for the proposed project.

All public improvements associated with this project including street and utility improvements, must meet the City of Kirkland Public Works Pre-Approved Plans and Policies Manual. A Public Works Pre-Approved Plans and Policies manual can be purchased from the Public Works Department, or it may be retrieved from the Public Works Department's page at the City of Kirkland's web site at www.ci.kirkland.wa.us.

R-4377

CITY OF KIRKLAND
123 FIFTH AVENUE, KIRKLAND, WASHINGTON 98033-6189
(425) 828 - 1257

DETERMINATION OF NONSIGNIFICANCE (DNS) .

CASE #: SEP02-00021 DATE ISSUED: 11/21/2002

DESCRIPTION OF PROPOSAL

The City of Kirkland Parks and Community Services Department has submitted a proposal for a master plan to guide future park development at Waverly Park.

PROPONENT:

LOCATION OF PROPOSAL

WEST SIDE OF MARKET ST. BETWEEN LAKE AVE. W AND WAVERLY WY.

LEAD AGENCY IS THE CITY OF KIRKLAND

The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21.030 (2) (c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public upon request.

This DNS is issued under 197-11-340 (2); the lead agency will not act on this proposal for 14 days from the date above. Comments must be submitted by 5:00 p.m. 12/5/2002

Responsible official: Eric Shields 11/19/02

Eric Shields, Director Date
Department of Planning and Community Development
425-828-1257

Address: City of Kirkland
123 Fifth Avenue
Kirkland, WA 98033-6189

You may appeal this determination to NANCY COX at Kirkland City Hall, 123 Fifth Avenue, Kirkland, WA 98033 no later than 5:00 p.m., December 05, 2002 by WRITTEN NOTICE OF APPEAL.

You should be prepared to make specific factual objections. Contact Nancy Cox to read or ask about the procedures for SEPA appeals.

Please reference case # SEP02-00021.

Publish in the Eastside Journal (date): Monday, November 25, 2002

Distribute this form with a copy of the checklist to the following ag

ATTACHMENT 4
Waverly Park master Plan

✓ Environmental Review Section, Department of Ecology,
P.O. Box 47703, Olympia, WA 98504-7703

_____ Eric Pentico (for streams and wetlands)
Department of Fish and Wildlife (with drawings)
16018 Mill Creek Boulevard, Mill Creek, WA 98012

✓ Rich Johnson (for shorelines and Lake Wa.)
Department of Fish and Wildlife (with drawings)
PO Box 1100, LaConner, WA 98257

_____ Seattle District, U.S. Army Corps of Engineers,
P.O. Box C-3755, Seattle, WA 98124

_____ Muckleshoot Tribal Council, Environmental Division,
Fisheries Department, 39015 172nd SE, Auburn, WA 98002

_____ Northshore Utility District, P.O. Box 489, Kenmore, WA 98028

_____ Shirley Marroquin
Environmental Planning Supervisor
King County Wastewater Treatment Division
201 South Jackson Street, MS KSC-NR-0505
Seattle, WA 98104-3855 - and -

_____ Gary Kriedt
King County Metro Transit Environmental Planning
201 South Jackson Street, MS KSC-TR-0431
Seattle, WA 98104-3856

_____ Support Services Center
Lake Washington School District No. 414
Attn: Bob Collard
P.O. Box 97039, Redmond, WA 98073

_____ John Sutherland, Developer Services
Washington State Department of Transportation
15700 Dayton Ave. N., MS 240
P.O. Box 330310, Seattle, WA 98133-9710

*East Lake Washington Audubon Society, PO Box 3632, Bellevue, WA 98009

Applicant / Agent _____

---MITIGATING MEASURES INCORPORATED INTO THE PROPOSAL: ----------

Traffic Impacts

1. Prior to Certificate of Occupancy for Heritage Hall, the Parks Department shall reconfigure the existing east driveway off Waverly Way so that it is located at least 100 feet west of the intersection of Waverly Way/Market Street. When the permanent driveway and parking area improvements are constructed, the east driveway off Waverly Way shall be located at least 100 feet west of the intersection of Waverly Way/Market Street.

2. The Parks Department shall monitor the operation of Waverly Way/Market Street to ensure that the queue does not significantly block the project east driveway and impede westbound traffic flow.

3. Prior to issuance of a permit to complete the new Market Street driveway and parking area improvements, the proposal shall be revised to include removal of four on-street parking spaces north of the proposed project driveway off Market Street.

4. The Parks Department shall evaluate sight distance at the driveway off Market Street after it has been constructed to determine if additional on-street parking spaces between the driveway and Waverly Way will need to be removed to ensure safe sight distance.

Slopes and Soils Impacts

1. The recommendations of the geotechnical evaluation dated April 5, 2001 by Hartcrowser shall be followed.

Existing Vegetation Impacts

1. Prior to issuance of any land surface modification permits:

a. Install a 6- foot high construction-phase chain link fence around the dripline of Bald Eagle perch trees.

b. Install signs on all fencing stating that the tree protection area shall not be disturbed with grading, fill material, storage of equipment or garbage.

d. The Planning Department shall inspect and approve the tree protection fencing.

cc: Case # ZON02-00013

Distributed to agencies along with a copy of the checklist. (see attached).

Distributed By: Suzanne Kerukoski

Date: 11-21-02

SEPA_C_A rev: 11/19/2002

CITY OF KIRKLAND
Planning and Community Development Department
123 Fifth Avenue, Kirkland, WA 98033 425.828.1257
www.ci.kirkland.wa.us

MEMORANDUM

To: Eric R. Shields, AICP, SEPA Responsible Official

From: Stacy Clauson, Planner SC

Date: November 19, 2002

File: SEP02-00021

Subject: ENVIRONMENTAL DETERMINATION FOR WAVERLY PARK MASTER PLAN

The City of Kirkland Department of Parks and Community Services has submitted a proposal for a master plan to guide future park development at the Waverly Park site located along the west side of Market Street between Lake Avenue West and Waverly Way (see Enclosure 1).

The site contains Heritage Hall, a 2,260 square foot building. The site is also developed with tennis courts, several gravel parking areas, and a paved parking area at the northern portion of the property. The site currently contains a gravel pathway that runs along the west edge of the open field.

The Parks and Community Services Department is proposing the following modifications to the existing park facility: a) grading and irrigating the wide open field to be used for informal recreational use; b) installing native landscaping along the bluff and removing blackberries; c) installing a low stone wall to limit access to the bluff; d) installing an accessible gravel trail along the west edge of the open field; e) installing a new bike trail through the park on the east edge of the open field; f) providing seating and viewpoint areas along the gravel trail; g) planting a native garden and installing a water feature north of the existing historic building at the southern corner of the property and completing other plantings throughout the park; h) constructing a restroom; i) creating a community park at the northern portion of the property by relocating the tennis courts and installing a basketball hoop and a natural play area; j) creating parking areas along the Market Street and Waverly Way frontages containing 33 vehicle parking spaces and 21 boat trailer/vehicle spaces; k) constructing a stairway along the northern portion of the site down the west slope to Lake Avenue W; l) relocating the arch; m) and opening Heritage Hall to use with the bottom floor housing the Kirkland Heritage Society Resource Center and the upper floor used as a community meeting hall. (see Enclosure 2)

The park is proposed to be developed in phases as funding sources for development and maintenance of the park become available. The first phase would involve opening the Heritage Hall to use. The remainder of the site would be developed sequentially as funding becomes available.

I have had an opportunity to visit the site and review the following documents:

- Environmental checklist (see Enclosure 3);
- July 12, 2002 e-mail from Julie Stofel at the Washington State Department of Fish and Wildlife (see Enclosure 4).
- Geotechnical Engineering Study completed by HartCrowser (see Enclosure 5);
- Traffic Analysis contained in the June 28, 2002 memo from Michael Cogle, Parks Planning Manager (see Enclosure 6)
- Supplemental Traffic Analysis contained in the November 8, 2002 letter from Iris Cabrera (see Enclosure 7); and

- Review letter from Thang Nguyen dated November 7, 2002 (see Enclosure 8).

The major environmental issues associated with this project are protection of Bald Eagles, geological hazards, and traffic, sight distance and parking.

Bald Eagles

The Washington State Department of Fish and Wildlife has identified the presence of perch trees for Bald Eagles on the park site. In order to protect habitat for Bald Eagles, the perch trees along the forested bluff should be protected during construction activities, as recommended by the Department of Fish and Wildlife (see Enclosure 4).

Geological Hazards

The Kirkland Sensitive Area Maps show the slope on the west side of the site as a High Landslide Hazard Area and Seismic Hazard Area. The proposal includes plans to construct a stairway along the northern portion of the site down the west slope to Lake Avenue W. In order to assess the feasibility of the stairway, the Parks Department has submitted a conceptual-level Geotechnical Study completed by Hartcrowser (see Enclosure 5). This conceptual level study provided a preliminary assessment of the slope materials, foundation support for the stairway, recommendations for slope clearing and vegetation removal and recommendations for additional geotechnical services.

Traffic, Sight Distance and Parking

The submitted traffic analysis (see Enclosures 6 and 7) addresses additional traffic resulting from the park enhancements and expanded activities and the impacts the traffic poses to intersections and driveways. It also includes a safety analysis and sight distance evaluation. The study also addresses the parking demand and capacity at Waverly Park and includes an impact assessment on the loss of on-site parking spaces which had historically served non-park users to the on-street parking located in the vicinity of the site.

The traffic analysis was reviewed by the Public Works Department (see Enclosure 8). The Public Works Department concluded the following:

- The proposed project passed traffic concurrency.
- Specific off-site traffic mitigation is not required, but payment of the City's standard road impact fee is required.
- Sight distance at the project driveway off Waverly Way does not meet the City's minimum requirements and the driveway should be relocated at least 100 feet away from the intersection of Waverly Way/Market Street.
- The eastbound queue at Waverly Park/Market Street should be monitored to determine if separate right and left-turn lanes would be necessary in order to ensure that the east driveway off Waverly Way is not blocked from vehicles queuing at the Waverly Way/Market intersection.
- On-street parking along Market Street should be removed north of the proposed project driveway.
- Sight distance at the driveway off Market Street should be evaluated to determine if additional parking spaces will need to be removed.
- There is sufficient parking on-site to meet the demand caused by the park users.
- There is no significant impact to the on-street parking supply caused by the loss of existing parking spaces.

It will be necessary to further analyze certain aspects of the proposal to determine if the project complies with all the applicable City codes and policies. That analysis is most appropriately addressed within the written report on the proposed master plan from the Parks Board to the City Council. In contrast, State law specifies that this environmental review under the State Environmental Policy Act (SEPA) is to focus only on potential significant

impacts to the environment that could not be adequately mitigated through the Kirkland regulations and Comprehensive Plan.[1]

Based on my review of all available information and adopted policies of the City, I am recommending that the proposal be changed or clarified to include the following mitigating measures so that a Determination of Nonsignificance (DNS) can be issued.

Traffic Impacts

1. Prior to Certificate of Occupancy for Heritage Hall, the Parks Department shall reconfigure the existing east driveway off Waverly Way so that it is located at least 100 feet west of the intersection of Waverly Way/Market Street. When the permanent driveway and parking area improvements are constructed, the east driveway off Waverly Way shall be located at least 100 feet west of the intersection of Waverly Way/Market Street.

2. The Parks Department shall monitor the operation of Waverly Way/Market Street to ensure that the queue does not significantly block the project east driveway and impede westbound traffic flow.

3. Prior to issuance of a permit to complete the new Market Street driveway and parking area improvements, the proposal shall be revised to include removal of four on-street parking spaces north of the proposed project driveway off Market Street.

4. The Parks Department shall evaluate sight distance at the driveway off Market Street after it has been constructed to determine if additional on-street parking spaces between the driveway and Waverly Way will need to be removed to ensure safe sight distance.

Slopes and Soils Impacts

1. The recommendations of the geotechnical evaluation dated April 5, 2001 by Hartcrowser shall be followed.

Existing Vegetation Impacts

1. Prior to issuance of any land surface modification permits:

   a. Install a 6- foot high construction-phase chain link fence around the dripline of Bald Eagle perch trees.

   b. Install signs on all fencing stating that the tree protection area shall not be disturbed with grading, fill material, storage of equipment or garbage.

   d. The Planning Department shall inspect and approve the tree protection fencing.

This recommendation is based on adopted policies of the City as found in the City's Comprehensive Plan. Specifically the following elements of the 1995 Comprehensive Plan contain the following policies:

Transportation

Policy T-4.1: Promote efficient use of existing right-of-ways through measures such as:
- Intersection improvements;
- Time-of-day parking restrictions along congested arterials;

[1] ESHB 1724, adopted April 23, 1995

- Signal timing optimization;
- Added center left-turn lanes; and
- Limiting left turns along congested arterials.

Policy T-6.6: Identify, evaluate and minimize or mitigate the negative environmental impacts of transportation facilities and operational decisions whenever feasible.

Goal CF-4: Ensure that water, sewer and transportation facilities necessary to support new development are available and adequate concurrent with the development, based on the City's adopted level of service standards.

Policy CF-4.1: Evaluate new development to ensure that it will not cause the level of service of water, sewer or transportation facilities to decline below the adopted standards.

Natural Environment

Policy NE-1.2: Manage activities affecting air, vegetation, water, and the land to maintain or improve environmental quality, to preserve fish and wildlife habitat, to prevent degradation or loss of natural features and functions and to minimize risks to life and property.

These policies directly support the above mentioned mitigating measures and require these measures in order to fully mitigate the impacts created by the proposal.

SEPA ENCLOSURES

1. Vicinity Map
2. Site Plan
3. Environmental checklist
4. July 12, 2002 e-mail from Julie Stofel at the Washington State Department of Fish and Wildlife
5. Geotechnical Engineering Study completed by HartCrowser
6. Traffic Analysis contained in the June 28, 2002 memo from Michael Cogle, Parks Planning Manager
7. Supplemental Traffic Analysis contained in the November 8, 2002 letter from Iris Cabrera
8. Review letter from Thang Nguyen dated November 7, 2002

Review by Responsible Official:

✓ I concur _____ I do not concur

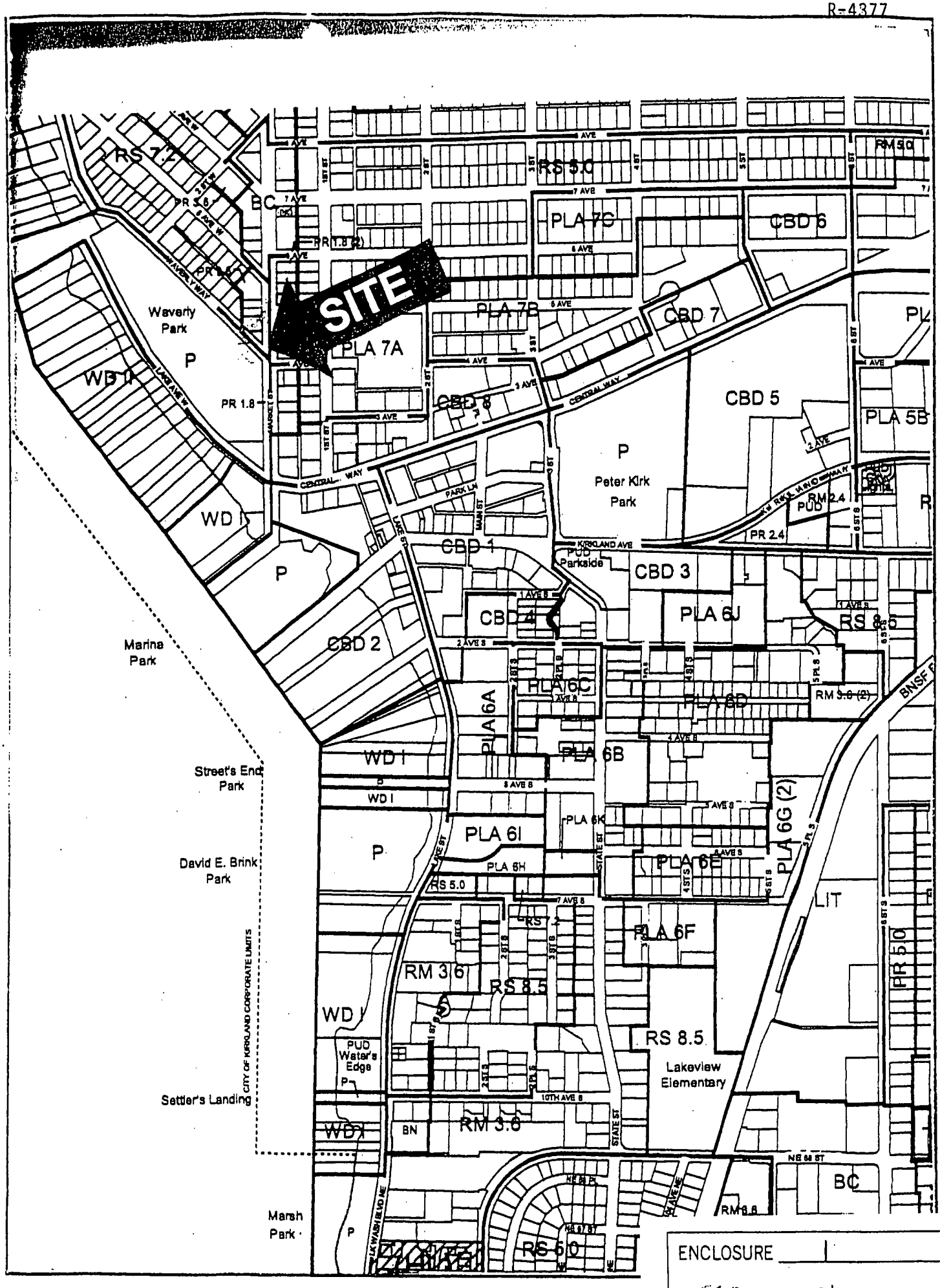
Comments:

Eric R. Shields 11/19/02

Eric R. Shields, Planning Director Date

cc: City of Kirkland Parks and Community Services

R-4377



ENCLOSURE 1

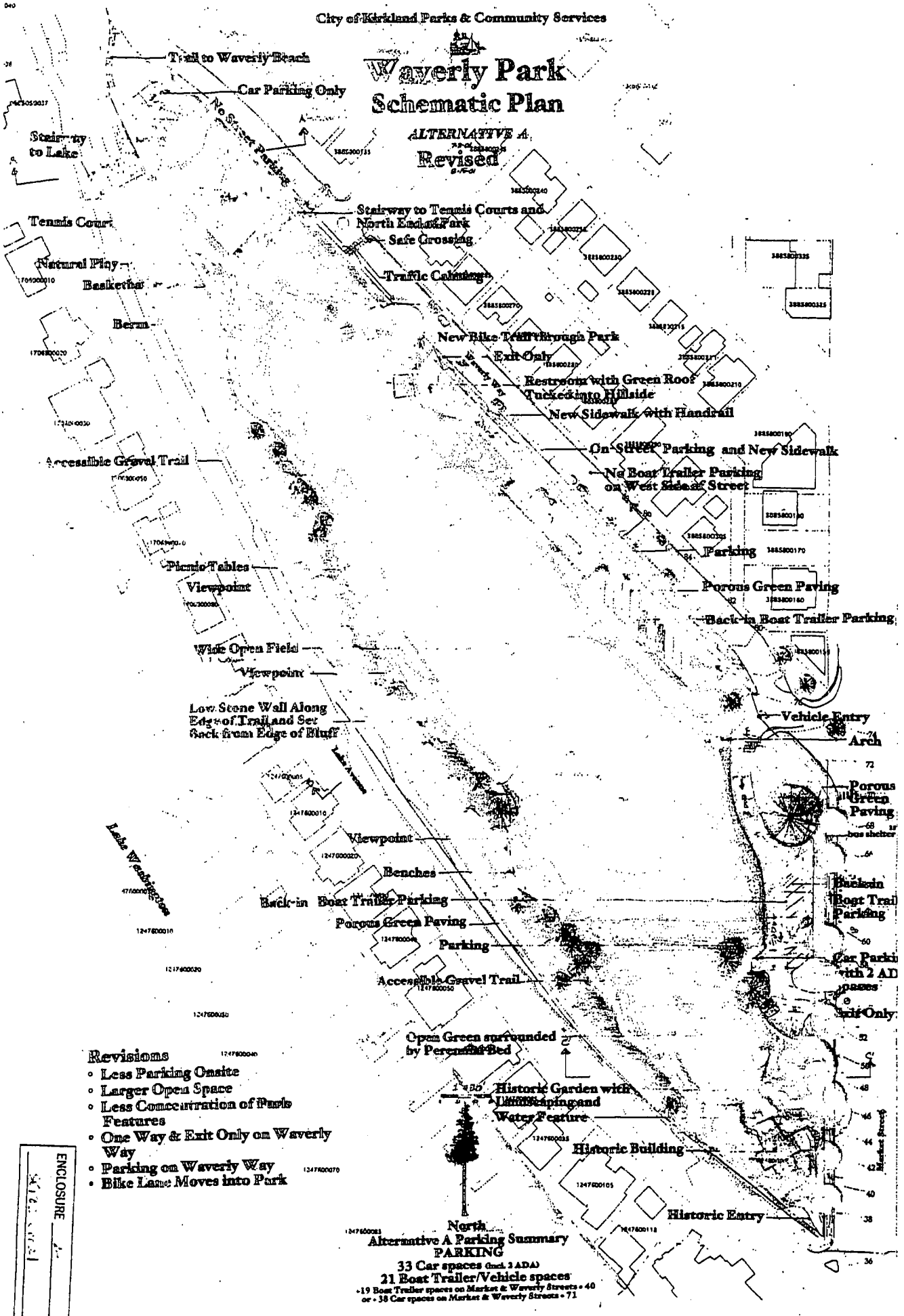
SEP02-0002

R-4377

City of Kirkland Parks & Community Services

Waverly Park
Schematic Plan

ALTERNATIVE A
Revised



Revisions

- Less Parking Onsite
- Larger Open Space
- Less Concentration of Park Features
- One Way & Exit Only on Waverly Way
- Parking on Waverly Way
- Bike Lane Moves into Park

Alternative A Parking Summary
PARKING

33 Car spaces (incl. 2 ADA)
21 Boat Trailer/Vehicle spaces
- 19 Boat Trailer spaces on Market & Waverly Streets = 40
or - 38 Car spaces on Market & Waverly Streets = 71

ENCLOSURE

CITY OF KIRKLAND
ENVIRONMENTAL CHECKLIST

Purpose of Checklist:

The State Environmental Policy Act (SEPA), Chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the City identify impacts from your proposal, and to reduce or avoid impacts from the proposal, whenever possible

Instructions for Applicants:

This environmental checklist asks you to describe some basic information about your proposal. Answer the questions briefly with the most precise information known, or give the best description you can.

You must answer each question accurately and carefully to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the City staff can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The City may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impacts.

Use of Checklist for Non-project Proposals:

Complete this checklist for non-project proposals also, even though questions may be answered "does not apply." IN ADDITION, complete
IPPLEMENTAL SHEET FOR NON-PROJECT ACTIONS (Part D).

ENCLOSURE 3
Sept 22 - Oct 21

)n-project actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as sal," "proposer," and "affected geographic area," respectively.

:ACKGROUND

1. Name of proposed project, if applicable: Waverly Park Site
2. Name of applicant: City of Kirkland - Parks & Community Services

R-4377

3. Tax parcel number: 388580-0006 / 388580-0005 / 388580-0020

4. Address and phone number of applicant and contact person: ATTN: MICHAEL COGLE 123 FIFTH AVE KIRKLAND 98033

5. Date checklist prepared: MAY 15, 2002

6. Agency requesting checklist: CITY OF KIRKLAND

7. Proposed timing or schedule (including phasing, if applicable): 2002 AND BEYOND

8. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal?

UNKNOWN

9. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

A GEOTECHNICAL STUDY PREPARED BY HART CROWSER

* Traffic Analysis dated 6/20/02
* Supplemental traffic analysis dated 11/6/02

10. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

NO

11. List any government approvals or permits that will be needed for your proposal, if known.

Building Permit
Grading Permit

N/A

12. Give brief, complete description of your proposal, including the proposed uses, the size and scope of the project and site including dimensions and use of all proposed improvements. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page.

DEVELOPMENT OF 10 ACRE PUBLIC PROPERTY AS A COMMUNITY PARK

13. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

DOWNTOWN KIRKLAND; INTERSECTION OF MARKET ST. AND WAVERLY WAY

R-4377

TO BE COMPLETED BY APPLICANT

EVALUATION FOR AGENCY USE ONLY
REVIEWED BY:
Stacy Clauson, Planner

B. ENVIRONMENTAL ELEMENTS

1. EARTH

a. General description of the site (circle one): (Flat,) rolling, AND hilly, steep (slopes,) mountainous, other

Kirkland Sensitive Area Map indicate west side of site is a High Landslide Hazard Area and Seismic Hazard Area.

b. What is the steepest slope on the site (approximate percent slope)?
45%

1H : 1V in some places

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.
Underlying Vashon Till comprised of dense gravelly sand overlain by loose to medium dense silty/gravelly sand (Colluvium)

Per assessment completed by Hartcrowser

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.
Western slope designated as a "High Landslide Hazard Area" by City Planning Department

Hartcrowser observed two landslide areas north and south of stairway route

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.
Excavation of approx 1,500 - 2,500 cubic yards of soil for development of parking.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.
Erosion is not anticipated generally; exceptional measures will be necessary in construction of proposed stairway to maintain slope stability.

Potential for erosion to occur from exposed soils.

R-4377

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt, buildings)?
Approx. 16%

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:
For stairway, follow geotech recommendations for construction
Compliance with local stormwater regulations concerning erosion and sedimentation control.

2. AIR

a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities, if known.
Auto/Truck emissions
Temporary impacts during construction that may include dust, automobile emissions.
On-going impacts from vehicle emissions.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.
No

c. Proposed measures to reduce or control emissions or other impacts to air, if any:
None
Compliance with air quality standards.

3. WATER

a. Surface

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.
Within 200' of Lake Washington

R-4377

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.
Development of stairway and walking paths, and landscaping, within 200 Feet of shoreline

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.
None.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.
None

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.
No

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.
No

b. Ground

1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.
No

R-4377

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals...; agricultural; etc.) Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

N/A

c. Water Runoff (including storm water):

1) Describe the source of runoff (include storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Parking areas, roofs, and paved pathways. Tennis Courts

For all new impervious areas, Must provide temporary and permenent storm water control and water quality treatment per 1998 King Co. Surface Water Design manual or current manual.

2) Could waste materials enter ground or surface waters? If so, generally describe.

No

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:

- Will provide temporary and permanent storm water control per 1998 King County Surface Water Design Manual.
- Will provide storm water detention system and storm water treatment
- Restroom roof drainage to be tight-lined to storm drainage system

4. PLANTS

a. Check or circle types of vegetation found on the site:

- ✓ deciduous tree: alder, maple, aspen, other
- ✓ evergreen tree: fir, cedar, pine, other
- ✓ shrubs
- ✓ grass
- ____ pasture
- ____ crop or grain

R-4377

[redacted] [redacted] [redacted]

___ wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
___ water plants: water lily, eelgrass, milfoil, other
___ other types of vegetation

b. What kind and amount of vegetation will be removed or altered?
Development of approximately 300,000 ft² of lawn area
Protect/maintain existing native trees, except for a few previously-topped pine trees in parking area.
Replace blackberries/invasives with low-growing native plants which preserve slope stability
Use native plantings

c. List threatened or endangered species known to be on or near the site.
None identified.

Bald Eagles (perch sites)
Salmon species in Lake Washington

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:
see (b) above

5. ANIMALS

a. Circle any birds and animals which have been observed on or near the site or are known to be on or near the site:

birds: hawk, heron, eagle, songbirds, other
mammals: deer, bear, elk, beaver, other
fish: bass, salmon, trout, herring, shellfish, other

b. List any threatened or endangered species known to be on or near the site.
Eagle

Bald Eagles (perch sites)
salmon species in Lake Washington.
Pacific Northwest flyway

c. Is the site part of a migration route? If so, explain.

d. Proposed measures to preserve or enhance wildlife, if any:
Develop formal gardens; introduce native plant species; maintain general site character
Develop management plan for eagle nesting area during construction activity.

Physical Protection of perch trees during construction activities (per recommendation from WA State Dept. of Fish and Wildlife)

R-4377

6. ENERGY AND NATURAL RESOURCES

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Electricity to serve historic building and restroom

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

Compliance with Uniform Energy code-

Restroom will not be heated

7. ENVIRONMENTAL HEALTH

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

No

1) Describe special emergency services that might be required.

N/A

2) Proposed measures to reduce or control environmental health hazards, if any:

N/A

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

Traffic

R-4377

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.
Traffic primarily during daylight hours

Temporary noise impact of construction equipment.

3) Proposed measures to reduce or control noise impacts, if any:
None

Compliance with local ordinance requiring limitations on construction hours.

8. LAND AND SHORELINE USE

a. What is the current use of the site and adjacent properties?
Park
Adjacent to residential

b. Has the site been used for agriculture? If so, describe.
No

c. Describe any structures on the site.
Historic Building

d. Will any structures be demolished? If so, what?
No

e. What is the current zoning classification of the site?
Park

Park / Public use (P)

f. If applicable, what is the current shoreline master program designation of the site?
N/A

suburban Residential / Urban mixed

g. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.
Western slope classified as a landslide hazard area

Western slope also classified as seismic hazard area

R-4377

h. Approximately how many people would reside or work in the completed project.
N/A

Archive office does not have a full-time employee

i. Approximately how many people would the completed project displace?
N/A

j. Proposed measures to avoid or reduce displacement impacts, if any:
N/A

k. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:
[redacted] Proposed park master plan approved by City Council via significant public involvement

Compliance with local zoning standards

9. HOUSING

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.
N/A

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.
N/A

c. Proposed measures to reduce or control housing impacts, if any:
N/A

10. AESTHETICS

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?
Restroom will be 12-15 feet high
Wood construction

R-4377

b. What views in the immediate vicinity would be altered or obstructed?
None

c. Proposed measures to reduce or control aesthetic impacts, if any:
N/A

Compliance with local zoning standards.

11. LIGHT AND GLARE

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?
Security lighting for restroom and parking areas only

b. Could light or glare from the finished project be a safety hazard or interfere with views?
No

c. What existing off-site sources of light or glare may affect your proposal?
None

d. Proposed measures to reduce or control light and glare impacts, if any:
N/A

Compliance with local zoning standards which requires applicants to select place and direct light sources so that glare does not extend to adjacent properties or right-of-way.

12. RECREATION

a. What designated and informal recreational opportunities are in the immediate vicinity?
Marina Park, Waverly Beach Park, Lake Washington

Undeveloped street end along Lake Avenue W

b. Would the proposed project displace any existing recreational uses? If so, describe.
No

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:
Project will provide many recreational opportunities for the public.

R-4377

13. HISTORICAL AND CULTURAL PRESERVATION

a. Are there any places or objects listed in, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.
Former Christian Science Church Building is on the site.

b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.
[redacted] Waverly School Arch

c. Proposed measures to reduce or control impacts, if any:
[redacted] Arch will be relocated and preserved on-site

14. TRANSPORTATION

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on-site plans, if any.
Waverly Way and Market Streets; Lake Ave West

Access via Waverly Way & Market Street.

b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?
Yes. Metro Route 255

c. How many parking spaces would the completed project have? How many would the project eliminate?
33 car spaces (including 2 ADA)
21 boat trailer w/vehicle spaces

Project would eliminate approximately 27 spaces and 2 boat trailer spaces.

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).
Lake Ave W - widen to 12 Feet, install storm drainage, curb, gutter, sidewalk
Waverly Way - remove and replace broken curb and gutter
Market St. - remove and replace broken curb and gutter

R-4377

e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No

f. How many vehicular trips per day would be generated by the completed project? If know, indicate when peak volumes would occur.

Peak PM Trips estimated to be 43

254 daily trips and 12 PM peak hour trips.

g. Proposed measures to reduce or control transportation impacts, if any:

N/A

Compliance with mitigation measures outlined in 11/7/02 memo from Thang Nguyen.

15. PUBLIC SERVICES

a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

No

b. Proposed measures to reduce or control direct impacts on public services, if any.

N/A

16. UTILITIES

a. Circle utilities currently available at the site: (electricity, natural gas, water, refuse service, telephone, sanitary sewer) septic system, other.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

None

Proposed restrooms will need to be connected to the sewer main in Waverly Way.

R-4377

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: _____

Date Submitted: May 15, 2002

R-4377

From: Michael Cogle
Sent: Wednesday, July 17, 2002 10:32 AM
To: Stacy Tucker
Subject: FW: Waverly Park Site Eagle Management Plan

Stacy, here are the comments from the representative of the Washington State Department of Fish and Wildlife representative regarding the bald eagle.

Please let me know if you require any further information.

-----Original Message-----
From: Julie Stofel [mailto:STOFEJLS@dfw.wa.gov]
Sent: Friday, July 12, 2002 2:31 PM
To: Teresa Sollitto
Subject: Re: FW: Eagle Management Plan

Teresa:

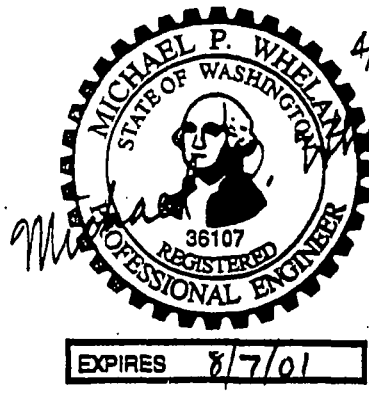
As I understand it, the tree in question is a perch tree, not a nest tree. I recently spoke with Steve Negri, who previously held my position and is familiar with the site and the project, and who apparently spoke with John Barker on this subject. Steve also confirmed that he did not know of a nest tree in the area, but that the concern is over the perch tree. Steve confirmed that the nearest nests that he knows about are the ones I mentioned to you in the Hunts Point/Yarrow Point area to the south, and the Denny Park area to the north. As I understand your project, the perch tree will be preserved, but a walking path and possibly a bench/wall will be built near the perch tree. WDFW has an interest in protecting known bald eagle perch trees, under WAC 232-12-292. As long as the perch tree is physically protected during construction, there is no need to curtail construction activties at any time of year. WDFW has curtailed construction activities within 400 ft of a nest in the past, but as of Dec 2001 WDFW no longer requires that restriction. Moreover, the closest nests are > 2.5 miles away. Thank you for your concern.

Julie Stofel
Washington State Department of Fish and Wildlife
16018 Mill Creek Blvd
Mill Creek, Wa 98012
ph. (425) 379-2301
fax (425) 379-2323

ENCLOSURE 4
SEP02-00021

HARTCROWSER
Delivering smarter solutions

www.hartcrowser.com



Anchorage
Boston
Chicago
Denver
Fairbanks
Jersey City
Juneau
Long Beach
Portland

MEMORANDUM

DATE: April 5, 2001

TO: John Barker, Barker Landscape Architects

FROM: Mike Whelan, P.E., and Garry E. Horvitz, P.E., Hart Crowser, Inc.

RE: **Conceptual-Level Geotechnical Study**
Proposed Stairway for Existing Slope at Waverly Park
Kirkland, Washington
J-7537

This memorandum presents the results of our conceptual-level geotechnical study of a proposed stairway route down the existing slope at Waverly Park in Kirkland, Washington. This work was completed in accordance with the scope of work (Alternative 1) described in our signed proposal dated February 5, 2001. Our work consisted of assessing reasonable means of founding the proposed stairway on the slope, and included an evaluation of near-surface geologic conditions. Our scope of work did not include an engineering evaluation of the slope's overall stability.

The Stairway Route and Design are Currently in Conceptual Stage

Waverly Park, located in Kirkland, Washington, is bounded on its west side by a relatively steep bluff. At the base of the bluff is a road (Lake Avenue West) and a series of homes along the shore of Lake Washington. Adjacent to the north end of the park property, at the base of the slope, is a small cleared area formerly occupied by a City pump station, now slated for possible parkland and public lakeshore access. The proposed project would involve construction of a stairway down the slope, connecting the north end of Waverly Park at the top of the bluff, to the lakeshore access park at its base.

The existing bluff appears to be approximately 50 feet high in this area and sloped at an angle of 1 Horizontal to 1 Vertical (1H:1V) or steeper in some places. There are numerous tall trees on the slope (particularly on its lower half) and a substantial amount of underbrush.

At this point the design and routing of the stairway are conceptual and very preliminary in nature. We based our field explorations and engineering assessment on the proposed route depicted on a Schematic Plan you sent us on February 14, 2001. The recommendations

1910 Fairview Avenue East
Seattle, Washington 98102-3699
Fax 206.328.5581
Tel 206.324.9530

ENCLOSURE 5
SEA02-00021

presented in this memorandum are applicable to that schematic layout; if the layout is changed substantially, it may be necessary to revise the recommendations presented herein.

Slope Appears to Consist of Glacial Till Overlain by Colluvium Layer

The area of this site as shown on the Geologic Map of the Kirkland Quadrangle (USGS, 1983), indicates that Waverly Park and its adjacent slope are underlain by the glacial Vashon Till. This soil type is typically a mixture of sand, silt, and gravel that was laid down, and overridden by, the continental glaciers that covered the area thousands of years ago. The weight of the glacial ice compressed the material to a very dense consistency and, as a result, the Vashon Till is recognized today as one of the densest soil types in the region and able to hold relatively steep slope angles for substantial lengths of time. It typically has a concrete-like appearance when freshly exposed and is commonly referred to as "hardpan" by those in the earthwork industry. The geologic map of Kirkland indicates that this material is present throughout the slope, from the crest to the base.

On February 15, 2001, a field geologist from Hart Crowser visited the site and performed a geologic reconnaissance of the site and slope in the specific area of the proposed stairway. Our geologist observed soil types exposed at the surface, looked for evidence of seepage or past slope instability, and performed hand-auger explorations at two locations on the slope to supplement the surficial observations.

In general, our geologist's observations support the premise that the slope is underlain by Vashon Till. Furthermore, borings conducted by Golder Associates in 1999 for the Lake Avenue Sewer Line, encountered Glacial Till continuing down to a depth of about 15 feet below the Lake Avenue ground surface. Below this were deposits described by Golder as "Ancient Landslide Debris."

Based on our geologist's reconnaissance of this slope, the Till appears to be overlain by a layer of relatively loose and recently deposited surface sediment (termed Colluvium). In the two hand-auger holes that were advanced on the slope by our geologist, the Colluvium was observed to be a loose to medium dense, moist, brown and gray, silty, gravelly Sand that was 0.5 to 3 feet thick. The underlying Vashon Till was observed to be dense to very dense, moist, gray, silty, gravelly Sand. Based on the topography, it appears likely that the colluvium is somewhat thicker near the crest of the slope and near its base; possibly on the order of 5 feet thick in these areas.

Our geologist looked for evidence of past landslide activity on the slope. He observed two areas in the vicinity of the proposed staircase that appeared to have undergone landsliding in the past. These areas were located to the north and south of the proposed stairway route,

and appeared to be relatively shallow slides, no more than approximately 3 feet deep. This indicates that the slides occurred in the surficial Colluvium layer, and did not necessarily extend into the underlying Till soil. Both slides were located in the lower half of the slope. The trees on the slope were fairly vertical, although some of the trees in the area of the observed former slides were tilted at various angles.

Our geologist looked for, but did not find, any specific areas of water seepage from the slope.

Support the Stairway on Till, at Grade or on Pile Foundations

The Vashon Till is generally a good soil type for foundation support. It has a high load-bearing capacity and is well-suited to shallow footing foundations or for supporting earthen embankments. The overlying colluvium, however, is substantially looser, and more susceptible to sliding and erosion. Colluvium tends to move downslope either in a slow process of "creep," or in sudden landsliding events, particularly under extreme weather conditions. Therefore, we recommend that the stairway not be supported directly on Colluvium, but rather directly on Till.

This can be accomplished in a few different ways.

Overexcavation of Colluvium. The Colluvium could be overexcavated from the stairway footprint so that the underlying Till is directly exposed. As described previously, we observed the Colluvium to be 0.5 to 3 feet deep in our two holes advanced on the slope, but we expect that it may be up to 5 feet thick (and possibly more) near the base and the crest of the slope.

Another option that would be possible on relatively shallow slopes would be to overexcavate the Colluvium and replace it with compacted select fill so that existing grades are maintained. While compacted fill would be better than Colluvium for supporting the staircase, it would still have the potential of slow creep down the slope, or, under worst-case conditions, landsliding, depending on the steepness of the slope on which the fill is placed. A slope of 2H:1V (or shallower) is generally regarded as stable for permanent slopes made of compacted fill.

Piles Founded in Till. Alternatively, the stairway structure could be founded on a pile foundation that is anchored a suitable depth into the very dense Till soils, so that the Colluvium is left in place but does not play a role in supporting the stairway. This conceptual foundation system may be advantageous where the colluvial thickness makes its overexcavation uneconomical, or where site grades force the staircase to be elevated on

supports above grade. The piles could take the form of "pin"-piles (drilled holes filled with concrete into which steel elements are inserted); or possibly helical ground anchors (which are "screwed" into the ground by torsion), depending on the ability of these anchors to achieve sufficient penetration into the Till. The selection and design of an acceptable pile system will need to take into account the possible lateral loading inflicted by colluvial soils moving downslope.

Overall, if the staircase is founded on or in the Till as described above, we expect that its presence will have little effect on the overall stability of the slope. It will, however, be subject to the potential for large-scale, "global" stability failure, which is a mode of failure that involves all or much of the slope, and involves movement of the Till itself. Our geologic reconnaissance did not specifically address the potential for this mode of failure; a true engineering assessment of global stability would require relatively deep borings advanced at the top of the slope and at its base.

Recommendations for Slope Clearing and Vegetation Removal

Construction of the proposed stairway will require some degree of temporary clearing so that earthwork can be performed and construction equipment can access the area. In general we recommend keeping disturbance of existing trees to a minimum during this process, since the existing vegetative cover helps to protect the slope from surface erosion and water infiltration. Clearing should be restricted, as much as possible, to groundcover and low brush, which should be cut off at or close to the surface rather than pulled out (except where overexcavation of Colluvium is performed).

It is likely that the existing root masses, particularly those of the larger vegetation and trees, help to "tie" the loose Colluvium layer to the underlying dense Till layer. Without the roots, the Colluvium might have a greater tendency to creep downslope. Clearing can be minimized by utilizing small construction equipment, and even hand labor if possible; and by routing the stairway in such a way as to avoid the most prominent trees.

In a similar vein we recommend against damaging existing trees on the slope by trimming or topping or otherwise adversely impacting their health. Over time this will increase the likelihood of the trees weakening or dying, which will in turn weaken their root mass, and its stabilizing effect on the Colluvium, while simultaneously increasing the likelihood of the tree toppling, which would expose more soil to erosion and load the slope unnecessarily with the weight of the fallen tree and would possibly damage the stairway.

We recommend that all cleared areas be replanted with vegetation that is low-lying and establishes a deep root system, for maximum surficial stability.

Recommended Additional Geotechnical Services

To proceed with design of this stairway, specific geotechnical engineering input will be needed for such design details as soil bearing pressures, pile capacities, and pile embedment depths. This will require a more thorough set of field explorations so that we can get more complete, quantitative data on the soil types and densities underlying the site. We would use the data obtained from these explorations to formulate recommendations for stairway design and construction, which would allow you to proceed with design of the stairway. We will also use the additional field information to conduct an engineering assessment of near-surface slope stability under existing conditions and following stairway completion.

We anticipate that an appropriate field program for design-level recommendations will consist of three geotechnical borings drilled on the slope to depths that are sufficient to penetrate through loose colluvium, at least 5 feet into underlying *in situ* materials. We estimate that these borings would need to be advanced to depths of 10 to 15 feet each.

Following this field program, we could provide you with parameters related to designing and constructing the proposed stairway. These would include design parameters for founding the stairway directly on grade or, if desired, using pile foundations as support elements. We would provide recommendations for pile embedment depths, capacity, and installation.

We would also provide a more quantitative comparison of the slope's present near-surface stability level (expressed as a factor of safety), compared to its surficial stability after a stairway is constructed and slight regrading is accomplished.

Note that this program would NOT include a quantitative assessment of the slope's overall, large-scale, "global" stability. Such an assessment would require drilling a boring at the top of the slope to a depth that encompasses the entire slope height (as a minimum), plus another boring at the base of the slope, to establish geologic conditions throughout the bluff.

We trust that this memorandum meets your current needs. If you have any questions or want to discuss this project further, please call.

F:\Docs\Jobs\7537\waverlyLevel(mem).doc

CITY OF KIRKLAND
123 FIFTH AVENUE • KIRKLAND, WASHINGTON 98033-6189 • (425) 828-1217

DEPARTMENT OF PARKS AND COMMUNITY SERVICES MEMORANDUM

To: Stacy Tucker, Planning Department

From: Michael Cogle, Parks Planning Manager

Date: June 28, 2002

Subject: Waverly Park Site Traffic and Parking Information

Project Description

Waverly Park is a community park serving the adjacent neighborhood and downtown Kirkland. It also provides boat-trailer parking for boaters launching their boats at the nearby Marina Park. The overall proposal is to enhance the existing Waverly Park and better accommodate boat-trailer and general parking. In addition, two tennis courts are proposed at the north end of the park and a historic building at the south end of the park.

Trip Generation

Park activities and trip generations at the Waverly Park includes: tennis court, team sports (such as little league soccer, softball and soccerl), general park use such as picnic, boat-trailer parking and activities related to the historic building. Although the proposed project will accommodate boat-trailer parking, the boat-trailer activity is actually a trip generation of Marina Park, where there is a boat launch. Boaters currently launch their boat at Marina Park then park their boat-trailer at Waverly Park and on Waverly Way, Market Street and surrounding neighborhood streets. The proposed project will provide additional boat-trailer parking to consolidate boat-trailers parking to one area to minimize impacts to neighborhood streets.

The proposed projects has four components to the trip generation:

- General Park Use
- Tennis Court
- Youth Sports Practice
- Historical Building
- Boat-trailer parking

A trip generation study was completed for the Houghton and South Juanita Neighborhood parks last summer. The average PM peak hour trip generation rate for the Houghton and South Juanita Neighborhood parks is one (1) trip per acre. These parks are smaller in size and do not have large fields for team sports and do not have tennis courts. Thus, their trip generation rate can only be applied to the general park use component of the Waverly Park.

ENCLOSURE 6
SEP01-00021

Based on the trip rate of one trip per acre of general park use, Waverly Park generates approximately 11 PM peak hour trips. With a conservative approach, it is estimated that the enhancement of the park will generate 50% more trips. Thus, the proposed park will generate six additional PM peak hour trips.

Two tennis courts will be constructed at the north end of the park. Based on an Institute of Transportation Engineers (ITE) PM peak hour trip rate of 3.88 trips per court, the proposed tennis facility will generate eight (8) trips.

The open field has space for two youth sport teams. It is anticipated that the field may be used for youth sports practice such as soccer, softball and baseball on an occasional basis. A typical youth team has 15 to 20 players and coaches. With four occupancies per vehicle, a team may generate four to six vehicle trips. Practice typically starts at 4 PM and ends before 7 PM. In a worse case scenario, there could be as much as 12 trips when two teams practice at the same time. Waverly Park is currently being used for youth sports practice and will continue after the park enhancement. Since the field will not expand in size, it will not generate additional team sports practice related trips.

The historical building has 3,270 square feet of space. The Kirkland Historic & Preservation Society will use half of the space as an archive office and the other half will be available as a banquet, meeting & party facility. The archive office is used on an irregular basis and does not have any full-time employee. The meeting facility will be used on a per demand basis but will be used most during the evenings (after 6 PM) and weekends. The building will operate similar to a church during the weekday. Most activities will occur in the evenings and weekends.

Thus, on the weekday, the traffic generation will be similar to a church. Based on ITE data, church has a PM peak hour trip generation of 0.66 trip per 1,000 square feet. Therefore, with 3,270 square feet, the building will generate 2 PM peak hour trips.

During peak boating season (May through August), approximately 13 to 24 boat-trailer park at Waverly Park and vicinity between 4 PM and 7 PM. There is one boat launch at the Marina Park. It typically takes 15 minutes to launch a boat. Thus, four boats can be launch within an hour and four trips are generated from Marina Park to Waverly Park to park. Since the number of trips to and from Waverly Park and Marina Park is based on the number of boat ramp and additional boat ramp is not proposed for the Marina Park, there will be no increase in trips.

As shown in Table 1, it is forecasted that the proposed enhancement of Waverly Park will generate 16 net new trips during the weekday PM peak hour. This estimate represents the peak season.

Table 1. Average Trip Generation

Use	**PM Peak Hour Trips**	
	Existing	Future
General Park Use	11	17
Tennis Courts	0	8
Team Sports Practice	12	12
Historical Building	0	2
Boat-Trailer Parking	4	4
Total	***27***	***43***
Net New		16

PARKING CAPACITY AND DEMAND

What is the existing parking capacity?

Presently parking on the Waverly Park Site is provided for in three distinct areas: 1) the gravel terrace lot, 2) the old school driveway paralleling Waverly Way, and 3) the north gravel lot. Boat trailers are not permitted to use the driveway, and seldom utilize the north lot.

Due to the informality of parking as presently exists on the site, the exact number of spaces that the site can accommodate for cars and boat trailers varies. For example, how and where boat trailers are parked on the gravel terrace lot early in the morning can dictate how many subsequent trailers can be parked for the remainder of the day.

All told, it is estimated that the existing maximum parking capacity for boat trailers is 23 spaces, and the existing capacity for cars is 50-60 spaces. Note that boat trailer spaces can be used by cars during the non-boating season.

What is the current parking utilization?

The following table details the estimated parking during peak season. Peak season is typically from May through August, during the boating season and youth baseball season. Primary use of parking on the Waverly Site is for:

- General Park Use. Includes year-round park users (tennis, informal play, strolling, etc.). During April and May, the site is used by youth sports groups for practice space.
- Boat Launch Parking. Most heavily used on weekends (and weeknights during periods of good weather).

Table A.1
Estimate of Existing Parking Use
(number of utilized spaces)

	Weekday Peak (4 – 7 p.m.)	Weekday Non-Peak (Day Use)	Weekend Peak	Capacity (Estimated)
General Park Use - Cars	20	7	12	60
Parking for Boat Launch	23	12	23	23

What is being proposed?

For the Waverly Park Site, parking is needed for general park users as well as for the historic building. Parking is also being proposed on the site to partially serve the parking needs for the downtown boat launch, which is separate from the parking requirements of the park itself.

The park design would accommodate 33 car spaces and 21 boat trailer spaces on site. Note that boat trailer spaces can also be utilized for car parking. In addition, up to 11 additional boat trailer spaces (or up to 20 car spaces) would be provided on Waverly Way (between Market Street and the park parking lot exit on Waverly Way). Finally, 8 additional boat trailer spaces are utilized on Market Street (between Lake Ave. W. and Waverly Way).

Table A.2
Estimate of Proposed Parking Use
(number of utilized spaces)

	Weekday Peak (4 – 7 p.m.)	Weekday Non-Peak (Day /Evening Use)	Weekend Peak	Proposed Capacity (including on-street)
General Park Use - Cars	30	11	18	33
Parking for Boat Launch	23	12	23	Up to 40
Historic Building	4	20	20	Included in general park use total

What is the impact of boat trailer parking on Waverly Way?
The proposal is to provide limited boat trailer parking on Waverly Way on the park side of the street. This would require the existing bike lane to be re-routed through the park. Simultaneously, it is proposed that parking on the residential side of Waverly Way be prohibited and signed accordingly.

Historically the City has permitted on-street boat trailer parking, except in areas specifically prohibited and signed accordingly. Vehicles with attached trailers have for some time utilized Market Street, Waverly Way, and (on rare occasion) other surrounding streets.

Typical vehicle traffic pattern for existing boat trailer parking on Waverly Way is as follows:

1. Launch boat at boat launch;
2. Travel north on Market Street to Waverly Way;
3. Travel west on Waverly Way;
4. Park vehicle with trailer on north (residential) side of Waverly Way;

Return to boat launch as follows:

5. Travel west on Waverly Way to 2nd Street West;
6. Travel north on 2nd Street West to 5th Avenue West;
7. Travel southeast on 5th Avenue West to Market Street;
8. Travel south on Market Street to boat launch to pick up boat.

By providing parking on the south (park side) of Waverly Way and prohibiting such on the north side, the traffic flow will be revised as follows:

1. Launch boat at boat launch;
2. Travel north on Market Street to Waverly Way;
3. Travel west on Waverly Way **and enter park entrance**:
4. ~~Park vehicle with trailer on north (residential) side of Waverly Way~~; **Travel through park parking lot and (if full) exit – right-hand turn - onto Waverly Way, park on south (park) side of Waverly Way**;

Return to boat launch as follows:

5. ~~Travel west on Waverly Way to 2nd Street West~~; **Travel east on Waverly Way to Market Street**;
6. ~~Travel north on 2nd Street West to 5th Avenue West~~;
7. ~~Travel southeast on 5th Avenue West to Market Street~~;
8. Travel south on Market Street to boat launch to pick up boat.

It is the view of the Parks Dept. that the proposed formalization and revision to parking on Waverly Way will reduce vehicular trips through the neighborhood.

It should be noted that boat trailer parking on Waverly Way is considered overflow parking to that provided within the park, and will be utilized on an occasional basis during the peak season only.

CITY OF KIRKLAND
Department of Public Works
123 Fifth Avenue, Kirkland, WA 98033 425.828.1243
www.ci.kirkland.wa.us

MEMORANDUM

To: Thang Nguyen, Transportation Engineer

From: Iris Cabrera, Transportation Engineer

Date: November 8, 2002

Subject: Supplemental Traffic Analysis for the Waverly Enhancement Project.

This memo supplements the Waverly Park Enhancement Project traffic report dated May 8, 2002 and includes the following topics:

Daily trip generation, trip distribution and assignment.
Significant Intersection proportionate share calculations.
LOS Analysis at significant intersections and driveways.
Safety Analysis at significant intersections and driveways.
Sight distance evaluation at proposed driveways.
On-street parking utilization and impact assessment

Daily Trip Generation

A summary of existing and future trip generation is presented in Table 1 below. The estimates shown are based on ITE Trip Generation 6th Edition and on information prepared by Parks and Community Services Department. The results of the analysis show that, at present, the combined uses (including general park, boat-trailer parking, tennis court and team sport practice) generate a total of 362 week daily trips. Enhancement to the park and use of the Historical Building will result in the addition of 254 trips for a total daily trip generation of approximately 616 trips. These estimates are conservative and represent peak use during the peak summer time.

ENCLOSURE 7
SEP02-00021

Table 1
Daily Trip Generation

Use	Future Inbound	Outbound	Total	Existing Inbound	Outbound	Total	**Net Total**
General Park Use (a)	165	165	330	110	110	220	**110**
Tennis Court (b)	31	31	62	31	31	62	0
Historical Building (c)	72	72	144	0	0	0	**144**
Boat-Trailer Parking (d)	28	28	56	28	28	56	0
Team Sport Practice (e)	12	12	24	12	12	24	0
Total	308	308	616	181	181	362	**254**

Table 1 (notes)

(a) General Park Use daily trip generation was obtained by applying a ratio of daily to PM trip generation of approximately 19.4. Since the existing and future PM peak trips associated with the general park use are estimated at 11 and 17 trips respectively, the resulting existing and future daily trip generation estimates are 220 and 330. The 19.4 ratio was obtained by averaging the ratios of daily to PM peak trip generation rates for various types of parks uses from ITE Trip Generation 6th Edition.

(b) Tennis court daily trip generation is based on a rate of 31.04 daily trips per tennis court, Land Use Code 491 from ITE Trip Generation 6th Edition.

(c) Historical Building daily trip generation is based on information prepared by Parks and Community Services Department consisting of estimates of average week-day attendance to meetings or special events (one daily event, attended by up to maximum of 50 people, two vehicle trips per person), and on the expected number of week-day visitor trips (four to six people per group, four three- hour visits, one person per vehicle) to the archive office.

(d) Daily trips associated with boat-trailer parking activity during the peak boating season is based upon the capacity of the boat launch area which is limited to four boat launch per hour, 14 hours a day, resulting in a maximum of 56 boat-trailer trips. Boat-trailer parking activity during the off-season is significantly lower.

(e) Youth team sport practice daily trip generation is based on an estimated daily attendance of two teams, from 4:00 to 7:00 PM, 15 to 20 members on each team , and assumed occupancy of four people per vehicle. The field has capacity for only two teams at a time

Trip Distribution and Assignment

Daily and PM peak distribution of existing, new and net new project trips are shown in Figures 1, 2 and 3, included in Attachment A. Printouts showing turning volumes at significant intersections and driveways for future conditions with and without project new trips are also included. It should be noted that all boat-trailers trips (56 daily and 4 PM peak) are assumed to have origin and destination at Marina Park, but a change in the circulation pattern has been proposed due to the addition of a right-turn-out-only driveway onto Market St, and changes to the existing driveways and internal circulation. The western most driveway will be exit only, whereas the eastern most one will be entrance only. It is expected that all boat-trailer trips will either exit the site onto Waverly Way and proceed east toward Market St or exit onto Market St directly. In other words, no boat trailer trips are expected to go west on Waverly Way as they do presently.

The distribution of the rest of the trips is 30-40% to/from the northeast/northwest area and 60-70% to/from southwest/east areas of the City. These percentages are primarily derived from daily and PM peak volume counts and adjusted slightly to be consistent with the City's BKR Model trip distribution percentages estimated for other projects.

Significant Intersection Proportionate Share Analysis

Per the City's Traffic Impact Analysis Guidelines, intersections impacted with new project trips in excess of 1% of signal warrants volumes (also referred to as proportionate share) are considered significant. Two intersections and the three project driveways have proportionate shares greater than 1%. Table 2 below summarizes the results of the proportionate share analysis. Proportionate share calculation worksheets are included in Attachment B.

Table 2
Proportionate Share Analysis Results

Intersection	Proportionate Share
1) Waverly Way at Market St	3.18 %
2) Central Way at Lake Street	1.00 %
3) Waverly Way at Driveway 1	1.32 %
4) Waverly Way at Driveway 2	2.12 %
5) Market Street at Driveway 3	1.15 %

PM Peak LOS Analysis at Significant Intersections and Driveways

The intersections and driveways listed on Table 2 above are considered significant; therefore, LOS(Level of Service) Analysis using Operational Method in the most recent Highway Capacity Manual is required to determine the PM peak impacts of the project trips on the operation of the intersections. LOS analysis was thus performed for existing, future without project impacts and future with project impacts conditions. The PM peak trip generation proposed in the traffic report dated May 8, 2002 was used in this analysis, but it was revised to account for adjustment to the trip generation associated with the Historical Building. In the original PM peak trip generation analysis, it was assumed that the Historical Building would operate similarly to a church facility during weekdays and thus it would generate four PM peak trips. In this analysis, the total number of PM peak trips associated with the Historical Building was increased from four to six due to the activity connected with the use of the archive section of the building. A summary of the adjusted PM peak trip generation is presented in Table 3 below.

Table 3
PM Peak Trip Generation Summary

	Existing	Future	Net
General Park Use	11	17	**6**
Tennis Court	8	8	**0**
Team Sport Practice	12	12	**0**
Historical Building	0	6	**6**
Boat Trailer Parking	4	4	**0**
Total	35	47	**12**

Significant Intersections and driveway LOS was estimated using existing and projected PM peak intersection counts and the PM Peak trip distribution shown in Figures 1, 2 and 3. The result of the analysis is summarized in Table 4 below and it shows that the project trips are not expected to impact the operation of the intersection of Central Way at Lake Street since the overall intersection delay will stay about the same (LOS E, 58.6 seconds per vehicle) with and without project trips. The project driveways are expected to operate at LOS A, which means that the average delay will be less than 5 seconds per vehicle. The unsignalized intersection of Waverly Way at Market Street will operate at LOS A, experiencing an overall delay of 2.6 seconds per vehicle, but the eastbound approach will change from Level of Service D to F, or 29.5 to 65.1 seconds of delay per vehicle.

Table 4
Level of Service Analysis Results
LOS (Delay in Seconds per Vehicle)

Intersection	Existing	Future w/o Project Impacts	Future with Project Impacts
Market St / Waverly Way	A(1.4) [C(19.4)]*	A (1.7) [D (29.5)]*	A (2.6) [F (65.1)]*
Central Way / Lake Street	C (34.1)	E (58.3)	E (58.6)
Driveway 1/ Waverly Way			A (1.0)
Driveway 2/ Waverly Way			A (1.4)
Driveway 3/ Market Street			A (0) [B (14.3]*

* [ ] LOS and Delay on Eastbound Approach

Safety Analysis at Significant Intersections and Driveways

A total of four accidents occurred during the period from 1999 to 2001, two parking accidents and one rear accident at the intersection of Market St and Waverly Way, and one parking accident on Waverly Way west of Market St. The yearly average is about one accident per year, which results in an accident rate of 0.10 accidents per million vehicles entering the intersection per year. This rate is significantly lower than the City's average for unsignalized intersections (0.54 accidents per million of vehicle approaching the intersection per year). In conclusion, the project driveways and the intersection of Waverly Way at Market Street are not considered high accident locations and are not expected to become one as a result of the project impacts. It is necessary, though, as a precautionary safety measure, that Driveway #2 (eastern most one) on Waverly Way be located, at least, 75 feet west of Market Street to minimize blocking of this driveway by eastbound vehicles exiting Waverly Way onto Market Street.

Sight Distance Evaluation

Both project driveways on Waverly Way (Driveways #1 and # 2) exceed stopping sight distance requirements for 33 MPH 85th percentile speed. Visibility for vehicles exiting the proposed right-turn-out-only driveway on Market Street may be impeded by cars parked south of Waverly Way; therefore, removal of some parking spaces may be necessary. Sight distance at this driveway should be evaluated after completion of the project to determine the exact length of parking to be removed.

On Street Parking Utilization Analysis and Impact Assessment

The following analysis is based on the parking information contained on the Waverly Park traffic report dated May 8, 2002, the Waverly Park Site parking count conducted on July 2002 and the on-street parking utilization data collected by Public Works Staff during the third week of August, 2002. The main objective of this analysis is to assess the project's potential on-street parking impacts. Summaries of parking capacity and demand for existing and future conditions with project impacts are shown in Tables 5.a and 5.b

Table 5.a

	Existing Capacity		Existing Parking Demand					
			Peak (4 to 7PM)		Off-Peak		Weekend (11 to 1 PM)	
	Boat Trailers	Other Park Uses	Boat Trailers	General Park Uses	Boat Trailers	General Park Use	Boat Trailers	General Park Use
Waverly Park								
On-site	**23**	**60**	**25**	**21**	**7**	**12**	**16**	**13**
Designated On-street Parking								
Waverly Way		31	1	9	1	6	1	6
Market St	8	22						
Sub-total	**8**	**53**	**1**	**9**	**1**	**6**	**1**	**6**
Marina Park Other Demand								
At Waverly Park				30				
On Waverly Way				12				
Sub-total				**42**				
Total	**31**	**113**	**26**	**72**	**8**	**18**	**17**	**19**

The **peak parking demand** occurs in the summer, when boating, youth sport practice and various other parking activities overlap on weekdays, from 4:00 to 7:00 PM. As shown in Table 5.a above, the peak demand consists of 26 boat-trailers and 72 general use parking spaces. During this period, there is enough on-site parking to support the park demand and demand from other users in the vicinity of the project such as Marina Park. Although there are enough parking spaces on site some park users park on street. Special events at the Marina Park and other non-park uses also park in and around Waverly Park. During a special event at the Marina Park, it was observed that the parking utilization in the Waverly Park increased by 51 stalls. These are accommodated by the excess supply of parking spaces within Waverly Park and on-street parking along the frontage of Waverly Park.

The parking capacity and demand for future conditions with project impacts is summarized in Table 5.b.

Table 5.b

	Proposed Parking Capacity		Future Parking Demand			
			Peak (4:00 to 7:00 PM)		Off-Peak	
	Boat Trailers	Other Park Uses	Boat Trailers	General Use (*)	Boat Trailers	General Use (*)
Waverly Park						
On-Site	**21**	**33**	**21**	**25**	**7**	**32**
Designated On-street Parking						
Waverly Way	11*	20*	5	9	1	6
Market St	8*	22*				
Sub-total	**19***	**42***	**5**	**9**	**1**	**6**
Marina Park Other Demand						
At Waverly Park				30		
On Waverly Way				12		
Sub-Total				**42**		
Total	**40**	**75**	**26**	**76**	**8**	**38**

(*) Includes four parking spaces required for Historical Building
* These spaces can accommodate either boat-trailers or general parking stalls.

The proposed enhancement of Waverly Park would reduce the number of parking stalls on-site. There will be 33 general parking spaces and 21 spaces for boat trailers. There will be designated on-street parking along the frontage of Waverly Park (on the south side of Waverly Way) for park users. These spaces can accommodate 11 boat trailers or 20 general parking stalls. Similarly there will be designated parking spaces on Market Street including eight boat-trailer or 22 general parking stalls. Thus there could be 21 to 40 stalls for boat-trailer or 33 to 75 stalls for general use.

The worse case scenario assumes the maximum parking demand for boat trailers on site. This utilizes 21 boat-trailer parking stalls and five designated stalls on-street. Thus the rest of the designated on-street parking would be available for general use, which equates to 22 parking spaces. Thus the overall parking supply (on-site and on-street) for general use is 55 spaces. As shown in Table 5.b the Waverly Park Enhancement project will require four additional general parking spaces during the peak demand period for a total of 25 parking spaces. Future on-site parking supply of 33 spaces can more than accommodate the park's future general use parking demand.

In assessing other parking demand not associated with the Waverly Park such as the Marina Park and other uses in the vicinity of the project site and as discussed above, 51 general parking spaces are needed.

The proposed Waverly Park can accommodate eight spaces of these and 22 can be accommodated via use of the designated on-street parking. Thus, the remaining 21 stalls needed will have to be found in other parking spaces in the area, most likely on-street parking in the vicinity of the site.

An on-street parking utilization study was conducted to determine the impact of those 21 spaces to near-by residential streets.

Table 6 summarizes the result of the on-street parking utilization analysis. The streets included in the analysis, shown in attached diagram, are Waverly Way, 3rd Street, 2nd Street, 7th Ave West, 5th Ave West and Market St from Lake Ave West to 7th Ave. Two options are considered: Option A assumes that parking on the north side of Waverly Way will be removed, whereas Option B assumes that parking on the north side of Waverly Way will continue to be available as it is now. The analysis consists of the following:

1) Estimation of on-street parking capacity, that is, the number of parking spaces available on each street segment, which depends on several factors such as street length, type of parking allowed, number of driveways, presence of bus stops, fire hydrants, crosswalks, etc. On-street parking capacity consists of a total of 267 parking spaces.
2) On-street parking count of the number of vehicles parked from 7:00 to 8:00 AM, 12:00 to 1:00 Noon, and 4:30 to 5:30 PM on three mid-week days during the third week of August. These numbers respectively are 53, 72 and 38.
3) Estimation of the existing parking utilization ratios by dividing the total number of parked vehicles during each peak period by the total number of available parking spaces. These ratios are 20%, 27% and 14% during the AM, Noon and PM peak periods respectively.
4) Estimation of the future overall parking utilization ratios (as impacted by alternative re-designation of on-street parking) by dividing the total number of parked vehicles on each peak period by the future number of available parking spaces for each option considered. Under Option A, on-street parking capacity would be reduced by 12% since 31 parking spaces would be impacted by the project. Under Option B on-street parking capacity would not be reduced.
5) Estimation of the unmet peak parking demand. 102 parking spaces are needed, but 81 spaces would be provided via combination of on-site and on-street parking on the south side Waverly Way and on Market Street. Thus 21 parking spaces are needed beyond the perimeter of the park.
6) Estimation of the future PM peak on-street parking utilization ratio with additional on-street project parking demand. This is the ratio of future on-street PM peak parking demand (38 existing plus 21 additional parking spaces needed = 59) to future on-street parking supply (236 under Option A and 267 under Option B). These ratios respectively are 25% and 22%.

Table 6
On-Street Parking Utilization Summary

Existing Number of On-Street Parking Spaces		Existing On-Street Parking Utilization Ratio = O / TA	Future On-Street Parking Utilization Ratio			
			No Parking on North Side of Waverly Way		Parking on North Side of Waverly Way	
			Option A		Option B	
			Existing Demand on Future Supply	Future Demand on Future Supply	Existing Demand on Future Supply	Future Demand on Future Supply
Total Available (TA)	267		236		267	
Occupied AM (OAM)	53	20 %	22 %	n/a	20 %	n/a
Occupied NOON (Onoon)	72	27 %	30 %	n/a	27 %	n/a
Occupied PM (Opm)	38 (59)*	14 %	16 %	25 %	14 %	22 %

* Existing PM peak on-street parking demand (38 spaces) plus unmet demand (21 spaces).

The results of the analysis show that currently during peak periods on week days there is sufficient on-street parking in the vicinity of the Waverly Park site since parking utilization ratios are well under 50%. The project parking impacts, which would be concentrated mainly on Waverly Way and Market Street, would depend on whether or not parking on the north side of Waverly Way (from 2nd Street to Market Street) is preserved. Should it not be,(Option A in Table 6 above) the overall on-street parking capacity would be reduced from 267 to 236 parking spaces, or by 12%. Preserving existing parking on the north side of Waverly Way, (Option B in Table 6) would not impact the overall on-street parking capacity. Under both parking options the overall parking utilization ratios are expected to remain under 50%.

Assuming a worse case scenario, there would be a deficit of 21 parking spaces during the PM peak period. This is because 102 parking spaces would be needed, but only 81 spaces would be provided; the combination of existing and future PM peak on-street parking demand results in 59 (38 + 21) spaces. This would result in a parking utilization rate of approximately 25% (59/236). In conclusion, there is sufficient on-site and on-street parking to accommodate the future park parking demand.

Conclusions

Proposed enhancement to the Waverly Park Site would result in the following :

- 254 additional one-way daily trips, 12 of which occur during the PM peak. These trips would mainly impact the segment of Waverly Way between Market Street and the western most driveway.
- Proportionate share of signal warrants greater than 1% at two intersections, Waverly Way at Market Street and Central Way at Kirkland Ave.
- No significant changes in the operation of impacted intersections, namely Waverly Way at Market Street and Central Way at Lake Street. In other words, the overall future LOS at these intersections will stay about the same with and without project impacts.
- The LOS on the eastbound approach on Waverly Way and Market Street, which now operates at LOS C, will deteriorate from D to F, with delay increasing from 29.5 to 65.1 seconds per vehicle.
- Proposed access and internal circulation and the addition of right-turn-only driveway on Market Street are expected to minimize/eliminate boat-trailer traffic through the neighborhood.
- Proposed on-site parking capacity supplemented by on-street parking on Waverly Way and Market Street will sufficiently satisfy the project parking demand during peak periods in summer.
- Proposed on-site parking capacity is sufficient to satisfy off-peak parking demand in the summer and during the rest of the year.
- Should existing parking in the north side of Waverly Way be removed the project's parking impacts would result in an 12% decrease in the overall on-street parking capacity in the vicinity of the site, but even accounting for this impact, the parking utilization ratios during AM, NOON and PM peak will remain under 50%.

Recommendations

The proposed enhancement to the Waverly Park Site is not expected to result in significant traffic impacts on and/or in the vicinity of the site that would require specific mitigation. Implementation of the following recommendations is necessary, in order to minimize potential operational and safety problems:

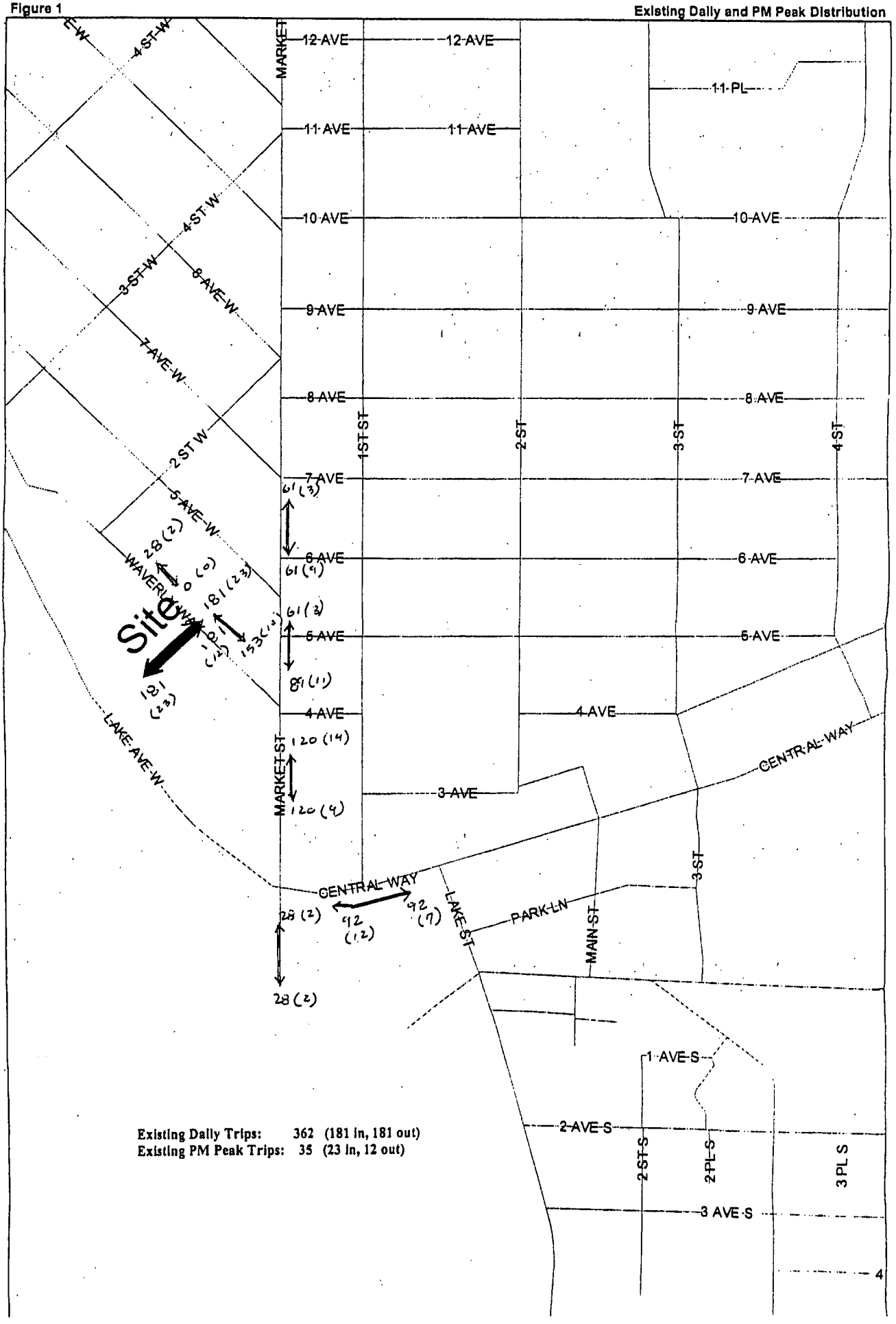
- Locate the eastern-most driveway on Waverly Way as far as practically possible from Market Street, no less than 100 ft. This is to minimize blocking of this driveway by eastbound vehicles.
- There may be a possibility that the eastbound queue at Market St / Waverly Way may block the eastern most driveway and impede westbound traffic flow onto the site. However, this possibility is low. The City will monitor this driveway once the project is completed and traffic stabilized. Should the eastbound queue hinder traffic flow on Waverly Way re-stripping the eastbound approach to provide a separate left turn bay may remedy the problem.
- Because the possible overlapping of summer activities may cause parking demand to peak during the period from 4-7:00 PM, special events on the Historical Building involving attendance in excess of 20 people should be carefully scheduled to avoid conflict with others scheduled park events.
- Conduct a parking utilization study after project implementation to re-assess project impacts in the summer season, both during PM peak and weekends and to determine appropriate mitigation.

R-4377

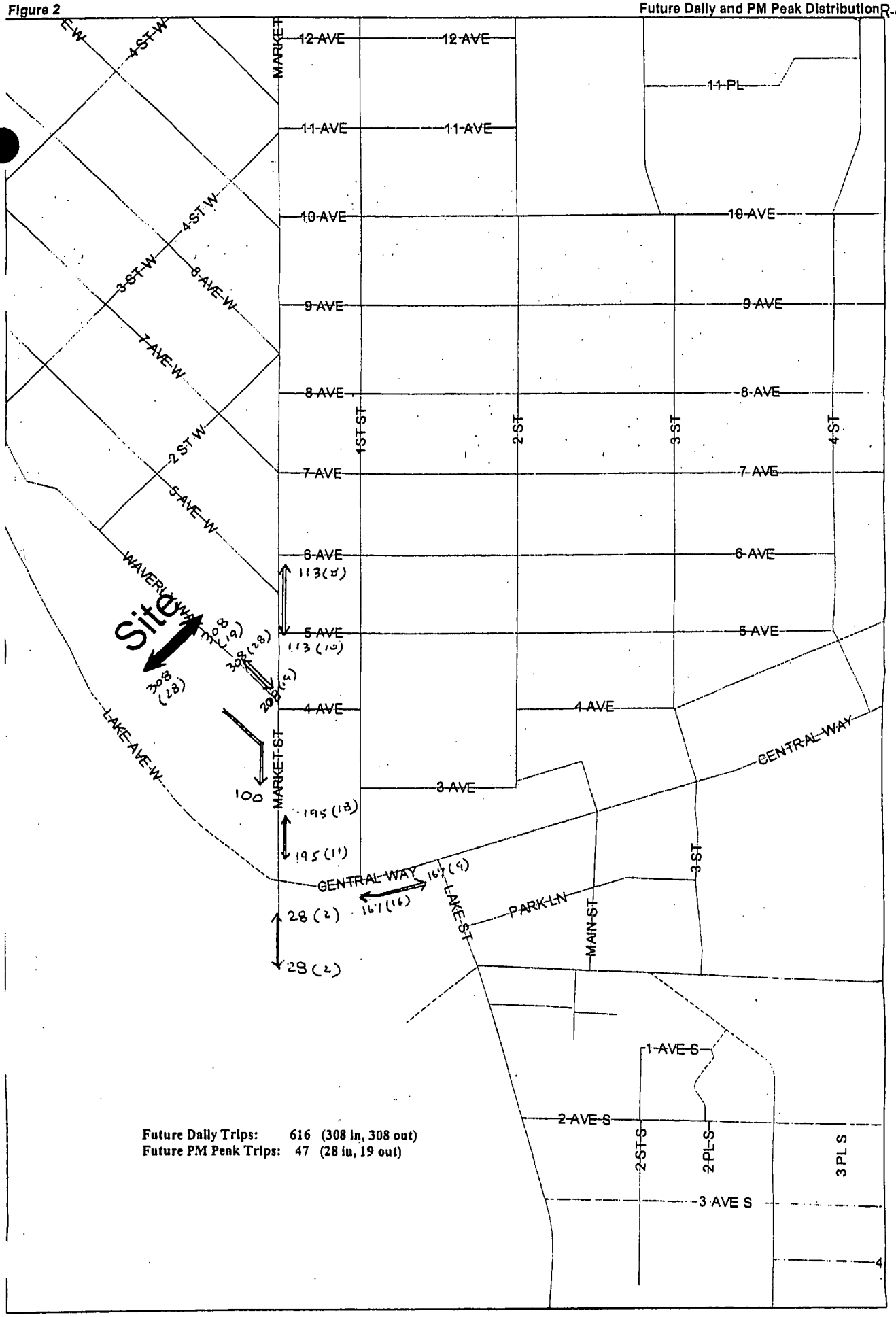
ATTACHMENT A

Figure 1

Existing Daily and PM Peak Distribution



Existing Daily Trips: 362 (181 in, 181 out)
Existing PM Peak Trips: 35 (23 in, 12 out)

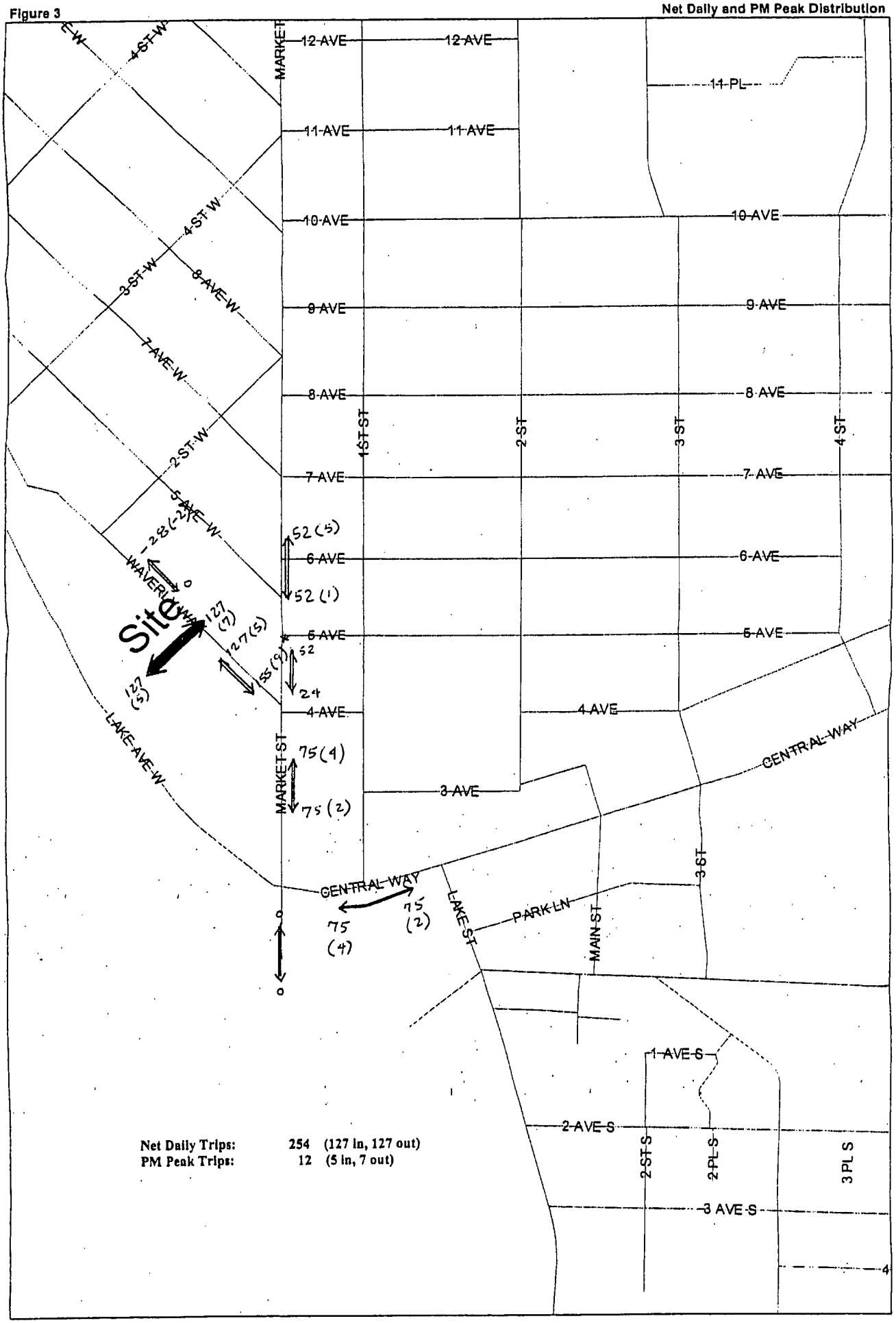


Future Daily Trips: 616 (308 in, 308 out)
Future PM Peak Trips: 47 (28 in, 19 out)

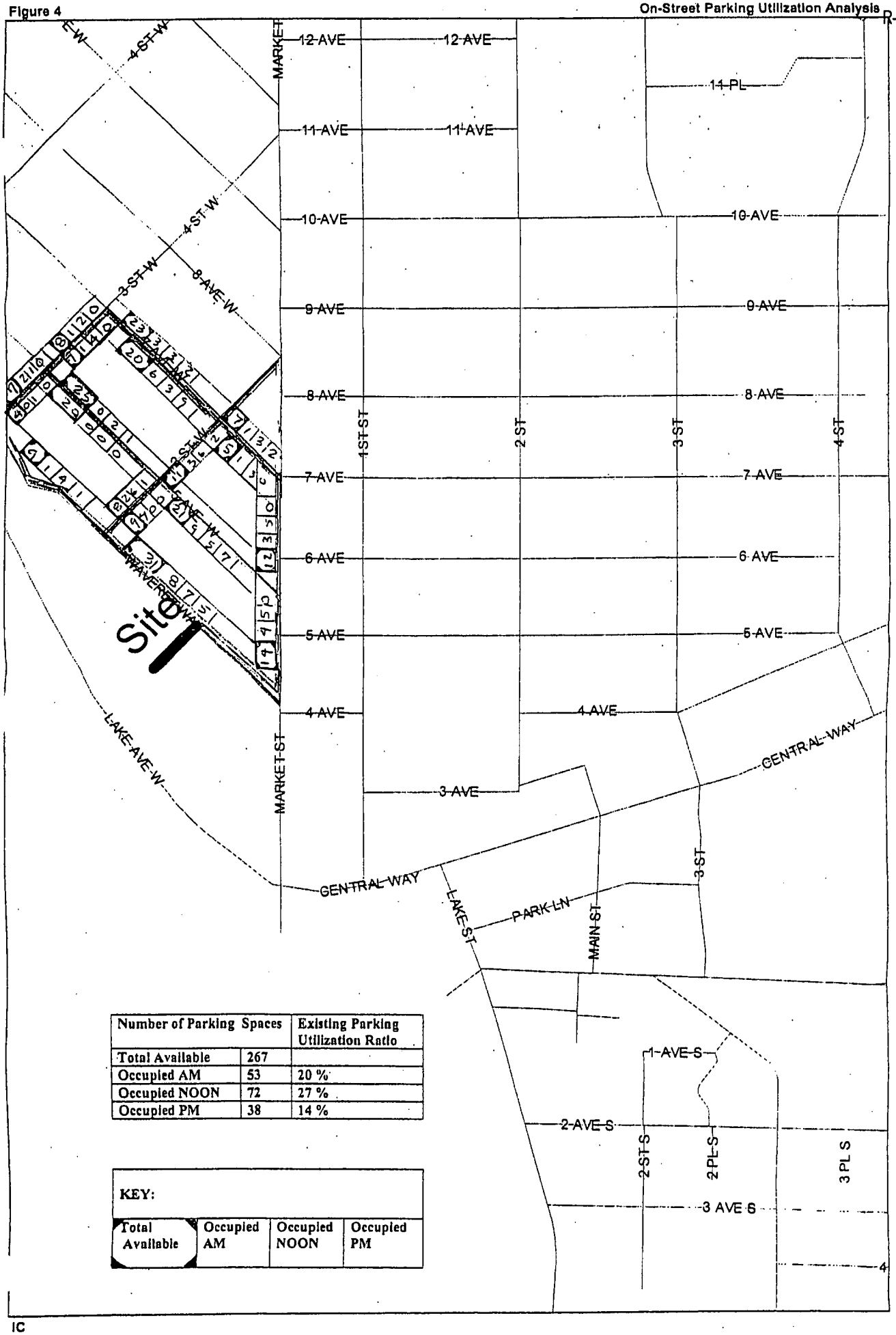
IC

Figure 3

Net Daily and PM Peak Distribution



Net Daily Trips: 254 (127 in, 127 out)
PM Peak Trips: 12 (5 in, 7 out)

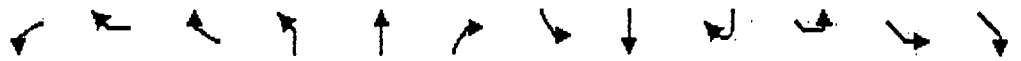


Number of Parking Spaces		Existing Parking Utilization Ratio
Total Available	267	
Occupied AM	53	20 %
Occupied NOON	72	27 %
Occupied PM	38	14 %

KEY:			
Total Available	Occupied AM	Occupied NOON	Occupied PM

HCM Unsignalized Intersec. .n Capacity Analysis

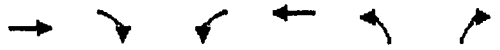
2: Waverly Way & Market St



Movement	WBL	WBR	WBR2	NBL	NBT	NBR	SBL	SBT	SBR	SEL2	SEL	SER
Lane Configurations												
Sign Control	Stop				Free			Free			Stop	
Grade	0%				0%			0%			0%	
Volume (veh/h)	5	0	11	73	1100	3	10	550	23	3	0	42
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (veh/h)	5	0	12	77	1158	3	11	579	24	3	0	44
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None										None	
Median storage veh)												
vC, conflicting volume	1957	1987	1159	603			1161			1935	1927	591
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
tC, single (s)	7.1	6.5	6.2	4.1			4.1			7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	2.2			2.2			3.5	4.0	3.3
p0 queue free %	87	100	95	92			98			93	100	91
cM capacity (veh/h)	40	59	238	974			602			44	60	507

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SE 1
Volume Total	17	77	1161	11	603	47
Volume Left	5	77	0	11	0	3
Volume Right	12	0	3	0	24	44
cSH	194	974	1700	602	1700	297
Volume to Capacity	0.18	0.08	0.68	0.02	0.35	0.16
Queue Length (ft)	15	6	0	1	0	14
Control Delay (s)	51.3	9.0	0.0	11.1	0.0	19.4
Lane LOS	F	A		B		C
Approach Delay (s)	51.3	0.6		0.2		19.4
Approach LOS	F					C

Intersection Summary			
Average Delay	1.4		
Intersection Capacity Utilization	84.5%	ICU Level of Service	D



Movement	EBL	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1800	1800	1700	1800
Lane Width	12	12	10	11	12	12
Total Lost time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Util. Factor	1.00	1.00	1.00	*0.85	1.00	1.00
Frpb, ped/bikes	1.00	0.95	1.00	1.00	1.00	0.95
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1583	1510	1565	2682	1583	1429
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	1583	1510	1565	2682	1583	1429
Volume (vph)	360	269	213	681	564	138
Peak hour factor, PHF	0.94	0.94	0.92	0.92	0.87	0.87
Growth Factor (vph)	100%	100%	50%	100%	100%	100%
Adj. Flow (vph)	383	286	116	740	648	159
Lane Group Flow (vph)	383	286	116	740	648	159
Conf. Peds. (#/hr)		4				25
Parking (#/hr)	10			10		
Turn Type		pm+ov	Prot		Perm	
Protected Phases	6	7	5	6 2	7	
Permitted Phases		6			7	
Actuated Green, G (s)	29.5	84.7	23.3	40.0	55.2	55.2
Effective Green, g (s)	30.5	86.7	24.3	42.0	56.2	56.2
Actuated g/C Ratio	0.25	0.72	0.20	0.35	0.47	0.47
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	402	1129	317	939	741	669
v/s Ratio Prot	c0.24	0.12	c0.07	c0.28	c0.41	
v/s Ratio Perm		0.07			0.11	
v/c Ratio	0.95	0.25	0.37	0.79	0.87	0.24
Uniform Delay, d1	44.0	5.7	41.2	35.0	28.7	19.1
Progression Factor	1.00	1.00	1.00	1.00	0.63	0.55
Incremental Delay, d2	32.7	0.1	0.7	4.4	1.5	0.1
Delay (s)	76.8	5.8	41.9	39.4	19.7	10.6
Level of Service	E	A	D	D	B	B
Approach Delay (s)	46.4			39.8	17.9	
Approach LOS	D			D	B	

Intersection Summary			
HCM Average Control Delay	34.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	77.1%	ICU Level of Service	C
c Critical Lane Group			

Movement	WBL	WBR	WBR2	NBL	NBT	NBR	SBL	SBT	SBR	SEL2	SEL	SER
Lane Configurations												
Sign Control	Stop				Free			Free			Stop	
Grade	0%				0%			0%			0%	
Volume (veh/h)	5	0	11	73	1301	3	10	701	23	3	0	42
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (veh/h)	5	0	12	77	1369	3	11	738	24	3	0	44
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None										None	
Median storage veh)												
vC, conflicting volume	2328	2308	1371	762			1373			2306	2297	750
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
tC, single (s)	7.1	6.5	6.2	4.1			4.1			7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	2.2			2.2			3.5	4.0	3.3
p0 queue free %	75	100	94	91			98			86	100	89
cM capacity (veh/h)	21	34	179	850			500			23	35	411

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SE 1
Volume Total	17	77	1373	11	762	47
Volume Left	5	77	0	11	0	3
Volume Right	12	0	3	0	24	44
cSH	54	850	1700	500	1700	194
Volume to Capacity	0.31	0.09	0.81	0.02	0.45	0.24
Queue Length (ft)	28	7	0	2	0	23
Control Delay (s)	99.7	9.7	0.0	12.4	0.0	29.5
Lane LOS	F	A		B		D
Approach Delay (s)	99.7	0.5		0.2		29.5
Approach LOS	F					D

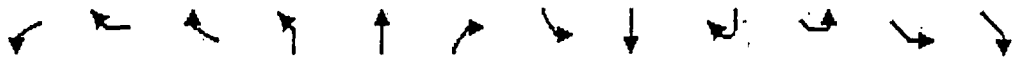
Intersection Summary			
Average Delay	1.7		
Intersection Capacity Utilization	95.6%	ICU Level of Service	E

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1800	1800	1700	1800
Lane Width	12	12	10	11	12	12
Total Lost time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Util. Factor	1.00	1.00	1.00	0.85	1.00	1.00
Frpb, ped/bikes	1.00	0.95	1.00	1.00	1.00	0.95
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1583	1509	1565	2682	1583	1429
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	1583	1509	1565	2682	1583	1429
Volume (vph)	451	292	201	769	643	120
Peak-hour factor, PHF	0.94	0.94	0.92	0.92	0.87	0.87
Growth Factor (vph)	100%	100%	50%	100%	100%	100%
Adj. Flow (vph)	480	311	109	836	739	138
Lane Group Flow (vph)	480	311	109	836	739	138
Confl. Peds. (#/hr)		44				28
Parking (#/hr)	10			10		
Turn Type		pm+ov	Prot		Perm	
Protected Phases	6	7	5	6 2	7	
Permitted Phases		6			7	
Actuated Green, G (s)	30.0	84.9	23.1	40.3	54.9	54.9
Effective Green, g (s)	31.0	86.9	24.1	42.3	55.9	55.9
Actuated g/C Ratio	0.26	0.72	0.20	0.35	0.47	0.47
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	409	1130	314	945	737	666
v/s Ratio Prot	c0.30	0.13	c0.07	c0.31	c0.47	
v/s Ratio Perm		0.08				0.10
v/c Ratio	1.17	0.28	0.35	0.88	1.00	0.21
Uniform Delay, d1	44.5	5.7	41.2	36.6	32.0	18.9
Progression Factor	1.00	1.00	1.00	1.00	0.85	0.76
Incremental Delay, d2	101.1	0.1	0.7	9.9	20.3	0.2
Delay (s)	145.6	5.8	41.9	46.5	47.5	14.7
Level of Service	F	A	D	D	D	B
Approach Delay (s)	90.7			45.9	42.3	
Approach LOS	F			D	D	

Intersection Summary			
HCM Average Control Delay	58.3	HCM Level of Service	E
HCM Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	87.4%	ICU Level of Service	D
c Critical Lane Group			

Movement	EBL	EBR	WBL	WBT	NB	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1800	1800	1700	1800
Lane Width	12	12	10	11	12	12
Total Lost time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Util. Factor	1.00	1.00	1.00	*0.85	1.00	1.00
Frpb, ped/bikes	1.00	0.95	1.00	1.00	1.00	0.95
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1583	1509	1565	2682	1583	1429
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	1583	1509	1565	2682	1583	1429
Volume (vph)	452	293	201	772	644	120
Peak hour factor, PHF	0.94	0.94	0.92	0.92	0.87	0.87
Growth Factor (vph)	100%	100%	50%	100%	100%	100%
Adj. Flow (vph)	481	312	109	839	740	138
Lane Group Flow (vph)	481	312	109	839	740	138
Confl. Peds. (#/hr)		44				28
Parking (#/hr)	10			10		
Turn Type		pm+ov	Prot			Perm
Protected Phases	6	7	5	6 2	7	
Permitted Phases		6				7
Actuated Green, G (s)	30.0	84.9	23.1	40.3	54.9	54.9
Effective Green, g (s)	31.0	86.9	24.1	42.3	55.9	55.9
Actuated g/C Ratio	0.26	0.72	0.20	0.35	0.47	0.47
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	409	1130	314	945	737	666
v/s Ratio Prot	c0.30	0.13	c0.07	c0.31	c0.47	
v/s Ratio Perm		0.08				0.10
v/c Ratio	1.18	0.28	0.35	0.89	1.00	0.21
Uniform Delay, d1	44.5	5.7	41.2	36.6	32.0	18.9
Progression Factor	1.00	1.00	1.00	1.00	0.84	0.76
Incremental Delay, d2	102.0	0.1	0.7	10.1	20.6	0.2
Delay (s)	146.5	5.8	41.9	46.8	47.7	14.7
Level of Service	F	A	D	D	D	B
Approach Delay (s)	91.2			46.2	42.5	
Approach LOS	F			D	D	

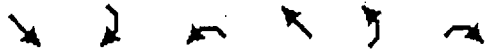
Intersection Summary			
HCM Average Control Delay	58.6	HCM Level of Service	E
HCM Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	87.5%	ICU Level of Service	D
c Critical Lane Group			



Movement	WBL	WBR	WBR2	NBL	NBT	NBR	SBL	SBT	SBR	SEL2	SEL	SER
Lane Configurations												
Sign Control	Stop				Free			Free			Stop	
Grade	0%				0%			0%			0%	
Volume (veh/h)	5	0	11	7	1301	3	10	699	24	8	0	41
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (veh/h)	5	0	12	8	1369	3	11	736	25	8	0	43
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None										None	
Median storage veh)												
vC, conflicting volume	2333	2315	1671	761			1873			2313	2304	748
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
tC, single (s)	7.1	6.5	6.2	4.1			4.1			7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	2.2			2.2			3.5	4.0	3.3
p0 queue free %	75	100	94	99			98			63	100	90
cM capacity (veh/h)	21	33	179	851			500			23	34	412

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SE 2	SE 1
Volume Total	17	81	1373	11	761	52
Volume Left	5	81	0	11	0	8
Volume Right	12	0	3	0	25	43
cSH	53	851	1700	500	1700	109
Volume to Capacity	0.31	0.10	0.81	0.02	0.45	0.48
Queue Length (ft)	28	8	0	2	0	52
Control Delay (s)	100.7	9.7	0.0	12.4	0.0	65.1
Lane LOS	F	A		B		F
Approach Delay (s)	100.7	0.5		0.2		65.1
Approach LOS	F					F

Intersection Summary				
Average Delay	2.6			
Intersection Capacity Utilization	95.6%	ICU Level of Service	E	



Movement	SEL	SER	NWL	NWT	NEL	NER
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	35	0	0	73	0	14
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (veh/h)	37	0	0	77	0	15
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
vC, conflicting volume			137		114	37
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			1574		883	1035

Direction, Lane #	SE 1	NW 1	NE 1
Volume Total	37	77	15
Volume Left	0	0	0
Volume Right	0	0	15
cSH	1700	1574	1035
Volume to Capacity	0.02	0.00	0.01
Queue Length (ft)	0	0	
Control Delay (s)	0.0	0.0	8.5
Lane LOS			A
Approach Delay (s)	0.0	0.0	8.5
Approach LOS			A

Intersection Summary			
Average Delay	1.0		
Intersection Capacity Utilization	14.0%	ICU Level of Service	A

Movement	SEL	SER	NWL	NWT	NEL	NER
Lane Configurations		↑		↱	↱	
Sign Control		Free		Free	Stop	
Grade		0%		0%	0%	
Volume (veh/h)	49	0	28	73	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (veh/h)	52	0	29	77	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None		
Median storage veh)						
vC, conflicting volume			52		187	52
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			98		100	100
cM capacity (veh/h)			1554		787	1016

Direction, Lane #	SE	NW	NE
Volume Total	52	106	0
Volume Left	0	29	0
Volume Right	0	0	0
cSH	1700	1554	1700
Volume to Capacity	0.03	0.02	0.00
Queue Length (ft)	0	2	0
Control Delay (s)	0.0	2.1	0.0
Lane LOS		A	A
Approach Delay (s)	0.0	2.1	0.0
Approach LOS			A

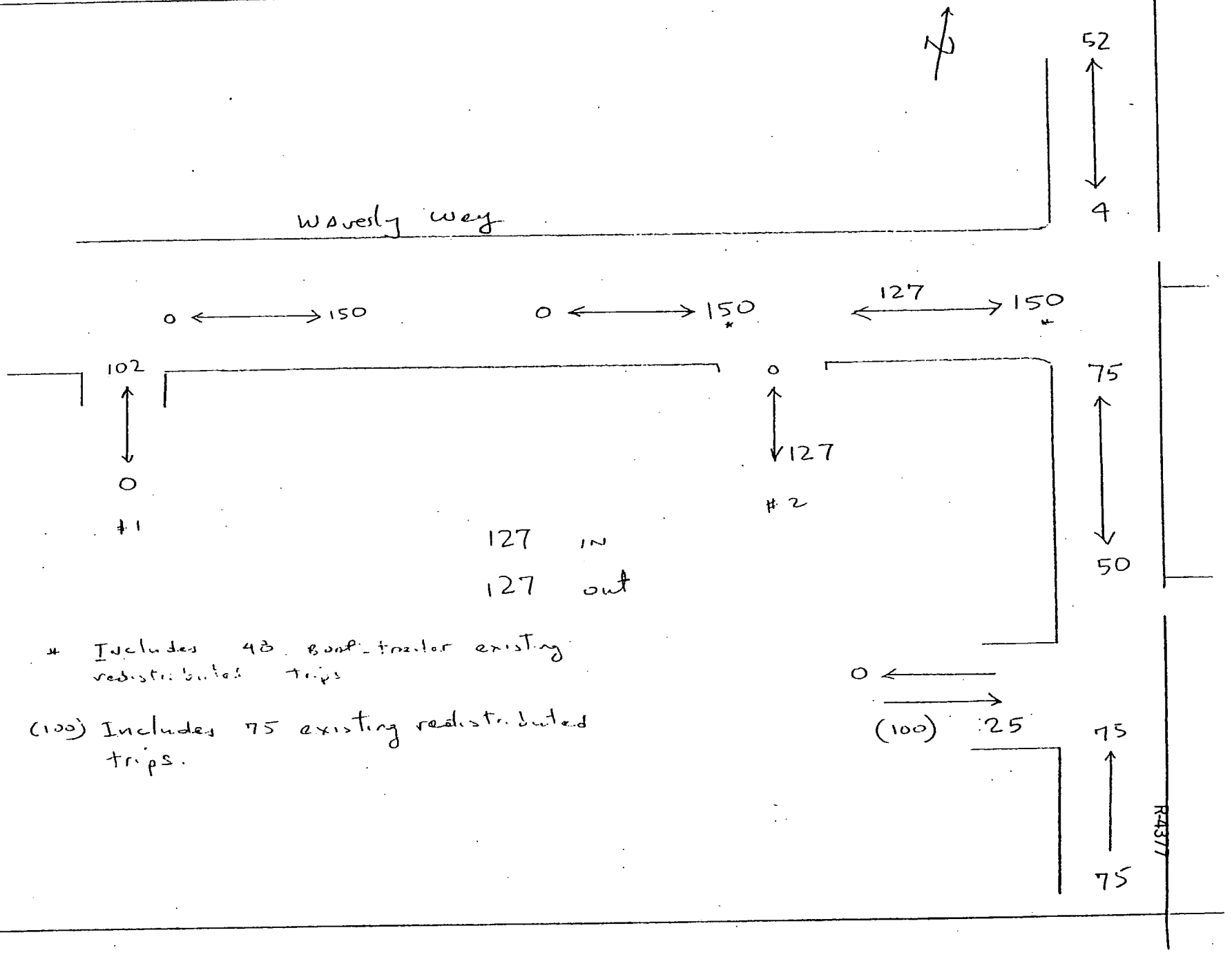
Intersection Summary			
Average Delay	1.4		
Intersection Capacity Utilization	11.3%	ICU Level of Service	A

HCM Unsignalized Intersection Capacity Analysis
41: Driveway 3 & Market Street

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	0	5	0	1381	745	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (veh/h)	0	5	0	1454	784	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
vC, conflicting volume	2238	784	784			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	47	393	834			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	5	1454	784
Volume Left	0	0	0
Volume Right	5	0	0
cSH	393	1700	1700
Volume to Capacity	0.01	0.86	0.46
Queue Length (ft)	1	0	0
Control Delay (s)	14.3	0.0	0.0
Lane LOS	B		
Approach Delay (s)	14.3	0.0	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	79.8%	ICU Level of Service	C



* Includes 48 Bonfi-trailer existing redistributed trips

(100) Includes 75 existing redistributed trips.

...oportional Share Impact Worksheet

R-4377

Input cells in green with appropriate information

[1] See "*Intersection Description*" worksheet for descriptions

1. May Change without notice, call staff if unsure.

			Through Lanes[1]
Project Name:	Waverly Enhancement		
Major Street[1]	Waverly Way	# of Lanes*=	1
Minor Street[1]	Driveway #1	# of Lanes*=	1

DATE:

10/23/2000

		Daily Volumes	*Entering Volumes* *		
Daily Project Traffic Entering the Intersection					
(Total of both approaches divided by two)	Major Street Volume V_1 =	75	150	0	*Major*
(Total of both approaches divided by two)	Minor Street Volume V_2 =	51	102	0	*Minor*

*Do not leave cell empty for zero volume

Determine Geometric Factors

Number of Lanes		Geometric Factors			
Major Street	Minor Street	f_1	f_2	f_3	f_4
2	2	1.000	1.330	1.000	1.330
2	1	1.000	1.000	1.000	1.000
1	2	0.833	1.330	0.833	1.330
1	1	0.833	1.000	0.833	1.000

f_1	f_2	f_3	f_4
0.833	***1***	***0.833***	***1***

Calculate Base Percentages

$P_1=V_1/(10{,}000 \times f_1)$ =	0.90%
$P_2=V_2/(5{,}000 \times f_2)$ =	1.02%
$P_3=V_1/(15{,}000 \times f_3)$ =	0.60%
$P_4=V_2/(2{,}500 \times f_4)$ =	2.04%

Calculate Proportional Share

$S_1=(P_1+P_2)/2$=	0.96%
$S_2=(P_3+P_4)/2$=	1.32%

Intersection Proportional Share = Maximum of S1 and S2 = 1.32%

Significant Intersection? yes

*Number of through lanes. Do not count exclusive turn lanes. Use the smaller number of lanes if the number of lanes is unequal on two legs. For Example, if one minor leg has two lanes and one minor leg has one lane, the number of lanes on the minor leg is one.

Computed By: Iris Cabrera

Company: Public Works City of Kirkland

Proportional Share Impact Worksheet

R-4377

Input cells in green with appropriate information

[1] See "*Intersection Description*" worksheet for descriptions

1. May Change without notice, call staff if unsure.

			Through Lanes[1]
Project Name:	Waverly Enhancement		
Major Street[1]	Waverly Way	# of Lanes*=	1
Minor Street[1]	Driveway #2	# of Lanes*=	1

DATE:

10/23/2000

Daily Project Traffic Entering the Intersection

		Daily Volumes	*Entering Volumes* *		
(Total of both approaches divided by two)	Major Street Volume V_1 =	213.5	277	150	*Major*
(Total of both approaches divided by two)	Minor Street Volume V_2 =	63.5	0	127	*Minor*

*Do not leave cell empty for zero volume

Determine Geometric Factors

Number of Lanes		Geometric Factors			
Major Street	Minor Street	f_1	f_2	f_3	f_4
2	2	1.000	1.330	1.000	1.330
2	1	1.000	1.000	1.000	1.000
1	2	0.833	1.330	0.833	1.330
1	1	0.833	1.000	0.833	1.000

f_1	f_2	f_3	f_4
0.833	***1***	***0.833***	***1***

Calculate Base Percentages

$P_1=V_1/(10{,}000 \times f_1)$ =	2.56%
$P_2=V_2/(5{,}000 \times f_2)$ =	1.27%
$P_3=V_1/(15{,}000 \times f_3)$ =	1.71%
$P_4=V_2/(2{,}500 \times f_4)$ =	2.54%

Calculate Proportional Share

$S_1=(P_1+P_2)/2$=	1.92%
$S_2=(P_3+P_4)/2$=	2.12%

Intersection Proportional Share = Maximum of S1 and S2 = 2.12%

Significant Intersection? yes

*Number of through lanes. Do not count exclusive turn lanes. Use the smaller number of lanes if the number of lanes is unequal on two legs. For Example, if one minor leg has two lanes and one minor leg has one lane, the number of lanes on the minor leg is one.

Computed By: Iris Cabrera
Company: Public Works City of Kirkland

roportional Share Impact Worksheet

R-4377

[1] See "*Intersection Description*" worksheet for descriptions

1. May Change without notice, call staff if unsure.

Input cells in green with appropriate information

		Through Lanes[1]	
Project Name:	Waverly Enhancement		
Major Street[1]	Market St	# of Lanes*=	1
Minor Street[1]	Driveway #3	# of Lanes*=	1

DATE:
10/23/2000

Daily Project Traffic Entering the Intersection

		Daily Volumes	*Entering Volumes* *		
(Total of both approaches divided by two)	Major Street Volume V_1 =	150	150	150	***Major***
(Total of both approaches divided by two)	Minor Street Volume V_2 =	25	25		***Minor***

*Do not leave cell empty for zero volume

Determine Geometric Factors

Number of Lanes		Geometric Factors			
Major Street	Minor Street	f_1	f_2	f_3	f_4
2	2	1.000	1.330	1.000	1.330
2	1	1.000	1.000	1.000	1.000
1	2	0.833	1.330	0.833	1.330
1	1	0.833	1.000	0.833	1.000

f_1	f_2	f_3	f_4
0.833	***1***	***0.833***	***1***

Calculate Base Percentages

$P_1=V_1/(10{,}000 \times f_1)$ =	1.80%
$P_2=V_2/(5{,}000 \times f_2)$ =	0.50%
$P_3=V_1/(15{,}000 \times f_3)$ =	1.20%
$P_4=V_2/(2{,}500 \times f_4)$ =	1.00%

Calculate Proportional Share

$S_1=(P_1+P_2)/2$=	1.15%
$S_2=(P_3+P_4)/2$=	1.10%

Intersection Proportional Share = Maximum of S1 and S2 = 1.15%

Significant Intersection? yes

*Number of through lanes. Do not count exclusive turn lanes. Use the smaller number of lanes if the number of lanes is unequal on two legs. For Example, if one minor leg has two lanes and one minor leg has one lane, the number of lanes on the minor leg is one.

Computed By: Iris Cabrera
Company: Public Works City of Kirkland

roportional Share Impact Worksheet

R-4377

Input cells in green with appropriate information

[1] See "*Intersection Description*" worksheet for descriptions

1. May Change without notice, call staff if unsure.

		Through Lanes[1]
Project Name:	Waverly Enhancement	
Major Street[1]	Central Way	# of Lanes*= 1
Minor Street[1]	Lake St	# of Lanes*= 1

DATE:

10/23/2000

Daily Project Traffic Entering the Intersection

		Daily Volumes	*Entering Volumes**		
(Total of both approaches divided by two)	Major Street Volume V_1 =	125	150	100	*Major*
(Total of both approaches divided by two)	Minor Street Volume V_2 =	25	50	0	*Minor*

*Do not leave cell empty for zero volume

Determine Geometric Factors

Number of Lanes		Geometric Factors			
Major Street	Minor Street	f_1	f_2	f_3	f_4
2	2	1.000	1.330	1.000	1.330
2	1	1.000	1.000	1.000	1.000
1	2	0.833	1.330	0.833	1.330
1	1	0.833	1.000	0.833	1.000

f_1	f_2	f_3	f_4
0.833	***1***	***0.833***	***1***

Calculate Base Percentages

$P_1=V_1/(10{,}000 \times f_1)$ =	1.50%
$P_2=V_2/(5{,}000 \times f_2)$ =	0.50%
$P_3=V_1/(15{,}000 \times f_3)$ =	1.00%
$P_4=V_2/(2{,}500 \times f_4)$ =	1.00%

Calculate Proportional Share

$S_1=(P_1+P_2)/2$=	1.00%
$S_2=(P_3+P_4)/2$=	1.00%

Intersection Proportional Share = Maximum of S1 and S2 = 1.00%

Significant Intersection? yes

*Number of through lanes. Do not count exclusive turn lanes. Use the smaller number of lanes if the number of lanes is unequal on two legs. For Example, if one minor leg has two lanes and one minor leg has one lane, the number of lanes on the minor leg is one.

Computed By: Iris Cabrera

Company: Public Works City of Kirkland

oportional Share Impact Worksheet

R-4377

Input cells in green with appropriate information

[1] See "*Intersection Description*" worksheet for descriptions

1. May Change without notice, call staff if unsure.

			Through Lanes[1]
Project Name:	Waverly Enhancement		
Major Street[1]	Market St	# of Lanes*=	1
Minor Street[1]	Waverly Way	# of Lanes*=	1

DATE:

10/23/2000

Daily Project Traffic Entering the Intersection		Daily Volumes	*Entering Volumes* *		
(Total of both approaches divided by two)	Major Street Volume V_1 =	102	54	150	*Major*
(Total of both approaches divided by two)	Minor Street Volume V_2 =	138.5	277	0	*Minor*

*Do not leave cell empty for zero volume

Determine Geometric Factors

Number of Lanes		Geometric Factors			
Major Street	Minor Street	f_1	f_2	f_3	f_4
2	2	1.000	1.330	1.000	1.330
2	1	1.000	1.000	1.000	1.000
1	2	0.833	1.330	0.833	1.330
1	1	0.833	1.000	0.833	1.000

f_1	f_2	f_3	f_4
0.833	***1***	***0.833***	***1***

Calculate Base Percentages

$P_1=V_1/(10{,}000 \times f_1)$ =	1.22%
$P_2=V_2/(5{,}000 \times f_2)$ =	2.77%
$P_3=V_1/(15{,}000 \times f_3)$ =	0.82%
$P_4=V_2/(2{,}500 \times f_4)$ =	5.54%

Calculate Proportional Share

$S_1=(P_1+P_2)/2$=	2.00%
$S_2=(P_3+P_4)/2$=	3.18%

Intersection Proportional Share = Maximum of S1 and S2 = 3.18%

Significant Intersection? yes

*Number of through lanes. Do not count exclusive turn lanes. Use the smaller number of lanes if the number of lanes is unequal on two legs. For Example, if one minor leg has two lanes and one minor leg has one lane, the number of lanes on the minor leg is one.

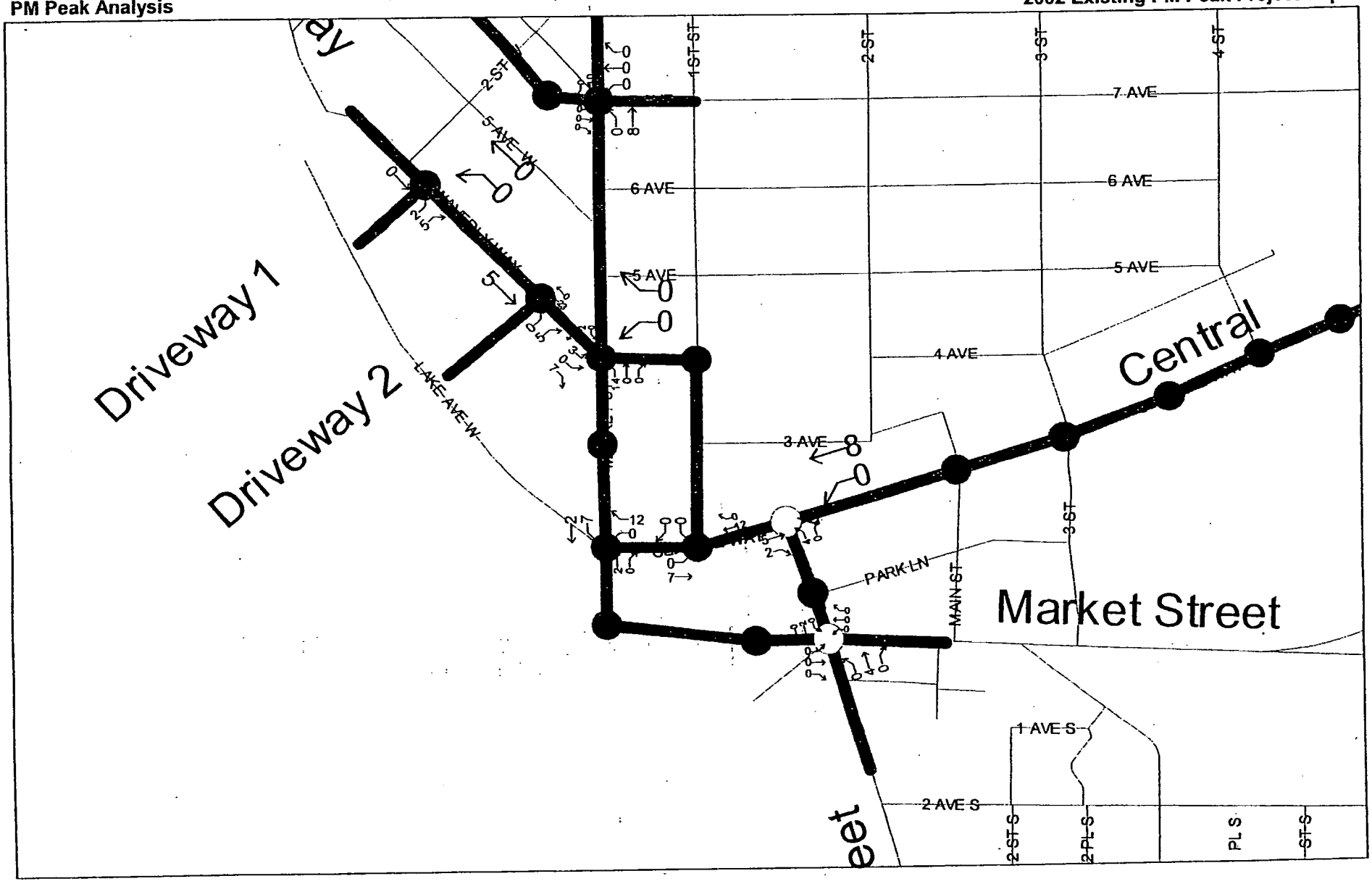
Computed By: Ins Cabrera

Company: Public Works City of Kirkland

R-4377

PM Peak Analysis

2002 Existing PM Peak Project Trips

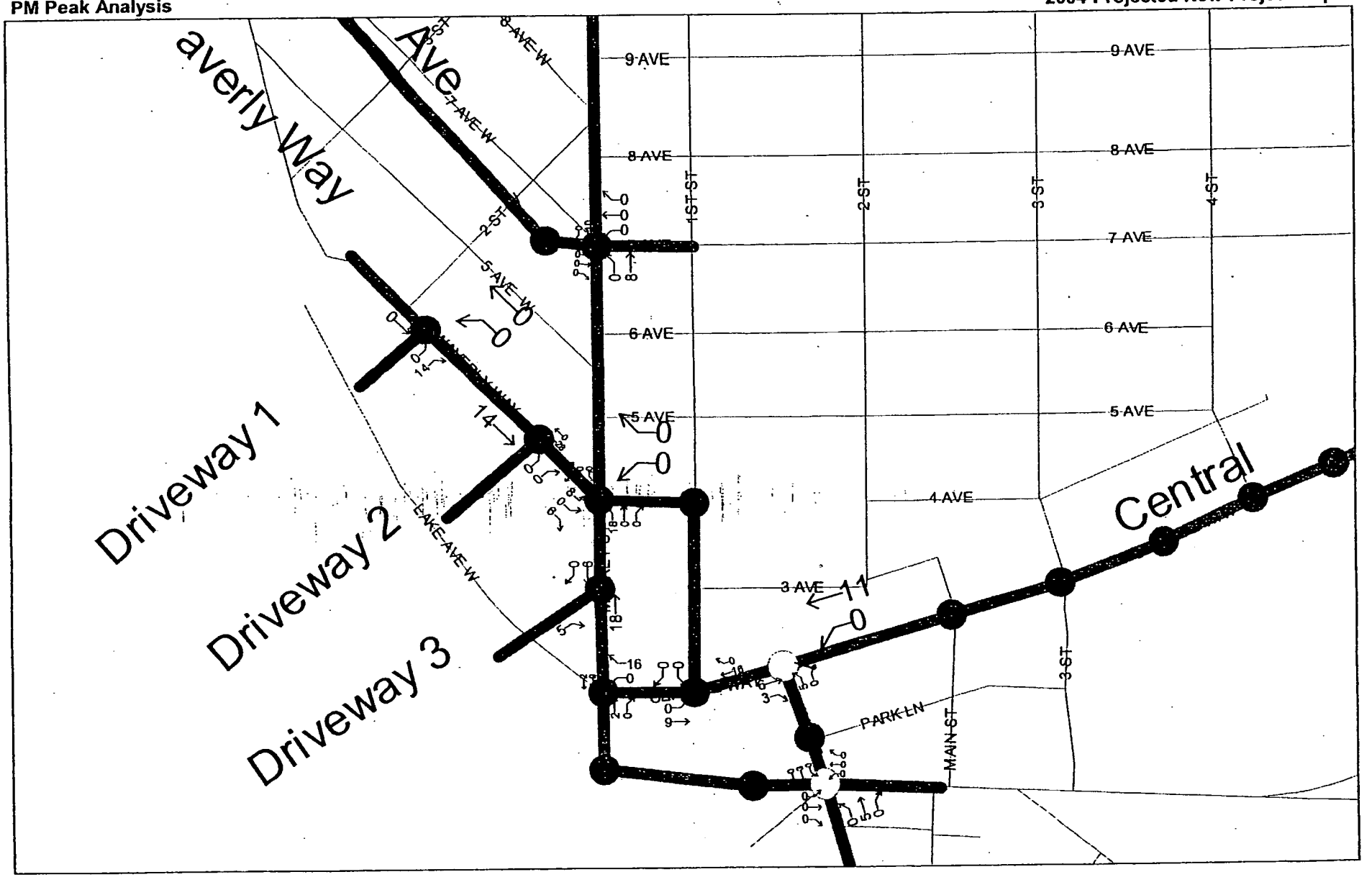


IC

R-4377

PM Peak Analysis

2004 Projected New Project Trips

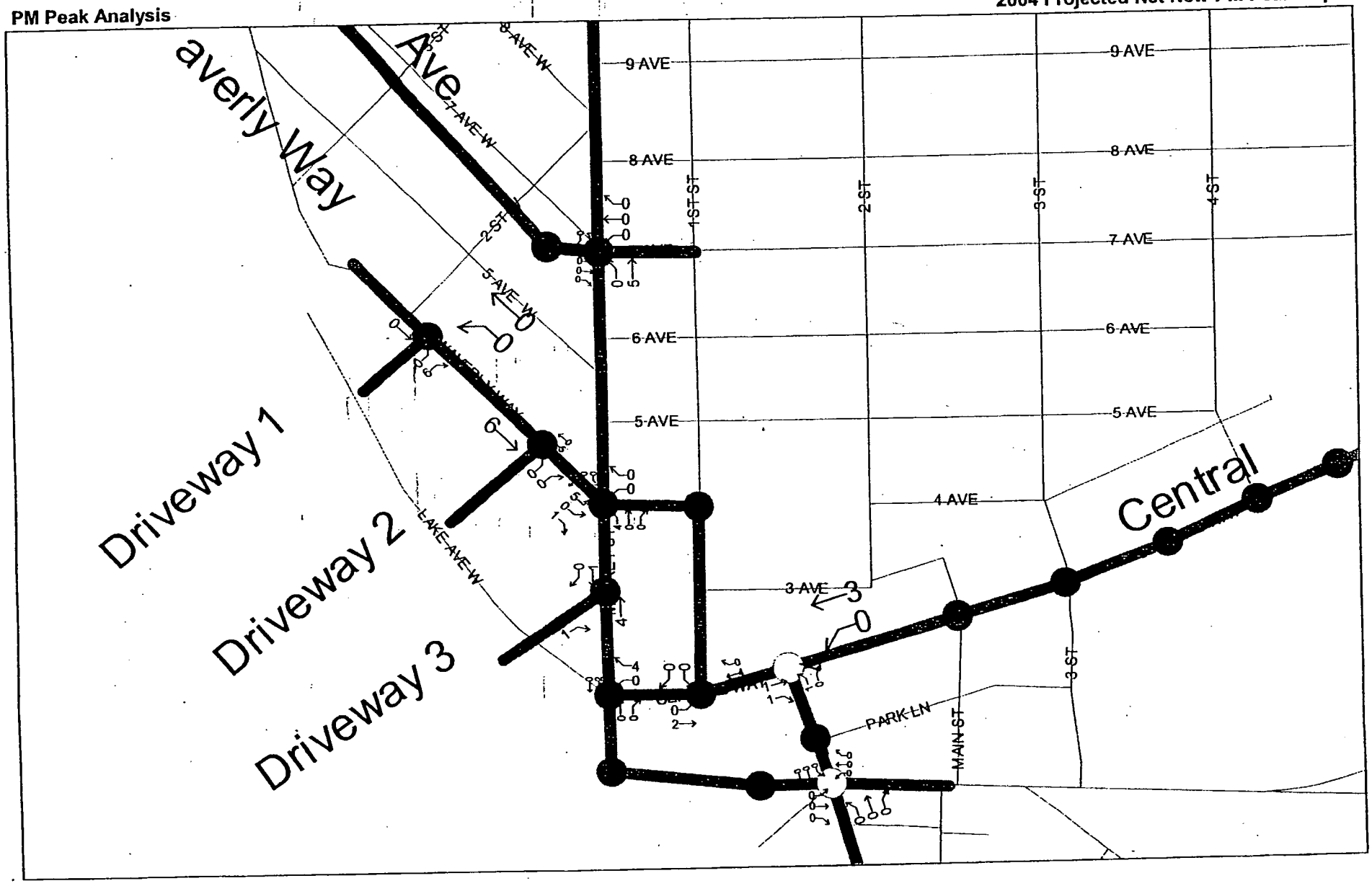


IC

R-4377

PM Peak Analysis

2004 Projected Net New PM Peak Trips

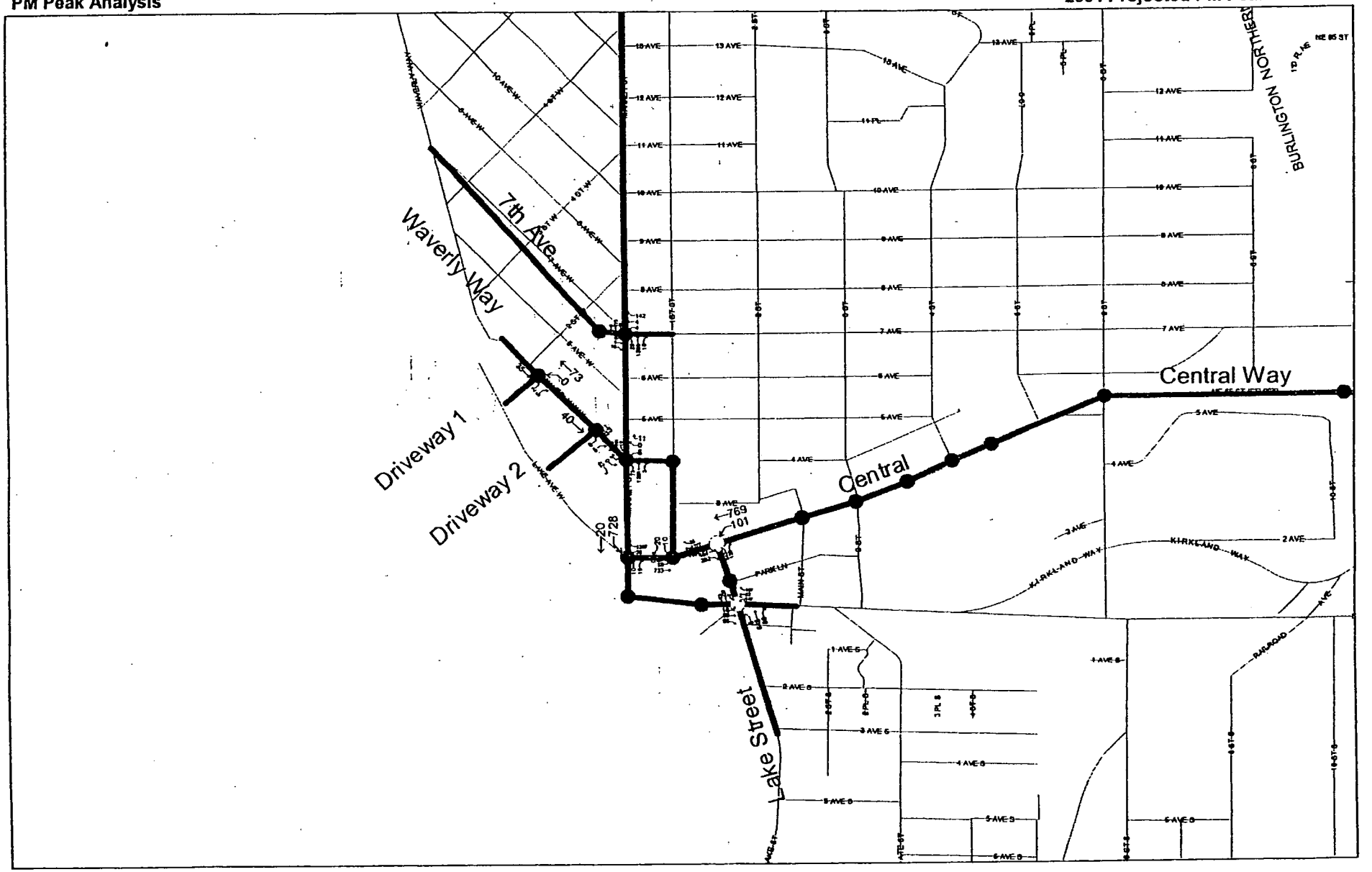


IC

R-4377

PM Peak Analysis

2004 Projected PM Peak Volumes

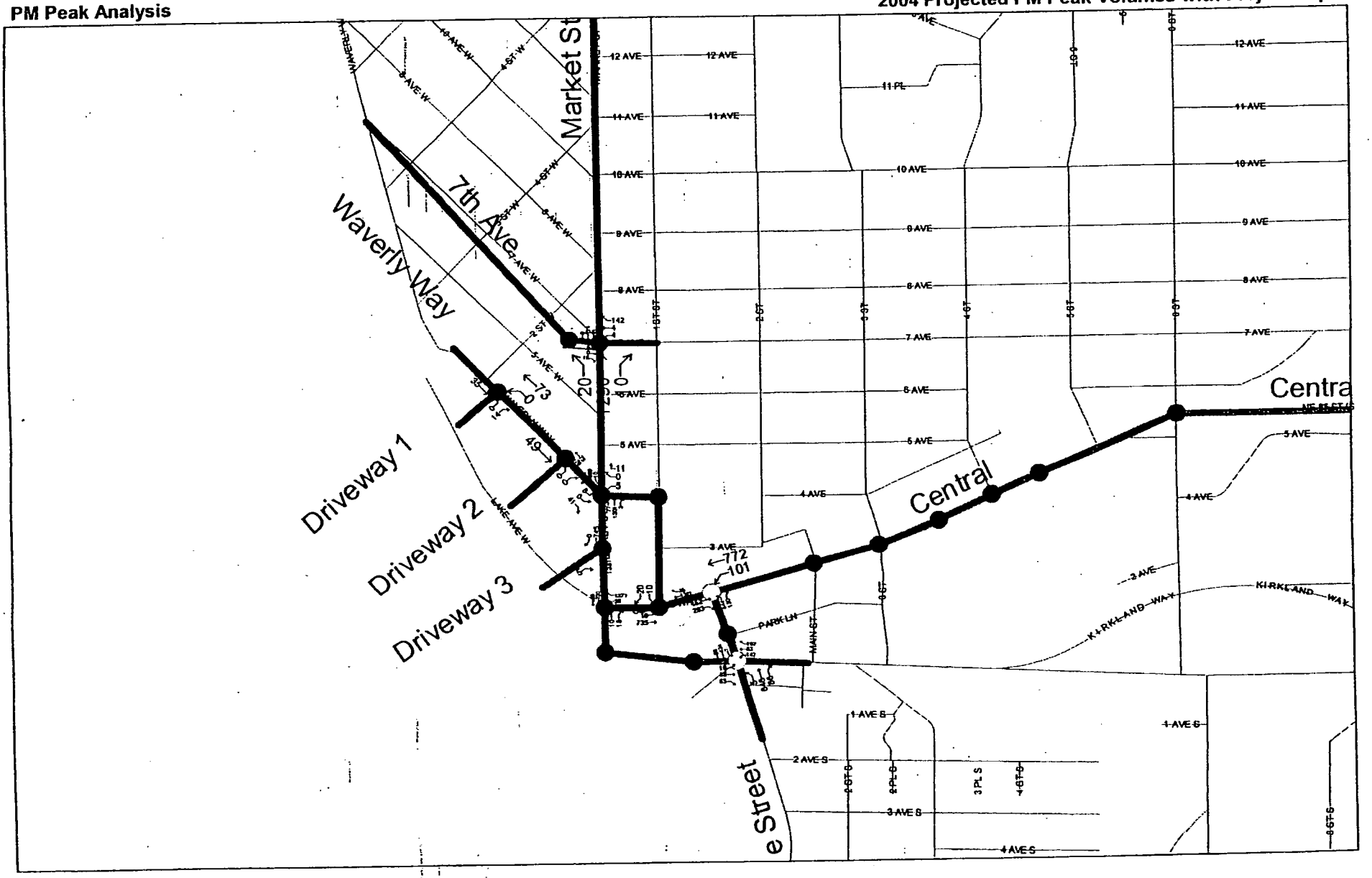


IC

R-4377

PM Peak Analysis

2004 Projected PM Peak Volumes with Project Trips



IC

R-4377

CITY OF KIRKLAND
123 FIFTH AVENUE • KIRKLAND, WASHINGTON 98033-6189 • (425) 828-1243

DEPARTMENT OF PUBLIC WORKS MEMORANDUM

To: Stacy Clauson, Planner

From: Thang Nguyen, Transportation Engineer

Date: November 7, 2002

Subject: Waverly Park Enhancement Project

This memo summarizes public works review of the proposed Waverly Park Enhancement project traffic impacts.

Project Description

The enhancement of Waverly Park includes relocating two tennis courts, opening of the Historic Building, and enhancement of the park grounds. The parking lot will be reconfigured to provide access from Waverly Way and Market Street. Additional parking for up to 21 boat-trailers will be provided on-site. The project is anticipated to be complete at the end of 2005.

Traffic Concurrency

The project passed traffic concurrency on May 8, 2002 and its concurrency test notice will expire on May 8, 2003.

Trip Generation

Based on ITE Trip Generation information and information from the Parks Department, the proposed project is forecasted to generate 254 daily trips and 12 PM peak hour trips.

Trip Distribution and Assignment

The trip distribution and assignment are based on trip allocation from the City BKR traffic model.

Significant Intersection

Per the City's Traffic Impact Analysis Guidelines, intersections impacted with new project trips by 1% or more are considered significant and further analysis are required. Two intersections and the three project driveways meet the requirement. Table 2 below summarizes the results of the proportionate share analysis.

ENCLOSURE 8
SEP02-00021

Table 1
Proportionate Share Analysis Results

Intersection	Proportionate Share
1) Waverly Way at Market St	3.18 %
2) Central Way at Lake Street	1.00 %
3) Waverly Way at Driveway 1	1.32 %
4) Waverly Way at Driveway 2	2.12 %
5) Market Street at Driveway 3	1.15 %

LOS Analysis

Level of service analyses were calculated for the significant intersections. Based on the level of service analyses, the driveways are forecasted to operate at LOS-A. The intersection of Waverly Way/Market Street will operate at LOS-A with the eastbound approach operating at LOS-F. The intersection of Central Way/Lake Street is forecasted to operate at LOS-E with and without the project.

In accordance to the Kirkland Traffic Impact Analysis Guidelines, mitigation is required when a development project traffic impact has a proportional share of 15% and the level of service of the impact intersection is LOS-E or when a development project traffic impact has a proportional share of 5% and the level of service of the impact intersection is LOS-F. The proposed project impacts to the significant intersections are less than 5%. Thus, specific off-site mitigation is not required.

Parking Demand Analysis

A Parking demand analysis was completed for the existing Waverly Park. The results indicate that the peak demand occur during the PM peak hour in the summer. At present, there is sufficient parking on-site to meet the demand.

Based on the traffic report, it appears that there will be sufficient parking on-site to meet the peak demand of Waverly Park. Although there will be designated on-street parking along the Park frontage for park users, the reduction in parking supply on-site will require other non-Waverly Park users to park on-street elsewhere. The traffic report indicates that 21 of those other non-Waverly Park users may impact near-by neighborhood streets.

An on-street parking utilization was conducted to assess the impact of those 21 non-Waverly Park users. The study area is defined as "within walking distance (500 feet) of the project site". Based on the results of the parking utilization study, there are 267 on-street parking stalls in the study area. The peak use of on-street parking in the study area was at noon and the utilization rate is 27% (72 spaces). Thus, 73% of the spaces (195 spaces) are not used.

The parks department is contemplating on restrict parking on the north side of Waverly Way. If parking is remains on the north side of Waverly Way, then there will be a supply of 267 parking spaces. With the future demand, 27% of those spaces (59spaces) would be utilized and 208 spaces would be availabled. If parking is restricted, then the on-street parking supply in the study area would drop to 236 spaces. With the future demand, 25% of those spaces (59 spaces) would be utilized and 177 spaces would be availabled. In the worse case scenario, the neighborhood on-street parking supply would be impacted by approximately 9% (21 spaces). This impact is not significant.

Traffic Safety & Driveway Operation

Sight distance analyses were conducted for the project driveways. Based on the results, there is sufficient sight distance. All driveways are forecasted to operate at LOS-A. Traffic accident records suggest that the project driveways and analyzed intersections will operate safely.

The City of Kirkland Standard requires that driveways be located at least 75 feet away from intersecting arterial street. The current proposed location of the east driveway off Waverly Way does not meet this requirement. Furthermore, the traffic report suggests that there may be a potential for eastbound traffic queue at Waverly Way/Market Street to block the proposed project east driveway and impede westbound traffic flow. The traffic report suggests that the east driveway be located at least 100 feet away from the intersection of Waverly Way/Market Street. Staff concurs with the recommendation of the traffic report.

Furthermore, staff recommends that the eastbound queue at Waverly Way/Market Street be monitored after the completion of project and traffic has stabilized. If traffic queue blocks the site driveway, then a more detail analysis should be conducted to determine if a separate right and left-turn lanes would be necessary to eliminate the blocking.

The traffic report suggests removing four to six parking spaces on Market Street between Waverly Way and the project driveway off Market Street. Staff concurs with the suggestion and recommends removing four parking spaces north of the driveway. Furthermore, a sight distance analysis should be re-evaluated after the construction of the driveway to determine if removal of additional parking spaces are needed to provide sufficient sight distance.

Road Impact Fees

Per City's Ordinance 3685, Traffic Impact Fees per Impact Fee Schedule in effect June 14, 1999 are required for all developments. Since there is no specific fee rate for City Park, impact fee shall be assessed based on the actual PM peak trip generation. The proposed project is forecasted to generate 12 new trips. The fee rate per trip is $877. Thus, the assessed impact fee for the proposed project is $10,524 (12 x &877). The final traffic fee will be determined at time of building permit issuance.

Staff Recommendations

Staff recommends approval of the project with the following conditions:

- Pay Road Impact Fees.
- Relocate the east driveway off Waverly Way to at least 100 feet west of the intersection of Waverly Way/Market Street.
- Monitor the operation of Waverly Way/Market Street to ensure that queue does not significantly block the project east driveway and impede westbound traffic flow.
- Remove four parking spaces north of the proposed project driveway off Market Street.
- Evaluate sight distance at the driveway off Market Street after it has been constructed to determine if additional parking spaces between the driveway and Waverly Way will need to be removed to ensure safe sight distance.

Cc: Michael Cogle, Parks Planning Manager
John Burkhalter, Development Engineer
Iris Cabrera, Transportation Engineer

CITY OF KIRKLAND
123 FIFTH AVENUE • KIRKLAND, WASHINGTON 98033-6189 • (425) 828-1243

DEPARTMENT OF PUBLIC WORKS MEMORANDUM

To: Stacy Tucker, Planner

From: Thang Nguyen, Transportation Engineer

Date: April 8, 2002

Subject: Waverly Park Enhancement Project

The purpose of this memo is to inform you that the proposed Waverly Park Enhancement project has passed traffic concurrency. The enhancement of Waverly Park includes adding two tennis courts, the Historic Building, additional parking for up to 19 boat-trailers. The project is anticipated to be complete at the end of 2005.

Attached is the Concurrency Test result. This memo will serve as the concurrency test notice for the proposed project. Per *Section 25.10.020 Procedures* of the KMC, this Concurrency Test Notice will expire in one year (May 8, 2003) unless a development permit and certificate of concurrency are issued or an extension is granted.

EXPIRATION

The concurrency test notice shall expire and a new concurrency test application is required unless:

1. A complete SEPA checklist, traffic impact analysis and all required documentation are submitted to the City within 90 calendar days of the concurrency test notice.

2. A Certificate of Concurrency is issued or an extension is requested and granted by the Public Works Department within one year of issuance of the concurrency test notice. (A Certificate of Concurrency is issued at the same time a development permit or building permit is issued if the applicant holds a valid concurrency test notice.)

3. A Certificate of Concurrency shall expire six years from the date of issuance of the concurrency test notice unless all building permits are issued for buildings approved under the concurrency test notice.

APPEALS

The concurrency test notice may be appealed by the public or agency with jurisdiction. The concurrency test notice is subject to an appeal until the SEPA review process is complete and the appeal deadline has passed. Concurrency appeals are heard before the Hearing Examiner along with any applicable SEPA

appeal. For more information, refer to the Kirkland Municipal Code, Title 25. If you have any questions, please call me at x2901.

Cc: Michael Cogle, Parks Planning Manager
John Burkhalter, Development Engineer

1) Project ID: Waverly Park Enhancement

2) Project Description: Park enhancement, add 2 tennis courts, additional boat-trailer parking and the Historic Building

3) Build-out Year: 2004

4) Transportation Concurrency Status: PASS

5) Transportation Concurrency Test Date: 8-May-02

6) Transportation Concurrency Certificate Date:

7) Certificate of Occupancy Date

SUMMARY OF TRAFFIC IMPACTS

8) Daily Trips | PM Peak Trips: 16 | Impacted Subarea(s): All | TAZ: 268

Signalized Intersection PM Peak Traffic Impact

Code	Intersection	Project PM Peak Turning Volumes: Eastbound LT	Eastbound TH	Eastbound RT	Westbound LT	Westbound TH	Westbound RT	Northbound LT	Northbound TH	Northbound RT	Southbound LT	Southbound TH	Southbound RT	PM Peak Trips	Daily Trips	Sum of Critical Vol*	Vol. Capacity Ratio*
107	Central Way/Lake St			2		2		2						8		1293	0.91
108	Lake St/Kirkland Ave						1							4		887	0.59
	#N/A													0		#N/A	#N/A
	#N/A													0		#N/A	#N/A
	#N/A													0		#N/A	#N/A
	#N/A													0		#N/A	#N/A
	#N/A													0		#N/A	#N/A
	#N/A													0		#N/A	#N/A
	#N/A													0		#N/A	#N/A
	#N/A													0		#N/A	#N/A
	#N/A													0		#N/A	#N/A
	#N/A													0		#N/A	#N/A
	#N/A													0		#N/A	#N/A
	#N/A													0		#N/A	#N/A
	#N/A													0		#N/A	#N/A
	#N/A													0		#N/A	#N/A
	#N/A													0		#N/A	#N/A
	#N/A													0		#N/A	#N/A
	#N/A													0		#N/A	#N/A

Transportation Concurrency Test

Subarea No	LOS Standards: A= Max. Intersection LOS	LOS Standards: B=Average 2007 V/C	LOS with Project Impacts: a=No. exceeding 1.4	LOS with Project Impacts: b=Average V/C	a <= A?	b<= B?
Southwest (1xx)	1.4	0.99	0	0.95	yes	yes
Northwest (2xx)	1.4	1.18	0	1.04	yes	yes
Northeast (3xx)	1.4	0.98	0	0.94	yes	yes
East(4xx)	1.4	1.06	0	1.01	yes	yes

TEST RESULTS

Result: PASS

* Based on Critical Movement, Planning Method TRC #212.

1. Number of intersection exceeding Average V/C LOS Standard (2012)
1. Sixth Year Target Average V/C ratio, see step 6, part 1 of the guidelines

R-4377

CITY OF KIRKLAND
123 FIFTH AVENUE • KIRKLAND, WASHINGTON 98033-6189 • (425) 828-1257

DEPARTMENT OF PARKS AND COMMUNITY SERVICES MEMORANDUM

To: Stacy Tucker, Planner

From: Michael Cogle, Community Services Manager

Date: June 29, 2002

Subject: Waverly Park Site Phasing Plan

Phase I

Phase I involves occupancy of the historic building on the site. Occupancy would initially occur in the lower level of the building once all required permits, up to and including an occupancy permit, were obtained.

Use of the building's lower level will be as a resource center organized by the Kirkland Heritage Society. The use by the organization's volunteers will be on an irregular basis, and the building will not house any regular or full-time employees.

Additional building renovation will be necessary to ensure occupancy of the building's upper floor, which will happen at a later time. The upper floor will be used as a community facility, primarily for meetings and social events. The maximum occupancy load for the upper floor is 61.

Use of the upper level will be primarily on evenings and weekends, for neighborhood and business association meetings, City-sponsored meetings and related activities, and private rental functions booked by the Parks and Community Services Department.

Parking during phase I will be accommodated in the existing gravel lot in the park. Public Works Dept. has authorized the creation of an ADA parking space on Market Street next to the building.

Phase II

The second phase of the project will be development of the park plan itself. Currently, the City does not have funding for the project, so a completion date is unknown at this time. It is possible that park improvements could be completed in phases over the coming years, based on available City and grant funding.

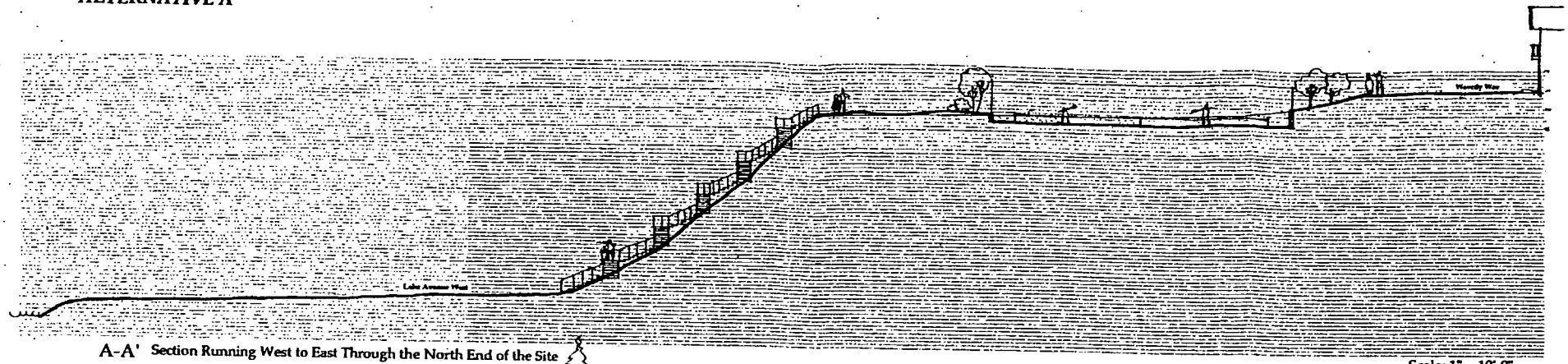
Use Zone Chart Compliance – Zoning Code Section 60.15.010 (P zone)

P Standards	Allowed/Required	Proposed
Use	Public Park	Public Park containing natural, landscaped and developed areas.
Process	Community review process	Community review process
Lot Size	None	Approximately 449,623 square feet (10.32 acres).
Front Yard	Determined on a case-by-case basis	Approximately 40 feet from property line adjoining Waverly Way to restroom. Approximately 20 feet from property line adjoining Waverly Way to tennis courts. Historic building remains in current location.
Side Yard	Determined on a case-by-case basis	Not applicable.
Rear Yard	Determined on a case-by-case basis	Not applicable.
Lot Coverage	Determined on a case-by-case basis	Less than 15 percent of the site.
Building Height	Determined on a case-by-case basis	Existing historic building to be tallest structure on-site.
Landscape Category	N/A	N/A
Sign Category	N/A	N/A
Required Parking	The P zone does not specify a parking space requirement for Public Parks. As a result, the parking requirement is determined on a case-by-case basis.	See Section II.D in the staff analysis.

ATTACHMENT 5
Waverly Park Master Plan

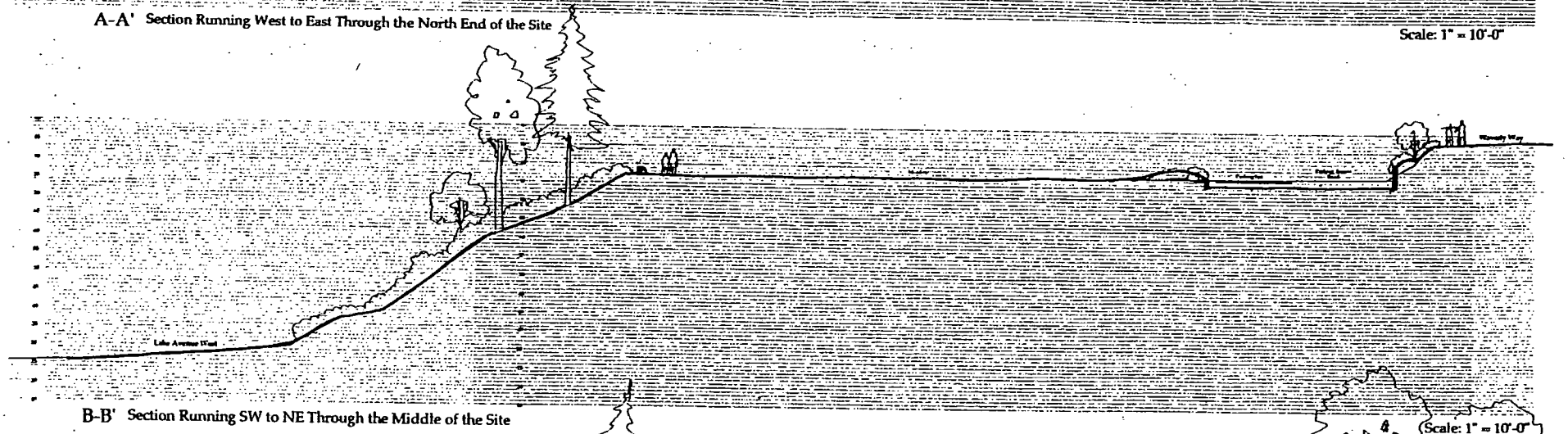
[redacted] [redacted] [redacted]

ALTERNATIVE A



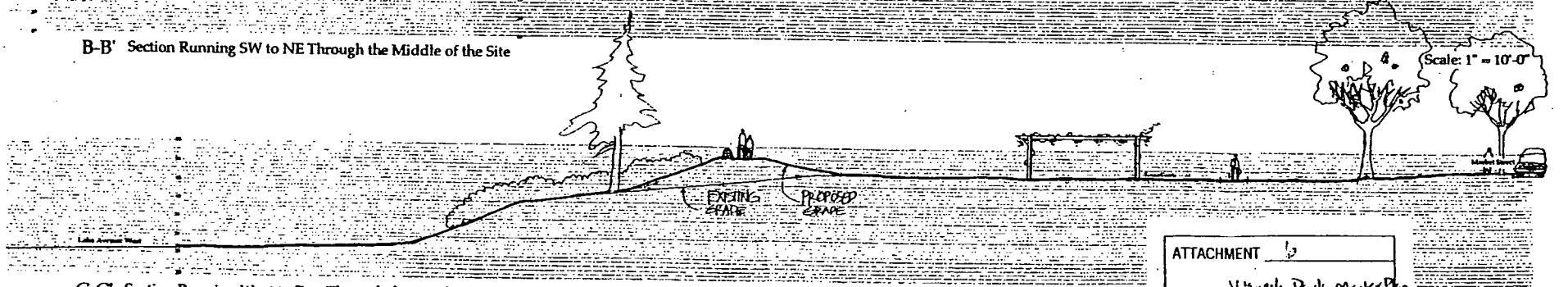
A-A' Section Running West to East Through the North End of the Site

Scale: 1" = 10'-0"



B-B' Section Running SW to NE Through the Middle of the Site

Scale: 1" = 10'-0"



C-C' Section Running West to East Through the South End of the Site

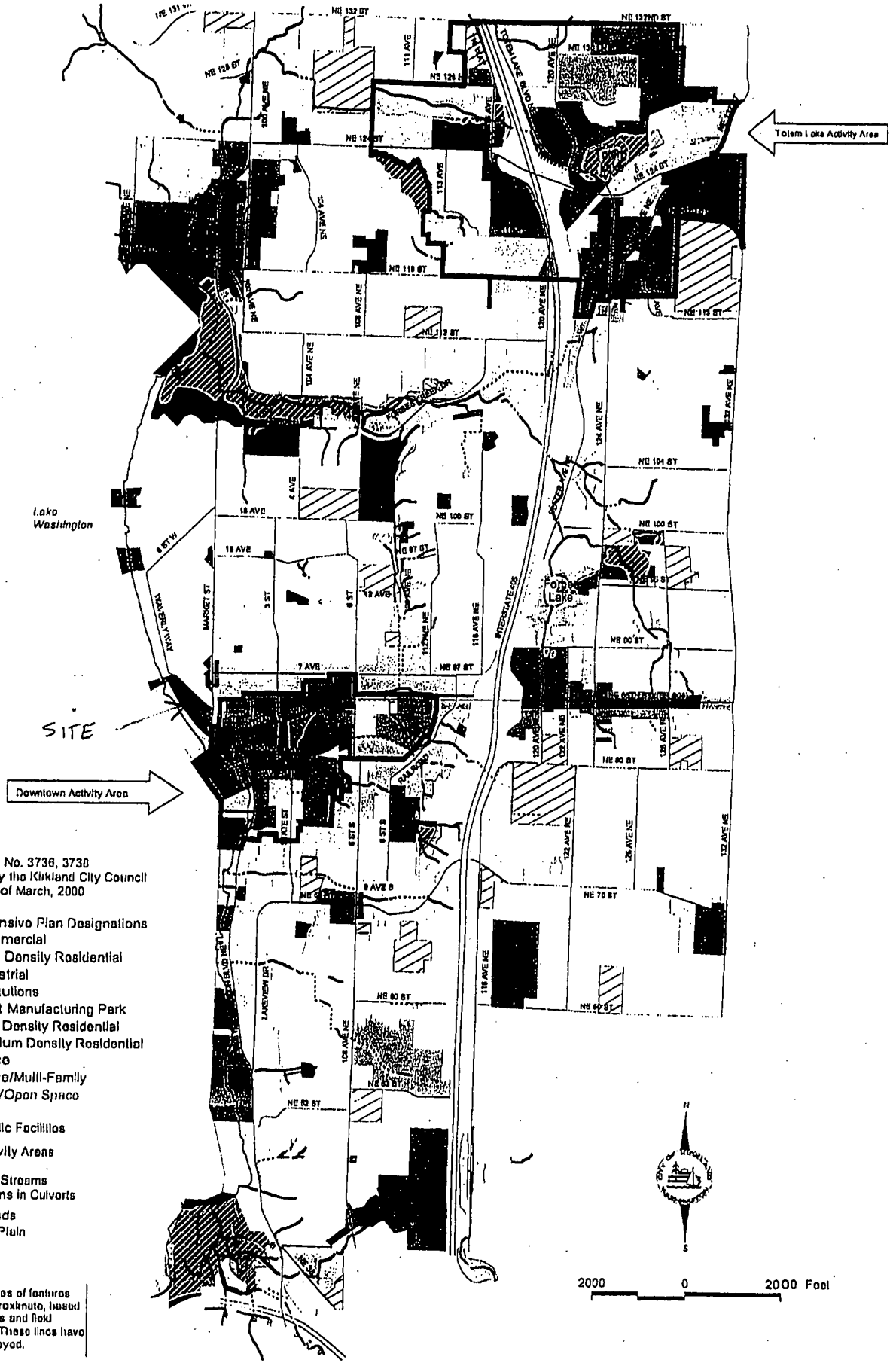
Scale: 1" = 10'-0"

ATTACHMENT 12
University Park Master Plan

R-4377

City of Kirkland Comprehensive Land Use Map

R-4377



ATTACHMENT 7
Waverly Park master Plan

pathways in the Market area should be established according to the designations in Figure MNH-5. A pedestrian/bicycle pathway (perhaps with scenic view stations overlooking Lake Washington) should be established along the west side of Waverly Way. This element of the trail system would provide uninterrupted pedestrian/bicycle access between Marina Park and Waverly Park.

F. PUBLIC SERVICES/FACILITIES

Public ownership and use of the former Kirkland Junior High School site should be continued. Redevelopment must be compatible with nearby low-density residential uses.

The site of the former Kirkland Junior High School is presently owned by the Lake Washington School District. The property is now being used as a center for vocational education. Much of the land is also available for public recreational use. This Comprehensive Plan recommends continued public ownership and public use of the site. Redevelopment could include governmental office space, expanded public recreational opportunities, a community center, or some combination of the above. In any case, substantial amounts of public open space must be maintained, and development along Waverly Way must have a low-rise configuration to blend with nearby residential uses.

Deficiencies in sewer, water, or drainage systems are to be corrected prior to occupancy of new development. Surface runoff is to be minimized.

Sanitary sewer service is considered to be inadequate in older parts of the Market area because the existing sewer lines are old and will have to be replaced within the next 15 to 20 years. Isolated problems may also exist with regard to water service and storm drainage in the Market area. These system deficiencies should not necessarily prohibit additional development in the Market area. However, prior to occupancy of new development, the sewer and water lines must be upgraded and/or extended as necessary to meet the requirements of land uses designated in Figure MNH-2 (see Public Services/Facilities: Water and Sewage Systems Policy 1 and Policy 2). If drainage problems exist, they too must be corrected prior to occupancy of new development. Methods should be implemented to maintain surface runoff at predevelopment levels (see Public Services/Facilities: Drainage Policy 2).

Undergrounding of utilities is to be actively encouraged.

In order to contribute to a more amenable and safe living environment as well as to enhance views and a sense of community identity, the undergrounding of utilities is to be actively encouraged (see Public Services/Facilities: Quasi-Public Utilities Policy 2, Community Goals and Policies Policy 2, and Open Space/Parks Policy 2).

Existing circulation patterns are to be maintained.

Vehicular circulation patterns are well established in the Market area and reflect the residential character of the neighborhood (see Figure MNH-6).

Through traffic is accommodated by Market Street with virtually no impact on the majority of residences. No major changes are proposed for circulation patterns in the Market area.

Major pedestrian and bicycle pathway system is to be enhanced.

Pedestrian and bicycle pathways are also important elements of the circulation network. Such pathways should be enhanced according to the designations in Figure MNH-5. In addition to these major designations, sidewalks or other small-scale improvements are encouraged to facilitate pedestrian and bicycle travel in the Market area.

ATTACHMENT 9
Waverly Park Master Plan

(a) Structures adjacent to single-family areas may not exceed a height normally associated with single-family houses. The height of structures should be kept as low as possible as measured from Market Street to prevent significant view obstructions.

(b) Development along Market Street should not significantly alter the exterior appearance of historic buildings. Restoration of such buildings is encouraged.

(c) Signing and lighting are to be controlled to be compatible with surrounding scale.

(d) Primary vehicular access must be directly to and from Market Street or side streets.

(e) Office development is required to provide large, densely landscaped setbacks as a visual buffer between residential and nonresidential uses. Parking would not be allowed in this setback area.

(f) The dedication of development rights to the City in the required buffer strip around the development facing the low-density residential areas.

E. OPEN SPACE/PARKS

Public lands do not adequately meet the park and open space needs of Market area residents.

There is a need for a neighborhood park in the Market area. At present, the only public lands in the vicinity are two waterfront parks (Waverly and Kiwanis Parks) and the former Kirkland Junior High School site (see Figure MNH-5). The waterfront parks serve a limited function since access is poor and the unattended beaches pose hazards for children. The Junior High School site may continue to serve park and open space functions.

Undeveloped private land may informally meet certain needs. The City should acquire land and develop a neighborhood park near the central portion of the Market area.

At the present time, small parcels of undeveloped private property may informally meet certain recreation and open space needs. However, there is no assurance such private land will continue to be available for such purposes. For all the reasons listed above, the City should acquire land and develop a neighborhood park facility somewhere near the central portion of the area west of Market Street.

Open space value of streets is to be recognized.

One important open space of great community value is often overlooked. The street system provides Kirkland's neighborhoods with a number of excellent local and regional views. Such view corridors lie within the public domain and are valuable for the beauty, sense of orientation, and identity they impart (see Community Goals and Policies Policy 2 and Open Space/Parks Policy 2). Such view corridors are to be identified, preserved, and enhanced. One means to this end may be the undergrounding of utilities (see Public Services/Facilities: Quasi-Public Utilities Policy 2).

Major pedestrian and bicycle system is discussed.

Pedestrian and bicycle pathways are also part of the park and open space system, in addition to providing a transportation function. Major

City of Kirkland Zoning Code
Special Regulations
Provisions for the Review of Park Master Plans

1) Except as provided for in Special Regulation 2 below, any development or use of a park must occur consistent with a master plan. A master plan shall be reviewed through a community review process, established by the Parks and Community Services Director, which shall include at a minimum:

   a) One formal public hearing, conducted by the Parks Board, preceded by appropriate public notice. The required public hearing on a master plan within the Houghton Community Municipal Corporation shall be conducted by the Houghton Community Council, which may be a joint hearing with the Parks Board.
   b) The submittal of a written report on the proposed master plan from the Parks Board to the City Council, containing at least the following:
      i) A description of the proposal;
      ii) An analysis of the consistency of the proposal with adopted Comprehensive Plan policies, including the pertinent Park and Recreation Comprehensive Plan policies;
      iii) An analysis of the consistency of the proposal with applicable development regulations, if any;
      iv) A copy of the environmental record, if the proposal is subject to the State Environmental Policy Act;
      v) A summary and evaluation of issues raised and comments received on the proposed master plan; and
      vi) A recommended action by the City Council.
   c) City Council review and approval. The City Council shall approve the master plan by resolution only if it finds:
      i) It is consistent with all applicable development regulations and, to the extent there is no applicable development regulation, the Comprehensive Plan; and
      ii) It is consistent with the public health, safety and welfare.
      iii) If the master plan is proposed within the Houghton Community Municipal Corporation, it shall become effective according to the procedure in KMC 2.12.040.

   In addition to the features identified in KZC 5.10.505[1], the master plan shall identify the following:
   a. Location, dimensions, and uses of all active and passive recreation areas.
   b. Potential users and hours of use.
   c. Lighting, including location, hours of illumination, lighting intensity, and height of light standards.
   d. Landscaping.
   e. Other features as appropriate due to the character of the neighborhood or characteristics of the subject property.

2) Development and use of a park does not require a master plan under this Code if it will not involve any of the following:

   a) Lighting for outdoor nighttime activities.
   b) The construction of any building of more than 4,000 square feet.
   c) The construction of more than 20 parking stalls.
   d) The development of any structured sports or activity areas, other than minor recreational equipment including swingsets, climber toys, slides, single basketball hoops, and similar equipment.

[1] KZC 5.10.505 states the definition of a Master Plan: A complete development plan for the subject property, showing placement, dimensions, and uses of all structures as well as streets and other areas used for vehicular circulation.

Waverly Park Master Plan

Acknowledgements

Kirkland City Council

Larry Springer, Mayor
Joan McBride, Deputy Mayor
Dave Asher
Mary-Alyce Burleigh
Sants Contreras
Tom Dillon
James Lauinger

Dave Ramsay, City Manager

Park Board (December 2002)

Bob Sternoff, Chair
Cindy Zeck, Vice Chair
Tory Haschak
Chuck Bartlett
Kevin Hanefeld
Colleen Cullen
Jeff Trager
Liz Pachaud

Waverly Advisory Group

John Hurney, Boating Community
Margaret Carnegie, KAN
Michael Radcliff, Heritage Society
Reed Walton, Youth Council
Karen Lightfelt, KDA
Dwight Altenburg, Citizen-at-Large
Chuck Bartlett, Market Neighborhood Assoc.
Bob Montgomery, Sports organizations
Garin Wedeking, Youth Council
Merrily Dicks, Kirkland Arts Center
Cindy Zech, Park Board
Rick Seim, Lake Avenue West Residents

Parks and Community Services Department Staff

Barry Russell, Director of Parks and Community Services
Michael Cogle, Park Planning Manager
Teresa Sollitto, Park Projects Coordinator

Other City Staff

Stacy Clausen, Planning Department
Rob Jammerman, Public Works
Thang Nguyen, Public Works
Iris Cabrera, Public Works

Design Consultant

John Barker, Barker Landscape Architects
Paige Crutcher, Barker Landscape Architects