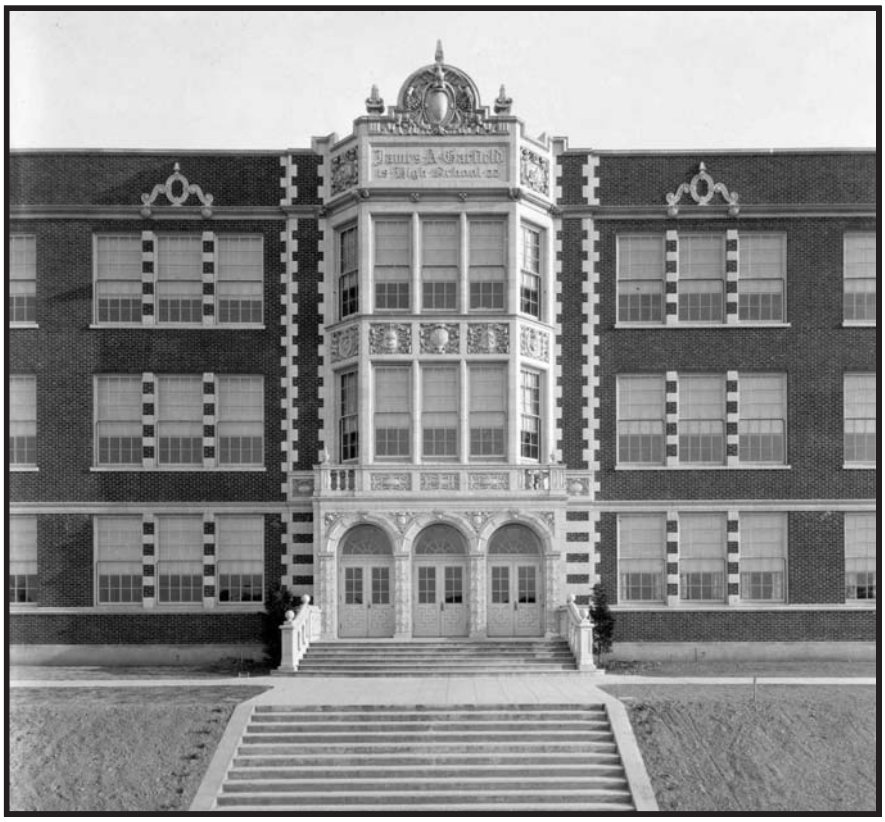
Garfield High School Redevelopment Project

Draft Supplemental Environmental Impact Statement



Public Comments Due June 25, 2004

Prepared for
Seattle School District

Prepared by
Adolfson Associates, Inc. and
Heffron Transportation, Inc.

May 2004

Ronald J. English
SEPA Official

SEATTLE PUBLIC SCHOOLS

To: Recipients of the Draft Supplemental Environmental Impact Statement for the Garfield High School Renovation Project

From: Ronald J. English, SEPA Official

Date: May 25, 2004

This Draft Supplemental Environmental Impact Statement (SEIS) discusses the potential environmental impacts that could result from the renovation of Garfield High School. This EIS supplements previous environmental review for the Seattle School District's "Building Excellence" capital improvement program, including the 1992 EIS on the District's Facilities Master Plan, and the 2000 Supplemental EIS on Phase II of Building Excellence.

Garfield High School is undergoing a $50 million renovation and addition. The work will remodel the historic three-story building and replace the old Gymnasium and Teen Life Center building with a new PE/Athletics facility, a new Performing Arts auditorium and stage, and a new Teen Life Center. In addition, the non-regulation running track will be replaced by a regulation all-weather track and field.

In November of 2003, as part of its capital planning effort, the School District held a public scoping meeting to receive public feedback on the scope and components of the Garfield High School renovation. Presentations were also made to the community and other public agencies such as the City of Seattle.

As part of the environmental review process, the District sought public comment on the scope of the environmental analysis. Based on that process, the District determined that this analysis would evaluate the following elements of the environment:

- Earth Resources
- Land Use
- Historic Resources
- Transportation
- Recreation

During the 30-day review period for this document, the District will conduct a public hearing to receive comment on the Draft SEIS. The hearing will be for public testimony only. No presentations will be made.

Date of Hearing:	June 10, 2004
Time:	7:30 to 9:00 pm, Public Hearing
Location:	Garfield High School Library
Address:	400 23rd Avenue, Seattle 98122

After the public review period, the School District will issue a Final Supplemental EIS that incorporates or responds to comments submitted during the review. The Final SEIS, along with program, engineering, financial and planning information, will be used by the Superintendent to develop a recommendation to the School Board regarding the renovation of Garfield High School. The School Board will also use the Final SEIS, along with other data, in making its final decision on Garfield High School. The current schedule calls for construction to begin in summer 2006, with completion by fall 2008.

The deadline for receipt of written comments and materials on this document is

June 25, 2004 by 4:30 PM

The comments should include the name and address of the author and the basis for the comment. Address comments to:

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FACT SHEET

Project Title

Garfield High School Redevelopment Project

Project Description

The proposed action is continued implementation of the *1992-2010 Facilities Master Plan*. This document, the *Garfield High School Redevelopment Project Draft Supplemental Environmental Impact Statement*, updates preliminary information supplied in the *Building Excellence Phase II Capital Improvement Program Final Supplemental Environmental Impact Statement* (September, 2000). This document provides the site-specific environmental review prescribed in the Phase II document.

Redevelopment of Garfield High School was identified in the *1992 – 2010 Facilities Master Plan*. Garfield High School is located in an urban area in the Central Neighborhood of Seattle. The school was originally constructed in 1923, with an annex constructed in 1929 and a gymnasium constructed in 1962. Enrollment for the 2002-2003 school year was 1,657.

Redevelopment of the school would include rebuilding classrooms, upgrading technology available to students, and redeveloping space for outdoor physical education and athletic practices. New replacement facilities would be constructed for performing arts, and P.E./ athletics programs as well as the Seattle Parks and Recreation Department's Teen Life Center.

Two alternatives are presented in this document – the Preferred Action, which entails an adjustment to the northern site boundary based on a land exchange with the Seattle Parks Department (Alternative 1), and redevelopment within the existing site boundary (Alternative 2). The alternatives are described beginning on page 2-1. Construction for the action alternatives is proposed to begin in summer of 2006, with the site ready for reoccupation for the 2008 school year. The No Action Alternative is not being analyzed as part of this Supplemental Environmental Impact Statement because it was previously analyzed in the *Building Excellence Phase II Capital Improvement Program EIS.*

Action Sponsor and Lead Agency

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Permits and Licenses Required or Potentially Required

Master Use Permit, City of Seattle
Clearing and Grading Permit, City of Seattle
Demolition Permit, City of Seattle
Building/Mechanical Permit, City of Seattle
Electrical Permit, City of Seattle
Certificate of Approval, Landmarks Preservation Board

Authors and Principal Contributors

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1.0 BACKGROUND

In January 1992, the Seattle School District (District) completed a comprehensive effort to identify the long-range facility needs for Seattle schools and support facilities through the year 2010. The effort involved District staff, parents, teachers, administrators, and citizens, and resulted in a document entitled *Superintendent's Preliminary Recommendation: Proposed Facilities Master Plan 1992 – 2010* (January 1992). The Facilities Master Plan (FMP) outlined the status of all District facilities, the future of those facilities, and the proposed actions necessary to fulfill the goals of that plan. The FMP has been updated, and the most recent version was adopted on March 17, 1999. The FMP Update provides direction for the strategic use of all District facilities through 2010 and is the basis for developing the District's capital programs. The updated FMP recommended renovating the 1923 building, demolishing the 1929 addition and 1962 gymnasium, and building a new addition and gym at Garfield High School.

Since the adoption of the 1992 plan, several changes have occurred that affect facilities planning and utilization in the District. These changes include student demographics, new student assignment plans, and a new method for funding students. Recent long-range enrollment projections show a flat to slightly declining enrollment through 2010. This enrollment pattern provides more stability for facilities planning, and it allows the District to focus on the facilities that are needed to support quality educational programs and services.

1.1 Summary of Recent Capital improvements

The District has made progress toward achieving many of the goals expressed in the 1992 FMP. These include:

- Passage of the Building Excellence I (BEX Phase I) levy in 1995 funded school improvements throughout the District.
- Passage of the Buildings, Technology, and Athletic Fields (BTA I) levy in 1998 provided funds for implementation of the District Technology Plan that includes Internet access, adequate student-to-computer ratios, and additional on-line resources, as well as athletic field improvements at a number of schools.
- Passage of Building Excellence II (BEX Phase II) in 2001 funded additional school improvements.
- Passage of the Buildings, Technology, and Athletic Fields (BTA II) levy in February 2004 renewed the expiring BTA I levy approved in 1998. The levy will fund nearly 700 facility improvement projects and technology upgrades at every school in the District.

BEX Phase I, as summarized below, was begun following passage of a funding levy in 1995, and construction was completed with the reopening of the new Coe Elementary School in January 2003. The environmental aspects of the BEX Phase I projects were reviewed in *Building*

Excellence: Seattle Public Schools Capital Improvement Program Final Supplemental Environmental Impact Statement (July 30, 1993). The original Building Excellence Plan, as amended in December 1994, provided for the following capital improvements:

- Ten schools were renovated and expanded, taking into consideration their historic value (Bryant, Coe, Concord, Dunlap, Emerson, Greenwood, Latona, Seward, Stevens, and West Seattle High School).
- One school was modernized (Madrona).
- Improvements were conducted at interim sites (Lincoln, Monroe, McDonald, and Hughes).
- Five new or replacement schools were constructed (African American Academy, Cooper, Highland Park, Whittier, and Ballard High School).
- A performing arts center/auditorium was constructed at Rainier Beach High School.
- Classroom additions were constructed (Kimball and Sanislo).

The six-year BTA I levy financed more than 465 small and large facility improvement projects at every school in the District. The BTA I program runs through 2004. All technology projects are now complete, while work on athletic fields continues (Seattle Public Schools, 2004). The BTA I program included updates to electrical systems to support the Technology Plan, modernization of heating and ventilation systems, and improvements toward compliance with the Americans with Disabilities Act (ADA). With the completion of the BEX Phase I and BTA I levies, all schools that are not part of the anticipated next phase of the building program will be in compliance with the current seismic building code, or will have received significant seismic mitigation.

Building Excellence Phase II continued implementation of the *1992-2010 Facilities Master Plan*. Environmental impacts were described in the *Building Excellence Phase II Supplemental Environmental Impact Statement* (2000). This document updated background information supplied in the 1993 Building Excellence EIS, and provided a programmatic level of environmental analysis for the BEX Phase II projects. Phase II required passage of a separate levy to fund projects from 2001 to 2008. Voters approved the capital levy for BEX Phase II in February 2001.

The BEX Phase II program covers new construction, redevelopment, or additions at 17 school facilities: seven high schools (including Garfield High School), two middle schools, six elementary schools, and two alternative schools. The program includes construction of new facilities, demolition and new construction on existing sites, major redevelopment, historical renovations, minor renovations such as adding cafeterias, and programmatic improvements at high schools. Redevelopment and new construction at Garfield High School is proposed as part of Phase II. To date the status of Phase II projects is as follows:

- Historic renovations are being designed at two facilities, including Garfield High School and Cleveland High School.

- Construction is scheduled to begin at five schools in spring and summer of 2004 (Beacon Hill and Wing Luke Elementary Schools, and, Chief Sealth, Nathan Hale and Roosevelt High Schools).
- Construction is underway at two schools (Brighton Elementary and Madison Middle School).
- Three facilities have been completed (the Center School, Graham Hill Elementary and Ingraham High School).
- Upgrades to Hamilton Middle School, South Shore and the World School are pending.

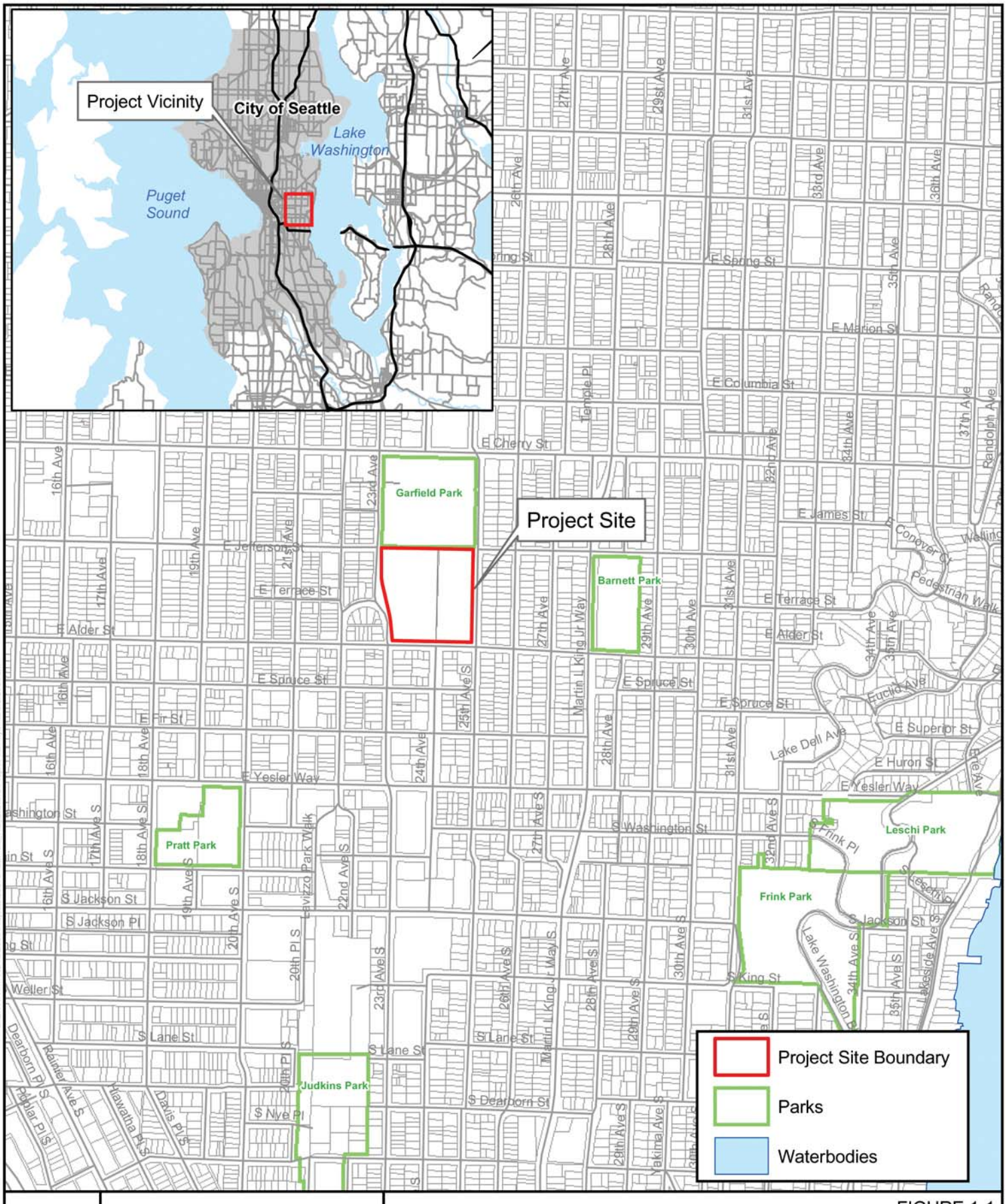
The 2004 BTA II capital levy will continue the Buildings, Technology, and Athletics levy passed by voters in February 1998. The $178 million capital levy will provide funds for facility improvement projects related to school buildings, arts and science labs, libraries, technology, and athletic facilities (Seattle Public Schools, 2004). The funding is divided into three program components – building, technology, and academics:

- The building component includes exterior renovations, interior finishes, ADA/life safety, and mechanical and playground improvements.
- The technology component includes improvements to classroom technology, computer systems and networks.
- The academic component of the levy includes athletic improvements; literacy, arts and science facility upgrades; renovation and modernizing of existing high school facilities; childcare facility upgrades, and providing appropriate facilities for Seahawks Academy and South Lake High School.

1.2 Project Development

Garfield High School is located in the Central Neighborhood of Seattle. The school is located between the Garfield Community Center, Medgar Evers Pool, and playfields on the north, E Alder Street on the south, and 23rd Avenue and 25th Avenue (see Figure 1-1). The school's original three-story building was constructed in 1923, with an addition constructed in 1929 and a gymnasium constructed in 1962. Student enrollment in October 2003 was 1,657.

Garfield High School is a comprehensive high school program that includes Language Arts, Science, Music, Technology, Foreign Language, Fine Arts, History, Social Studies, and Mathematics including Honors and Advanced Placement courses, as well as modified credit for students with learning disabilities.



Map data shown are the property of the sources listed below. Inaccuracies may exist, and Adolfson Associates, Inc. implies no warranties or guarantees regarding any aspect of data depiction.

Source: King County GIS, 2003

FIGURE 1-1

PROJECT VICINITY

GARFIELD HIGH SCHOOL REDEVELOPMENT PROJECT
SEATTLE, WASHINGTON

1.2.1 Project Objectives

The objective of the Garfield High School Redevelopment project is to provide the school with facilities to meet planned educational program goals. Specifically the project will:

- Construct new classrooms to meet current and projected standards, academic teaching models, and building code requirements.

Constructs new gym and performing art facilities.

- Improve technology available to students, and
- Construct a new athletic track and field.

1.2.2 Summary of the Process for Developing Alternatives

The District developed several alternatives for the Garfield High School Redevelopment project. The Garfield High School Design Team (SDT) and community members collaborated in developing alternatives. The recommended site layouts were based upon site operations (building and educational planning efficiency) and functionality. Several assumptions were used to develop the alternatives. These included:

- The exteriors of the 1923 and 1929 buildings were landmarked and would be preserved.
- The 1962 gymnasium and the track and field should be replaced.
- Garfield playfield lights would need to be moved to the north as a result of the lot boundary adjustment.
- The school building should be about 248,000 sf in area.
- The Teen Life Center (to be owned by the City of Seattle Parks Department) will be part of the new construction.
- For Alternative 2 only, there will be an approximately additional 6,000 sf for the autoshop.
- No lighted fields will be part of this project.
- Planning capacity is 1,600 students.
- The community should have access to the performing arts center and gymnasium via a separate entrance.

1.2.3 School Design Team

In 2001, the District developed a design process for all school construction projects using School Design Teams (SDTs). The SDT assembled for the Garfield High School Redevelopment consists of 37 members, who have met 20 times since March 2003. SDT members include the Garfield High School staff, students, parents and alumni, Seattle School District capital program representatives, support staff, consultants, and community members.

A checklist for school design was developed by the District to guide SDTs through the development process. Alternative designs developed for the Garfield High School Redevelopment were presented to the team by District staff and architects, and were subsequently assessed according to the design criteria outlined in the checklist. Through this process, a preferred alternative was identified. This alternative, Alternative 1, along with one other action alternative are addressed in this Supplemental Environmental Impact Statement (SEIS).

1.3 Public Involvement Process

A public scoping period was held from October 30 to November 20, 2003 to solicit public comments on the project alternatives, the elements of the environment that should be addressed in the SEIS, and mitigation measures that should be considered.

Notifications were mailed to 706 residents and businesses in the area surrounding the school. Additional copies were sent to 56 community groups, city contacts, libraries, and community centers. Notice of the scoping meeting was published in the Seattle Times/Post-Intelligencer, Beacon Hill News/South District Journal, Queen Anne News, Magnolia News, Capitol Hill Times, Seattle Medium, Metro, The Skanner, and Northwest Asian Weekly. Notices were also placed at the Garfield Community Center and given to the Seattle Parks Department for distribution.

On November 13, 2003, the District held an open house and conducted a formal EIS scoping meeting as part of its process to select an alternative for the redevelopment of Garfield High School. Approximately 40 people attended some portion of the meeting, along with District staff and consultants. The purpose of the meeting was to gather comments regarding the scope of the SEIS, as well as to address questions and concerns regarding the project. In addition to oral comments heard at the meeting, written comments were received from one attendee at the scoping meeting.

Three conceptual site plans/schemes were displayed at the scoping meeting – Scheme 1, Scheme 2A, and Scheme 2B. The project architects and District representatives were available to discuss design features that could be used to minimize the visual impacts of the new addition.

Scheme 1 showed the proposed development located entirely within the existing site boundary. The new development was concentrated in the northeastern portion of the site. It included an outdoor plaza at the main entrance to the 1923 building and a non-regulation-sized track and athletic field located in the eastern part of the site. The performing arts center, P.E./athletics, auto shop, and Parks Department Teen Life Center were consolidated into a single structure. The existing gymnasium building was shown to be demolished. Off-street parking ran in a strip across the entire north property line from 23rd Avenue to 25th Avenue.

Scheme 2A would require an adjustment to the north lot boundary to be accomplished through a land swap with Seattle Parks Department. The site layout included two separate buildings -- the performing arts center located in the northwestern corner of the site and the Teen Life Center/ gymnasium/auto shop addition in the northeastern corner of the site. An outdoor plaza separated

the two buildings. Scheme 2A located the auto shop at the northeastern part of the Teen Life Center/ gymnasium/auto shop addition. On-site parking stalls and auto shop storage were also included at the northeastern corner of the site. A regulation-sized track and field was located in the eastern portion of the site. Additional on-site parking was provided in the central portion of the site between the existing school building and the track and field. An on-site parking lot was also shown north of the revised property line on the Parks Department property.

Scheme 2B was similar to Scheme 2A. The primary difference between the schemes related to the position of the auto shop at the southwestern corner of the Teen Life Center/gymnasium/ auto shop addition. This change put the auto shop more central to the site and shifted some of the on-site parking from the central portion of the site to the northeastern corner.

The formal SEPA scoping period ended on November 20, 2003. The comments received during scoping are summarized in Table 1-1, along with the section of the SEIS where each comment is addressed.

Table 1–1. Scoping Comments

Scoping Comments Summary	SEIS Section
Alternatives	
Consider moving Performing Arts Center to east of plaza and allow P.E. to move to 25th	Section 2.0; Land Use 3.2.1.3
Consider retractable locking bleachers	Land Use 3.2.1.3
Code requirements should be explored for parking and bus loading	Land Use 3.2.1.3; Transportation 3.4
Provide adequate facilities for traditional sports	Section 2.0
Explore eliminating long narrow area between school and track	Section 2.0
Move field and track to the north and place building under the field at the north end of the property	Section 2.0
Preserve Rhododendron and cherry plants at north entrance and the large tree on the northwest corner	Historic Resources 3.3
Modify 2A: move performing arts center to NE, between plaza and pool; put parking where performing arts center is shown	Section 2.0
In alternative 1, make the track full size by moving teen life center and auto shop	Section 2.0
Plan 2B is favorable because the auto shop is contained, and further inside the property line than 2A	Section 2.0
Preserve the historic nature of the school both inside and outside the building, specifically those elements identified by the Landmarks Preservation Board	Historic Resources 3.3
Update the systems – electrical, plumbing, heating, science labs – without losing the character of the school that people remember and treasure	Land Use 3.2.1
Could the track and field be moved north and the gym be located to the south?	Section 2.0

Scoping Comments Summary	SEIS Section
Alternatives (continue)	
A plaza at the northwest corner would preserve views and would be safer because it is not obstructed from views	Section 2.0
The auto shop near homes is not desirable	Section 2.0; Land Use 3.2.1.3
The full sized track is necessary to meet regulations and to host track meets	Section 2.0
The auto shop at the northeast corner is a potential hazard	Section 2.0; Land Use 3.2.1.3
Programming	
Consider terraced areas for smaller group gatherings	Section 2.0; Land Use 3.2.2
Include space for small sports activities (gymnastics, etc.)	Land Use 3.2.2
Document existing hours of use (weekday and weekends) prior to finalizing design and programming	Land Use 3.2.2
Ensure the larger community has access to the school for other uses	Land Use 3.2.2
Light and Glare	
Lighting system should have night-off controls	Land Use 3.2.2
Construction and permanent lighting should not invade homes on 25th	Land Use 3.2.2
Ball fields should be lit	Comments Not Addressed 1.4
Provide adequate lighting for sports	Comments Not Addressed 1.4
The Central Area Neighborhood Plan call for lighting field	Comments Not Addressed 1.4; Land Use 3.2.1.2
Views	
Views of the north façade are important	Land Use 3.2.2
Safety	
Safety and security concerns regarding unlit field	Land Use 3.2.2
Area between track and school is isolated and not visible; this encourages problems. Bleachers would make this situation worse	Land Use 3.2.2
Visibility concerns of plaza under concepts 2B/2C	Land Use 3.2.2
Safety concern in walk through area from plaza to track	Land Use 3.2.2
Conduct safety review in the early design process	Land Use 3.2.2
Plan for crime prevention and avoid creating “crime/loitering” magnets during construction as well as in final design	Land Use 3.2.2
Safety through environmental design (CEPTED)	Land Use 3.2.2
The field and track should be lit to provide safety and to allow the facilities to be used to their maximum benefit	Comments Not Addressed 1.4; Land Use 3.2.2

Scoping Comments Summary	SEIS Section
Neighborhood Impacts	
Concern about the impact of gym so close to private residences on 25th Avenue (noise, trash, blocked driveways)	Land Use 3.2.2
Concern about lighting and noise if the field and track are lit	Comments Not Addressed 1.4; Land Use 3.2.2
Parking and Transportation	
Shrink plaza and make more parking with a load/unload bus area off 23rd Avenue	Section 2.0; Transportation 3.4.2
Busses should drop off and pick up students at the front door of the school	Section 2.0; Transportation 3.4.2
Alder is too narrow to function as a bus and parent drop-off	Section 2.0; Transportation 3.4.2
Bus drop–off should support the main entrance at the NW corner	Section 2.0; Transportation 3.4.2
Lid teacher parking on east side and tie the sports field directly to the building	Section 2.0; Transportation 3.4.2
Could the area between the school and track be the bus zone, with busses turning in off of Alder and going through campus and exiting out to Cherry	Section 2.0; Transportation 3.4.2
Bus routing: currently there is back up at Yesler to 25th in the morning and on 24th in the afternoon; hazardous because there is no traffic light	Section 2.0; Transportation 3.4.2
Traffic during drop-offs is a huge issue	Section 2.0; Transportation 3.4.2
In general none of the alternatives provide enough parking	Section 2.0; Transportation 3.4.2
Provide as much parking on site as possible	Section 2.0; Transportation 3.4.2
Reduce plaza size for more parking	Section 2.0; Transportation 3.4.2
Explore bus access from 23rd Avenue at northern end; most traffic is currently on the narrowest streets which does not make sense	Section 2.0; Transportation 3.4.2
Explore subsurface parking	Section 2.0; Transportation 3.4.2
Explore parking at NW corner where portables are now	Section 2.0; Transportation 3.4.2
Air Quality	
Concerned about air quality associated with auto shop	Comments Not Addressed 1.4
Process	
Please provide summary of written comments on the project website	Section 1.3
Extend public comment period for scoping	Section 1.3
Post site designs on the School Design team website for access by the community	Section 1.3
Land Use	
Minimize land swapping with Seattle Parks so Parks does not have to re-plan its area	Section 2.0; Land Use 3.2.2

1.4 Comments Identified but Not Addressed in this Document

Several comments were received during the scoping process that are not addressed in this SEIS (Table 1-2). Those comments are summarized below along with the reason they are not being addressed in this document.

Table 1–2. Comments Not Addressed in This Document

Comment	Reason Not Addressed
Concern about air quality associated with the auto shop	The new auto shop will be designed to meet all air quality and emission standards
Lighting of the sports field	Lighting of the sports field is not considered in this SEIS because there is no funding allocated for lighting. Seattle Parks Department will be considering replacement of the Garfield Playfield lights in the future. Any light replacement would require SEPA review
Could the track and field be moved north and the gym be located to the south	Did not meet program goal for the gym to be accessible from school building and the track and field

1.5 Impact and Mitigation Summary

Table 1-3 summarizes the identified probable environmental impacts and proposed mitigation measures associated with the redevelopment of Garfield High School, and with the No Action Alternative. Refer to Chapter 3 for further discussion of these impacts and mitigation measures. Construction activity requirements are provided in Appendix B.

Table 1–3. Summary of Impacts and Mitigation

Alternative 1 – Preferred Alternative	Alternative 2 – South Addition
EARTH RESOURCES	
Impacts: • Estimated 17,300 cy of excavation on-site • Estimated 360 cy of excavation for water line improvements within the 25th Avenue right-of-way • Minor erosion during construction • Potential for leaks from construction equipment	**Impacts:** • Alternative 2 would require approximately 500 cy more excavation compared to Alternative 1
Mitigation: • Expose soil only in the active construction area • Install straw bales, silt fences, and/or geonetting around sensitive areas and the site perimeter • Cover stockpiled materials • Balance cut and fill on the site as much as possible • Revegetate/landscape the area promptly following construction • Store absorbent pads and spill containment supplies on-site for use in the event of a leak of hydraulic fluid, oils, lubricants, etc.	**Mitigation:** • Same as Alternative 1
LAND USE	
Impacts: • Temporary dust, noise, visual impacts during construction • Field improvements would result in increased use • Development would require departure from city regulations • New building bulk and mass would be located along north property line and 25th Avenue; a net increase of 23,200 sf (including 9,228 sf Teen Life Center) • Views from 25th Avenue would be permanently altered	**Impacts:** • Same as Alternative 1 • Building bulk and mass would shift approximately 70 feet to the south compared to Alternative 1 • Net increase of 29,200 sf (including 9,228 sf Teen Life Center and 6,000 sf autoshop)
Mitigation: • Construction consistent with city codes, including approval of departures from single-family development standards • Proposed design measures such as lowering the school building and roof heights help to minimize height, bulk, and scale impacts • Building facades and design will complement historic structures • Parking lot and security lighting will be designed to minimize spillover	**Mitigation:** • Same as Alternative 1
HISTORIC RESOURCES	
Impacts: • The 1923 and 1929 building exteriors would be retained and restored • Changes to 1923 interior would alter historic character • Historic gyms would be reconstructed as the new library • Original windows would be lost • Improved views of 1923 building from 23rd Avenue	**Impacts:** • Same as Alternative 1
Mitigation: • Preserve murals from former art room and mechanical room, if feasible • Perform photographic and written documentation prior to removal of any historic structures • Work with School District archives to save important artifacts, and memorabilia	**Mitigation:** • Same as Alternative 1 • Replicating windows

Alternative 1 – Preferred Alternative	Alternative 2 – South Addition
TRANSPORTATION	
Impacts: • New truck traffic during construction • 64 truck trips per day for 3 months • Traffic operations and congestion would improve • Access points surrounding the site would be improved to enhance pedestrian safety and security at the site • Circulation changes • Up to 91 off-street parking spaces • Joint use agreement with Seattle Parks Department required to allow shared use of parking lot spaces • On-street parking along two roadways adjacent to the site would be reconfigured • Bus loading/unloading would occur onsite • New inbound driveway would be constructed on 23rd Avenue to access bus loading area • On-street bus loading areas and existing parking restriction for bus loading would be removed • Increase in on-street parking capacity (net increase of 17 spaces): net increase of 40 spaces would become available between 1 and 3 p.m. due to the removal of bus loading activities on E Alder Street	**Impacts:** • New truck traffic during construction same as Alternative 1 • Traffic operations and congestion would improve, but not as much as Alternative 1 • Access conditions along E Alder Street improved slightly • Access points surrounding the site would be improved to enhance pedestrian safety and security at the site • Circulation changes • Up to 63 off-street parking spaces • Approximately 47 additional vehicles would require on-street parking along local neighborhood streets during peak school hours • Joint use agreement with Seattle Parks Dept required to allow shared use of parking lot spaces • On-street parking capacity reduced by about two spaces during most hours and increased by about 11 spaces during bus loading periods • Increase demand for on-street parking spaces farther from the school site; additional blocks may require RPZ designation to maintain parking supply for local residents • Most bus loading/unloading would occur on-site • New inbound driveway would be constructed on 23rd Avenue to access bus loading area • Bus loading activity for at least three buses would remain on E Alder Street
Mitigation: • For Alternative 1, reconfigure on-street parking along the north side of E Alder Street between 23rd and 25th Avenues to provide back-in angle parking in place of the existing parallel parking. Remove the school-bus loading signs and parking restrictions along the north side of E Alder Street • For both alternatives, develop parent pick-up and drop-off guidelines to maintain safe and efficient operations • Work with the community and SDOT to determine if additional streets near the school should be added to the RPZ or if the restrictions should be modified • Prepare a construction management plan that addresses truck traffic and pedestrian control	**Mitigation:** • See Alternative 1
RECREATION	
Impacts: • Recreational activities displaced during construction • Teen Life Center temporarily suspended or relocated during construction • Increased use of new athletic field and track • Lights at Garfield Playfield would need to be relocated to the north as a result of the lot boundary adjustment	**Impacts:** • Similar to Alternative 1
Mitigation: • Scheduled recreational events at the site would be relocated with the school or to other District facilities, during construction • At the completion of the Garfield High School project, close coordination between the District and Seattle Parks and Recreation staff would minimize scheduling conflicts • Hours of site operation would remain similar to current conditions	**Mitigation:** • Same as Alternative 1

2.0 DESCRIPTION OF ALTERNATIVES

The following two action alternatives are the result of the collaborative process of developing alternatives described in Chapter 1, Section 1.3. The No Action Alternative is not being analyzed as part of this EIS because it was previously analyzed in the *Building Excellence Phase II Capital Improvement Program EIS*. No Action would maintain the existing conditions at the Garfield High School site and would not meet the program objectives for the school.

The Garfield High School campus is located on an 8.93-acre rectangular lot. The campus does not provide adequate space for outdoor physical education, outdoor athletic practices, and on-site parking (see Figure 2-1). The campus includes a Teen Life Center that is located on the north side of the High School gymnasium and is owned and operated by Seattle Parks and Recreation. The objective of the District is to rebuild Garfield High School to meet the program objectives for the school.

Table 2-1 summarizes the components associated with each alternative. For all action alternatives, construction is anticipated to begin in the summer of 2006 and continue through the summer of 2008, with the school reopening in the fall of 2008. For all alternatives, the proposed enrollment at the school is projected to decrease slightly, from the year 2002-2003 student enrollment of 1,657 down to 1,600 students.

Table 2–1. Summary of Components of the Action Alternatives

	Alternative 1 – Preferred Action	Alternative 2 – Development within Existing Site Boundary
Site Acquisition	None. Boundary adjustment on north property line as part of an equal land swap with Seattle Parks Department	None
Building Demolition	1962 gymnasium	Same
New/Renovated Facilities	• 78,000-sf addition in northeast corner of the site • Original library converted to new use • Gyms converted to library • Murals from former art room and mechanical drawing room preserved if feasible • Stairwells, lobby, clock and exterior of the 1923 and 1929 buildings will be preserved	• 84,000-sf addition in northeast corner of the site • Addition includes an autoshop at northeast corner of site in place of a surface parking lot • Improvements to 1923 and 1929 buildings same as Alternative 1
Earthwork Volumes	• 17,247 cubic yards for school site, 360 cubic yards for water main construction on 25th Avenue	• 500 cy more excavation compared to Alternative 1.
Field Type	• Regulation 400-meter 6-lane track, with an 8-lane straightaway; field events; football/soccer; artificial turf	• Non-regulation, 4-lane practice track; 8-lane straightaway; field events; non-regulation football/soccer; artificial turf
On-site Parking	• Up to 91 on-site spaces (28 spaces on school property and 45 on Parks Property after land swap) • 97 on-street spaces	• Up to 63 on-site spaces (10 spaces on Parks and Recreation property) • 68 on-street spaces

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NORTH (no scale)

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Original graphics by: JAB
Additional graphics by:
Date: 3/16/04

SOURCE:
Cardwell Architects, 2003

FIGURE 2-1

EXISTING CONDITIONS - GARFIELD HIGH SCHOOL SITE

GARFIELD HIGH SCHOOL REDEVELOPMENT PROJECT
SEATTLE, WASHINGTON

2.1 Alternative 1 – Preferred Action

Alternative 1 has been designated as the "Preferred Action" because it best meets the educational program needs while maintaining existing on-site parking levels and providing a regulation size track and field. Alternative 1 assumes a boundary adjustment along the north property line of the high school campus (see Figure 2-2). This would be accomplished through a land swap between the Seattle School District and the Seattle Parks Department. The land swap comprises an area of approximately 25,570 sf (0.59 acre).

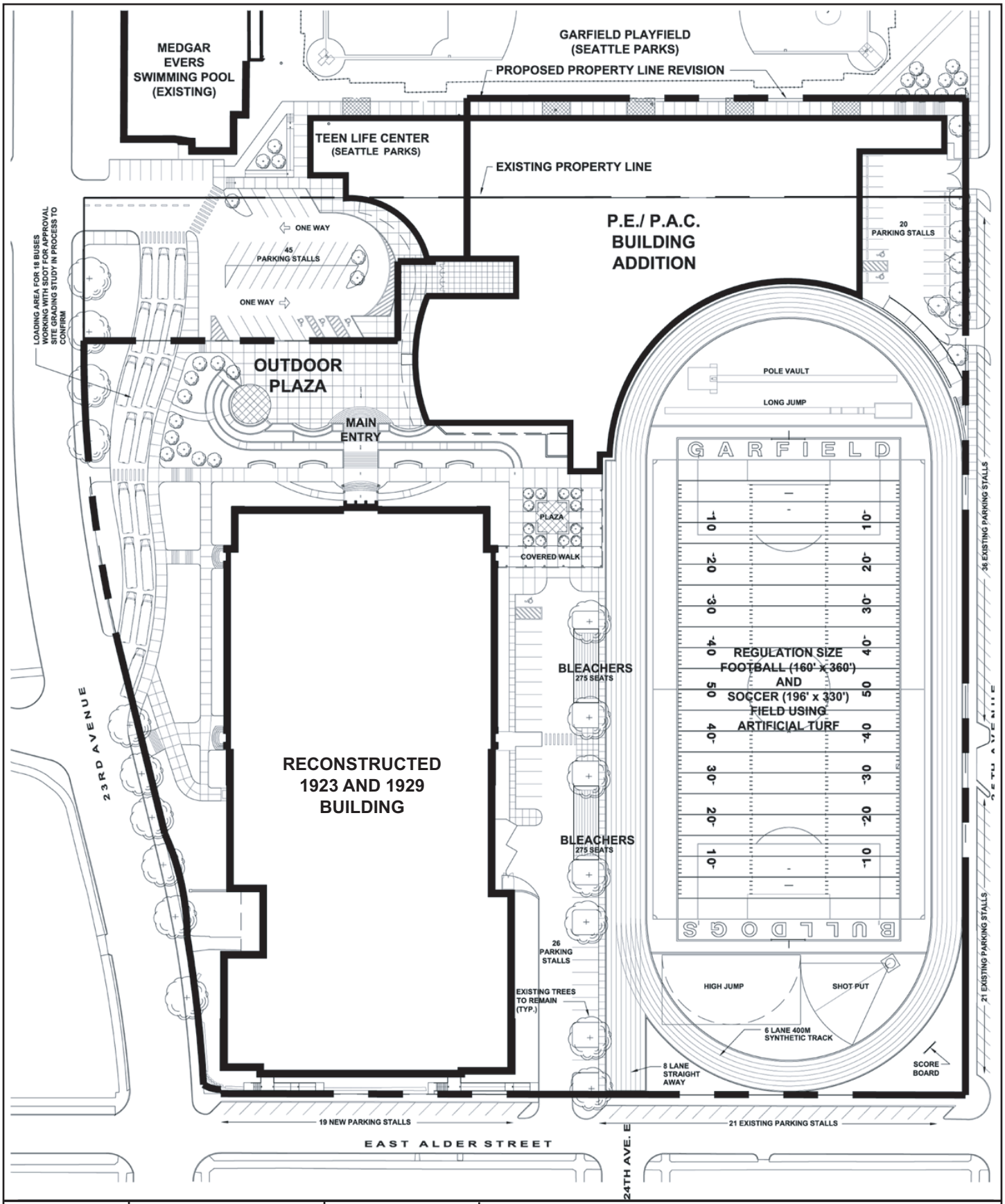
With Alternative 1, the 1962 gymnasium would be demolished and the interiors of the 1923 and 1929 school buildings would be reconstructed. An 78,000 -sf addition would be located in the northeast corner of the site to house the performing arts center, gymnasium, and Teen Life Center. The new auditorium would provide seating for about 600 and the new gymnasium would seat approximately 2,300. The Teen Life Center would be part of the new construction but located on Seattle Parks Department property.

An outdoor student plaza would be located north of the main entrance to the existing 1923 school building. A regulation-size track and field would be constructed in the southeastern half of the site. The field would consist of a six-lane track with an eight-lane straightaway on the west side, and space for field events and football/soccer in the track interior. Bleachers would provide seating for approximately 550.

A total of 91 on-site parking spaces would be provided under this alternative. Twenty-six of these spaces would be located in the central portion of the site between the existing high school and the new track and field, 45 stalls would be provided at the northwestern corner of what would be the future Seattle Parks Department property after the land swap and 20 stalls would be provided in the northeastern corner of the site. The lot boundary adjustment agreement with the Parks Department would dedicate school use of the 45 stalls during school hours. This would be accomplished through a use agreement with the Parks Department. The Parks Department would have use of the plaza and parking during off-school hours. Access to these parking areas would be off of E Alder Street, 23rd Avenue, and 25th Avenue respectively.

In addition to the on-site parking, a total of 97 on-street parking spaces would be provided on 25th Avenue and E Alder Street. Along the west side of 25th Avenue, 57 spaces would be provided between Jefferson Street and E Alder Street. Forty new angle parking spaces would be provided on the north side of E Alder Street between 23rd Avenue and 25th Avenue; this represents a net increase of 17 spaces compared to current conditions.

A bus loading area would be constructed at the northwestern corner of the site with access off of 23rd Avenue. The bus loading area would provide on-site loading space for 18 buses. In addition to on-site work, a water main extension would occur in the 25th Avenue Street right-of-way.



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Original graphics by: JAB
Additional graphics by: JAB
Date: 5/6/04

SOURCE:
BLRB Architecture, Planning and Interiors

FIGURE 2-2

ALTERNATIVE 1 - PREFERRED ACTION

GARFIELD HIGH SCHOOL REDEVELOPMENT PROJECT
SEATTLE, WASHINGTON

2.2 Alternative 2 – Development within Existing Site Boundary

Similar to Alternative 1, the 1962 gymnasium would be demolished and an 84,000-sf addition would be constructed in the northeastern corner of the site, with a plaza at the main entrance to the 1923 school building (see Figure 2-3). Both the 1923 and 1929 building interiors would be reconstructed.

A new synthetic track and field would be located in the eastern half of the site along 25th Avenue where the current athletic field is located. Both the track and field would be non-regulation in size. The field would consist of a four-lane practice track with an eight-lane straightaway on the west side, and space for field events in the track interior. Bleachers would provide seating for approximately 550.

A total of 63 on-site parking spaces would be provided under Alternative 2. Of these, 26 spaces would be located in the central portion of the site between the existing high school and the new track and field, and 37 stalls would be provided at the northwestern corner of the site. Access to this parking area would be off of E Alder Street and 23rd Avenue.

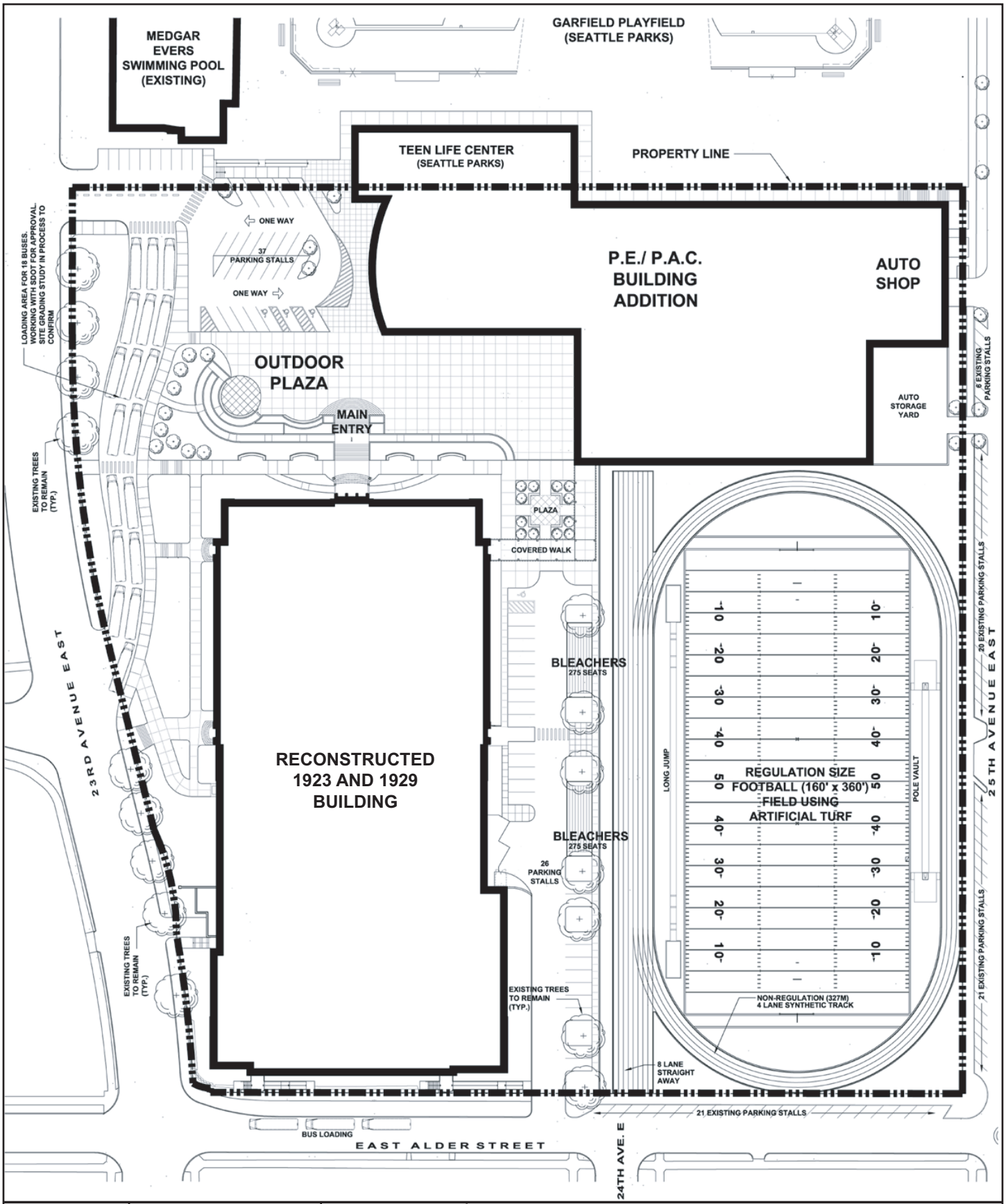
A total of 68 on-street parking spaces would be provided: 47 spaces on west side of 25th Avenue between Jefferson Street and E Alder Street and 21 spaces on E Alder Street. The spaces on E Alder Street between 23rd and 24th Avenues would not be available between the hours of 7:00 and 9:00 AM and 1:00 and 3:00 PM due to bus loading. Between 24th and 25th Avenues parking on E Alder Street would be reconfigured for back-in parking and the bus loading activity would be removed.

Bus loading would continue on E Alder Street, with 3 spaces for buses between 23rd and 24th Avenues. A new bus loading area would be developed at the northeastern portion of the site as described under Alternative 1.

2.3 Other Alternatives

During the design process, three other alternatives were considered for the site layout but were not pursued as final alternatives to be analyzed in this EIS. Two of the alternatives were presented at the public scoping meeting -- Schemes 2A and 2B. For these alternatives, separate buildings were proposed for the auditorium and the Teen Life Center/gymnasium/auto shop. The auditorium was located near 23rd Avenue with a plaza separating it from the Teen Life Center/gymnasium/auto shop addition to the east (refer to Section 1.3, Public Involvement Process for more detail). Based on public comments at the scoping meeting and in the design team meetings, this alternative was rejected because the auditorium would block views of the designated 1923 school building and create safety issues related to the plaza and sight distance between the two new buildings.

The design team also considered locating the gymnasium in the southeastern portion of the site. This third alternative was eliminated from further consideration because the remainder of the site at the north end would have been too constricted to accommodate the regulation track and field. It also did not meet educational programs and adjacency requirements.



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Original graphics by: JAB
Additional graphics by: JAB
Date: 5/6/04

SOURCE:
BLRB Architecture, Planning and Interiors

FIGURE 2-3

ALTERNATIVE 2 - DEVELOPMENT WITHIN EXISTING SITE BOUNDARY

GARFIELD HIGH SCHOOL REDEVELOPMENT PROJECT
SEATTLE, WASHINGTON

3.0 ELEMENTS OF THE ENVIRONMENT

3.1 EARTH RESOURCES

3.1.1 Affected Environment

The project site is located within the City of Seattle and has been developed as a high school since 1923. Additions to the school were constructed in 1929 and in 1962. As a result of development, the majority of the site has been disturbed. The City's critical areas maps were reviewed for this project. No mapped critical areas occur in or near the project area.

The entire Puget Sound region is seismically active and has experienced thousands of earthquakes. The U.S. Geological Survey has designated the Puget Sound area as a Zone 3 (Class III) seismic/landslide risk area. Zone 3 is described as a zone of major seismic risk potential in conjunction with earthquakes having intensities of 4.0 or higher.

3.1.2 Impacts of Alternatives

3.1.2.1 Alternative 1 – Preferred Action

Construction of the 78,000-sf addition would require excavation for building foundations. Site grading would result in a net export of approximately 17,300 cubic yards of excavated material. In addition to on-site construction, a water line within the 25th Avenue right-of-way would be extended approximately 640 feet south from E Cherry Street, resulting in 360 cubic yards of excavation. Erosion and minor sedimentation may occur during construction. Excavated areas or soil stockpiles exposed to rainfall would be particularly susceptible to erosion. These impacts would be minimized by the use of erosion control measures described below in Section 3.1.3.

Incidental leaks of oils, lubricants, and fuels from construction equipment and vehicles could occur. If not prevented, cleaned up, or contained, these leaks could result in contamination of soil and surface water. The volume of such leaks from any given piece of construction equipment would be minimal.

Following construction of the facilities, impacts to earth resources during operation of the school are not anticipated.

3.1.2.2 Alternative 2 - Development within Existing Site Boundary

Impacts associated with Alternative 2 are similar to those described above for Alternative 1. The volume of excavation would be about 500 cubic yards more than for Alternative 1.

3.1.3 Mitigation Measures

Construction activities would be conducted in accordance with the City of Seattle's clearing and grading requirements. Erosion and sedimentation control measures would be implemented

during all construction activities. Stringent measures would be employed at the site boundaries to minimize the potential for sediment to be transported off-site.

To reduce construction-related erosion and sedimentation, a site-specific erosion and sedimentation control plan would be developed, which would include the following at a minimum:

- Expose soil only in the active construction area.
- Install straw bales, silt fences, and/or geonetting around sensitive areas and the site perimeter.
- Cover stockpiled materials.
- Balance cut and fill on the site as much as possible.
- Revegetate/landscape the area promptly following construction.

Absorbent pads and spill containment supplies would be available on-site for use in the event of a leak of hydraulic fluid, oils, lubricants, etc.

3.1.4 Unavoidable Adverse Impacts

No unavoidable adverse impacts to earth resources have been identified.

3.2 LAND USE

The following section describes existing land use on the Garfield High School site and adjacent properties. Also described are applicable land use plans, policies, and land use development regulations, followed by potential impacts and mitigation measures.

3.2.1 Affected Environment

Garfield High School is located in the Central District Neighborhood of Seattle. The school site is bounded by Medgar Evers Pool and Garfield Playfield on the north, E Alder Street on the south, 23rd Avenue on the west, and 25th Avenue on the east. The school site includes a 1923 three-story building, a 1929 addition to the original structure, a 1962 gymnasium, a track and field, a parking area, and lawn and landscaped areas. Currently, there are five single portables and two double portables on the campus.

The school site is terraced and slopes down toward the north and west. The 1923 building and 1929 addition are situated on an upper terrace in the southwest portion of the site. The gym is detached and located on a lower terrace in the northwest portion of the site, and the parking lot, playfield, and track occupy the eastern half of the site on an intermediate terrace. Both of the double portable units and one single unit are located between the track and field and the 1923 building, and the other four single units are located on the northwest side of the 1923 structure (see Figure 2-1).

The track and field are enclosed with chainlink fencing and are bounded by school parking lot on the north, the school building on the west, 25th Avenue on the east, and E Alder Street on the south. Given the site topography, the track and field are located approximately 3 to 4 feet below E Alder Street on the south and 8 feet above the school's parking lot on the north. Concrete ramps lead down to the track at the southwest corner and up to the track at the northwest corner (Seattle Landmarks Preservation Board, 2003).

The surrounding land use is primarily single-family residential with houses dating back to the 1890s (Seattle Landmarks Preservation Board, 2003). Adjacent land use includes the Medgar Evers pool, Garfield Community Center and playfield to the north, single-family residences to the east and south, and apartments, houses, and commercial development to the west along 23rd Avenue.

The site is zoned SF 5000 (Single Family Residential, with a minimum lot size of 5,000 sf) and Residential Multifamily Lowrise 1 (L-1). With the exception of areas along 23rd Avenue which are zoned L-1, the majority of adjacent properties are zoned single-family residential (see Figure 3-1).

At 8.9 acres, the school site is substantially undersized for a modern high school. Modern high school sites are typically in the range of 40 acres. The school's urban location and historical significance make acquiring substantial additional land or relocating the school infeasible. The neighborhood is built out and there is no available land within the city block.

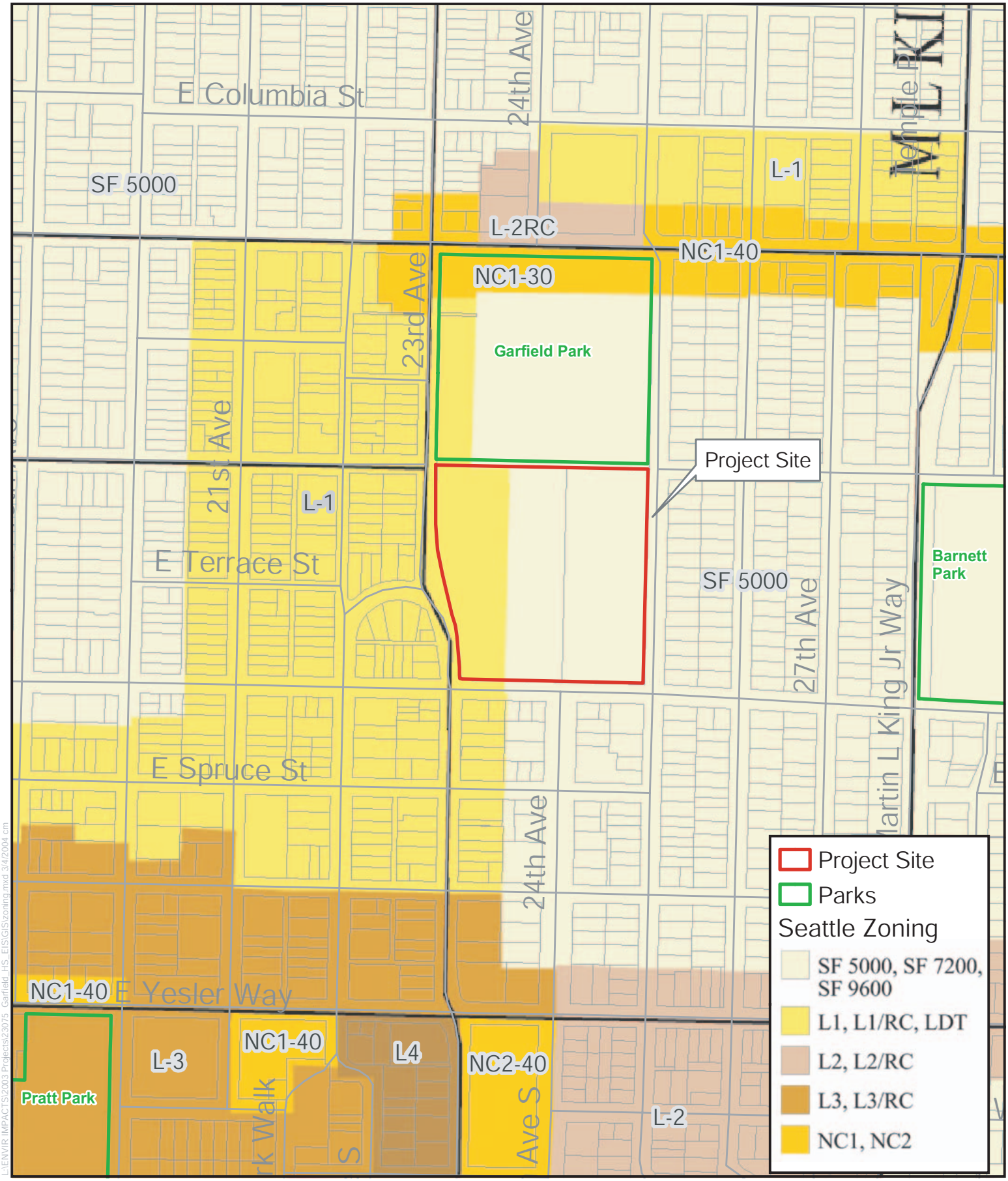
3.2.1.1 Consistency with Adopted Plans and Policies

This section describes the major plans and policies that are relevant to the proposed action.

Seattle Comprehensive Plan: Toward a Sustainable Seattle—Seattle's Plan for Managing Growth

The City of Seattle's Comprehensive Plan was adopted in 1994 and last amended in January 2001. The plan establishes the framework for managing future growth over the 20-year period from 1994 to 2014 and is consistent with the Washington State Growth Management Act. The Capital Facilities element of the plan includes a policy to "Work together with the School District to encourage siting, redevelopment, and expansion of school facilities in areas that are best equipped to handle growth."

In addition, policies pertaining to education are included in the Human Development section of the Comprehensive Plan, including: work with schools to include co-location and joint use of facilities to make a broader variety of services available to students (HD 17), and encourage the joint use of schools and City and community facilities for a greater availability of services in urban village areas (HD 51).



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Map data shown are the property of the sources listed below. Inaccuracies may exist, and Adolfson Associates, Inc. implies no warranties or guarantees regarding any aspect of data depiction.

Source: King County GIS, 2003
Seattle, 2004

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FIGURE 3-1

ZONING

GARFIELD HIGH SCHOOL REDEVELOPMENT PROJECT
SEATTLE, WASHINGTON

Central Area Action Plan II

The *Central Area Action Plan II (CAAP)* is the relevant neighborhood plan component of the Seattle Comprehensive Plan. It includes goals, actions, and strategies related to planning, development, and community needs in the Central Area Neighborhood. Garfield High School is located within the "23rd and Jackson Residential Urban Village" of the Central Area Neighborhood.

A number of action strategies and policies contained in the CAAP are relevant to the Garfield High School Redevelopment project. The Urban Design element of the plan focuses on enhancing the physical characteristics of the Central Area residential neighborhoods and commercial districts, while recognizing and protecting historic and cultural resources and incorporating their elements into building design guidelines. Policy UD-4.2.2 relates to commercial, mixed-use, and minor institution development and the need to consider the following design guidelines:

- Responding to Site Context
- Consideration for Community Character
- Building Architecture
- Promote People Gathering – site amenities and furnishings
- Landscaping and Open Space Requirements – parking design, crime prevention through environmental design, exterior lighting and signage

In addition, the CAAP includes several recommendations for traffic calming, pedestrian enhancements, and parking management strategies in the vicinity of Garfield High School. These recommendations are discussed further in Section 3.4, Transportation.

Seattle Park and Recreation Plan

The Seattle Department of Parks and Recreation's *Plan 2000* is a revision of the 1993 COMPLAN that addressed open space, park, and recreation services for a 10- to 20-year timeframe. *Plan 2000* includes a revised vision statement, policy statements, and a new 6-year action plan for 2000 to 2006. The plan describes the Department of Parks and Recreation's joint-use relationship with the Seattle School District and identifies the need to encourage community use of school grounds and facilities. *Plan 2000* contains a policy statement and sections of the 6-year plan that support a continued joint-use relationship with the District. The current joint-use agreement between the District and the Department of Parks and Recreation is described in Section 3.5, Recreation.

Seattle Land Use Code

The Seattle Land Use code indicates that public schools and additions to existing public schools are permitted in single-family zones; however, modifications are subject to special development standards and departures from standards (Seattle Municipal Code 23.44.006). Parking quantity requirements are described in SMC 23.54. Development standards for public schools are

described in SMC 23.44.017. The standards include regulations and guidelines for maximum lot coverage, height, setbacks, structure width, parking quantity, parking location, and bus and truck loading and unloading. In addition, the noise, odor, and light and glare standards for small institutions apply (SMC 23.45.100). A departure from certain standards may be granted or required pursuant to criteria established in Chapter 23.79.

Departure Procedures for Public Schools

The Seattle Land Use Code (Chapter 23.79) includes a procedure by which departures from the required development standards of the code can be granted for public school structures. Any proposed demolition of residential structures to accommodate public school development automatically initiates this review process. The departure process requires the District to apply to the Director of the Department of Planning and Development Services (DPD, formerly DCLU), who then forwards the application to the Department of Neighborhoods (DON). The Director of DON establishes a Development Standard Advisory Committee to gather public comments and to make recommendations on modifications of the development standards. The Committee is composed of a representative of the City who acts as a non-voting chair, a District representative, a person residing within 300 feet of the site, a person owning property or a business within 300 feet, two neighborhood representatives, a representative of the Joint Advisory Commission on Education, a non-voting representative of DPD, two parent representatives associated with the subject school or site, and a person residing in a housing unit that may be affected by the proposal.

The Land Use Code establishes specific responsibilities for the Committee, as well as procedures for notice of committee meetings and appeal processes. Applications for school departures are evaluated for consistency with the City's land use policies. The Committee is to consider and balance the impacts to surrounding areas and the need for departure.

Seattle SEPA Ordinance

The project would require such approvals as a master use permit, building permits, demolition permits, and others necessary to apply the development standards for public schools outlined in the Seattle Land Use Code.

Other Policies Related to Implementation of the Proposal

A number of other policies apply to the redevelopment of Garfield High School. For example, King County Environmental Health Division manages health and safety standards for school construction. The District would be required to follow national standards of the American Society of Heating, Refrigerating, and Air-Conditioning Engineers for indoor air quality. Health and safety standards for school construction are also found in the Washington Administrative Code (WAC) 246.366.080.

Table 3-1 lists the permits that would likely be required for the Garfield High School project.

Table 3–1. Land Use Permits Required for the Garfield High School Project

Permit	Agency
Master Use Permit	City of Seattle
Demolition Permit	City of Seattle
Grading Permit	City of Seattle
Building/Mechanical Permit	City of Seattle
Electrical Permit	City of Seattle
Certificate of Approval (Historic Structures)	Seattle Landmarks Preservation Board

3.2.1.2 Light and Glare

Schools in single-family and multi-family residential areas are subject to standards for height, noise, odor, and light and glare under the Seattle Land Use Code. Light and glare concerns at schools are primarily associated with lights for athletic fields. Parking lot and security lighting may also create light and glare impacts to adjacent residential areas.

The Land Use Code (SMC 23.45.100) requires that lights be shielded or directed away from residential lots or principal structures on residential lots, and restricts the height of poles for lights to a maximum of 30 feet.

Outdoor lighting of the athletic field is not proposed for any of the alternatives; only parking lot and security lighting would be installed at the site.

3.2.1.3 Aesthetics

As described in Section 3.3, Historical Resources, the original school building was built in 1923, with additions built in 1929 and 1962. The exteriors of the 1923 and 1929 buildings have been designated as historical landmarks. The site has also been designated, excluding the 1962 gymnasium, Parks Department field house, breezeways, portables, two north parking lots, and track and field (Seattle Landmarks Preservation Board, 2003). The 1962 gymnasium was not designated because it does not blend with the character of the older buildings and obscures the view of the historic buildings. See the Historic Resources section for a detailed description of the building interiors.

Off-Site Views

Single-family residences and a few commercial buildings immediately surround Garfield High School. Views from these areas include Garfield High School, adjacent residential and commercial areas, and Seattle cityscapes.

3.2.2 Impacts of Alternatives

3.2.2.1 Alternative 1 – Preferred Action

Construction

Construction activities associated with Alternative 1 would result in temporary land use impacts including dust, noise, truck traffic, and visual changes. These impacts would be expected to last for the duration of construction. Construction activities would be limited to the hours allowed by the city's noise ordinance (SMC 25.08.425). Construction activities, including demolition and removal of materials from the site, are scheduled to last from June 2006 through August 2008.

Operation

The Garfield High School buildings would be closed in June 2006 and would reopen for use in summer 2008. At the completion of the Garfield High School redevelopment, the site would revert to its existing use as a high school. Improvements to the track and athletic field would increase the use of the site for sports activities and meets (refer to Section 3.5, Recreation, for further discussion). Alternative 1 would provide a total of 91 off-street parking stalls, including 46 located on school property and 45 on Seattle Parks Department property (refer to Section 3.4, Transportation, for further discussion).

This alternative would include the preservation of the exterior 1923 school building and the exterior of the 1929 addition. The 1962 gym addition, parking, and track and field would be replaced. On August 21, 2003, the Seattle Landmarks Preservation Board designated several parts of Garfield High School as historical landmarks (see Section 3.3 for further discussion).

Redevelopment of Garfield High School would be consistent with the intent of the Seattle Comprehensive Plan, CAAP II neighborhood plan, and Parks and Recreation policies discussed earlier in this section. Throughout the planning of the project, the School District and Design Team have worked closely with the community and agencies to develop a facility that:

- Responds to the community character.
- Protects historic resources.
- Provides amenities to the community.
- Addresses design and safety concerns.

Table 3-2 indicates the project's consistency with applicable land use code requirements. Although the site is zoned both L-1 and SF-5000, no new development would occur within the L-1 zone.

Table 3–2. Consistency of Alternatives with Applicable Land Use Code Sections

Element	Requirement and Applicable Code Section	Alternative 1	Alternative 2
Lot Coverage	SF-5000 zone – not more than 35 percent of site or 1,750 sf (SMC 23.44.010) and 45 percent with departure (SMC 23.44.017.A.3). L-1 zone – not more than 40 percent in the (SMC 23.45.010).	Lot coverage limit in the SF-5000 zone is greater than 35 percent and would require a departure.	Same as Alternative 1.
Height Limits	SF zone – maximum base structure height is 30 feet (ft) in (SMC 23.44.012) and 25 ft in the L-1 zone (SMC 23.45.009); with departure, maximum height is 60 ft plus 15 ft for a pitched roof (SMC 23.44.017.B.4).	A height departure for 60 ft would be required.	Same as Alternative 1.
Structure Setbacks	SF zone – 10-ft setback required from all lot lines in SF zone (SMC 23.44.022); maximum façade length is 30 ft. L-1 zone – setback requirements for front, rear and sides do not apply to school buildings.	SF zone – new structures would meet setback requirements of 10 ft.; total east façade length is 138 ft which exceeds 30 ft in length; modulation is incorporated into design to reduce bulk and mass; a departure would be required for the west property line setback as it splits the Teen Life Center and new school building; Parks Department would need a setback variance and City Council approval for the Teen Life Center.	Similar to Alternative 1. A departure would be required for the north property line setback as it splits the Teen Life Center and new school building; Parks Department would need a setback variance and City Council approval for the Teen Life Center.
Parking	Requirements as established in SMC 23.54 for single-family zones (existing) would require 405 parking stalls.	Alternative 1 would develop 46 on-site spaces and 45 off-street shared spaces on Seattle Parks Department property for a total of 91 off-street stalls; a departure for parking would be required; a joint use agreement with Seattle Parks Department would be required to allow shared use of all parking lot spaces.	Alternative 2 would develop 63 on-site stalls.
Exterior Lighting/ Light and Glare	Exterior lighting should be shielded and directed away from residential lots and the use of nonreflective surfaces are required (SMC 23.45.100)	Final design would comply with lighting requirements. Outdoor lighting of athletic fields is not proposed.	Same as Alternative 1.

Lot Boundary Adjustment

Alternative 1 would require modifications to buildings and other facilities within the existing school property. The northern property line would be adjusted through a land swap and boundary adjustment with the Seattle Parks Department; however, this would not result in a change to the overall site acreage (8.9 acres). The land swap comprises an area of approximately 25,570 sf (0.59 acre) (see Figure 2-2). A departure would be required to allow the property line setback to be zero where the property line splits the school building and the Teen Life Center. Because the Departure process is only applicable to the School District, a setback variance and City Council approval would be required for the Seattle Parks Department Teen Life Center.

Loss/Displacement of Housing

There would be no loss or displacement of housing adjacent to the Garfield High School site as a result of project construction.

Modifications to the School Building's Bulk and Mass

Alternative 1 would include the removal of the 40,000-square-foot gymnasium and the Parks Department Teen Life Center located at the northern edge of the site, midway between the east and west site boundaries. Construction would result in a net increase of approximately 23,200 sf of building area, which includes the Parks Department Teen Life Center. The Teen Life Center would be approximately 9,200 sf but would be located on Seattle Parks Department property.

The proposed 78,000-sf addition would be located along the northern part of the school site (see Figure 2-2). Alternative 1 would therefore concentrate the bulk and mass of buildings along the northern edge and northeast corner of the school property. The City of Seattle has classified the north face of the new addition as the building depth and the east face as the width. Modulation is required for the width but not the depth (Heery, 2004).

Relationship to Departure Process Criteria

SMC 23.79.008 establishes the responsibilities of the Development Standard Advisory Committee for its participation in the departure process. In reaching recommendations, the Advisory Committee is directed to consider the project's relationship with the surrounding area. Five issues are identified for the Committee's consideration (SMC 23.79.008.C.1.a.):

1. Appropriateness in relation to the character and scale of the surrounding area;
2. Presence of edges (significant setbacks, major arterials, topographic breaks, and similar features) which provide a transition in scales;
3. Location and design of structures to reduce the appearance of bulk;
4. Impacts on traffic, noise, circulation, and parking in the area; and
5. Impacts on housing and open space.

Several of these considerations (in particular 1, 2, and 3) relate to the bulk and scale of a proposal. These three considerations are discussed below.

1. In terms of the relationship of Alternative 1 to the character and scale of the surrounding area, the width of the proposed addition along the northern and eastern property line would exceed the typical width of a single-family home but is similar to the width of the existing school structure. Architectural features, including setbacks and façade treatment similar to the existing building, are intended to reduce the appearance of bulk to a scale appropriate to the surrounding area. The north façade of the new building would not be modulated at ground level in order to address safety and security concerns; however, modulation would be applied to the upper levels. The proposed modulation of the eastern façade would help to minimize the appearance of bulk and mass from the homes on 25th Avenue.
2. "Edges" are identified as providing a transition in scale. The design for Alternative 1 provides the required setbacks from the northern property line and from 25th Avenue. There is a 23-foot difference in the site grade between 23rd and 25th Avenues. The grade difference on the site helps to provide a transition in scale from the single-family homes on 25th Avenue to the historic landmark school building.
3. The departure process criteria indicate that the location and design of structures can be employed to reduce the appearance of bulk. Figure 3-2 illustrates the schematic designs and elevations for the east, west, and north elevations associated with this alternative. As indicated in the figure, rooftop elevations of the new buildings are lower than those of the 1923 and 1929 buildings, since the new buildings would be located at a lower elevation on the site.

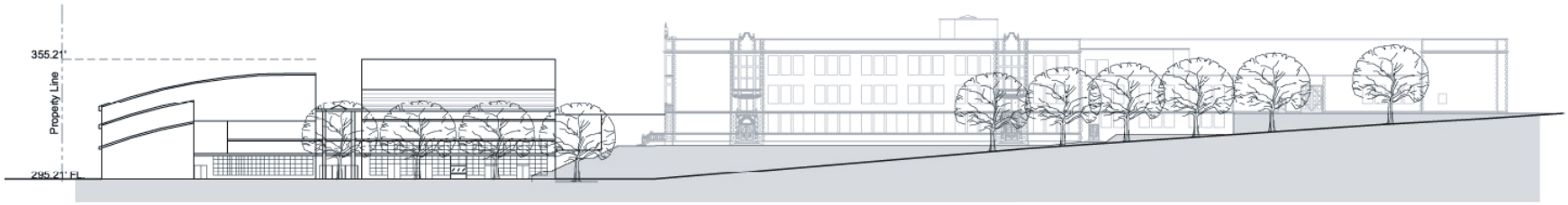
Light and Glare

Impacts from light and glare are not anticipated because lighting is not proposed for the athletic field. The parking areas and buildings would be lighted for security, but this is not anticipated to impact surrounding properties because security lighting is already present around the existing buildings and site perimeter.

Aesthetics

Views from homes along 25th Avenue would change. Alternative 1 would locate the Teen Life Center, new gymnasium and performing arts center, and auto shop at the northeastern portion of the site and closer to single-family residences along 25th Avenue. The adjustment of the northern property boundary would also shift the concentration of uses to the north.

Views from the homes along 25th Avenue looking west toward the school would be altered. The top of the new buildings would range from 15 to 43 feet high and would be similar to the height of the existing school and gymnasium. Because the site slopes downward from east to west, and the houses on 25th Avenue sit about 3 feet above the base elevation, the buildings may not appear as tall when viewed from affected homes. Foreground views from some of the single-family residences toward the west would change from that of a parking lot to new buildings with



WEST ELEVATION

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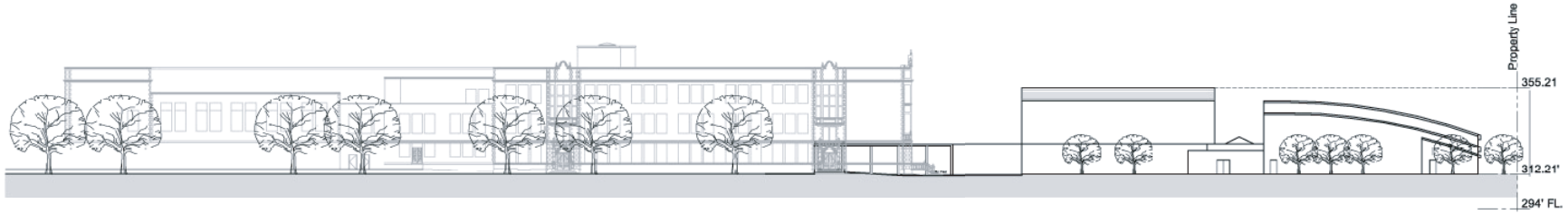
NORTH ELEVATION

SCALE: 1"= 80'-0"



EAST ELEVATION

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Additional graphics by:
Date: 4/12/04

SOURCE:
BLRB Architecture, Planning & Interiors

FIGURE 3-2

ALTERNATIVE 1 - ELEVATION VIEW

GARFIELD HIGH SCHOOL REDEVELOPMENT PROJECT
SEATTLE, WASHINGTON

an adjacent parking lot. Given the proximity of the buildings to 25th Avenue and the site topography, the buildings would be the primary view from two homes directly across 25th Avenue. The taller, central portions of the new buildings would be set back from 25th Avenue.

Views from the homes along E Alder Street would change from a view of the track and field to include views of the new school buildings at the northern end of the school site. Because the site topography slopes downward to the north and west, the bulk and scale of the new buildings would appear less dominant from these viewpoints.

Views from homes and businesses to the west along 23rd Avenue would not be impacted as the bulk and mass of the new buildings would be located further away. Demolition of the gymnasium and Teen Life Center would expose the northern façade of the original 1923 school building to views from the northwest and west. Alternative 1 would maintain the views of the 1923 historic building by concentrating the new buildings in the northeastern portion of the site. This is a beneficial aspect of the site layout as it relates to the designated historic features of the building exterior.

The new buildings would also be visible from the north and northwest (from Garfield Community Center and Playfield, the Nova School, and businesses along E Cherry Street). Although the Garfield Playfield would be in the foreground view, the new building would be a dominant feature looking south from these locations given the width of the northern building façade.

Modifications to the Educational Program and Building Use

Enrollment at Garfield High School was 1,657 for the 2002-2003 school year. Facilities are being sized to accommodate 1,600 students. The gymnasium seating capacity would be increased to 2,300 seats, and the performing arts auditorium would be downsized to accommodate 600 seats.

3.2.2.2 Alternative 2 – Development within Existing Site Boundary

Construction

Construction impacts would be similar to those described for Alternative 1.

Operation

Operational impacts would be similar to those described for Alternative 1. Alternative 2 would include an autoshop and car storage at the southeastern corner of the addition. The eastern façade of the addition would appear wider compared to Alternative 1. Sixty-three off-street parking stalls would be provided (refer to Section 3.5, Transportation, for further discussion).

Lot Boundary Adjustment

Alternative 2 would require modifications to buildings and other facilities within the existing school property only; no adjustment to property lines would be required. As with Alternative 1,

a departure would be required for the property line setback to zero where the property line splits the school building and the Teen Life Center. A setback variance and City Council approval would also be required for the Seattle Parks Department Teen Life Center.

Loss/Displacement of Housing

There would be no loss or displacement of housing adjacent to the Garfield High School site as a result of project construction under Alternative 2.

Modifications to the School Building's Bulk and Mass

Similar to Alternative 1, Alternative 2 would also include the removal of the 40,000-square-foot gymnasium and field house and construction of an 84,000-square-foot addition in the northeast corner of the site.

Construction would result in a net increase of approximately 29,200 sf, with the building bulk and mass concentrated along the northern edge and northeast corner of the school property. The northern property line would not change for Alternative 2. Because development would occur within the existing site boundary, the track and field would be reduced in size under Alternative 2 (see Figure 2-2). Due to the addition of the autoshop (6,000 sf) the bulk and mass of the buildings would slightly increase compared to that described for Alternative 1.

Relationship to Departure Process Criteria

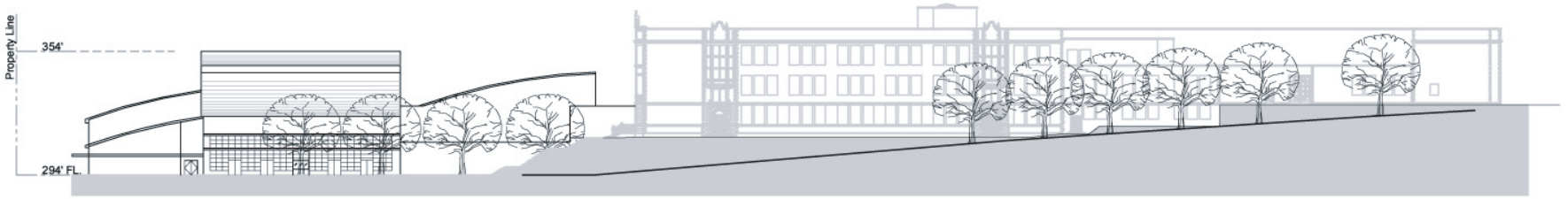
The departure process would be similar to that described for Alternative 1. The considerations relating to character and scale of surrounding neighborhood, edges, and design criteria would be similar to those described for Alternative 1. Figure 3-3 illustrates the east, west, and north elevations associated with this alternative.

Light and Glare

Impacts resulting from light and glare would be similar to those described for Alternative 1.

Aesthetics

Views from homes along 25th Avenue looking toward the west would be affected by a school building being located directly across the street. Because development would occur within the existing site boundary, the bulk and mass of the buildings would be shifted approximately 70 feet south compared to Alternative 1. The change in views would be similar to those described for Alternative 1. The autoshop to the southeastern corner of the addition would result in a slight increase in bulk and scale compared to Alternative 1. The eastern building façade would be slightly wider than that shown for Alternative 1.



WEST ELEVATION

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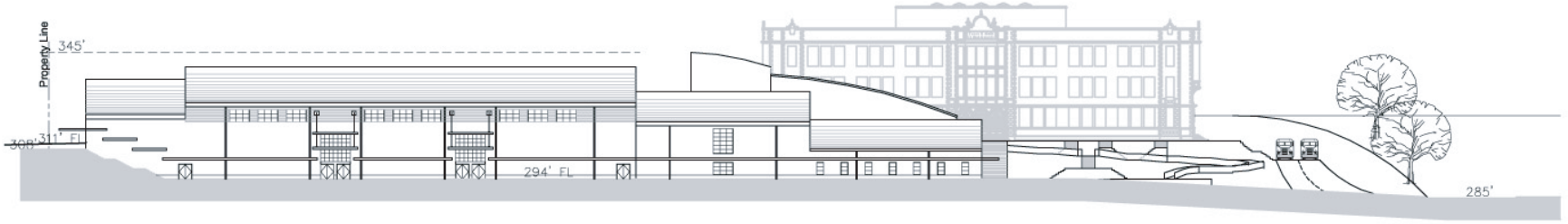

NORTH ELEVATION

SCALE: 1"= 80'-0"

EAST ELEVATION

SCALE: 1"= 80'-0"

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Date: 4/12/04

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BLRB Architecture, Planning & Interiors

FIGURE 3-3

ALTERNATIVE 2 - ELEVATION VIEW

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Modifications to the Educational Program and Building Use

Modifications to the educational program and building use would be similar to those described for Alternative 1.

Implementation of Alternative 2 would result in a non-regulation track and field. Practice for football, soccer, and track and field events may occur at Garfield High School; track meets and games may be programmed at Garfield or other District facilities.

3.2.3 Mitigation Measures

Construction of the Garfield High School improvements is expected to require approval of departures from single-family development standards for the north and west property setbacks, lot coverage, height, bus loading and parking to be consistent with Seattle Land Use Code requirements.

Creative and innovative design can often reduce the height, bulk, and scale impacts of buildings. The District has incorporated such design measures, including: lowering the school building and the roof heights.

Lighting impacts from parking lots and security lighting can be minimized by proper design. The lighting system would be designed by an experienced lighting engineer who would develop a system to provide adequate lighting while minimizing the impacts on neighboring areas.

Aesthetic considerations are an integral part of the facility design for both of the action alternatives. Building facades would be designed to complement the historic structures on the site.

3.2.4 Unavoidable Adverse Impacts

No significant unavoidable land use impacts would occur under Alternative 1 or Alternative 2.

3.3 HISTORIC RESOURCES

The following section describes existing historic resources on the Garfield High School site. Also described are applicable federal, state, and local laws that regulate historic resources, followed by potential impacts and mitigation measures.

3.3.1 Affected Environment

Garfield High School, built in 1923, was the second of three distinctive Seattle high schools designed by Seattle School District architect Floyd Naramore, and the only one designed in the Twentieth Century Jacobean style. Floyd Naramore was a prominent Seattle architect who served the Seattle School District from 1919 to 1932. The James A. Garfield school building opened in 1923 with 1,200 students. A two-story, south wing addition, also designed by

Naramore, was built in 1929. As enrollment continued to grow, portables were added, and the gymnasium (designed by Bassetti and Morse Architects) was built in 1962.

The school now includes the 1923 original three-story building, the 1929 addition that is compatible in style with the original structure, and the 1962 gymnasium. The original building and the 1929 addition are located on the upper terrace in the southwest quadrant of the site, giving it a monumental presence on 23rd Avenue, a major arterial in Seattle's Central District. Originally, a sequence of broad concrete stairs and terraced lawns led to the main entrance of the building at the north side. The detached 1962 gymnasium, located on the lower terrace in the northwest quadrant, now faces the main entrance to the 1923 building. The 1963 parking lot, playfield, and track occupy the east side of the site on the intermediate terrace.

Garfield has some of the most elaborate and whimsical terra cotta detailing in the school district. All trim on the original 1923 building was executed in a buff-colored, tooled, matte-glazed terra cotta, speckled with black. The three-story elevations have a finely molded terra cotta cornice and terra cotta string course at the first floor window lintel level. The two-story elevations to the south have a continuation of the string course. Main building corners are trimmed with terra cotta quoins, as are all major entry bays. Windows are primarily twelve-over-twelve, double-hung wood sashes, organized in bays of three, with terra cotta sills and alternating bands of brick and terra cotta in the center piers. Half of the windows are original and half have been replaced. Entries are detailed with elaborate terra cotta panels with varying relief motifs, with terra cotta shields, finials, and tympanums, and with symbolic three-dimensional figures in the cornice.

The 1929 one-story addition has a U-shaped footprint, with the ends of the U adjoining the base of the two-story wrap-around wing to the north. A two-story pavilion is located adjacent to the base of the U, facing E Alder Street. The addition is constructed of materials similar to the original structure, but is not as elaborately detailed. The addition continues the banded pier motif between windows within each bay.

One of the important interior spaces in the original 1923 building is the entrance hall, which includes the original plaster-ribbed ceiling ornamentation in a geometric design, plaster ornamental ceiling border with foliated relief, ornamental plaster wall plaques decorated with roses and thistles on shields, plaster arched opening at the assembly hall entrance, plaster arch over the door at the west wall, multi-paneled wood doors at the building entrance and west elevation, arched side opening to east and west main corridors, and the two-toned terrazzo floor in a square pattern laid on the diagonal.

Other interior spaces and elements that are representative of Naramore's high school interiors of the 1920s include the layout and arrangement of major spaces on a central axis, secondary entry stair bays at the intersections of corridors, and classrooms on both sides of hallway corridors; high ceilings; plaster and wood finishes and detailing at the entrance hall; wood trim and casework details at classrooms; the girls gymnasium; the boys' gymnasium including the mezzanine running track; the lunchroom serving station; and ceiling lights under skylights. The original library includes an ornamental entry door and side door frames and bracketed ceiling beams, though installation of partitions and other changes have diminished the original character.

A 4-foot-high mural frieze is painted around the top of the interior walls of the former art room (Room 310) and former mechanical room (Room 312). One room features circus images and the other room features American folk characters. These paintings were completed by Irwin Caplan in 1937 on the original plaster finish. Over the years, the plaster has cracked and is in disrepair.

Garfield High School's original interior spaces that best convey the Twentieth Century Jacobean character expressed on the outside of the building include the entrance hall, and the assembly hall. The entrance hall has had relatively minor alterations. The library has been remodeled. Substantial remodeling of the assembly hall occurred in 1975 when the Learning Resource Center was added. The assembly hall balcony was removed, the plaster ceiling demolished, and the roof lowered. Windows on the east and west elevations were removed and wall openings filled in. The original ornamental plaster band at the proscenium arch was removed. The original opera-style seating was replaced with the existing seating. Modern-style wood tambour panels were provided on the side walls and acoustic tile installed at the ceiling. The entry doors to the auditorium from the lobby were replaced with the modern-style glazed doors that exist now. Only the original assembly hall side exit doors and wood trim remain.

3.3.1.1 Landmarks Preservation

The Seattle Landmarks Preservation Ordinance (SMC 25.12) is the local regulation addressing the designation and preservation of individual landmarks in Seattle. The provisions of the Landmarks Preservation Ordinance are carried out by the City's Landmarks Preservation Board (LPB), which is staffed by the Historic Preservation Office, Department of Neighborhoods.

On August 6, 2003, the LPB designated Garfield High School as a Seattle Landmark based on criteria C, D, E, and F of Section 25.12.350 of the Landmarks Preservation Ordinance. These criteria are as follows:

C. It is associated in a significant way with a significant aspect of the cultural, political, or economic heritage of the community, city, state or nation.

D. It embodies the distinctive visible characteristics of an architectural style, or period, or of a method of construction.

E. It is an outstanding work of a designer or builder.

F. Because of its prominence of spatial location, contrasts of siting, age, or scale, it is an easily identifiable visual feature of its neighborhood or the city and contributes to the distinctive quality or identity of such neighborhood or city.

The designation identified the exterior of the 1923 building and the 1929 addition for preservation. The following features of the interior of the 1923 building were also identified: the main entrance hall, the murals in the former art room (currently Room 312), and mechanical drawing room (currently Room 310), the interior of the former library (currently Room 229), the four interior bay stair towers, the master clock in the administrative area, and the boys' and girls' gyms.

Also designated is the school site, excluding the 1962 gymnasium and Parks Department fieldhouse, the breezeways, the portables, the two north parking lots, and the playfields and running track area.

Any changes to these features, including any demolition or remodeling, will be reviewed by the LPB. The Landmarks Preservation Ordinance requires a Certificate of Approval for any alterations to landmarks.

Following LPB approval of a landmark designation, the process continues through negotiation with the owner on controls and incentives and designation by City Council ordinance. This process will be done at the completion of the project. As part of this process, the LPB reviews all proposed changes to specified features of a prospective or designated landmark through the Certificate of Approval process from the date of nomination approval. The LPB has adopted the Secretary of Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (36 CFR 67) as standards for review of landmark properties. The discussion of impacts that follows this section evaluates how the proposed alternatives relate to the LPB approval.

Under the provisions of the City's SEPA Ordinance (Section 25.05.675), projects involving designated landmarks are to comply with the design review procedures of the Landmarks Preservation Ordinance. Proposals for new construction adjacent to designated landmarks are referred to the City's Historic Preservation Officer for an assessment of impacts and comments on mitigation.

3.3.2 Impacts of Alternatives

This analysis addresses impacts to the interior of the original 1923 building and the impacts on the site features included in the Seattle LPB motion to designate Garfield High School as a historic landmark. The exteriors of the original 1923 building and the 1929 building would be preserved under all alternatives, with the exception of the following changes:

- The corridor connection between the original 1923 building and 1929 addition on the west side would be demolished and replaced with a seismically reinforced and climatically controlled corridor area.
- On the west side, the existing concrete retaining wall would be demolished and relocated several feet closer to the building to allow additional on-site parking.
- At the north end of the existing track and field, the existing retaining wall would be demolished and rebuilt further to the north at the end of the new and enlarged track and field.
- A new hallway would be constructed to connect the second story of the 1923 building with the third story of the 1929 building.
- The exterior chimney would be removed.

3.3.2.1 Alternative 1 - Preferred Action

Changes to 1923 Building Interior

The following changes to interior spaces in the 1923 building would alter its existing character. The majority of the building interior would be reconstructed in order to meet seismic code requirements and programmatic needs. The entrance hall and the four main stairwells would be preserved essentially in their existing forms except that windows and some finishes (i.e., plaster walls) would be upgraded and restored. Modifications to the interior of the 1923 building include converting the original library to a new use. The original decorative woodwork and shelving in the library would be salvaged and relocated to an appropriate place in the building. The former assembly hall would be converted to a student commons/lunchroom. A replicate of the original proscenium arch is planned to stand in the student commons/lunchroom (former assembly hall). The boys' and girls' gyms would be converted into a library and the mezzanine running track would be demolished. The walls separating the two gyms would be removed, but the line of columns along the wall would be retained. Skylights would be replaced to meet current building codes and would be of similar appearance. Throughout the building, windows would be replaced with new approximations of the original windows.

The murals in the former art room (currently Room 312) and the murals in the former mechanical drawing room (currently Room 310) are not expected to withstand the extensive interior demolition work needed. Artwork from the former art room and former mechanical drawing room would be preserved if feasible; however, photo-documenting the paintings to allow for replication in another location would be done if preservation is not possible. Modifications to the former art room, murals in Room 229, former library, and boys' and girls' gyms inside the 1923 building designed by Floyd Naramore, which are designated features, would be a significant impact.

Changes to Other Onsite Structures

Under Alternative 1, the 1962 gym addition would be demolished and the parking area and track and field would be replaced; none of these are designated historic. A 78,000-sf addition would be located in the northeast corner of the site at the location of the existing 1962 gymnasium. An outdoor plaza would be located north of the main entrance to the 1923 school building between the main entrance and the parking area. A regulation-size track and field would be constructed in the southeastern portion of the site. Parking spaces would be located in the central portion of the site between the 1923 building and the new track and field, roughly in the same location as the existing portable classrooms, and at the northwestern corner of the site at the location of existing portables and parking.

Some sidewalks and street trees on the east side would be retained. The WWII memorial rhododendron garden located at the southwest corner of the track and field would be culled and relocated to the northwestern portion of the site near the new plaza. The "Peace Garden," located on the south and west sides of the 1929 addition would be removed. The main stairs to the north entry and the adjacent landscaping are expected to be removed. Most of the mature trees (five to seven) on the west side of the track and field are expected to be retained. In addition, four to five mature trees in the parking strip along 23rd Avenue would be retained.

No known eligible or designated historic structures are located on the Seattle Parks Department property that is proposed for the boundary adjustment under this alternative.

Changes in Views

Removing the 1962 gymnasium would improve views of the main entrance to the 1923 building from the north and northwest. The new addition on the northeast corner of the site would change views of the historic 1923 building from the northeast along 25th Avenue.

3.3.2.2 Alternative 2 – Development within Existing Site Boundary

Impacts to designated historic features on the site would be the same as described for Alternative 1. Similar to Alternative 1, the 1962 gymnasium would be demolished and an 84,000-sf addition would be constructed in the northeastern corner of the site, with an outdoor plaza at the main entrance to the 1923 school building. The type of track and field proposed and the provision of parking and bus loading would be slightly different under Alternative 2, but are not expected to result in additional impacts to historic features.

3.3.3 Mitigation Measures

As mitigation for changes to designated features of the 1923 building interior, the District proposes to retain and relocate the master clock in the administration area to an appropriate place in the building; salvage and relocate the original decorative woodwork and shelving in the library to an appropriate place in the building; and upgrade finishes, including the decorative plaster ceiling detail in the east-west corridor and lobby. Another mitigation measure for some of the changes to the designated features of the school's interior is the preservation of the entrance hall and four main stair towers.

The District has demonstrated commitment to working cooperatively with the Seattle Landmarks Preservation Board in the design of the proposed project, while reserving its legal rights in relation to City jurisdiction.

The District will apply for a Certificate of Approval for preliminary design of the proposed changes to Garfield High School. Any Certificate of Approval for preliminary design will be conditioned upon subsequent LPB approval of the final design. The preliminary design process provides an additional opportunity to mitigate potential adverse impacts on historic resources and allows an additional avenue for public comment on the proposals for Garfield High School and impacts on historic resources.

The following procedural steps will also be taken prior to any demolition of designated interior features:

- At a minimum, perform photographic and written documentation pursuant to the Secretary of Interior's *Standards and Guidelines for Architectural and Engineering Documentation: Historic American Buildings Survey/Historic American Engineering Record* (HABS/HAER) prior to alteration, relocation, or demolition of properties.
- Work with the School District Archives to save important artifacts and memorabilia.

3.3.4 Unavoidable Adverse Impacts

Unavoidable adverse impacts to historic resources would occur under Alternatives 1 and 2 (see discussion under Section 3.3.2). These alternatives would alter or remove historic interior features in the 1923 building designed by Floyd Naramore. This includes the adaptive reuse of the boys' and girls' gyms, the former library, and the murals in the former art room and former mechanical drawing room.

3.4 TRANSPORTATION

3.4.1 Affected Environment

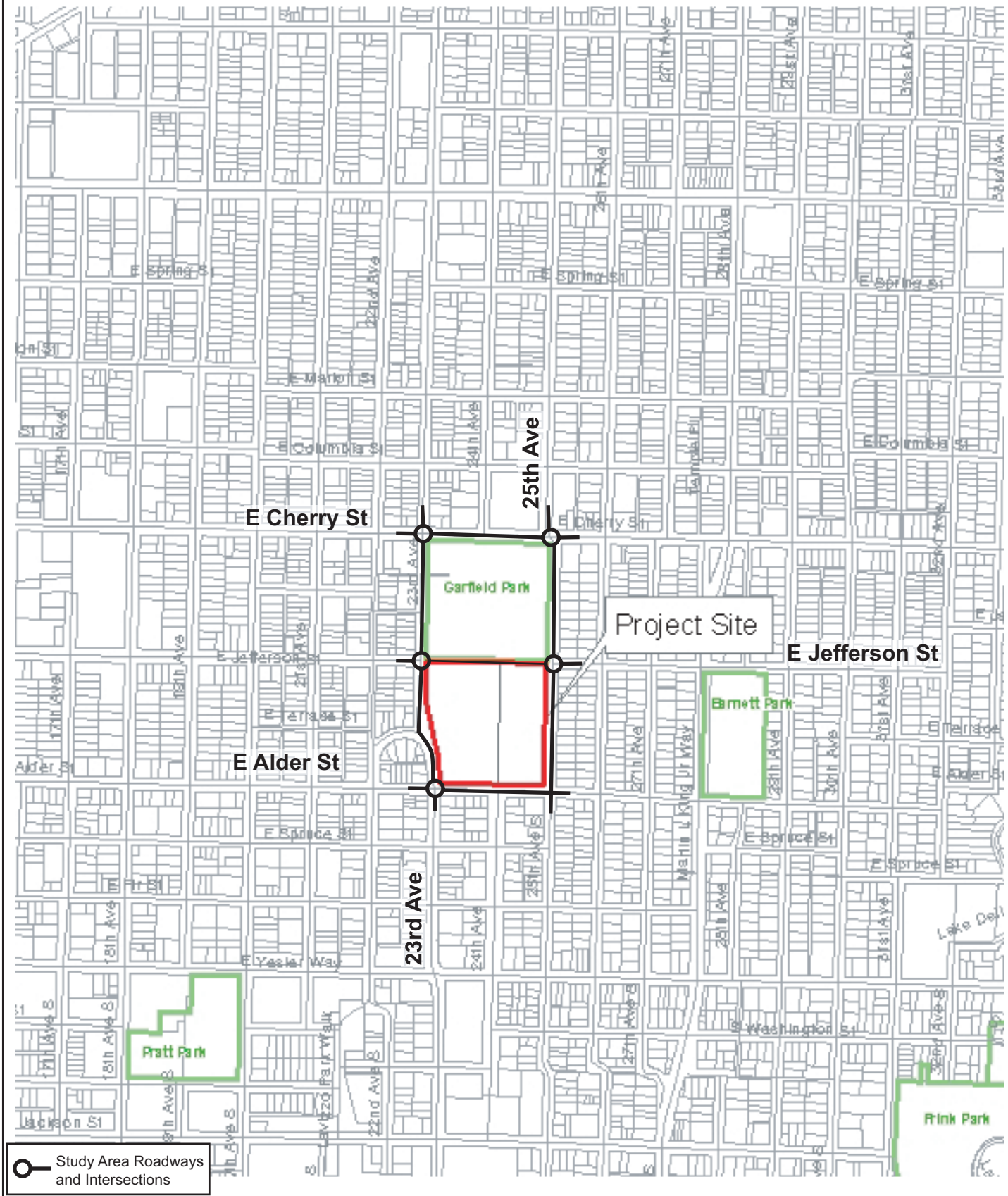
This section includes descriptions of the existing and future transportation system that serves the Garfield High School vicinity. Information is provided about the local roadways, traffic volumes, intersection operations, safety, transit facilities, as well as pedestrian and bicycle facilities. Figure 3-4 shows the project site location and vicinity of Garfield High School. Appendix A contains more detailed discussions of the transportation system and analyses conducted for this EIS.

3.4.1.1 Existing Site Description

The Garfield High School site is bounded by 23rd Avenue on the west, E Alder Street on the south, 25th Avenue on the east, and approximately E Jefferson Street on the north (see Figure 3-4). The site includes an existing auditorium/theater, gymnasium, and outdoor athletic facility with a non-regulation track and a grass football/soccer field. The auditorium/theater is used for student performances and classes and has seating for 673 people. The gymnasium is currently used for physical education and sports events and has an estimated bleacher seating capacity for 2,016 persons. Total enrollment at Garfield is currently 1,657 students and is expected to be 1,600 students or fewer by year 2008. This level of enrollment is expected with or without the proposed redevelopment project.

The existing site has approximately 71 marked parking spaces in two lots on the site. The main parking lot is located north of the existing athletic field and northeast of the high school buildings. Another small parking area is located along the eastern side of the school building. Although there are only 71 marked parking spaces, approximately 93 vehicles typically park in-site in the two lots. All remaining parking demand generated by the school is currently served by on-street parking on surrounding roadways.

There are signed bus loading areas along the north side of E Alder Street between 23rd and 25th Avenues. School-related and residential parking occurs in these areas when they are not restricted to bus loading.



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Original graphics by: JAB
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Date: 4/14/04

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FIGURE 3-4

ROADWAY NETWORK

GARFIELD HIGH SCHOOL REDEVELOPMENT PROJECT
SEATTLE, WASHINGTON

3.4.1.2 Roadway Network

The study area for the transportation analysis was determined based on the potential transportation impacts that could result from the Garfield High School redevelopment project. Intersections and roadways were selected based on routes used to access the site and the potential for project related impacts. The proposal is not expected to change traffic volumes or access routes outside of the project study area. The intersections included in this analysis are shown on Figure 3-4 and are listed below. Refer to Appendix A for detailed descriptions of the existing roadways.

Signalized Intersections

- 23rd Avenue/E Cherry Street
- 23rd Avenue/E Jefferson Street

Unsignalized Intersections

- 25th Avenue/E Cherry Street
- 25th Avenue/E Jefferson Street
- 25th Avenue/E Alder Street
- 23rd Avenue/E Alder Street (has pedestrian-actuated signal)

Near the school, there is a Residential Parking Zone (RPZ) that restricts parking to two hours between 7:00 A.M. and 4:00 P.M. except with a permit.

Several planning documents were reviewed to determine what transportation improvements might be made near Garfield High School by 2008 when it would reopen. These documents included: the *Central Area Action Plan II* (the neighborhood plan encompassing the area surrounding Garfield High School); the *Plan Matrix* for the *Central Area Action Plan II*; the *City of Seattle 2003-2008 Adopted Capital Improvement Program*; and the *2004-2009 Proposed Capital Improvement Program.* A detailed summary of these plans, programs and recommendations are provided in Appendix A.

There were no specific funded transportation projects within the local site vicinity included in the Transportation sections of the *City of Seattle 2003-2008 Adopted Capital Improvement Program* or the *2004-2009 Proposed Capital Improvement Program*. Therefore, existing intersection and signal conditions were assumed to remain for future-year-2008 conditions. Although the Central Area neighborhood plan recommended considering making 25th Avenue one way south of Cherry Street, that change has not been fully reviewed by the SDOT, Department of Neighborhoods, or the local residents that would be affected. Therefore, the analyses in this report assume that 25th Avenue would continue to operate as it does today. The remaining actions included in the *Plan Matrix* were assumed to be complete by 2008.

3.4.1.3 Traffic Volumes

The following sections summarize existing (2004) and future (2008) without-project traffic volumes. A description of traffic generated by Garfield High School is presented first; a description of overall traffic on surrounding roadways is presented second. Year 2008 is the

expected re-opening year for Garfield High School. Refer to Appendix A for detailed descriptions of the traffic volumes.

School Traffic

Due to the urban location of Garfield High School and the limited amount of parking in the area, students regularly use a variety of travel modes to access the school. According to data provided by the Seattle Public Schools' Transportation Office, the average daily ridership on school buses is about 47% of the total school enrollment. The remaining students generally arrive at school by private automobile (e.g. carpools, parent drop-off, or drive-and-park), Metro bus, or non-motorized modes (walk or bicycle).

Drivers typically access Garfield High School using 23rd Avenue and Cherry Street. Travel routes are also affected by the location of parking lots and on-street parking, as well as the locations of bus and automobile loading areas. Vehicles arrive at Garfield using Alder Street, Jefferson Street, 24th Avenue, 25th Avenue, or Spruce Street. Automobile passenger loading generally occurs in several locations including 25th Avenue, the parking lots, E Alder Street, and the small Parks Department parking lot located at the northwest corner of the site. Bus loading zones are located on Alder Street, 25th Avenue, and 23rd Avenue. Because parking is allowed on both sides of 25th Avenue south of the site and Alder Street east of the site, these narrow two-way streets become congested during morning arrival times and particularly afternoon departure times. Parking and bus loading on E Alder Street limits two-way traffic to one travel lane, which also causes congestion at the E Alder Street/25th Avenue intersection while vehicles wait for an opportunity to use the street.

To document the level of traffic generated by the school, traffic counts were performed on roadway sections in two locations adjacent to the school—on 25th Avenue north of E Jefferson Street and on E Alder Street east of 23rd Avenue. The counts were performed over four days in January and included one day with no school (Monday, January 26th—the day between semesters). The counts from this day were compared to the average of the three following school days. The comparison helps to demonstrate the existing level of school traffic generated on adjacent roadways on a typical weekday. Table 3-3 shows the results of the comparison and the estimated number of trips generated by Garfield High School on the two adjacent roadways. The school-related traffic volumes determined for Garfield High School are reasonable, given the size of the school and percentage of students using yellow buses or Metro.

Table 3–3. Existing Garfield High School Traffic on 25th Ave and on E Alder Street

Period	Inbound	Outbound	Total
Daily	660	660	1,320
School AM Peak Hour (7:00 to 8:00 A.M.)	260	215	475
School PM Peak Hour (2:00 to 3:00 P.M.)	70	110	180
Commuter PM Peak Hour (5:00 to 6:00 P.M.)	15	10	25

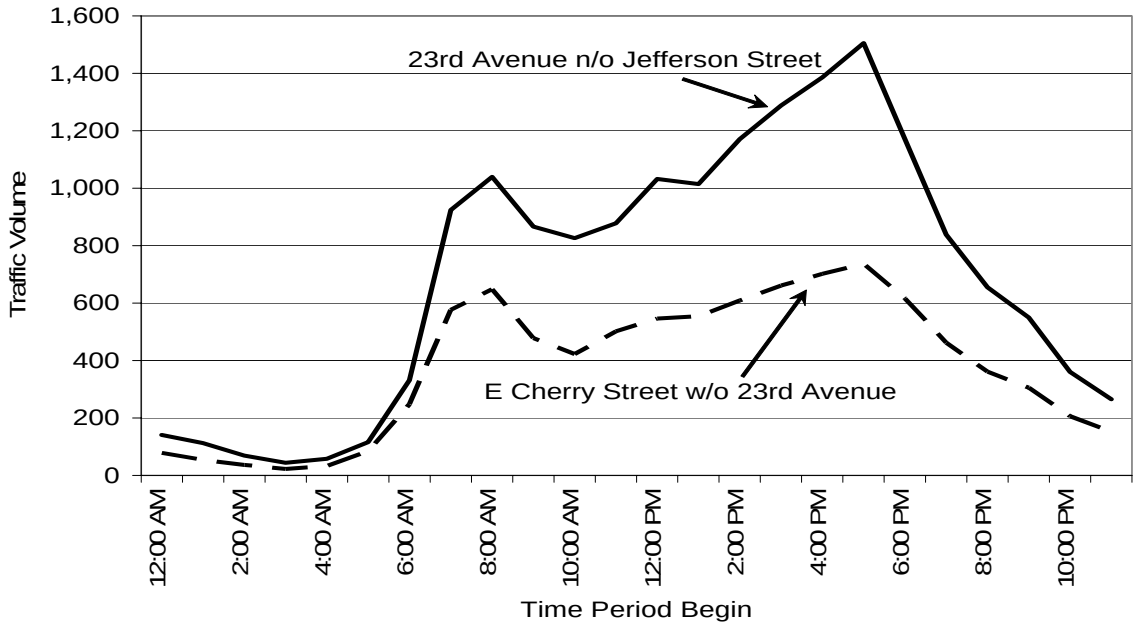
Note: classes begin at 7:40 a.m. and students are dismissed at 2:15 p.m.

Background Traffic

Traffic volume data for nearby roadways were collected from several sources. Historical 24-hour counts from spring 2003 were obtained from the City of Seattle for 23rd Avenue and E Cherry Street. New turning movement counts were performed specifically for this EIS at study area intersections in January 2004 (see the *Background Traffic* section of Appendix A for additional details).

The City's 24-hour counts on 23rd Avenue and E Cherry Street were compiled to better demonstrate daily traffic patterns near the site (see Figure 3-4 for street locations). Figure 3-5 shows the hourly traffic volumes on these two roadways. As shown, the highest volumes on both roadways occur during the commuter PM peak hour (5:00 to 6:00 p.m.).

Figure 3-5. Total Hourly Traffic Volumes on Surrounding Arterials



Source: 23rd Avenue counts by City of Seattle Department of Transportation, April & March 2003
E Cherry Street counts by City of Seattle Department of Transportation, March 2003

During the hours when Garfield generates the most traffic, volumes on these roadways are much lower than the commuter PM peak hour. Based on the review of historical traffic counts, two periods were selected for analysis: the school PM peak hour (between 2:00 and 3:00 p.m.) and the commuter PM peak hour (5:00 to 6:00 p.m.). These are the two periods when school-related traffic and other background traffic are highest.

New afternoon (2:00 to 6:00 P.M.) turning movement counts were performed at five study-area intersections to establish baseline volumes at these locations; details and results of these counts are provided in the *Background Traffic* section of Appendix A. As indicated in Figures 3 and 4

of Appendix A, traffic volumes on the roads surrounding Garfield High School are about 24% to 28% lower during the 2:00 p.m. to 3:00 p.m. hour (when school traffic is highest) than they are during the afternoon peak hour for commuters (5:00 to 6:00 p.m.). This baseline information was collected in order to better reflect actual conditions near the school, and is incorporated into Table 3-4 below.

Since the school would be reopened in September 2008, that year was selected for all future conditions analyses. Year 2008 traffic volumes were forecast using a 0.5% annual growth rate, which is typical for the City of Seattle and was approved by City of Seattle Transportation review staff. Details about the traffic forecasting method are included in the *Background Traffic* section of Appendix A.

3.4.1.4 Traffic Operations

The quality of traffic flow and intersection operations is defined by level of service (LOS). Levels of service are qualitative descriptions of traffic operating conditions and are designated with letters ranging from "A," which is indicative of good operating conditions with little or no delay, to "F," which is indicative of stop-and-go conditions with frequent and lengthy delay. Operating conditions of LOS D or better are acceptable within the City of Seattle. The existing traffic operating conditions in the study area were analyzed using the methodology in the *Highway Capacity Manual 2000* (Transportation Research Board, 2000).

The results of the existing traffic operations analysis are summarized in Table 3-4 below. As shown, all but one intersection currently operate at LOS D or better during both the school and commuter peak periods. At the unsignalized intersection of 23rd Avenue/Alder Street, drivers turning onto or crossing 23rd Avenue from the west experience LOS E conditions during the commuter PM peak hour. Very little change in intersection operations is expected by 2008 when Garfield High School would reopen. Potential growth in traffic on 23rd Avenue could degrade the westbound movements from E Alder Street at 23rd Avenue from LOS C to LOS D. All other intersections are expected to continue operating at existing levels in 2008 during both the school and commuter peak periods. *Traffic Operations* section of Appendix A discusses the details of the level of service analyses performed at the five study area intersections. As discussed below in Section 3.4.2 Impacts of the Alternatives, the LOS during school operations is D or better both with and without the project; therefore, no mitigation is needed as a result of school operations.

Table 3–4. Level of Service Summary – Existing and 2008-Without-Project

	School PM Peak Hour (2-3 P.M.)				Commuter PM Peak Hour (5-6 P.M.)			
	Existing 2004		2008-Without-Project		Existing 2004		2008-Without-Project	
Signalized Locations	LOS [1]	Delay [2]	LOS	Delay	LOS	Delay	LOS	Delay
23rd Ave/E Cherry St	C	24.6	C	24.7	D	35.1	D	35.5
23rd Ave/E Jefferson St	A	8.7	A	8.6	A	9.8	A	9.9
Unsignalized Locations[3]	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
23rd Ave/E Alder St	C	20.9	D	27.5	E	41.3	E	46.2
25th Ave/E Jefferson St	B	13.0	B	13.0	A	9.1	A	9.2
25th Ave/E Cherry St	C	16.7	C	16.9	B	13.7	B	14.4

Source: Heffron Transportation, Inc.

1. *Level of service*
2. *Average seconds of delay per vehicle.*
3. *Results are presented for the worst-operating movement.*

3.4.1.5 Parking

The existing Garfield High School site has two parking lots with a total of 71 striped parking spaces and space for about 22 more vehicles, for a total on-site parking capacity of about 93 vehicles. The remaining parking demand generated by the school is served by on-street parking spaces. The largest concentration (about 57 spaces) of school parking in the surrounding neighborhood is along the west side of 25th Avenue between E Alder and E Jefferson Streets. Student and staff parking also occurs along other surrounding residential neighborhood streets including 24th Avenue, 26th Avenue, E Spruce Street, E Jefferson Street, and E Alder Street. Within the area, parking demand is also generated by residential uses (primarily single-family homes) and the adjacent Community Center. There is a parking lot adjacent to the school site that serves the Medgar Evers Swimming Pool and Teen Life Center. That lot has 17 striped spaces.

An on-street parking utilization study was performed for the streets near Garfield High School. The *Parking* section of Appendix A describes in detail the methodology used to determine the parking study area, existing on-street parking supply, existing parking demand, and existing on-street parking usage levels. There are approximately 324 on-street parking spaces available near Garfield High School during most hours. However, bus loading zones reduce the parking supply on school days between 7:00 and 9:00 A.M. and again between 1:00 and 3:00 P.M. At 1:00 P.M., when the largest number of on-street parking spaces is restricted for bus loading, there are approximately 301 spaces available near the school.

The on-street parking utilization within the study area ranged from a low of 32% on a Monday morning with no school to a high of 81% midday on a school day. Demand was also high on school days throughout the study area in the morning period. Parking demand was noticeably reduced after 4:00 p.m. When compared to conditions when school was not in session, the school is estimated to generate a peak on-street parking demand of approximately 141 vehicles during the midday (1:00 p.m.) time period.

Parking demand counts were also performed in the parking lots on the same school days as the on-street parking utilization study. Peak parking-lot demand generally occurred during the 9:30 a.m. and 1:00 p.m. counts, when about 93 vehicles were parked in the site's two parking lots. Parking-lot demand was generally lower during the 4:00 and 8:30 p.m. counts (70 and 63, respectively).

The total peak Garfield High School parking demand is approximately 234 vehicles (including parking lots and on-street parking). As a result, the existing parking demand exceeds the parking-lot supply and uses just under 50% of the local on-street parking supply within walking distance (400 feet) of the school.

There are no specific projects planned in the immediate study area that would change the parking supply by year 2008. Therefore, the future conditions without the project assume the existing level of parking demand and supply.

3.4.1.6 Event Conditions

Spectator events currently occur at Garfield High School. As mentioned previously, the existing school includes a gymnasium with bleacher seating for approximately 2,016 people and a theater/auditorium with seating for approximately 673 people. According to School District staff, the largest school-related spectator events that occur at the site include varsity basketball games in the gymnasium (boys and girls), and theater and concerts in the auditorium.

To measure the traffic volumes associated with a basketball game, 24-hour traffic counts were performed along both 25th Avenue and E Alder Street on Friday, January 23, 2004. That night, a 'quad' basketball event was held with Ballard High School. A 'quad' event is when girls' and boys' junior varsity and varsity teams play games on one afternoon/evening. The Seattle School District Athletic Department indicated that attendance for these games totaled 242 people. The traffic counts indicate traffic volumes near the school were approximately 530 trips higher than volumes during a night without basketball games. At this rate, a capacity event in the gymnasium (with over 2,000 spectators) could generate as many as 4,400 trips. However, capacity school-related events at Garfield are very infrequent.

The track around the Garfield High School athletic field is scheduled for different community track teams typically on weeknights from March through May. The baseball/softball fields located on Parks property north of the site are scheduled for youth baseball teams during evenings in the spring.

Community-sponsored events such as workshops, rallies, marches, and community planning meetings likely represent the largest attendance conditions for the school site.

3.4.1.7 Site Access

There are four locations for vehicles to access the Garfield High School site. The two primary access driveways serve the parking lots. The main site driveway is located on 25th Avenue opposite E Jefferson Street and serves the largest parking lot. A second driveway, on E Alder Street, provides

access to limited additional parking. A curb cut also exists on 25th Avenue between E Jefferson and E Alder Street for use by athletic field maintenance vehicles. The fourth driveway is located on 23rd Avenue and is used to access a kayak storage area. The athletic field and kayak storage driveways are seldom used and are not used for typical everyday student or staff trips.

Adjacent to the site, there is a driveway on 23rd Avenue opposite E Jefferson Street that provides access to spaces that are designated for use by the adjacent Medgar Evers Pool at the Garfield Community Center. All other access to the site occurs via pedestrian paths and stairways from the surrounding roadways. Pedestrian access occurs from 23rd Avenue, 25th Avenue, E Jefferson Street, and E Alder Street.

A total of 29 buses serve Garfield High School. Buses approach the site from local neighborhood streets, 25th Avenue, 24th Avenue, 23rd Avenue, and E Spruce Street. These buses load on 25th Avenue, E Alder Street, and 23rd Avenue.

There are no specific projects planned in the study area that will change site access by 2008; therefore, the future conditions without the project assume the existing site access conditions. See the *Site Access* section of Appendix A for further details about site access for automobiles and buses.

3.4.1.8 Safety

Traffic accident data were obtained from the City of Seattle. The accident data included the period between January 1, 2001 and December 25, 2003. Signalized intersections with 10 or more accidents per year and unsignalized intersections with five or more accidents per year are considered high-accident locations by the City of Seattle. Table 6 in Appendix A summarizes the average annual accidents by severity and the accident rates at each signalized intersection.

The E Cherry Street/23rd Avenue intersection met the City's high accident threshold during 2003. Over the three-year period, the largest number of accidents (7) involved right-angle collisions. Since there were no reported accidents in 2002 and a total of 8 accidents in 2001, it is not clear that there are any unusual safety conditions at this intersection.

At the Jefferson Street/23rd Avenue intersection, left-turn collisions represented the largest number of accidents (8). The data do not indicate a contributing cause for these accidents; however, they often occur at locations where permissive left-turn movements conflict with heavy opposing through volumes.

There were a total of 7 accidents involving pedestrians or bicyclists within the study area (see Appendix A for details).

There is no way to accurately forecast accident experience for future year 2008 conditions without the project. However, growth in background traffic can result in a proportional increase in accidents.

3.4.1.9 Transit Facilities and Service

King County Metro Transit provides transit service near Garfield High School on 23rd Avenue, E Cherry Street, E Jefferson Street, and Yesler Way. In the immediate vicinity of the school, there are bus stops located on both sides of 23rd Avenue at E Alder Street, E Jefferson Street, and E Cherry Street and stops on both sides of E Cherry Street between 23rd and 25th Avenues. See Appendix A for further details on existing transit routes and stops near the site.

The *King County Metro Six-Year Transit Development Plan* (updated February 2002) indicates some route consolidation and adjustments to the times between consecutive buses for routes serving the Garfield High School vicinity. The 23rd Avenue and Jefferson Street corridors are possible candidates for improved service (by reducing the time between consecutive buses) by year 2007.

Under the *Central Area Acton Plan II*, King County Metro would review bus stop locations along 23rd Avenue and make recommendations for consolidation as appropriate. It would also recommend bus stop improvements including lighting and shelters. This is expected to be complete in the first quarter of 2004.

3.4.1.10 Non-Motorized Transportation Facilities

All roadways in the study area have sidewalks. In addition, the signalized study-area intersections have pedestrian signals. There is also one pedestrian-only signalized crossing of 23rd Avenue on the north side of the E Alder Street intersection. The crosswalks at E Jefferson and E Alder Streets provide direct access to the Garfield High School frontage. There is a mid-block crosswalk located on E Cherry Street east of 23rd Avenue directly opposite the Nova High School building. The SDOT recently completed a project that added curb bulbs to this intersection to narrow the crossing width and slow traffic on E Cherry Street.

Students cross 23rd Avenue, E Jefferson Street, E Alder Street, 25th Avenue, and E Cherry Street regularly before school, during school between classes, and after school. Students walk along and cross numerous other neighborhood streets surrounding the school as well. Crossing activity occurs at both marked and signed crosswalks as well as at unsigned mid-block locations.

The *Central Area Action Plan II* recommended that Cherry Street be designated as a Key Pedestrian Street between 23rd Avenue and Martin Luther King Jr. Way. As a result of this recommendation, the SDOT has identified a project that would rebuild 120 feet of curb and repair sidewalks on Cherry Street between 23rd and 25th Avenues to improve pedestrian safety, add on-street parking, and improve pedestrian access to Nova and Garfield High School and the Garfield Community Center. This project is anticipated to be complete in 2004.

3.4.2 Impacts of Alternatives

3.4.2.1 Alternative 1 – Preferred Action

Construction

The construction-related traffic impacts of the proposed action would vary throughout the construction process. Most construction activity and related impacts would occur on the Garfield High School site. However, some activities would require use of the local roadways and intersections surrounding the site.

The most noticeable traffic activity would be related to demolition of existing buildings on site and re-grading portions of the site (e.g., the athletic fields). The exporting effort is expected to occur over approximately three (3) months beginning in year 2006 (approximately 63 working days). The export of both demolition debris and excavated material would require approximately 31 truckloads per day and an estimated 8 truck trips per hour (4 inbound, 4 outbound).

In addition to on-site construction, a water line within the 25th Avenue right-of-way, would be extended approximately 640 feet south from E Cherry Street. The project would take approximately six to eight weeks to complete and would include excavation of approximately 360 cy of material. This element of the project would require closure of one lane of 25th Avenue between E Cherry Street and E Jefferson Street during the construction period. This portion of the project may occur during the summer of 2005 or summer of 2006. Traffic control would be required during the lane closure.

The construction of the project would also require employees and equipment that would generate traffic to and from the site. The number of workers at the project site at any one time would vary depending upon the nature and construction phase of the project. Current estimates indicate the average number of construction employees on site would be approximately 50 to 100. However, the number could peak to about 50 to 150 employees during some phases such as finish work.

Based on these estimates, the proposed project would likely generate a noticeable amount of construction traffic on surrounding roadways. Trucks carrying material from the site would be most noticeable and would likely use 23rd Avenue, 25th Avenue, E Alder Street, and/or E Cherry Street. Although the truck traffic would be noticeable, the increase would represent 1% or less of overall midday traffic. The truck traffic is not expected to degrade operations of study area intersections during off-peak hours and impacts during peak hours are expected to be reduced since construction transportation is reduced during these times. However, the truck activity and water line extension could disrupt some on-street parking along 25th Avenue or E Alder Street. Since the school population would not be on site during construction, this disruption is not anticipated to be significant.

A construction management plan (CMP) addressing traffic and pedestrian control would be prepared to address truck routes and lane closures. This CMP would address lane closures, sidewalk closures, and bus stop relocations, where required. To the extent possible, the CMP

should direct trucks away from residential streets to avoid unnecessary conflicts with resident and pedestrian activity.

The presence of a temporary construction work force would also generate demand for parking spaces around Garfield High School. However, the school will be closed during construction and the demand from construction workers is not expected to exceed that currently generated by the school. Therefore, there would be adequate parking supply to accommodate the construction related demand. Most of the construction employee parking is anticipated to occur along the adjacent on-street parking areas on the west side of 25th Avenue and the north side of E Alder Street and on-site when available.

Operation

Roadway Network

Although no changes to the roadway network are necessary to accommodate the proposed Garfield High School redevelopment, one potential change has been identified as part of Alternative 1. The project would widen the section of E Alder Street between 23rd and 24th Avenues to provide back-in angle parking along the north side of the street. Bus loading areas along these roadway sections would be removed. The widening of E Alder Street and the removal of the bus loading areas are expected to enhance traffic operations since parked vehicles (buses or automobiles) along the north side of E Alder Street would no longer narrow the roadway width to one lane. As a result, less congestion is expected along this section of E Alder Street and its intersections with 23rd, 24th, and 25th Avenues.

Traffic Volumes

Overall traffic volumes generated by Garfield High School are expected to be about the same as existing conditions, the changes in parking at and around the site would slightly shift traffic on some local roadways. The largest shifts in traffic are expected to occur during the hours just before and just after school. For example, an estimated 51 trips are expected to shift to the 23rd Avenue/Jefferson Street intersection where the new main parking lot would be accessed. All of the bus trips would be shifted to the new bus loading area, which would be accessed from 23rd Avenue. Smaller changes in traffic would be expected elsewhere around the site.

The number of bus trips on local neighborhood streets would be reduced. Buses could access the site directly from 23rd Avenue and load on site without impacting local traffic operations.

Appendix A provides details on the anticipated shift in traffic volumes on roadways adjacent to the site for both the school and commuter PM peak hours and how the shifts in traffic were assigned to the local roadway system. The changes in traffic were incorporated into the year 2008 traffic forecasts and then used to evaluate traffic operations with the project (see next section).

Traffic Operations

Levels of service were determined for project conditions under Alternative 1. Table 3-5 summarizes the results of the analysis. As shown, Alternative 1 would not degrade the operations of any study area intersections below LOS D; therefore no mitigation is needed as a result of school operations. The shift in traffic from Alternative 1 would add small amounts of delay (less than one second) to a few locations.

Table 3–5. Level of Service Summary – 2008 Without and With Alternative 1

	School PM Peak Hour (2-3 P.M.)				Commuter PM Peak Hour (5-6 P.M.)			
	2008 Without Project		2008 With Alternative 1		2008 Without Project		2008 With Alternative 1	
Signalized Intersection	LOS [1]	Delay [2]	LOS	Delay	LOS	Delay	LOS	Delay
23rd Ave/E Cherry St	C	24.7	C	24.8	D	35.5	D	35.5
23rd Ave/E Jefferson St	A	8.6	A	9.1	A	9.9	B	10.0
Unsignalized Location [3]	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
23rd Ave/E Alder St	D	27.5	D	27.4	E	46.2	E	46.9
25th Ave/E Jefferson St	B	13.0	B	11.0	A	9.2	A	9.0
25th Ave/E Cherry St	C	16.9	C	16.2	B	14.4	B	14.3

Source: Heffron Transportation, Inc.

1. *Level of service*
2. *Average seconds of delay per vehicle.*
3. *Results are presented for the worst-operating movement.*

The new on-site bus loading area would significantly improve traffic operations at and around the school site during peak school hours. The change in bus loading would also reduce bus circulation trips through the local neighborhood. Bus trips along northbound 24th and 25th Avenues to access westbound E Alder Street would no longer be required. The project would not result in significant adverse impacts to traffic operations; no off-site intersection improvements would be required to accommodate the proposed project.

Bus trips combined with pick-up and drop-off activity at the 23rd Avenue/Jefferson Street intersection may result in congested conditions within the new main lot. This congestion could affect turning movements from 23rd Avenue into the site and bus movements leaving the site. The Garfield High School administration would develop parent pick-up and drop-off guidelines to maintain safe and efficient operations.

Event Conditions

Spectator events at Garfield High School with Alternative 1 would be similar to those that would occur without the project. Theater events and concerts would continue to occur on site in the new performing arts center auditorium. The proposed performing arts center would seat approximately 75 fewer persons than the existing facility. Therefore, the traffic and parking demand associated with performances at the venue are expected to remain similar to existing levels. However, performances may occur more frequently due to the superior quality of the venue.

Athletics such as basketball (boys and girls), wrestling, and gymnastics would continue to occur on site in the new gymnasium. The seating capacity at the gymnasium would be increased by about 285 seats. This change in seating capacity is not expected to change the attendance at scholastic events held on campus.

Junior varsity soccer and football would continue to occur at the renovated athletic fields. Varsity soccer (boys and girls), track practice, and possibly some limited small track meets (two-school meets) would likely be moved on site to the new athletic facility. The project is proposing some bleacher seating (capacity of up to 550) for the athletic fields. However, relatively few spectators (35 to 75) are anticipated for the soccer, JV football, and track events that would occur at the site. These activities would not generate significant levels of traffic or parking demand. Baseball and softball would continue to occur at the adjacent Garfield Playfield. Varsity football and most track-and-field meets would continue to occur at one of several School District athletic complexes. No changes to traffic and parking conditions are anticipated from these activities.

The renovation of the athletic fields would provide an improved surface for football and soccer and would likely result in increased use for non-scholastic athletics such as adult and youth soccer or other field sports (e.g., ultimate, rugby, and lacrosse) organized through Seattle Parks and Recreation. These activities would occur only after the school has completed use of the fields (generally after 5:00 p.m. or on weekends) and could only extend until dusk (no field lighting is planned). More activity is expected during summer months when daylight extends longer into the evening. A typical activity would be an adult soccer match, which usually results in between 25 and 30 adults on site and each driving alone. Participants are expected to access the site from 25th Avenue or E Alder Street and park on street or in the parking lot between the school building and the fields. This type of typical event generates between 50 and 60 trips (one arriving and one departing trip for each participant) and peak parking demand of approximately 60 vehicles (usually occurring between games when four teams are on-site at once. The traffic and parking demand generated by these activities would occur more frequently with the project. However, they would not result in significant adverse impacts to traffic operations or parking conditions. The local roadway network together with the parking lots and on-street parking supply would accommodate the traffic and parking demand associated with these activities.

Community use of the Garfield High School campus facilities may also increase. The larger gymnasium capacity could result in some events with larger attendance. Very few events are expected to draw capacity attendance in the gymnasium. The annual community-sponsored activities for the Martin Luther King Jr. holiday would likely result in the largest attendance. Traffic congestion and parking demand surrounding the site for larger events could be slightly worse than existing conditions. However, the slight increase in gymnasium capacity is not expected to significantly influence attendance at these types of events. In addition, these large events occur infrequently and as a result, the related traffic and parking impacts would not be considered significant adverse impacts. The proposed on-site bus loading area could be used for automobile parking for large events and evenings when no bus loading is required. The loading area could provide approximately 22 additional automobile parking spaces for these times.

Parking

Alternative 1 would reconfigure parking lots and on-street parking for Garfield High School. A total of 91 parking spaces would be provided in lots with this alternative. Twenty-six spaces would be located in the central parking lot between the existing high school and the athletic fields, and 45 spaces would be provided in the northwestern corner lot (which will be future Seattle Parks and Recreation Department property after the land swap), and 20 spaces would be located on the northeastern corner lot. A joint-use agreement with the Seattle Parks Department will be required to allow shared use of all of the three parking lots. It is anticipated that most of the parking would be dedicated for school use during school hours and for large events in the gymnasium or performing arts center. A number of spaces could be reserved or signed for community center patrons using the Medgar Evers swimming pool or other athletic fields during the school day or during special events at the school. The change in parking lots would likely result in the displacement of roughly 20 vehicles to on-street parking near the school during peak parking demand periods.

With Alternative 1, on-street parking along E Alder would be reconfigured. Parking along the north side of E Alder Street between 23rd and 25th Avenues would be modified from parallel to back-in angle parking and bus loading areas would be removed. As a result, the existing parking restriction for bus loading (between 7 and 9 a.m. and between 1 and 3 p.m.) would be removed. These changes are expected to provide a total of 40 parking spaces—a net increase of 17 spaces. Removing the bus loading activity on E Alder results in 40 spaces becoming available for use during bus loading periods. Slight modifications to on-street parking along the west side of 25th Avenue between E Jefferson and E Alder Streets may be required to accommodate changes in driveway locations; however, these modifications are not expected to change the total amount of on-street parking available.

The parking demand that may be shifted from parking lots to on-street spaces could be accommodated by the new on-street parking capacity provided along the north side of E Alder Street. Since the project would result in approximately the same number of spaces located on site and adjacent to the site, on-street parking in the surrounding neighborhood is expected to remain at existing utilization levels. The proposed changes to parking lots and on-street parking would help reduce parking overflow to surrounding roadways further from the site during the bus loading periods. Alternative 1 parking revisions could attract some parking demand closer to the site than current conditions during bus loading periods. Overall, parking conditions on roadways one or more blocks from the school would be virtually the same for typical school day conditions and for spectator event conditions.

Site Access

Alternative 1 would maintain vehicular site access in predominately the same locations as currently exists. One vehicular driveway would be maintained on E Alder Street. The expanded lot on the northwest corner of the site would be accessed from 23rd Avenue at E Jefferson Street similar to the existing Medgar Evers Pool parking area. Vehicular access to the northeastern parking lot would occur from two driveways on 25th Avenue. One driveway would be located opposite E Jefferson Street as exists currently. A new second access driveway serving this lot would be constructed approximately 125 feet south of the E Jefferson Street intersection. The third vehicular access driveway on 25th Avenue that serves the athletic fields would remain

approximately where it exists today. Since the existing northeast parking lot would be reduced in capacity (from 64 to 20 striped spaces), the volume of traffic entering and leaving the site on 25th Avenue would be reduced. The driveway that serves the athletic field would continue to be used very infrequently. A new inbound driveway would be constructed on 23rd Avenue at approximately E Terrace Street to provide bus access to the bus loading area.

All site access points are expected to operate at LOS C or better during all peak periods and bus access operations are expected to be improved compared to existing conditions. Truck access and loading activity are not expected to change with Alternative 1.

Safety

Alternative 1 would reduce the volume of traffic using the parking lot access from 25th Avenue and would likely increase the use of two other site driveways—on E Alder Street and from 23rd Avenue at E Jefferson Street. Although the project would increase some conflicting movements at these locations, the changes in traffic patterns are not expected to result in significantly different accident experience. Since both intersections are projected to operate at good levels of service, the potential for increased accidents would be small. The project would remove bus loading activities that currently block 25th Avenue and E Alder Street. This would reduce conflicts with pedestrians and vehicles along both streets and at the E Alder Street/23rd Avenue intersection and improve overall safety conditions.

Transit Facilities and Service

Alternative 1 would construct a new bus loading/unloading area along the northwest portion of the site that would accommodate approximately 18 buses. The new bus facility would be accessed from an inbound driveway along 23rd Avenue at approximately E Terrace Street. Outbound buses would use the east leg of the E Jefferson Street/23rd Avenue signalized intersection to access the local roadway network. The location of the bus driveway together with bus loading activities could create some congestion along 23rd Avenue between E Alder Street and E Terrace Street. This is also the current location of a Metro Transit stop for Routes 4 and 48. The additional school bus activity is not expected to adversely impact Metro Transit service to the area. However, Metro Transit may desire to review the location of stops along 23rd Avenue based on the potential changes to access, traffic turning movements, and the emphasized Garfield High School building access points.

Non-Motorized Transportation Facilities

The redevelopment project would include reconstruction of sidewalks surrounding the site. In addition, access points surrounding the site would be improved to enhance pedestrian safety and security at the site. The site's walkway improvements were developed with community input in an effort to increase mobility on and through the campus for local residents and community members. The resulting site plan would likely include an east-west pedestrian walkway along the north edge of the site between 23rd and 25th Avenues, and a north-south walkway along the west side of the athletic facilities between E Alder Street and the E Jefferson Street/23rd Avenue intersection. Other pedestrian access enhancements are proposed along 23rd Avenue between the bus loading areas and the school building and along the north side of the school building. No adverse impacts to pedestrian or non-motorized facilities are anticipated.

3.4.2.2 Alternative 2 - Development within Existing Site Boundary

Construction

The construction-related traffic impacts of the proposed action would be similar to Alternative 1. Therefore, traffic and parking impacts would also be similar. For Alternative 2, the truck traffic related to material export would slightly higher than that identified for Alternative 1. Alternative 2 would require export of approximately 500 cy more than Alternative 1. This additional material would require a total of about 30 additional truck trips over the course of the three-month demolition and grading period. Alternative 2 is expected to have similar levels of construction employees and equipment as described for Alternative 1. Therefore, overall traffic and parking impacts would be similar.

A construction management plan (CMP) similar to that described for Alternative 1 would be prepared to address truck routes and lane closures.

Operation

Roadway Network

Alternative 2 would not require changes to the study area roadway network. Although no changes to the roadway network are necessary to accommodate the proposed Garfield High School redevelopment, one potential modification has been identified as part of Alternative 2. The project would reconfigure on-street parking along the north side of E Alder Street between 24th and 25th Avenues to provide back-in angle parking and would remove the existing bus loading area. These changes are expected to enhance traffic operations. The improvement would result during the afternoon loading period since parked buses on this section of E Alder Street would no longer narrow the roadway width of the street to one lane. As a result, less congestion is expected along this section of E Alder Street and at the intersections with 24th and 25th Avenues. The impacts on local-area parking conditions are discussed in a subsequent section.

Traffic Volumes

Alternative 2 would accommodate the same level of enrollment as Alternative 1 but would include a smaller main parking lot and would reconfigure only a portion of the on-street parking along E Alder Street to increase capacity. Therefore, the total number of parking spaces in lots and on-street adjacent to the school site would decrease. Alternative 2 would shift some trips from the existing main parking lot to the proposed main parking lot, which would be accessed from 23rd Avenue. The remaining trips would be shifted to on-street parking areas surrounding the school site. A small increase in traffic is expected along E Alder Street where a larger parking lot would be provided and a small increase in on-street parking would occur. Slight increases in traffic volumes would also be expected along nearby residential streets east and south of the site since increases in school-related parking would occur in these areas. However, overall traffic patterns surrounding the school would be very similar to existing conditions.

Since bus loading activity for approximately three buses is anticipated to remain on E Alder Street, Alternative 2 would not improve traffic operations and congestion as much as Alternative 1. However, some improvement is expected. Buses would no longer be required to double park along E Alder Street and operations along the roadway should be better than existing conditions. Some bus trips (approximately 3 morning and afternoon trips) would continue to occur along local neighborhood roadways such as 24th and 25th Avenues. This would be required for those buses that continue to load from E Alder Street. Overall, Alternative 2 would reduce the number of bus trips on these local neighborhood streets.

Alternative 2 would include provision of an on-site auto mechanics shop and would eliminate the need for midday bus trips to transport students between Garfield High School and Washington Middle School for class.

Traffic Operations

Traffic operations in the study area would be better than conditions without the project. This alternative would have little effect on traffic volumes but would slightly improve access conditions along E Alder Street. Intersection levels of service would be comparable to those presented for Alternative 1.

Parking

Alternative 2 would include approximately 63 spaces in two parking lots—one on the northwest corner of the site (with 37 spaces), and one in the central portion of the site (with 26 spaces) between the school building and the athletic fields. Alternative 2 would also slightly change the on-street parking capacity (by about two spaces) during most school hours. This is due to the loss of about 10 spaces along 25th Avenue due to curb-cut locations and a net increase of about eight spaces along E Alder Street due to the removal of the bus loading activity between 24th Avenue and 25th Avenue.

Alternative 2 would increase demand for on-street parking spaces farther from the school site. During peak hours of the school day, approximately 47 vehicles would be displaced from parking lots to on-street parking. When combined with the slight changes to on-street parking along 25th Avenue and E Alder Street, roughly 50 additional vehicles would require on-street parking along local neighborhood streets during peak school hours. While some of this demand may be accommodated by unused on-street spaces along E Alder Street or 25th Avenue, most would be accommodated by spaces further east and south of the school site. As a result, additional blocks may require RPZ designation to maintain parking supply for local residents.

Event Conditions

Alternative 2 is different than Alternative 1 in that the athletic facilities would not include a regulation track. As a result with Alternative 2, the site would not likely host track meets. The traffic and parking demand associated with spectator events at Garfield High School with Alternative 2 would be nearly identical to those that would occur with Alternative 1 and similar to those without the project. However, since less parking would be available immediately adjacent to the site with Alternative 2, parking demand for large events may overflow farther

from the school site into the adjacent neighborhood compared to existing conditions, future conditions without the project, or conditions with Alternative 1.

Site Access

Automobile, pedestrian, and truck access to the site with Alternative 2 would be virtually identical to that presented for Alternative 1. However, some bus loading activity would continue to occur along E Alder Street. Since most bus access to the site would be relocated to the on-site bus-loading area, bus access and operations are expected to be improved compared to existing conditions and conditions without the project.

Alternative 2 would include an auto mechanics shop at the northeast corner of the site in place of a surface parking lot. As a result, driveways serving the shop would be located south of the existing driveways and those proposed to serve the Alternative 1 parking area. Traffic into and out of the auto mechanics shop would be very low and very infrequent.

Safety

Alternative 2 would have approximately the same benefits and impacts to safety conditions as Alternative 1.

Transit Facilities and Service

Alternative 2 would have virtually the same impacts to Transit Facilities and Service as for Alternative 1.

Non-Motorized Transportation Facilities

Changes to non-motorized transportation facilities with Alternative 2 would be virtually identical to those described for Alternative 1. No adverse impacts to non-motorized facilities are anticipated.

3.4.3 Mitigation Measures

Several mitigation measures have been incorporated into the project alternatives as options to improve overall transportation, access, bus loading, and/or parking conditions in the site vicinity. Some or all of these mitigation measures will be included with any of the alternatives and include:

- For Alternative 1, reconfigure on-street parking along the north side of E Alder Street between 23rd and 25th Avenues to provide back-in angle parking in place of the existing parallel parking. Remove the school-bus loading signs and parking restrictions along the north side of E Alder Street.
- Consider utilizing on-street parking along Cherry Street just west of 25th Avenue for afternoon school bus staging or loading for three buses.
- For Alternative 2, reconfigure on-street parking along the north side of E Alder Street between 24th and 25th Avenues to provide back-in angle parking in place of the existing parallel parking. Remove the school bus loading signs and parking restrictions along the north side of E Alder Street in this section.

- For both alternatives, to minimize congestion during school peak drop-off and pick up periods, Garfield High School administration may desire to develop parent pick-up and drop-off guidelines to maintain safe and efficient operations.
- For both alternatives, during design of new on-site bus driveway access to 23rd Avenue opposite E Jefferson Street, work with SDOT and the local community to determine if signal phasing and/or lane channelization changes would be feasible and/or desirable at the E Jefferson Street/23rd Avenue intersection to improve operations, safety conditions, and school access operations during peak arrival and departure times.
- Work with the community and SDOT to determine if additional streets near the school should be added to the RPZ or if the existing restrictions should be modified.
- Prepare a construction management plan that addresses truck traffic and pedestrian control. It would identify truck routes, lane closures, sidewalk closures, and bus stop relocations. To the extent possible, the CMP would direct trucks away from residential streets to avoid unnecessary conflicts with resident and pedestrian activity.

In addition to the measures listed above, a potential mitigation measure that was considered for both alternatives was to increase the parking supply near the school by reconfiguring 25th Avenue between E Cherry and E Jefferson Streets. The west side of 25th Avenue between E Jefferson Street and E Cherry Street could be modified to provide back-in angle parking in place of the existing parallel parking. This change could also require removal of parallel parking along the east side of 25th Avenue in this section. A net increase of approximately 26 spaces could result with this modification. Approval from local neighbors and SDOT would be required. This potential mitigation was eliminated from further consideration because it would require the construction of a retaining wall along Seattle Parks Department property and the cost was not within the project budget.

3.4.4 Unavoidable Adverse Impacts

None of the project alternatives are expected to result in significant unavoidable adverse impacts to transportation facilities or operations.

3.5 RECREATION

The following section describes the existing recreational opportunities within the Garfield High School site and in the immediate vicinity of the school, in addition to recreational impacts associated with the proposed project. Also described is the Joint Use Agreement between the City of Seattle Parks and Recreation Department and the District, which permits school athletic facilities to be used for community youth and adult recreation activities.

3.5.1 Affected Environment

3.5.1.1 Off-site Recreational Facilities

A number of City of Seattle parks and recreational facilities are located within a 0.25-mile radius of Garfield High School and provide off-site recreational opportunities. These include the Garfield Community Center campus, Powell Barnett Park, Spruce Street Mini Park, and Pratt Park. Information on these parks and facilities was taken from the Seattle Department of Parks and Recreation website (Seattle Parks and Recreation, 2004).

The **Garfield Community Center** campus is located just north of the high school property. Facilities include a community center, the Medgar Evers Swimming Pool, the Garfield Playfield, and the Teen Life Center (inside gym).

Garfield Community Center offers a wide array of programs for youth, adults, and senior adults including team sports, fitness, dance classes, and computer literacy, as well as special events such as jazz night. The facility is open Mondays, Wednesdays, and Fridays from 1 to 9 p.m. and Tuesdays and Thursdays from 10 a.m. to 9 p.m.

Medgar Evers Pool is one of eight indoor pools operated by Seattle Parks and Recreation. Located in the Garfield Community Center Campus, this facility offers a wide array of programs for all ages including tot, youth, adult, and senior adult swimming lessons (both group and private) and water exercise classes, and family swim, public swim, and lap swim times. In addition, the facility includes two ADA-accessible family changing rooms, a sauna, and a universal weight machine. Hours of operation are Monday through Friday from noon to 8 p.m. and Saturdays from 8:30 a.m. to 5 p.m.

The Garfield Playfield is 9.4 acres in size and features lighted sportsfields, a children's play area, tennis courts, picnic tables, and restrooms. The playfield is open daily from 6 a.m. to 11 p.m.

The Teen Life Center is located on the north side of the high school gymnasium and provides a place for teens to participate in activities such as dances, music, movies, cooking, arts and crafts, games, discussion groups, field trips, and barbecues. Hours of operation are Monday through Thursday from 2 to 9 p.m., Fridays from 2 p.m. to 12:30 a.m., and Saturdays from 8 p.m. to 12:30 a.m.

Powell Barnett Park is located east of Garfield High School at 352 Martin Luther King Jr. Way. This 4.4-acre park includes a children's play area, climbing structures, a wading pool, basketball hoops, and a field for general activities. ADA-accessible restrooms are located next to the play area, and benches and picnic tables are located throughout the park. The park is open from 4 a.m. to 11:30 p.m.

Spruce Street Mini Park is a 0.7-acre modern play area that is open to the public from 4 a.m. to 11:30 p.m. The park includes a children's play area, benches, and landscaped areas.

Pratt Park is a 5.6-acre park that is open to the public from 4 a.m. to 11:30 p.m. The park features basketball hoops, a children's play area, a wading pool, trails, picnic tables, and restrooms.

In addition to the facilities described above, Washington Middle School and other parks and recreation facilities are located within 0.5 mile of the high school and provide further off-site recreational opportunities.

3.5.1.2 On-site Recreational Opportunities

Garfield High School students currently use the gymnasium for indoor sports during school and after school. Athletic programs include basketball, volleyball, gymnastics, and wrestling practices and games/meets, during their respective seasons. This includes both junior varsity and varsity sports.

Garfield High School students and non-school-related youth and adults also use the track and athletic field, located on the eastern half of the school site. The field is used for school practices for several sports including soccer, football, track and lacrosse, and some junior varsity football and soccer matches. Interscholastic athletic games for varsity football, baseball, and softball, as well as track meets, are held at off-site District facilities. The athletic field is scheduled for different community track teams on weekday evenings from March through May. The Seattle Parks and Recreation Teen Life Center uses the Garfield High School gymnasium from 6 p.m. to 9 p.m. on weekdays and occasionally on weekends. In addition, the Garfield Community Center uses the gym occasionally for events such as basketball tournaments (Neal, 2004). Parks also schedules use of the track and field.

The track and field are generally considered in poor condition with cracks in paved surfaces and poor drainage during wet periods.

3.5.1.3 Joint Use Agreement

Over one-third of the District's public schools adjoin Seattle Parks and Recreation Department land or facilities. The District and Parks have cooperated for more than 75 years in planning and jointly using these separately owned facilities and grounds to benefit students and community members. The District and Parks renewed an agreement for the joint use of facilities in August 2000; the current agreement is valid through August 31, 2005. The agreement sets forth guidelines for joint use of recreational facilities. Each agency has agreed to make its buildings and grounds available for use by the other agency on a first priority basis after the space requirements for its own programs have been met.

In 1997, the Joint Athletic Facilities Development Program (JAFDP) identified priority athletic facility projects that would increase field capacity and improve the quality of play on Seattle fields for both youth and adults. Seattle Parks and Recreation prepared an update to the 1997 program in June 2002 to increase the scheduling capacity and improve athletic fields as a whole. Garfield High School is mentioned in the 2002 update as a potential site for providing 1,300 hours for football/soccer and 300 hours for track and field sports (Seattle Department of Parks and Recreation, 2002).

3.5.2 Impacts of Alternatives

3.5.2.1 Alternative 1 – Preferred Action

Construction

No significant impacts to recreational activities are anticipated from project construction because Seattle Parks and Recreation does not currently program recreational activities at Garfield High School. Non-programmed football, soccer, track and field, and other activities played by youth and adults on the existing field would be temporarily displaced until the new athletic field is installed and available for use in 2008. Runners, joggers, and walkers who use the track would also temporarily be displaced until the new track is installed and available for use.

Activities that are programmed at Seattle Parks and Recreation's Teen Life Center, which is co-located at Garfield High School, would also be temporarily suspended or relocated to a School District facility during the construction period. As a result, the Garfield Community Center and Playfield, located adjacent to the high school, could experience an increase in recreational users during the construction period.

Under Alternative 1, the building footprint would be located close to the Garfield Playfield but would not displace or reduce the size of the ball fields. The existing playfield lights would have to be moved to the north, outside of the school building setback and property line (adjusted). Users of the Garfield Playfield could be subject to noise and dust from weekday construction activities.

Operation

No operational impacts to indoor recreational opportunities are anticipated because the new gymnasium would offer the same indoor court sports as the existing gymnasium. Student access to the gymnasium and athletic field and athletic equipment would be improved as a result of the new site configuration. Given the increased seating capacity of the new gymnasium, youth and adult usage of the new gymnasium could increase beyond existing conditions.

The new athletic field would provide an improved, regulation-sized outdoor facility that would accommodate football, soccer, and track activities. Synthetic turf would be installed at the site, allowing for potentially greater use due to the year-round availability of a synthetic field as opposed to natural turf. The new regulation track would be six lanes (400 meters) with an eight-lane straightaway.

The new field would accommodate high school football and soccer practices, along with junior varsity games for both sports. The improved outdoor facility would allow the District to schedule high school practices and junior varsity games at the Garfield site that are currently occurring elsewhere. The facility would be used by the Garfield High School junior varsity football team. The District would have use of the field from 9 a.m. to 5 p.m. Monday through Friday during the school year (September to June). Small track meets and practices would

require the use of the adjacent Garfield Playfield to accommodate field events such as discus and javelin.

The District has adopted a Joint Athletic Facility Agreement with Seattle Parks and Recreation. It is expected there would be an increase in field use by Seattle Parks and Recreation for both youth and adults outside of the school year with the redevelopment of the track and field to regulation-sized facilities. As previously stated, Seattle Parks and Recreation anticipates Garfield High School as a potential site for providing 1,300 hours for football/soccer and 300 hours for track and field sports. Adult sports activities, including recreational soccer games, would also be scheduled on the field and coordinated with Parks and Recreation. However, since athletic field lighting is not proposed as part of this project, adult sports activities would be restricted to daylight hours on the weekdays and weekends throughout the year.

The renovation of the athletic fields would provide an improved surface for football and soccer and would likely result in increased use for non-scholastic athletics such as adult and youth soccer or other field sports (e.g., ultimate Frisbee, rugby and lacrosse) that are organized through Seattle Parks and Recreation. These activities would be programmed around school use of the fields (generally after 5 p.m. or on weekends). The hours of usage scheduled by Seattle Parks and Recreation would increase from current conditions given that no activities are scheduled at the track and field. Seattle Parks and Recreation typically has access to school fields from 5 p.m. to dusk during the school year on weekdays and from 9 a.m. to dusk on weekends. During summer months, Parks athletic hours would be from 9 a.m. to dusk on weekdays and weekends. These hours of use would generally apply to the Garfield High School site following redevelopment of the site.

3.5.2.2 Alternative 2 – Development within Existing Site Boundary

Construction

Construction impacts would be the same as those described for Alternative 1 above.

Operation

Similar to Alternative 1, Alternative 2 would implement a synthetic-surface practice track and new sportsfield. Use of the track and sportsfield would be similar to the description for Alternative 1, including improved access and storage facilities. However, implementation of Alternative 2 would result in a non-regulation track and field, which may reduce the overall demand on the facility compared to Alternative 1.

This alternative also includes a four-lane, synthetic-surface practice track with an eight-lane straightaway. The facility would be used for track practices only since competitive tracks are required to have six lanes (400 meters) around the entire perimeter of the track to accommodate middle- and long-distance running events. Practice for these events would continue to occur at Garfield High School. Small track meets and practices would require the use of the adjacent Garfield Playfield to accommodate field events such as discus and javelin.

3.5.3 Mitigation Measures

There are a number of parks and recreational facilities in the vicinity of Garfield High School that could accommodate recreational activities. In particular, the Garfield Community Center and Playfield located adjacent to the high school on the north could accommodate many of the non-programmed recreational uses.

At the completion of the Garfield High School project, close coordination between the District and Seattle Parks and Recreation staff would minimize scheduling conflicts related to joint use of recreational facilities for students as well as the public. Since field lighting is not proposed as part of this project, hours of operation for the new athletic field would remain similar to present conditions.

3.5.4 Unavoidable Adverse Impacts

With the implementation of Alternatives 1 or 2 and associated improvements to the outdoor sportsfield, surrounding residents would experience increased traffic and noise associated with football, soccer, and track practices and competitions.

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Appendix A – Transportation Technical Report

TRANSPORTATION TECHNICAL REPORT

for

The Garfield High School Renovation & Redevelopment
Environmental Impact Statement

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Seattle Public Schools

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May 19, 2004

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INTRODUCTION

This technical report evaluates the transportation impacts of the proposed Garfield High School Renovation project. Elements addressed in this section include the school's affect on the roadway system, intersection operations, parking, traffic safety, site access, transit, and non-motorized facilities. The project also evaluates event conditions that could occur with the school facilities.

AFFECTED ENVIRONMENT

This section includes descriptions of the existing and future roadway network, existing and future traffic volumes, traffic operations, safety, intersection operations, transit facilities, and non-motorized facilities. These are the conditions against which the impacts of the project will be compared. Figure 1 shows the project site location and vicinity of Garfield High School.

Existing Site Description

The existing Garfield High School is located at 400 - 23rd Avenue in Seattle. The school site is bounded by 23rd Avenue to the west, E Alder Street to the south, 25th Avenue to the east, and approximately E Jefferson Street to the north. The existing site has approximately 71 striped parking spaces in two lots on the site. One parking lot located north of the existing athletic field and northeast of the high school buildings, has 64 striped spaces that are primarily used by school staff. Approximately 15 additional vehicles often park in unstriped areas of this lot. This parking lot is accessed from a driveway located on 25th Avenue opposite the E Jefferson Street approach. A small parking area with seven (7) striped parking spaces is located along the eastern side of the school building and is accessed from a driveway on E Alder Street. Eight (8) additional vehicles often park in unstriped areas of this lot. In total, the existing school site has space for approximately 93 parked vehicles. Adjacent to the school site east of the E Jefferson Street/23rd Avenue intersection, there is a Parks Department parking lot with 17 striped parking spaces.

All remaining parking demand generated by the school is currently served by on-street parking supply on surrounding roadways. The largest concentration of school parking is along the west side of 25th Avenue between E Alder and E Jefferson Streets. There are approximately 57 unrestricted back-in-angle on-street parking spaces on this section of roadway (although these spaces are not currently striped). Student and staff parking also occurs on street along other nearby residential roadways including 24th Avenue, 26th Avenue, E Spruce Street, E Jefferson Street, and E Alder Street.

Bus loading and unloading occurs in several locations. There are signed bus loading areas along the north side of E Alder Street between 23rd and 25th Avenues. The curb along this section of school frontage is signed for "bus-loading only" between 7:00 and 9:00 A.M. and between 1:00 and 3:00 P.M. School-related and resident parking occurs in these areas when they are not restricted to bus loading. The bus-loading areas are not adequate to accommodate the number of yellow school buses that serve Garfield High School. Therefore, buses are double parked along E Alder Street during the afternoon load period and two other areas are used for bus loading—the west side of 25th Avenue just north of Jefferson Street and 23rd Avenue just north of E Alder Street. Observations indicate that buses also occasionally load students from the middle of the street on 25th Avenue south of Alder Street. Since parking is allowed on both sides of the street in this area, the buses effectively close 25th Avenue for between 15 and 30 minutes during afternoon loading period. While buses are double parked along E Alder

Street between 23rd and 25th Avenues, E Alder Street is narrowed to one lane for both directions of traffic during bus loading activities in the afternoon.

The site includes an existing auditorium/theater, which is used for student performances and classes. The existing auditorium has seating for 673 people (source: seat count by BLRB Architects).

The existing school has a gymnasium with estimated bleacher seating capacity for 2,016 persons (source: estimate by BLRB Architects). The existing gymnasium is used for interscholastic athletics including boys' and girls' basketball, volleyball, gymnastics, and wrestling. The existing outdoor athletic facility has a non-regulation track and a grass football/soccer field (with soccer goals/football goalposts). There are baseball/softball fields located northeast of the school property on Seattle Parks and Recreation Department property. The Seattle School District Athletic Department (source: Ammon McWashington, Seattle Schools Athletics Director, November 2003) provided information about the athletic activities that currently occur at the site. The existing site is used for several athletic activities. The gymnasium is used for boys' and girls' basketball, gymnastics, volleyball, and wrestling. The on-site outdoor athletic facilities are used for junior varsity football games, and junior varsity soccer matches. The Parks Department fields are used for varsity and junior varsity baseball and softball games. In addition, the existing athletic fields are used for practices for several sports. Interscholastic athletic games for varsity football, soccer, tennis, as well as track meets are held at other off-site facilities such as Memorial stadium, West Seattle Stadium, Interbay, or the four recently renovated facilities at Ingraham, Sealth, Nathan Hale, or Rainier Beach High Schools.

Finally, there is a Teen Life Center operated by Seattle Parks and Recreation located on the north side of the existing gymnasium. The facility provides a place for teens to spend time and participate in a variety of activities such as dances, barbecues, and events at the Medgar Evers Pool. The center is open Monday through Thursday from 2:00 to 9:00 P.M., Fridays from 2:00 P.M. until midnight, and Saturdays from 8:00 P.M. until midnight.

For the 2003-2004 academic year, total enrollment at Garfield is 1,657 students (source: Susan Dersé, Garfield High School Principal)—slightly lower than for the 2002-2003 academic year, which had total enrollment of 1,688 students (Source: Seattle Public Schools, Garfield High School 2002 Annual Report). The Seattle School District plans for further reductions in enrollment at Garfield High School over the next several years based on demographic trends in Seattle. By year 2008 when the redevelopment project is complete, the enrollment is expected to be 1,600 students or fewer. This level of enrollment is expected with or without the proposed redevelopment project. The school has 95 teachers, 25 support staff, and 4 administrators.

Roadway Network

The study area for this analysis was determined based on the potential effects that could occur from the Garfield High School redevelopment project. These potential effects are described in detail for each alternative later in this report. The study area for the transportation analysis is shown on Figure 1 and includes the following intersections and associated roadways:

Signalized Intersections

- 23rd Avenue/E Cherry Street
- 23rd Avenue/E Jefferson Street

Unsignalized Intersections

- 25th Avenue/E Cherry Street
- 25th Avenue/E Jefferson Street
- 25th Avenue/E Alder Street
- 23rd Avenue/E Alder Street (has pedestrian-actuated signal)

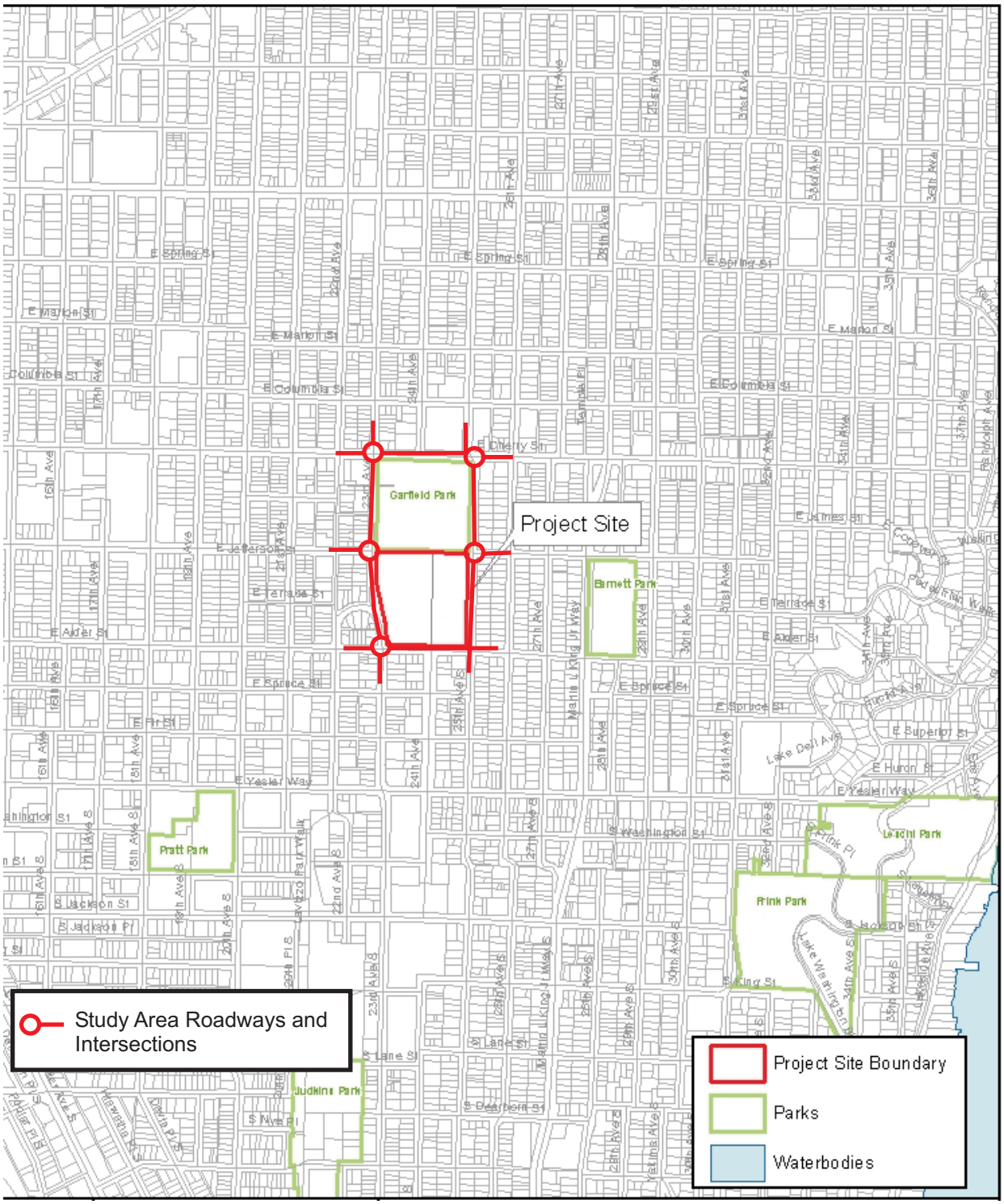

Figure 1

PROJECT SITE LOCATION AND SITE VICINITY

GARFIELD HIGH SCHOOL
RENOVATION & REDEVELOPMENT
ENVIRONMENTAL IMPACT STATEMENT

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These intersections and roadways were selected based on routes used to access the site and the potential for project related impacts. The proposal is not expected to change traffic volumes or access routes outside of the project study area.

Near the school, there is a Residential Parking Zone (RPZ) that restricts parking to two-hours between 7:00 A.M. and 4:00 P.M. except with a Zone 14 permit. The RPZ parking restrictions and locations are identified later in the *Parking* section. Within the City of Seattle, the speed limit on arterials is 30 mph, unless otherwise posted; the speed limit on other roadways is 25 mph. The existing roadway conditions are described below:

23rd Avenue is a four-lane, north-south principal arterial providing access between Rainier Avenue S to the south and E Madison Street to the north. In the vicinity of the project site, parking is not allowed on the west side of the street. Parking is also not allowed on the east side of the roadway except for a short section just north of E Jefferson Street adjacent to the Medgar Evers Pool. All but two of these spaces have no restriction. One space is signed as a 30-minute load space on weekdays; the other is signed for disabled parking only.

23rd Avenue has curbs, gutters, and paved sidewalks on both sides. Near Garfield High School, the roadway is approximately 42 feet wide. Traffic signals are located at E Jefferson Street and E Cherry Street and both intersections have pedestrian signals and crosswalks on all four legs. There is a pedestrian-actuated signal located on the north side of E Alder Street. The signal stops north-south traffic on 23rd Avenue to allow people to cross 23rd Avenue. However, the signal does not control vehicular movements to or from Alder Street. The posted speed limit on 23rd Avenue is 30 mph.

25th Avenue provides north-south access adjacent to the site. Near Garfield High School, it is a two-lane local-access road. The roadway has curbs, gutters, and paved sidewalks on both sides. For most of its length, 25th Avenue is approximately 25 feet wide, but it widens to about 34 feet between E Jefferson and E Alder Streets where back-in angle parking is allowed on the west side. Its intersection with E Cherry Street is controlled by a stop sign. There is a traffic circle at the intersection with E Alder Street.

E Cherry Street is a four-lane roadway with two lanes in each direction. It provides east-west access from downtown Seattle to the west and the Madrona/Leschi neighborhoods near Lake Washington to the east. It is identified as a minor arterial from 23rd Avenue to James Way, as a minor arterial east from 23rd Avenue to Martin Luther King Jr. Way, and as a collector arterial east to 37th Avenue. Between 23rd and 25th Avenues, the roadway is approximately 47-feet wide and striped for one lane of travel in each direction. Parking is allowed on the south side of the street between 24th and 25th Avenues. No on-street parking is allowed on the north side of the roadway in this section. The Nova Alternative Public High School is located in the Horace Mann Building at 2410 E Cherry Street (on the north side of the street). There is intermittent on-street parking along Cherry Street east of the study area. There is a marked and signed crosswalk with curb-bulb extensions located mid-block on E Cherry Street. This crosswalk provides a direct pedestrian connection between Nova High School and the Garfield Community Center parking area between 24th and 25th Avenues.

E Jefferson Street is a two-lane east-west roadway that extends east from the site at 25th Avenue and extends west from the site at 23rd Avenue. It is vacated between 23rd and 25th Avenues along the north property line of Garfield High School. Between 23rd Avenue and 8th Avenue, Jefferson Street is identified as a collector arterial. East of the school it provides local-residential access from 25th Avenue to 32nd Avenue. Near Garfield High School, there are curbs, gutters, and sidewalks on both sides, and the street is approximately 25 feet wide. Parking is not allowed along Jefferson Street west of 23rd Avenue. Parking is allowed on both sides of E Jefferson Street east of 25th Avenue.

E Alder Street is a local-access residential roadway that provides east-west access between 14th Avenue and 32nd Avenue. Near Garfield High School, there are curbs, gutters, and sidewalks on both sides. The roadway is approximately 25 feet wide. West of 23rd Avenue, parking is allowed on both sides with no restrictions. Between 23rd and 25th Avenues, parking is not allowed on the south side of the

street while there is a school-bus load-unload zone on the north side. Parking is allowed in these areas except during the weekdays between 7:00 and 9:00 A.M. and again between 1:00 and 3:00 P.M. Between 24th and 25th Avenues, there is recessed curb along the north side of the roadway for the bus load-unload zone. Between 25th and 26th Avenues Residential Parking Zone (RPZ) 14 restricts on-street parking on the south side of the street; parking is unrestricted on the north side. East of 26th Avenue, on-street parking is unrestricted.

Several planning documents were reviewed to determine what transportation improvements might be made near Garfield High School by 2008 when it would reopen. These documents included: the *Central Area Action Plan II* (the neighborhood plan encompassing the area surrounding Garfield High School); the *Plan Matrix for the Central Area Neighborhood Plan*; the *City of Seattle 2003-2008 Adopted Capital Improvement Program*; and the *2004-2009 Proposed Capital Improvement Program.* The following describes each document and the parts pertinent to the Garfield High School area.

The *Central Area Action Plan II* (the neighborhood plan encompassing the area surrounding Garfield High School) included several recommendations for traffic calming, pedestrian enhancements, and parking management strategies. The plan can be viewed at www.cityofseattle.net/neighborhoods/npi/plans/central. Recommendations in the *Transportation* section included the following:

- **23rd Avenue Corridor.** Recognize 23rd Avenue as the arterial backbone that links the Central Area's major economic hubs, including Jackson, Cherry, Union, and Madison Streets. Work with the Seattle Department of Transportation (SDOT), Seattle Parks and Recreation, and Seattle City Light Tree Planting Program to implement the "23rd Avenue Central Corridor" concept. Proposed improvements include:
  - → Identify opportunities for planting trees where enough right-of-way exists and incorporating visible landscaped open space in new developments;
  - → Install textured crosswalks or other treatments at key intersections; provide directional signage that leads the way to different neighborhoods and neighborhood facilities.
  - → Provide interpretive kiosks, exhibits, and community bulletin boards that could become part of a "heritage route" along 23rd Avenue between Jackson and Madison.
- **Mid-Block Crossings.** Explore options for improving the safety of the existing mid-block crossings (Cherry Street at Garfield Community Center completed and Jackson at Central Park Trail in process).
- **Impacts of School Buses.** Review impacts of school bus access routes and loading and unloading and student parking on the surrounding neighborhoods, specifically the impact on 25th at Garfield High School and also at Meany School.
- **Cherry Street Improvements.** Work with SDOT and Seattle Parks and Recreation to plan and implement improvements on Cherry Street to complement the new Garfield Community Center development. Request on-street parking along Cherry between 23rd and 25th Avenues.
- **Cherry Street at 23rd Avenue.** Work with SDOT and Seattle Parks and Recreation to develop plans that will further enhance the pedestrian character at the 23rd Avenue/Cherry Street intersection, complementing the presence of the Garfield Community Center.
- **Parking Study.** Perform a parking study for the area around the Garfield Community Center on Cherry Street between 23rd and 25th. Address illegal parking on planting strips. Recommend removal of "no parking" signs on Cherry Street. Consider making 25th Avenue one way.
- **Key Bicycle Streets.** Designate key bicycle streets and work with SDOT to target improvements on these streets, adding lane striping and/or bicycle symbols where possible, and to en-

sure that future transportation decisions do not degrade travel safety for cyclists. Key bicycle streets currently identified include Martin Luther King Jr. Way, 20th/19th, 14th, and 12th Avenues, Jackson Street, Cherry Street east of 23rd, and Union Street to 34th Avenue, Denny Way and Madrona Drive, as well as the regional trail systems along Lake Washington Boulevard and Hiawatha Place to Dearborn Street.

- **Pedestrian Streets**. Designate other key arterials as Key Pedestrian Streets, including Martin Luther King Jr. Way, 23rd Avenue, Cherry Street between 23rd Avenue and Martin Luther King Jr. Way, and Yesler Street between Boren and 23rd Avenues.
- **Traffic Calming at Business Nodes.** Examine traffic calming measures at major commercial nodes to promote stopping and shopping. Evaluate possibility of on-street, off-peak parking on 23rd Avenue. Implement a demonstration project between Cherry Street and Union Street. Consider designating a through-transit and right-turn-only lane on Union Street at 23rd Avenue to improve safety of the intersection.
- **Bus Shelter Improvements.** Work with Metro, the City, and developers to ensure provision of comfortable bus shelters with the new developments at 23rd Avenue and Jackson, Cherry and Unions Streets.

The *Plan Matrix for the Central Area Neighborhood Plan* includes several actions being undertaken by the SDOT as a result of the above recommendations.

- **Number OI-27** would consider making 25th Avenue one-way for the block south of Cherry Street. SDOT has indicated that it will work with the community on this once a community lead has been identified.
- **Number NH-5** would designate Cherry Street as a Key Pedestrian Street between 23rd Avenue and Martin Luther King Jr. Way. The project would rebuild 120 feet of curb and repair sidewalks on Cherry Street between 23rd and 25th Avenues to improve pedestrian safety, add on-street parking (by consolidating driveways), and improve access to high schools and the Garfield Community Center. This project is anticipated to be complete in 2004.
- **Number NH-6** installed curb bulbs on Cherry Street at the Garfield Community Center mid-block to the Nova High School building.
- **Number NH-7** would have SDOT work with community to provide on-street parking on Cherry Street between 23rd and 25th Avenues and would remove “no parking” signs on Cherry Street between 23rd and 25th Avenues. No completion date has been set.
- **Number NE-3** would have King County Metro review bus stop locations along 23rd Avenue and make recommendations for consolidation as appropriate. It would also recommend bus stop improvements including lighting and shelters. This is expected to be complete in the first quarter of 2004.

There were no specific funded transportation projects within the local site vicinity included in the Transportation sections of the *City of Seattle 2003-2008 Adopted Capital Improvement Program* or the *2004-2009 Proposed Capital Improvement Program*. Therefore, existing intersection and signal conditions were assumed to remain for future-year-2008 conditions. Although, the *Central Area Neighborhood Plan* recommended considering making 25th Avenue one way south of Cherry Street. That change has not been fully reviewed by the SDOT, Department of Neighborhoods, or the local residents that would be affected (source: John Marek of SDOT, and Ted Divina of the Department of Neighborhoods). Therefore, the analyses in this report assume that 25th Avenue would continue to operate as it does today. The remaining actions included in the *Plan Matrix* were assumed to be complete by 2008.

Traffic Volumes

The following sections summarize existing (2004) and future (2008) without-project traffic volumes for both Garfield High School and for background traffic. Year 2008 is the expected re-opening year for Garfield High School.

School Traffic

Due to the urban location of Garfield High School and the limited amount of parking, students regularly use a variety of travel modes to access the school. Significant numbers of students use "yellow" school buses, Metro Transit, and walk to school. According to data provided by the Seattle Public Schools' Transportation Office, approximately 65% of Garfield students are eligible for District Transportation and 64% are assigned to "yellow" school bus routes. The remaining 1% is assigned Metro passes. Average daily ridership on school buses is roughly 47% of the total school enrollment. The remaining students generally arrive at school by car (e.g. carpools, parent drop-off, or drive-and-park), Metro bus, or non-motorized modes (walk or bicycle).

The routes that drivers take to access Garfield High School are related to the location of major arterials in the site vicinity (23rd Avenue and Cherry Street), the location of parking lots and on-street parking, and the areas where bus and automobile loading typically occurs. Inbound vehicles arrive at Garfield along Alder Street, Jefferson Street, 24th Avenue, 25th Avenue, or Spruce Street. Automobile passenger loading generally occurs in several locations including 25th Avenue, the parking lots, E Alder Street, and the small Parks Department parking lot located at the northwest corner of the site. Bus loading zones are located on Alder Street, 25th Avenue, and 23rd Avenue. Since parking is allowed on both sides of 25th Avenue south of the site and Alder Street east of the site, these narrow two-way streets become congested during morning arrival times and particularly afternoon departure times. Parking and bus loading on E Alder Street limits two-way traffic to one travel lane, which also causes congestion at the E Alder Street/25th Avenue intersection while vehicles wait for an opportunity to use the street.

To document the level of traffic generated by the school, four-day machine traffic counts were performed in two locations adjacent to the school—on 25th Avenue north of E Jefferson Street and on E Alder Street east of 23rd Avenue. The counts were performed from January 26th through January 29th, 2004. Since there was no school on Monday, January 26th (the day between semesters), the counts from this day were compared to the average of the three following weekdays. The comparison helps to demonstrate the existing level of traffic generated on adjacent roadways by Garfield High School on a typical weekday. Table 1 shows the results of the comparison and the estimated number of trips generated by Garfield High School on the two adjacent roadways. Estimates of daily trips as well as peak hour trips are presented. These school-related volumes determined for Garfield High School are reasonable, given the size of the school and percentage of students using yellow buses or Metro.

Table 1. Summary of Existing Garfield Traffic Generation on 25th Avenue and E Alder Street

Period	Inbound	Outbound	Total
Daily	660	660	1,320
School AM Peak Hour (7:00 to 8:00 A.M.)	260	215	475
School PM Peak Hour (2:00 to 3:00 P.M.)	70	110	180
Commuter PM Peak Hour (5:00 to 6:00 P.M.)	15	10	25

Note: classes begin at 7:40 A.M. and students are dismissed at 2:15 P.M.

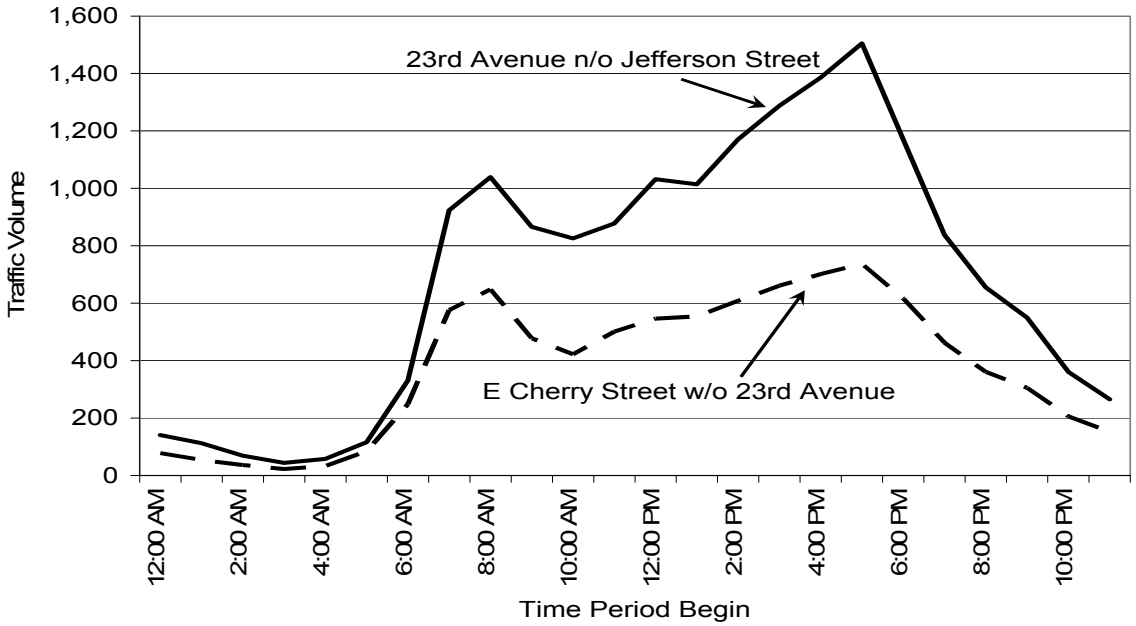
The Seattle School District has begun preparing for reduced enrollment at Garfield High School based on demographic forecasts for the overall district. By year 2008, the total enrollment at Garfield will be reduced to 1,600 students from the current enrollment of 1,657. This is expected to occur with or without the redevelopment project. While this reduction in enrollment is expected to reduce the overall number of trips made to the area surrounding the school, traffic on roadways immediately adjacent to the school are not expected to decrease noticeably with the slight reduction in enrollment. Analyses of future conditions without the project assume the existing level of traffic volume—no reduction was assumed to account for reduced enrollment.

Background Traffic

Traffic volume data were collected from several sources. Historical 24-hour machine counts from spring 2003 were obtained from the City of Seattle for 23rd Avenue and E Cherry Street. New turning movement counts were performed specifically for this project at study area intersections in January 2004.

The City's 24-hour machine counts on 23rd Avenue and E Cherry Street were compiled to better understand daily traffic patterns near the site. Figure 2 shows the hourly traffic volumes on these two roadways. As shown, the highest volumes on both roadways occur during the commuter PM peak hour (5:00 to 6:00 P.M.). The AM peak hour (8:00 to 9:00 A.M.) traffic volumes are lower by 31% on 23rd Avenue, and by 12% on E Cherry Street. During the hours when Garfield generates the most traffic, volumes on these roadways are also much lower than the commuter PM peak hour. During the hour when most students arrive for class (7:00 to 8:00 A.M.), traffic on 23rd Avenue and E Cherry Street is between 22% and 39% lower than the commuter PM peak hour volumes. Between 2:00 and 3:00 P.M., when most students leave the school (dismissal is at 2:15 P.M.), traffic on the surrounding streets are between 17% and 22% lower than the commuter PM peak hour volumes. Based on these data, the school PM peak hour (between 2:00 and 3:00 P.M.) and the commuter PM peak hour (5:00 to 6:00 P.M.) were selected for detailed analyses. These are the two hours when school-related traffic and other background traffic are highest.

Figure 2. Total Hourly Traffic Volumes on Surrounding Arterials



Source: 23rd Avenue counts by City of Seattle Department of Transportation, April & March 2003
E Cherry Street counts by City of Seattle Department of Transportation, March 2003

New afternoon (2:00 to 6:00 P.M.) turning-movement counts were performed at the five study-area intersections on Wednesday, January 28, 2004. The day of the counts was a typical school day with normal classes and no large spectator events (athletics or performing arts). The counts were performed at:

- 23rd Avenue/E Cherry Street
- 23rd Avenue/E Jefferson Street
- 23rd Avenue/E Alder Street
- 25th Avenue/E Cherry Street
- 25th Avenue/E Jefferson Street

Figure 3 shows the existing (2004) school PM peak hour (2:00 to 3:00 P.M.) traffic volumes at study area intersections. Figure 4 shows the existing (2004) commuter PM peak hour (5:00 to 6:00 P.M.) traffic volumes. It is important to note that these counts include traffic that is currently generated by Garfield High School with its current enrollment of 1,657 students.

The proposed Garfield High School Redevelopment project is proposed to begin construction in summer 2006 and end by August 2008. The school would be reopened for the 2008/2009 school year in September 2008. Therefore, to represent conditions when the project will likely be fully complete and in use, year 2008 was selected for all future year analyses—four years from existing conditions. To estimate future year-2008-traffic conditions without the proposed redevelopment, a compound annual growth rate was applied to existing traffic volumes at study area intersections. The following describes the traffic forecasting method.

A single growth rate for all intersections in the study area was developed based on a review historical traffic counts performed by the City of Seattle from 1998 to 2003. Over this five-year period, traffic on local streets decreased slightly. This is consistent with traffic count results in several areas of Seattle over this period. However, as recommended by the City of Seattle's Department Planning and Design (DPD) staff, a 0.5% compound annual growth rate was applied to all existing 2004 volumes to estimate 2008 traffic volumes. The growth rate is intended to account for potential increases in traffic passing through the study area and traffic generated by developments that have not yet applied for permits or are unknown at this time. It also provides a conservative worst-case condition for traffic analysis. The DPD staff was also contacted to determine if any other projects are proposed in the site vicinity and should be considered separately as part of the future traffic forecasts. The DPD staff indicated that there are no specific projects near the site with permit applications on file. Therefore, DPD staff indicated that the 0.5% annual growth rate would adequately represent future traffic growth near the site.

Figures 5 and 6 show the forecast 2008-without-project traffic volumes for the school PM peak hour and commuter PM peak hour, respectively.

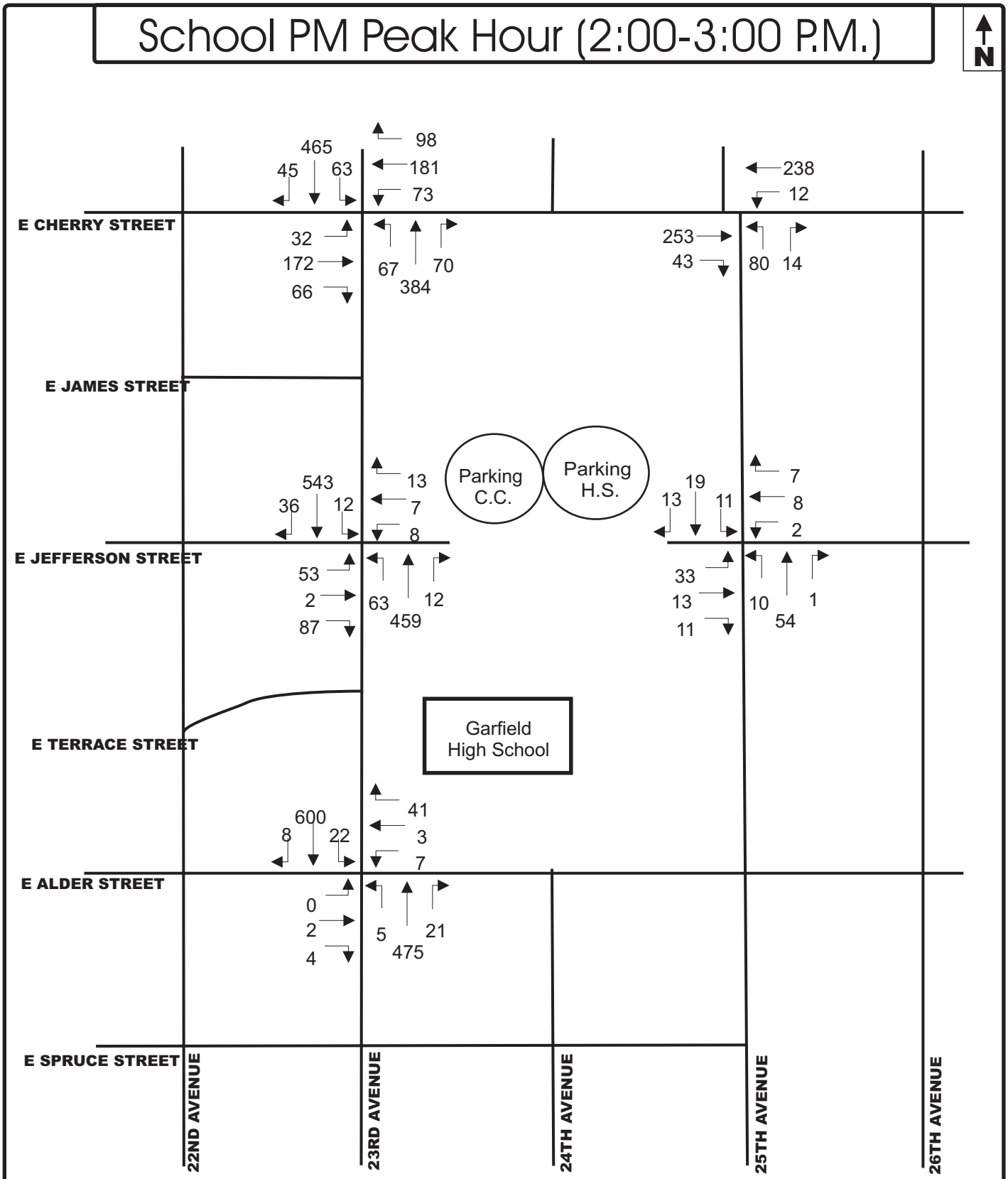


Figure 3

GARFIELD HIGH SCHOOL
RENOVATION & REDEVELOPMENT
ENVIRONMENTAL IMPACT STATEMENT

EXISTING (2004) SCHOOL PM PEAK HOUR TRAFFIC VOLUMES

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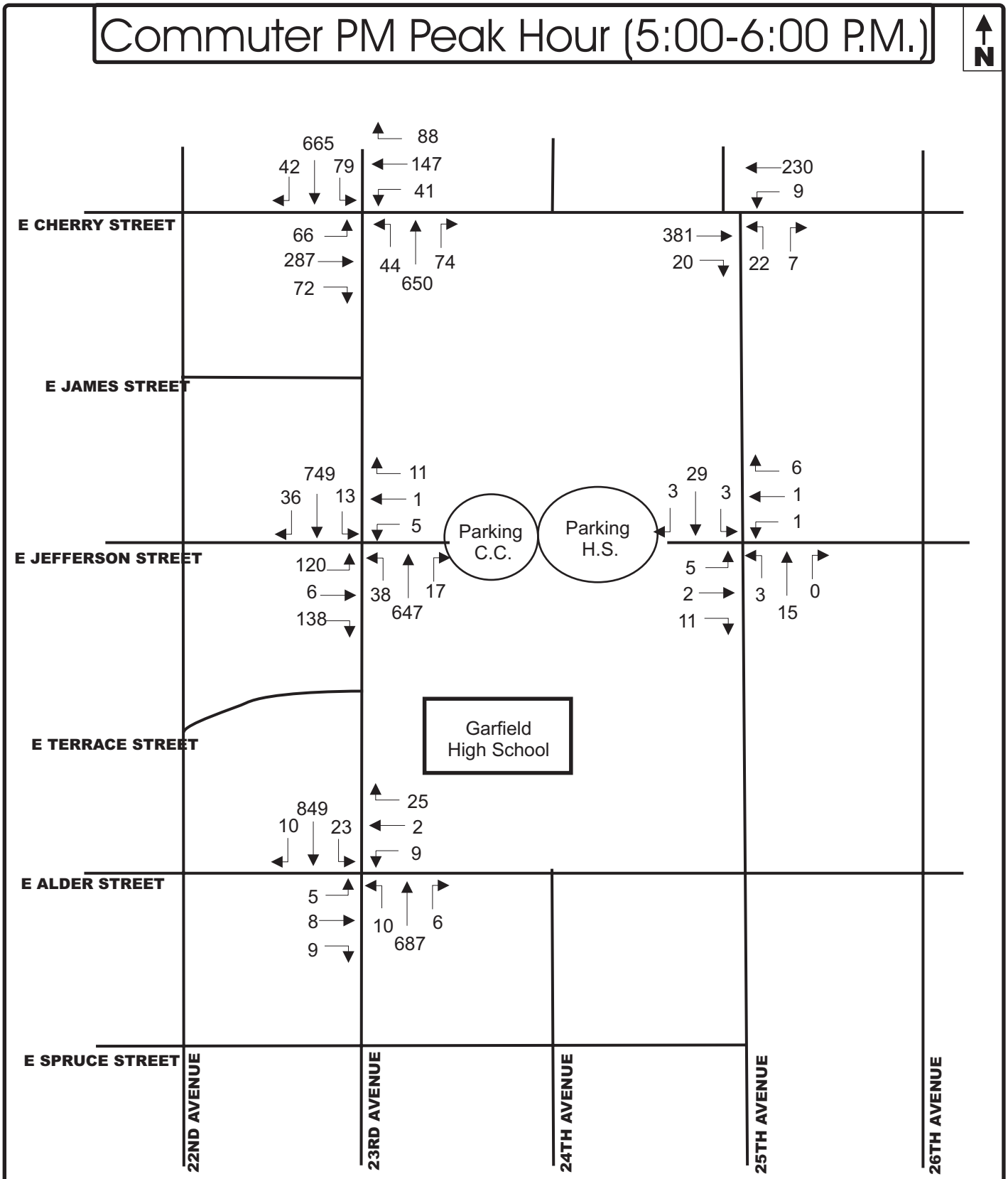

Figure 4

GARFIELD HIGH SCHOOL
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ENVIRONMENTAL IMPACT STATEMENT

EXISTING (2004) COMMUTER PM PEAK HOUR TRAFFIC VOLUMES

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School PM Peak Hour (2:00-3:00 P.M.)

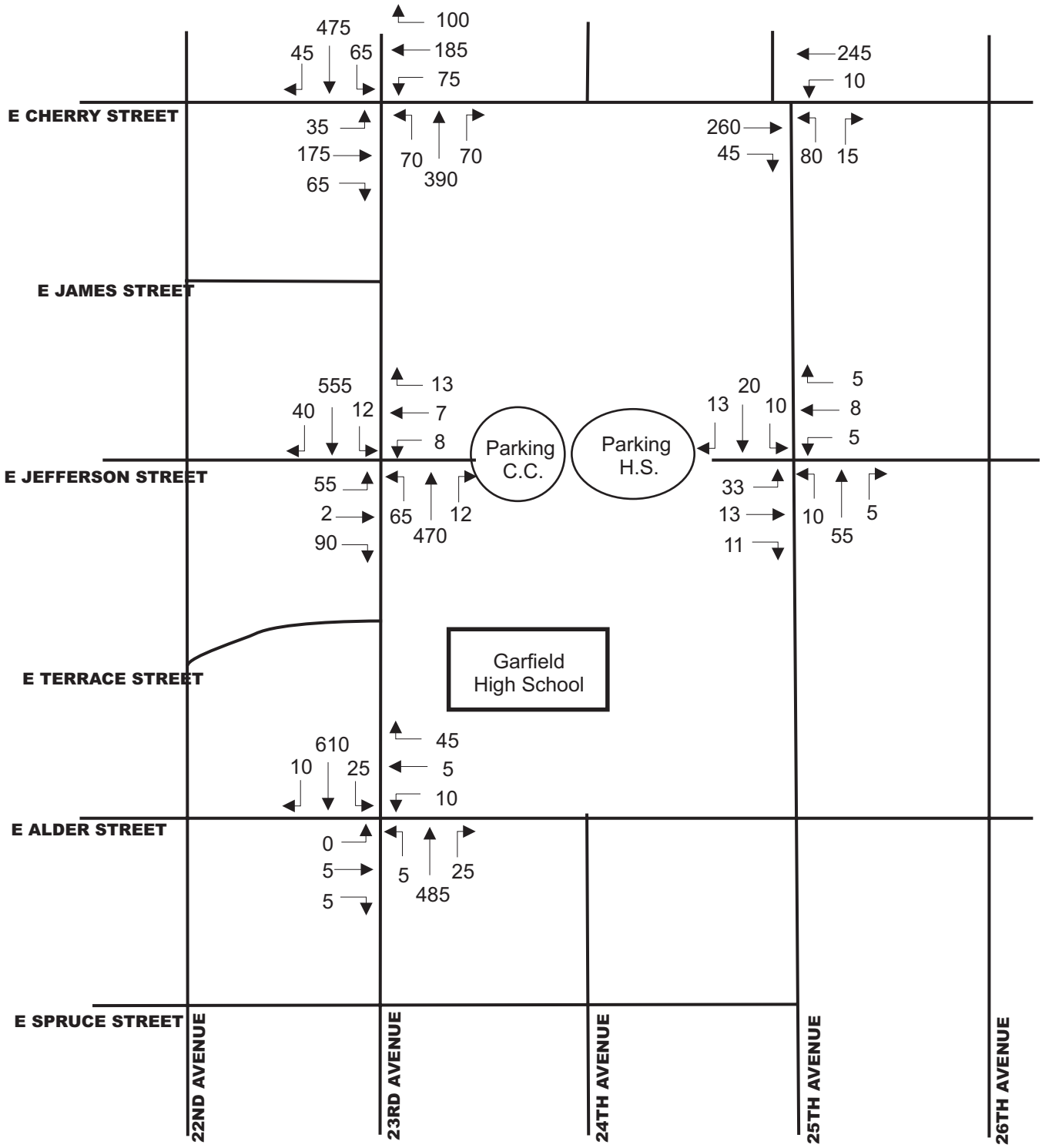

Figure 5

GARFIELD HIGH SCHOOL
RENOVATION & REDEVELOPMENT
ENVIRONMENTAL IMPACT STATEMENT

FORECAST 2008 WITHOUT- PROJECT
SCHOOL PM PEAK HOUR
TRAFFIC VOLUMES

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Commuter PM Peak Hour (5:00-6:00 P.M.)

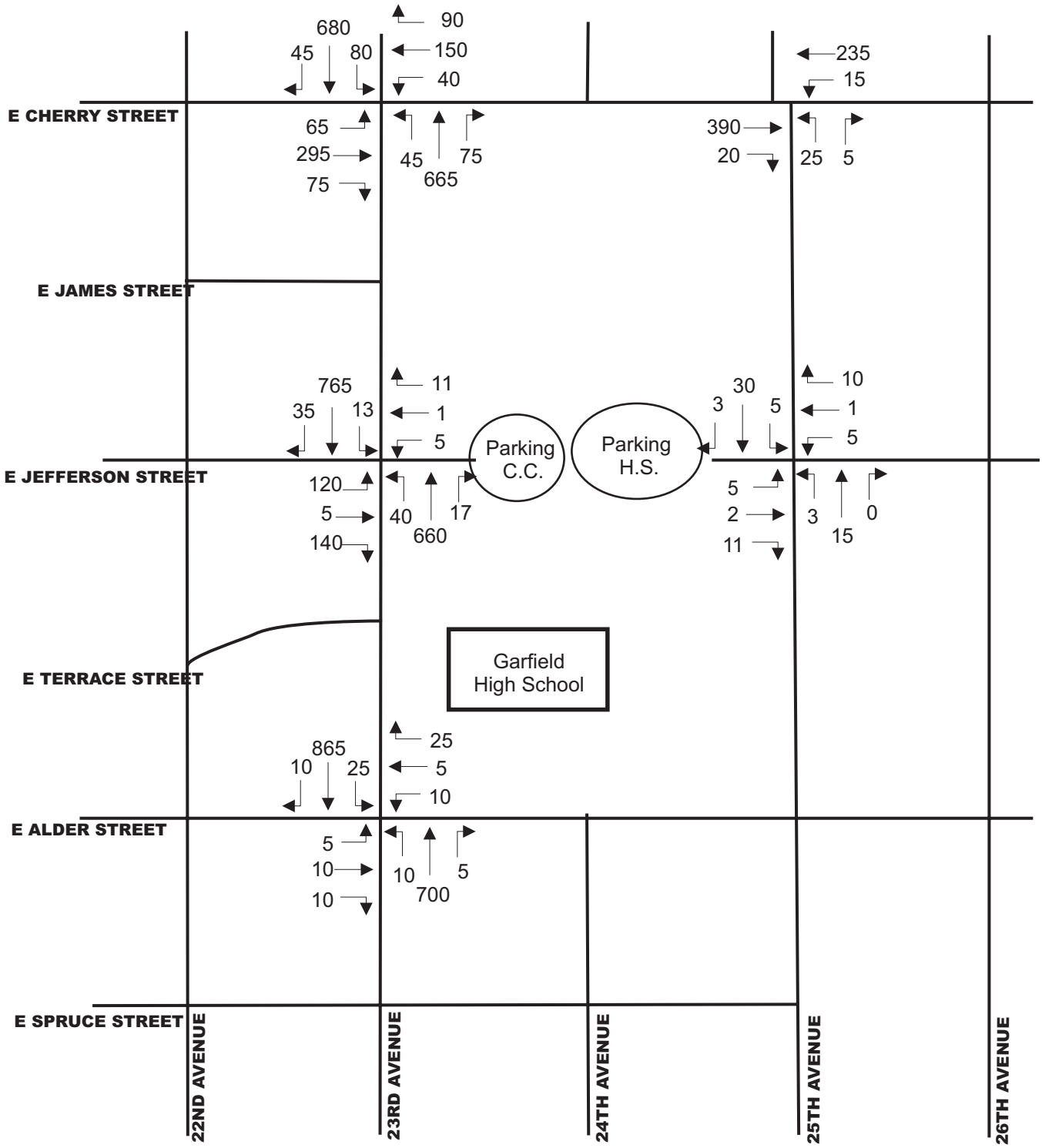

Figure 6

GARFIELD HIGH SCHOOL
RENOVATION & REDEVELOPMENT
ENVIRONMENTAL IMPACT STATEMENT

FORECAST 2008 WITHOUT-PROJECT
COMMUTER PM PEAK HOUR
TRAFFIC VOLUMES

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Traffic Operations

The quality of traffic flow and intersection operations is defined by level of service (LOS). Levels of service are qualitative descriptions of traffic operating conditions and are designated with letters ranging from "A," which is indicative of good operating conditions with little or no delay, to "F," which is indicative of stop-and-go conditions with frequent and lengthy delay. Operating conditions of LOS D or better are acceptable within the City of Seattle. The existing traffic operating conditions in the study area were analyzed using the methodology in the *Highway Capacity Manual 2000* (Transportation Research Board, 2000). All level of service analyses were performed using the *Synchro* analysis software, which is widely used by the City of Seattle for evaluating traffic operations. The traffic signal timings (including coordination characteristics, signal offsets, cycle lengths, and phase splits) were provided by the City of Seattle and field verified.

Table 2 summarizes the levels of service at the five study area intersections during the school (2:00 to 3:00 P.M.) and commuter (5:00 to 6:00 P.M.) PM peak hours. The signalized intersections currently operate at LOS D or better during both peak hours. Drivers turning onto or crossing 23rd Avenue from E Alder Street experience LOS E conditions during the commuter PM peak hour. The other unsignalized study-area intersections operate at LOS D or better. The potential 0.5% annual increase in traffic on 23rd Avenue would degrade the westbound movements from E Alder Street at 23rd Avenue from LOS C to LOS D. Otherwise, all intersections are expected to continue operating at existing levels in 2008 without the project.

Table 2. Level of Service Summary – Existing and 2008-Without-Project

	School PM Peak Hour (2:00-3:00 P.M.)						Commuter PM Peak Hour (5:00-6:00 P.M.)					
	Existing			2008-Without-Project			Existing			2008-Without-Project		
Signalized Intersection	LOS [1]	Delay [2]	v/c [3]	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c
23rd Avenue/E Cherry Street	C	24.6	0.71	C	24.7	0.71	D	35.1	0.86	D	35.5	0.87
23rd Avenue/E Jefferson Street	A	8.7	0.57	A	8.6	0.58	A	9.8	0.75	A	9.9	0.76
Unsignalized Intersection	LOS		Delay	LOS		Delay	LOS		Delay	LOS		Delay
23rd Ave/E Alder St												
Eastbound from E Alder St	C		20.9	D		27.5	E		41.3	E		46.2
Westbound from E Alder St	C		20.8	C		24.5	C		24.0	D		30.6
Northbound left from 23rd Ave	A		0.3	A		0.3	A		0.5	A		0.5
Southbound left from 23rd Ave	A		1.0	A		1.1	A		0.8	A		0.9
25th Avenue/E Jefferson Street												
Eastbound from Site Access	B		13.0	B		13.0	A		9.1	A		9.2
Westbound from E Jefferson St	B		11.3	B		11.8	A		9.0	A		9.1
Northbound left from 25th Ave	A		1.2	A		1.2	A		1.2	A		1.2
Southbound left from 25th Ave	A		2.0	A		1.9	A		0.6	A		1.0
25th Avenue/E Cherry Street												
Westbound left from E Cherry St	A		0.5	A		0.4	A		0.4	A		0.6
Northbound from 25th Ave	C		16.7	C		16.9	B		13.7	B		14.4

Source: Heffron Transportation, Inc.

1. *Level of service*
2. *Average seconds of delay per vehicle.*
3. *Volume-to-capacity ratio*

Parking

As described previously, the existing Garfield High School site has two parking lots with 71 striped parking spaces and space for approximately 22 more vehicles for a total on-site parking capacity of about 93 vehicles. The remaining parking demand generated by the school is served by on-street parking spaces along adjacent and neighboring streets. Within the area, parking demand is also generated by residential uses (primarily single-family homes), churches, and the adjacent Community Center. There is a parking lot adjacent to the school site that serves the Medgar Evers Swimming Pool and Teen Life Center. That lot has 17 striped spaces.

To document the current level of on-street parking activity in the area, an on-street parking utilization study was performed for the streets near Garfield High School. The following describes parking study area, existing on-street parking supply, existing parking demand, and existing on-street parking usage levels.

On-Street Parking

The study area for the on-street parking utilization study was determined based on the methodology described in the City of Seattle's Client Assistance Memorandum (CAM) #117. This memorandum defines the study area for a parking utilization study as "an area which is within a 400 foot *walking* distance of the subject property." Therefore, the study area includes all roadways within 400 feet of the entire school site (bounded on the north by approximately E Jefferson Street, on the south by E Alder Street, on the east by 25th Avenue, and on the west by 23rd Avenue). Figure 7 shows the study area for the Garfield High School parking utilization study. As shown, several streets surrounding the school site allow parking within the 400-foot walking distance including: 22nd, 23rd, 24th, 25th, and 26th Avenues, as well as E James, E Terrace, E Jefferson, E Alder, and E Spruce Streets.

The on-street parking supply within the study area was determined based on the methodology described in CAM #117. The study area was separated into individual block faces. A block face consists of one side of a street between two cross-streets. For example, the south side of E Jefferson Street between 25th and 26th Avenues is one block face. Each block face was analyzed to determine the number of available on-street parking spaces. First, all common street features—such as driveways, fire hydrants, and special parking zones—were noted. Second, certain distances adjacent to the common street features were noted. For example, no on-street parking was assumed within 30 feet of a signalized or unsignalized intersection, 20 feet of an uncontrolled intersection, 15 feet on either side of a fire hydrant, or five feet on either side of a driveway or alley. The remaining unobstructed lengths of street, between street features, were converted to legal on-street parking spaces using the following table.

Table 3. Number of Legal On-Street Parking Spaces

Unobstructed Distance	Number of Parking Spaces	Unobstructed Distance	Number of Parking Spaces	Unobstructed Distance	Number of Parking Spaces
0 – 15 feet	0	206 – 221 feet	11	412 – 433 feet	22
16 – 31 feet	1	222 – 243 feet	12	434 – 449 feet	23
32 – 53 feet	2	244 – 259 feet	13	450 – 471 feet	24
54 – 69 feet	3	260 – 281 feet	14	472 – 487 feet	25
70 – 91 feet	4	282 – 297 feet	15	488 – 509 feet	26
92 – 107 feet	5	298 – 319 feet	16	510 – 525 feet	27
108 – 129 feet	6	320 – 335 feet	17	526 – 547 feet	28
130 – 145 feet	7	336 – 357 feet	18	548 – 563 feet	29
146 – 167 feet	8	358 – 373 feet	19	564 – 585 feet	30
168 – 183 feet	9	374 – 395 feet	20	586 – 601 feet	31
184 – 205 feet	10	396 – 411 feet	21	602 – 623 feet	32

Source: City of Seattle, CAM #117. The numbers of parking spaces for unobstructed lengths over 319 feet were derived by Heffron Transportation using the City's methodology.

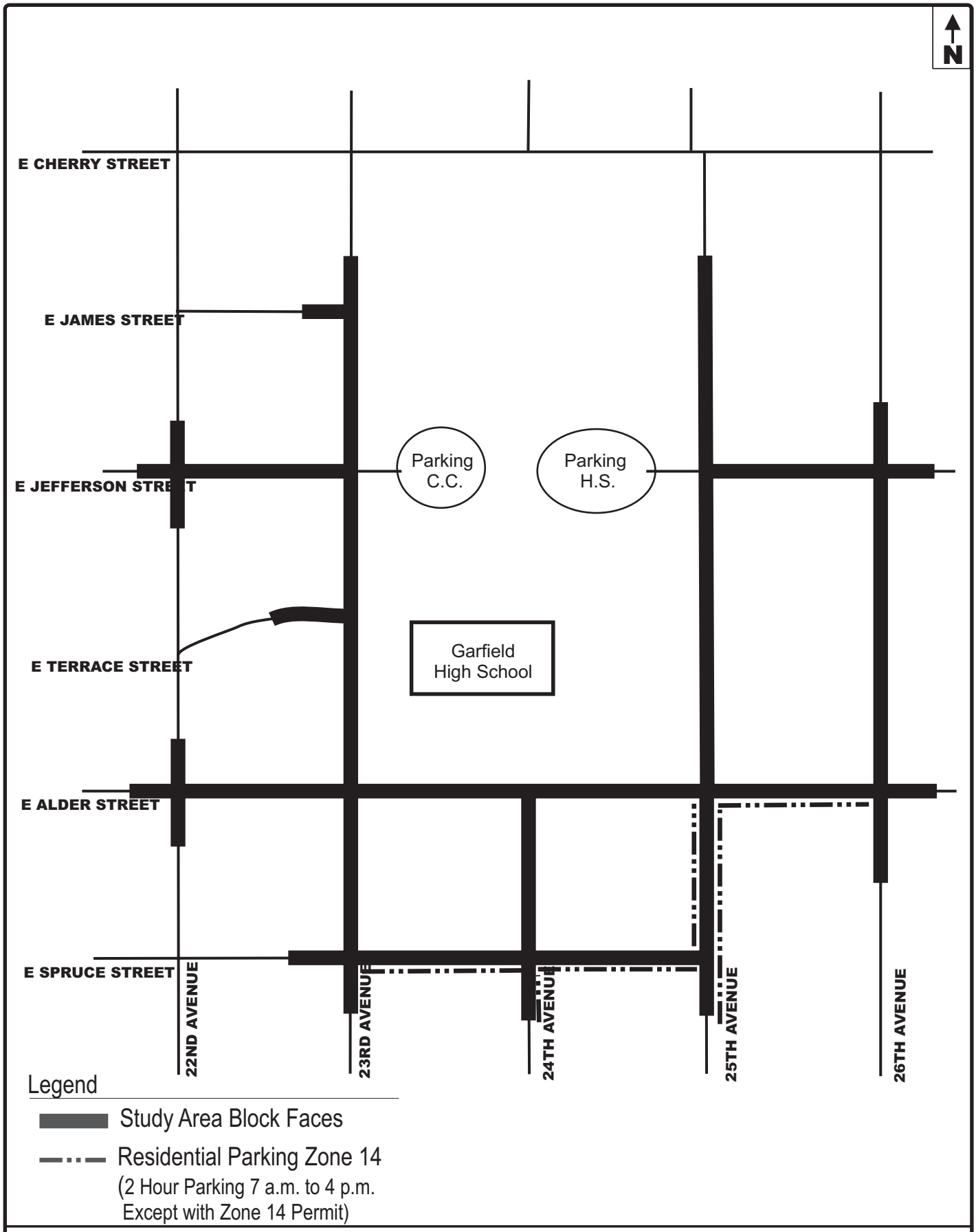

Figure 7

GARFIELD HIGH SCHOOL
RENOVATION & REDEVELOPMENT
ENVIRONMENTAL IMPACT STATEMENT

STUDY AREA FOR ON-STREET PARKING UTILIZATION SURVEYS

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Using the methodology described above, 324 on-street parking spaces are available within the study area on weekdays between 9:00 A.M. and 1:00 P.M. and again after 3:00 P.M. During weekday afternoons between 1:00 and 3:00 P.M., fewer on-street parking spaces are available because parking is restricted along E Alder Street. At 1:00 P.M., when parking in the school bus zones along E Alder Street is restricted, the on-street parking supply within 400 feet of the school is reduced to approximately 301 spaces. Summaries of the on-street parking supply by block face are attached at the end of this Technical Report.

On-street parking demand was surveyed within the study area for four weekday time periods—9:30 A.M., 1:00 P.M., 4:00 P.M., and 8:30 P.M. The morning and midday surveys were performed to determine parking conditions during times when school is typically in session. The weekday afternoon and evening time periods were surveyed to show the existing on-street parking demand during times after school is dismissed, but when other activities occur at the site such as after-school sports practices, theatrical performances, and interscholastic athletics. These are also the times when some activities scheduled by Seattle Parks and Recreation occur on school athletic fields or the adjacent Garfield Playfield when not in use for school sports.

Parking demand surveys were conducted on January 15th, 23rd, 26th, and February 18th, 2004. These days were selected to capture parking demand on days with school in session, as well as days with school out of session (January 26 was a day between semesters when Seattle Schools were out of session, but it was not a national holiday). The evening survey on January 23rd captured conditions with a basketball quad event (described in the following *Event Conditions* section) in the existing gymnasium, the evening survey on January 15th captured conditions with 8th Grade Parent's Night activities. The results of the on-street parking surveys are summarized in Table 4. Summaries of the on-street parking demand for each block face are attached at the end of this Technical Report.

Table 4. Total On-Street Parking Demand Survey Results

With School In Session		No School	
Time Period/Day Surveyed	Total Vehicles Parked	Time Period/Day Surveyed	Total Vehicles Parked
9:30 A.M.		9:30 A.M.	
Thursday, January 15, 2004	231	Monday, January 26, 2004	104
Friday, January 23, 2004	244		
1:00 P.M.		1:00 P.M.	
Thursday, January 15, 2004	249	Monday, January 26, 2004	104
Friday, January 23, 2004	241		
4:00 P.M.			
Thursday, January 15, 2004	137		
Friday, January 23, 2004	134		
8:30 P.M.		8:30 P.M.	
Thursday, January 15, 2004	156	Wed., February 18, 2004	116
Friday, January 23, 2004	177		

On-street parking utilization was calculated using the methodology described in CAM #117. The City determines the on-street parking utilization rate as the average number of on-street parked vehicles divided by the number of legal on-street parking spaces within the study area. As described above, the legal on-street parking supply ranges from 301 to 324 spaces within the study area. The on-street parking utilization within the study area during the analysis time periods is shown in Table 5 and ranged from a low of 32% (on a Monday morning with no school) to a high of 81% (midday on a school day).

Table 5. On-Street Parking Utilization Results

Time Period	With School In Session			No School		
	Avg. Vehicles Parked On-Street	Total On-Street Supply	On-Street Parking Utilization	Avg. Vehicles Parked On-Street	Total On-Street Supply	On-Street Parking Utilization
9:30 A.M.	238	324	73%	104	324	32%
1:00 P.M.	245	301	81%	104	301	35%
4:00 P.M.	136	324	42%		Counts not taken	
8:30 P.M.	167	324	52%	116	324	36%

As shown, the highest on-street parking utilization in the vicinity of Garfield High School occurred during the midday period with school in session. Demand was also high throughout the study area in the morning period. Parking demand was noticeably reduced after 4:00 P.M. When compared to conditions when school was not in session, the school is estimated to generate a peak on-street parking demand of approximately 141 vehicles during the midday (1:00 P.M.) time period.

Parking Lots

Parking demand counts were also performed in the parking lots on the same school days as described above for the on-street parking study. Peak parking-lot demand generally occurred during the 9:30 A.M. and 1:00 P.M. counts, when about 93 vehicles were parked in the site's two parking lots. Parking-lot demand was generally lower during the 4:00 and 8:30 P.M. counts (70 and 63, respectively). Parking demand in the lot adjacent to the Medgar Evers Pool was also counted. Demand in this lot during the school day was generally below its capacity of 17 striped spaces (approximately 14 vehicles at 9:30 A.M. and at 1:00 P.M.). However, demand after 4:00 P.M. increased to exceed the lot's capacity (with an average of 24 vehicles at 4:00 P.M., and 19 vehicles at 8:30 P.M.).

Collective Parking Conditions

When the peak parking-lot demand is combined with the school-related on-street parking demand documented above, the total Garfield High School parking demand can be estimated. Based on these counts, the school generates a peak parking demand of approximately 234 vehicles. As a result, the existing parking demand exceeds the parking-lot supply and uses just under 50% of the local on-street parking supply within 400 feet of the school. During the time when school demand peaked, there was some excess parking supply available on-street within the 400-foot walking distance of the school. The existence of the RPZ near the school likely provides most of this excess on-street parking supply. These zones seem relatively effective, although some students likely park in some of these spaces and move vehicles after two hours to avoid parking tickets.

There are no specific projects planned in the immediate study area that would change the parking supply by year 2008. Therefore, the future conditions without the project assume the existing level of parking demand and supply. However, as described previously, the SDOT and the local community are considering revisions to E Cherry Street to allow on-street parking east of 23rd Avenue—this improvement is beyond the 400-foot study area for the on-street parking surveys, but would enhance parking supply conditions in the larger Garfield Campus vicinity.

Event Conditions

Spectator events currently occur at Garfield High School. As mentioned previously, the existing school has a gymnasium with bleacher seating for approximately 2,016 people and a theater/auditorium with seating for approximately 673 people. According to School District staff, the largest school-related spectator events that occur at the site include varsity basketball games in the gymnasium (boys and girls), and theater and concerts in the auditorium.

To measure the traffic volumes associated with a basketball game, a 24-hour machine count was performed along both 25th Avenue and E Alder Street on Friday, January 23, 2004. That night, a 'quad' basketball event was held with Ballard High School. A 'quad' event is when girls' and boys' junior varsity and varsity teams play games on one afternoon/evening. The game start times were: boys' junior varsity – 3:30 P.M., girls' junior varsity – 5:00 P.M., girls' varsity – 6:30 P.M., boys' varsity – 8:00 P.M. The Seattle School District Athletic Department indicated that attendance for these games totaled 242 people (49 students with ASB cards, and 193 others—adults and students without ASB cards). The machine counts indicate that over the seven-hour period between 2:00 and 10:00 P.M., traffic volumes near the school were approximately 530 trips higher than volumes during a night without a varsity basketball game. The observed level of traffic corresponds to a trip generation rate of approximately 2.2 trips per attendee. At that rate, a capacity event in the gymnasium (with over 2,000 spectators) could generate as many as 4,400 trips. However, capacity school-related events at Garfield are very infrequent. For example, attendance at five Garfield 'quad' basketball events during the 2004 season ranged from 242 to 584 with an average attendance of about 370.

As mentioned in the previous section, on-street and off-street parking demand data were also collected during the 'quad' basketball event on Friday, January 23rd. Counts were performed at 4:00 and 8:30 P.M. to capture demand conditions for earlier junior-varsity games and the later boys' varsity game. Based on these counts, the peak parking demand occurred at 8:30 P.M. and totaled 134 vehicles (83 off-street and 61 on-street).

Seattle Parks and Recreation scheduling staff indicated that the track around the Garfield High School athletic field is scheduled for different community track teams from March through May (typically on weeknights between 4:00 and 8:00 P.M.). The baseball/softball fields located on Parks property north of the site are scheduled for youth baseball teams in the spring after Garfield High School use is over (between 5:00 and 8:30 P.M.).

Community-sponsored events are also held at Garfield High School. The "March in Martin Luther King Jr.'s Footsteps" annual workshops, rally, and march are organized by the *Martin Luther King Celebration Committee* and begin at the Garfield High School gymnasium. The event typically includes a rally with speakers, poetry and music, followed by a march to Downtown Seattle. Other community sponsored events have historically included peace rallies/war protests and community planning meetings. These community events likely represent the largest attendance conditions for the school site.

Site Access

There are four locations for vehicles to access the Garfield High School site; the two primary access driveways serve the parking lots. The main site driveway is located on 25th Avenue opposite E Jefferson Street and serves the largest parking lot (with room for a total of 79 vehicles including 64 striped spaces). A second driveway, on E Alder Street, provides access to limited additional parking (space for a total of 15 vehicles including seven (7) striped spaces). A curb cut also exists on 25th Avenue between E Jefferson and E Alder Street for use by athletic field maintenance vehicles. The fourth driveway is located on 23rd Avenue and is used to access a kayak storage area. The athletic field and kayak storage driveways are seldom used and are not used for typical everyday student or staff trips.

Adjacent to the site, there is a driveway on 23rd Avenue opposite E Jefferson Street that provides access to approximately 17 striped spaces that are designated for use by the adjacent Medgar Evers Pool at the Garfield Community Center. All other access to the site occurs via pedestrian paths and stairways from the surrounding roadways. Pedestrian access occurs from 23rd Avenue, 25th Avenue, E Jefferson Street, and E Alder Street.

Bus access and operation information was provided by the Seattle Public Schools Transportation Department. Based on these data, a total of 29 buses and six special education vans serve Garfield High School. Of the 29 buses, 16 serve Garfield only, while 13 serve both Garfield High School and Washington Middle School. As a result, the buses arrive at the site in two shifts. In the morning, buses arrive at Garfield High School, unload students, and depart the site. However, in the afternoon, buses arrive at the site and wait for school to be dismissed and for students to board. A total of 21 buses arrive by 2:10 P.M., load students after classes are dismissed at 2:15 P.M., and depart by 2:25 P.M. Of the first 21 buses, three (3) load on 25th Avenue, six (6) load from the north side of E Alder Street between 23rd and 24th Avenues, seven (7) load from the curb pull-out lane on the north side of E Alder Street between 24th and 25th Avenues, and five (5) load from the westbound travel lane of E Alder Street between 24th and 25th Avenues. The five buses that load from the westbound travel lane on E Alder Street are combination buses that begin at Garfield and then serve Washington. Since 18 buses load from westbound E Alder Street, all must approach the site from the east on local neighborhood streets. Approximately fourteen buses use 25th Avenue; while about four buses use 24th Avenue (some buses approaching the site from the north, turn left from 23rd Avenue onto E Spruce Street to access 24th or 25th Avenues). Three buses also approach the site from the north on 25th Avenue.

Eight (8) buses that begin at Washington Middle School depart Washington at 2:25 P.M. for Garfield. These buses load Garfield students from the outside northbound lane of 23rd Avenue at about 2:30 P.M. The special education vans typically arrive and depart the site before most bus activity occurs.

There are no specific projects planned in the study area that will change site access by 2008. Therefore, the future conditions without the project assume the existing site access conditions.

Safety

Traffic accident data were obtained from the City of Seattle. The accident data included the period between January 1, 2001 and December 25, 2003 (approximately 3 years). Signalized intersections with 10 or more accidents per year and unsignalized intersections with five or more accidents per year are considered high accident locations by the City of Seattle. Table 6 summarizes the average annual accidents by severity and the accident rates at each signalized intersection. The E Cherry Street/23rd Avenue intersection met the City's high accident threshold during 2003. Over the three-year period, the largest number of accidents (7) involved right-angle collisions. Although the data do not indicate a contributing cause, these accidents can occur when vehicles run red lights. This can occur when the signal heads are not well signed or well positioned for drivers, or when cycle lengths are too long and drivers become frustrated with delays. These conditions do not appear to exist at the E Cherry Street/23rd Avenue intersection. Since there were no reported accidents in 2002 and a total of eight (8) accidents in 2001, it is not clear that there are any unusual safety conditions at this intersection.

At the Jefferson Street/23rd Avenue intersection, left-turn collisions represented the largest number of accidents (8). The data do not indicate a contributing cause for these accidents; however, they often occur at locations where permissive left-turn movements conflict with heavy opposing through volumes.

Accident data for the two unsignalized study-area intersections did not indicate any unusual traffic safety conditions. Data were also obtained for the arterial roadway segments in the study area. Table 6 also shows the total number of accidents for each year by type. As shown, the highest number of acci-

dents occurred on 23rd Avenue between E Cherry and E Jefferson Streets. A large majority of these accidents were rear-end collisions, which occur more often at signalized intersections.

There were a total of seven (7) accidents involving pedestrians or bicyclists within the study area. Three of these accidents occurred at the E Cherry Street/23rd Avenue intersection and one occurred at the E Jefferson Street/23rd Avenue intersection. Also near the school site, two occurred mid-block on 23rd Avenue, and one occurred mid-block on E Cherry Street. No contributing causes are apparent from the data provided by the City of Seattle. Pedestrian signals already exist at the E Jefferson Street, E Alder Street, and E Cherry Street intersections with 23rd Avenue.

There is no way to accurately forecast accident experience for future year 2008 conditions without the project. However, growth in background traffic can result in a proportional increase in accident experience.

Table 6. Intersection Accident Summary (1/1/2001 – 12/25/2003)

	Type of Accident (Totals for Three Years)								Accidents by Year			
Signalized Intersection	Head-On	Rear-End	Side-Swipe	Right Turn	Left-Turn	Right Angle	Peds/ Bicycle	Other	2001	2002	2003	Avg./ Year
23rd Avenue/E Jefferson St.	0	2	3	0	8	2	1	2	5	7	6	6.0
23rd Avenue/ E Cherry Street	0	1	0	1	5	7	3	1	8	0	10	6.0
Unsignalized Intersection	Head-On	Rear-End	Side-Swipe	Right Turn	Left-Turn	Right Angle	Peds/ Bicycle	Other	2001	2002	2003	Avg./ Year
23rd Avenue/E Alder Street	0	0	0	0	2	2	0	0	1	2	2	1.7
25th Avenue/E Cherry Street	0	0	0	1	0	2	0	1	2	1	1	1.3
Roadway Segment	Head-On	Rear-End	Side-Swipe	Right Turn	Left-Turn	Right Angle	Peds/ Bicycle	Other	2001	2002	2003	Avg./ Year
23rd Avenue between E Cherry and E Jefferson Streets	0	9	1	0	0	0	1	8	5	6	8	6.3
23rd Avenue between E Alder and E Jefferson Streets	1	8	4	0	0	0	1	1	4	10	1	5.0
E Cherry Street between 23rd and 25th Avenues	0	4	0	0	0	1	1	4	3	3	4	3.3

Source: City of Seattle, 2003

Transit Facilities and Service

King County Metro Transit provides transit service near Garfield High School on 23rd Avenue, E Cherry Street, E Jefferson Street, and Yesler Way. There are bus stops located on both sides of 23rd Avenue at E Alder Street, E Jefferson Street, and E Cherry Street. Only one of these stops has a shelter—on the west side of 23rd Avenue, south of Cherry Street. There is a bus stop on the north side of E Jefferson Street west of 23rd Avenue and stops on both sides of E Cherry Street between 23rd and 25th Avenues. South of the school, there is a bus stop on the south side of Yesler Way just east of 23rd Avenue.

The bus stops on 23rd Avenue are served by King County Metro Transit Routes 4 and 48 south of Jefferson Street, and Metro Routes 3 and 48 north of Jefferson Street. The stop on Jefferson Street is served by Metro Routes 3 and 4. The stops on Cherry Street are served by Metro Route 3. The stop on Yesler Way is served by Metro Routes 8 and 27. Metro Transit Route 84 provides "night-owl" service (2:00 to 5:00 A.M.) throughout Seattle and operates along E Jefferson Street, 23rd Avenue, and E Cherry Street.

The routes within the study area provide service to and from North Queen Anne Hill, Downtown Seattle, First Hill, Madrona, Southeast Seattle, Loyal Heights, Greenwood, Ravenna, Columbia City, Capital Hill, Martin Luther King Jr. Way, Leschi, Colman Park, and Rainier Beach. Routes 3, 4, and 48 operate seven days per week with headways ranging from ten minutes at peak times on weekdays, to 30 minutes on weekends. Routes 8 and 27 operate on weekdays only along Yesler Way with headways ranging from 20 to 30 minutes during peak hours to one hour during off-peak periods.

The King County Metro Six-Year Transit Development Plan (updated February 2002) indicates some route consolidation and adjustments to the times between consecutive buses for routes serving the Garfield High School vicinity. The 23rd Avenue (between the University District and Columbia City) and Jefferson Street (between the Seattle CBD and the Central Area) corridors are possible candidates for improved service (by reducing the time between consecutive buses) by year 2007 and are identified as "Core Service Priority Investment Corridors."

As mentioned previously, the Central Area Neighborhood Plan would have King County Metro review bus stop locations along 23rd Avenue and make recommendations for consolidation as appropriate. It would also recommend bus stop improvements including lighting and shelters. This is expected to be complete in the first quarter of 2004.

Non-Motorized Transportation Facilities

As described in the *Roadway Network* section, all roadways in the study area have sidewalks. In addition, the signalized study-area intersections have pedestrian signals. There is also one pedestrian-only signalized crossing of 23rd Avenue on the north side of the E Alder Street intersection. The crosswalks at E Jefferson and E Alder Streets provide direct access to the Garfield High School frontage. There is a mid-block crosswalk located on E Cherry Street east of 23rd Avenue directly opposite the Nova High School building. The SDOT recently completed a project that added curb bulbs to this intersection to narrow the crossing width and slow traffic on E Cherry Street.

Students cross 23rd Avenue, E Jefferson Street, E Alder Street, 25th Avenue, and E Cherry Street regularly before school, during school between classes, and after school. Students walk along and cross numerous other neighborhood streets surrounding the school as well. Crossing activity occurs at both marked and signed crosswalks as well as at unsigned mid-block locations.

As mentioned previously, the Central Area Neighborhood Plan recommended that Cherry Street be designated as a Key Pedestrian Street between 23rd Avenue and Martin Luther King Jr. Way. As a result of this recommendation, the SDOT has identified a project that would rebuild 120 feet of curb and repair sidewalks on Cherry Street between 23rd and 25th Avenues to improve pedestrian safety, add on-street parking, and improve pedestrian access to Nova and Garfield High School and the Garfield Community Center. This project is anticipated to be complete in 2004.

IMPACTS OF ALTERNATIVE 1 PREFERRED ACTION

Alternative 1 would include the following improvements:

- A boundary adjustment on north property line as part of an equal land swap (of about 25,570-sf or about 0.59 acres) with Seattle Parks Department
- The 1962 gymnasium would be demolished and the interiors of the 1923 and 1929 school buildings would be remodeled.
- The redeveloped school would include approximately 242,000 square feet (sf) of building space.
- A 78,000-sf addition would be located in the northeast corner of the site to house the performing arts center, gymnasium, and Teen Life Center. The replacement gymnasium would have bleacher seating capacity for approximately 2,300 persons, the performing arts center would have seating capacity for approximately 600 persons. The new Teen Life Center would replace the existing Teen Life Center and would continue to be operated by Seattle Parks and Recreation.
- The athletic facilities on the southeast portion of the site would be renovated to include a synthetic football/soccer field, a 6-lane 400-meter track with an 8-lane straightaway, and space for field-event practices. Bleacher stands (with total capacity of approximately 550 seats) would be provided along the west side of the track and field.
- A total of 91 parking spaces would be provided in three lots. Twenty-six (26) spaces would be located in the central portion of the site between the existing high school and the renovated athletic facilities. Access to these spaces would be provided from E Alder Street. Forty-five (45) spaces would be provided at the northwestern corner of what will be the future Seattle Parks and Recreation Department property after the land swap. Twenty (20) spaces would be provided at the northeastern corner of the site. Access to these parking spaces would be provided from two driveways on 25th Avenue. A joint-use agreement with the Parks Department will be required for parking in all lots. Access to these spaces would occur from 23rd Avenue at its signalized intersection with Jefferson Street.
- This alternative proposes to reconfigure on-street parking adjacent to the site. Existing parallel parking would be converted to back-in angle parking along the north side of E Alder Street between 23rd and 25th Avenues.
- A new outdoor plaza would be located on the north side of the main school building just south of the proposed northwestern parking lot. The plaza would be separated from the parking lot with rolled curbs and removable bollards.
- A new two/three-lane bus-loading and drop-off area would be constructed on the northwest edge of the site. It would have an inbound driveway from 23rd Avenue and would exit to the eastern approach of the E Jefferson Street intersection. The bus loading area would provide space for approximately 18 school buses on the site.
- A school-bus zone located along the south side of E Cherry Street just west of 25th Avenue to accommodate approximately three buses during the afternoon pick-up period.
- The alternative includes reconstructed sidewalks along the school's frontage on E Alder Street, 23rd Avenue, and 25th Avenue.
- A water line improvement within the 25th Avenue right-of-way extending approximately 640 feet south from E Cherry Street.

Construction

The construction-related traffic impacts of the proposed action would vary throughout the construction process. Most construction activity and related impacts would occur on the Garfield High School site. However, some activities would require use of the local roadways and intersections surrounding the site.

The most noticeable traffic activity would be related to demolition of existing buildings on site and re-grading portions of the site (e.g., the athletic fields). The demolition would result in approximately 18,000 cubic yards (cy) of debris leaving the site. The re-grading effort would result in a net export of approximately 17,300 cy of excavated material. The excavated material is expected to be moved using dump trucks with trailers (carrying and average of 15 cy each) or larger belly dump trucks (carrying 20 cy each). The average truck size is expected to be about 18 cy. The exporting effort is expected to occur over approximately three (3) months beginning in year 2006 (approximately 63 working days). Based on these assumptions, the export of both demolition debris and excavated material would require approximately 31 truckloads per day. Each truckload would generate two trips (one inbound and one outbound) and would most likely occur during daytime hours (8:00 A.M. through 4:00 P.M.). Most construction transportation is stopped by 4:00 P.M. to avoid unnecessary delay to truck drivers from peak hour congestion. Assuming transportation occurs over eight hours each workday, the export efforts would generate an average of 8 truck trips per hour (4 inbound, 4 outbound).

The proposed water line extension on 25th Avenue would require approximately six to eight weeks and would include excavation of approximately 360 cy of material. This element of the project would require closure of one lane of 25th Avenue between E Cherry Street and E Jefferson Street during the construction period. This portion of the project may occur during the summer of 2005 or summer of 2006. Traffic control would be required during the lane closure.

The construction of the project would also require employees and equipment that would generate traffic to and from the site. Construction at the site would likely occur Monday through Saturday beginning at about 7:00 A.M. It is anticipated that construction workers would arrive at the construction site before the AM peak traffic period on local area streets and depart the site prior to the PM peak period; construction work shifts typically begin by 7:00 A.M. and end by 4:00 P.M., while the corresponding peak traffic periods typically occur in the following hours. The number of workers at the project site at any one time would vary depending upon the nature and construction phase of the project. Current estimates indicate the average number of construction employees on site would be approximately 25. However, during peak activities such as finish work, the number could range from 50 to 150 employees.

Based on these estimates, the proposed project would likely generate a noticeable amount of construction traffic on surrounding roadways. Trucks carrying material from the site would be most noticeable and would likely use 23rd Avenue, 25th Avenue, E Alder Street, and/or E Cherry Street. Although the truck traffic would be noticeable, the increase would represent 1% or less of overall midday traffic. The truck traffic is not expected to degrade operations of study area intersections during off-peak hours and impacts during peak hours are expected to be reduced since construction transportation is reduced during these times. However, the truck activity and water line extension could disrupt some on-street parking along 25th Avenue or E Alder Street. Since the school population would not be on site during construction, this disruption is not anticipated to be significant.

A construction management plan (CMP) addressing traffic and pedestrian control would be prepared to address truck routes and lane closures. This CMP would address lane closures, sidewalk closures, and bus stop relocations, where required. To the extent possible, the CMP should direct trucks away from residential streets to avoid unnecessary conflicts with resident and pedestrian activity.

The presence of a temporary construction work force would also generate demand for parking spaces around Garfield High School. However, the school will be closed during construction and the demand from construction workers is not expected to exceed that currently generated by the school. Therefore,

there would be adequate parking supply to accommodate the construction related demand. Most of the construction employee parking is anticipated to occur along the adjacent on-street parking areas on the west side of 25th Avenue and the north side of E Alder Street and on-site when available.

Operation

Roadway Network

Alternative 1 would include some changes to the study area roadway network. Although no changes to the roadway network are necessary to accommodate the proposed Garfield High School redevelopment, one potential modification has been identified as part of Alternative 1. The project would widen the section of E Alder Street between 23rd and 24th Avenues to provide back-in angle parking along the north side of the street. Bus loading areas along these roadway sections would be removed. The slight widening of E Alder Street and the removal of bus loading areas are expected to enhance traffic operations because parked vehicles (buses or automobiles) along the north side of E Alder Street would no longer narrow the roadway width of the street to one lane. As a result, less congestion is expected along this section of E Alder Street and at E Alder Street's intersections with 23rd, 24th, and 25th Avenues. The impacts on local-area parking conditions are discussed in a subsequent section.

Traffic Volumes

As described previously, total enrollment at Garfield High School in year 2008 would be reduced to 1,600 students and Alternative 1 would accommodate this level of enrollment. Although the total number of student trips generated by Garfield High School in year 2008 would likely be less than are generated currently (since 2003-2004 enrollment is 1,657), no reduction in traffic was assumed. With Alternative 1, parking-lot spaces would be reallocated. The total number of striped parking spaces (in both Parks Department and School District property) would slightly increase from 88 to 91 spaces. Approximately 110 vehicles currently park in School District and Parks Department lots and approximately 20 vehicles would likely shift to on-street parking with the project. Alternative 1 proposes to increase the on-street parking supply adjacent to the site to accommodate this shift. The potential changes to parking lots and on-street parking are described later in the *Parking* section. With the changes to the parking lots and on-street parking, teachers and other staff who arrive at the school earliest are expected to continue parking in parking lots. Once the parking lots are full, the remaining staff and students who drive to school would park in on-street spaces.

When considered together, the total number parking spaces in lots or on streets adjacent to the site (including on-street parking along the west side of 25th Avenue and the north side of E Alder Street) would increase with the project by approximately 20 stalls. This would include a slight increase of three (3) spaces in parking lots, and a net increase of about 17 on-street spaces along the north side of E Alder Street. Since the project would increase the number of parking spaces very close to the site, some students and staff that have historically parked in on-street spaces in the adjacent neighborhood, would be able to park closer to the school. In total, the additional on-street parking spaces and the change in parking locations are expected to result in a slight shift of traffic around the school, and a slight decrease in traffic on roadways further from the site. This analysis focuses on the areas where traffic could increase.

The potential shift in traffic on nearby streets was estimated based on the proposed change in parking location and supply on or near the Garfield High School site. The largest shifts in traffic would likely occur along 25th Avenue, E Alder Street, and 23rd Avenue where access to parking occurs.

To evaluate the impact of the potential shift in traffic, the school PM peak hour trips were re-assigned to the local roadway system based on the proposed allocation of parking surrounding the site (including parking-lot and on-street spaces). For example, Alternative 1 would decrease the number of stalls that could be accessed from 25th Avenue. Currently a total of 168 stalls can be accessed from 25th Avenue (79 in the main school lot, and 89 on-street spaces along 25th Avenue between E Alder and E Cherry Streets). With the project, the northeastern parking lot would be reduced in capacity (to 20 spaces) and the number of on-street spaces would not change. Therefore, fewer vehicles would access parking directly from 25th Avenue. However, 51 spaces could be accessed from E Alder Street including 40 on-street spaces along the north side of the street, and 11 additional spaces in the lot between the school building and the athletic facilities. Traffic would also be expected to shift to 23rd Avenue where the largest parking lot would be located. Approximately 45 spaces would be located in this lot and would be accessed from the Jefferson Street intersection with 23rd Avenue. The drop-off area and main school entrance near the new plaza would also encourage more parent-drop-off activity at the 23rd Avenue access.

The project would also shift bus traffic. Approximately 18 buses currently use local neighborhood streets to access westbound E Alder Street where loading and drop-off activities occur. Since the project would provide on-site bus loading along the northwest portion of the site for up to 18 buses, the number of bus trips on local neighborhood streets would be reduced. Buses could access the site directly from 23rd Avenue and load on site without impacting local traffic operations. The six special education buses would likely use the on-site bus loading area and would leave the site before most of the main bus activity occurs.

It is anticipated that the commuter PM peak hour traffic at the site would primarily be affected by the relocation of parking lot spaces. Therefore, some of the trips that currently use the parking lot access from 25th Avenue were reassigned to the E Jefferson Street access at 23rd Avenue where the new main lot is proposed. Table 7 shows the anticipated shift in traffic volumes on roadways adjacent to the site for both the school and commuter PM peak hours.

Table 7. Traffic Generated by Garfield High School on Adjacent Roadways

School PM Peak Hour (2:00 to 3:00 P.M.)									
	Existing and 2008 Without Project			2008 With Alternative 1 – Preferred Action			Net Change in Traffic		
Access Location	In	Out	Total	In	Out	Total	In	Out	Total
23rd Ave/Jefferson St	24	24	48	42	57	99	18	33	51
E Alder Street	44	42	86	37	82	119	-7	40	33
25th Avenue	24	67	91	20	52	72	-4	-15	-19
Bus Access/23rd Ave		n/a		29	29	58	29	29	58
Commuter PM Peak Hour (5:00 to 6:00 P.M.)									
	Existing and 2008 Without Project			2008 With Alternative – 1 Preferred Action			Net Change in Traffic		
Access Location	In	Out	Total	In	Out	Total	In	Out	Total
23rd Ave/Jefferson St	5	5	10	10	17	27	5	12	17
E Alder Street	8	6	14	6	3	9	-2	-3	-5
25th Avenue	7	4	11	5	1	6	-2	-3	-5
Bus Access/23rd Ave		n/a		0	0	0	0	0	0

The shifts in traffic described above and shown in Table 7 were assigned to the local roadway system. These trips (shown in Figure 8 and Figure 9) were then added to the year 2008 without-project traffic forecasts described previously to represent 2008 with-project conditions, and are shown on Figure 10 (school PM peak hour) and Figure 11 (commuter PM peak hour).

School PM Peak Hour (2:00-3:00 P.M.)

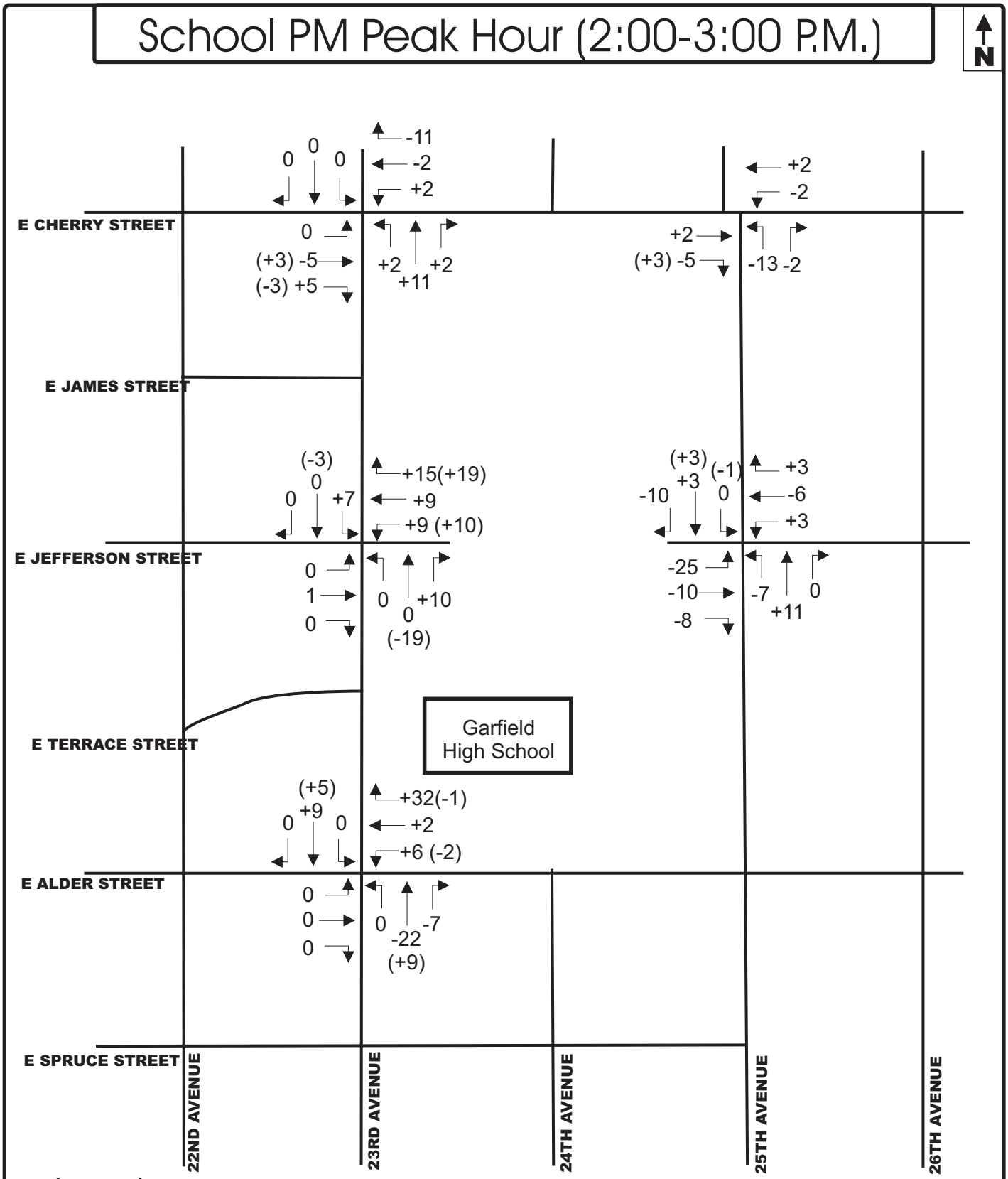

Figure 8

GARFIELD HIGH SCHOOL
RENOVATION & REDEVELOPMENT
ENVIRONMENTAL IMPACT STATEMENT

SCHOOL PM PEAK HOUR
PROJECT TRAFFIC ASSIGNMENT
ALTERNATIVE 1

heffron transportation, inc.

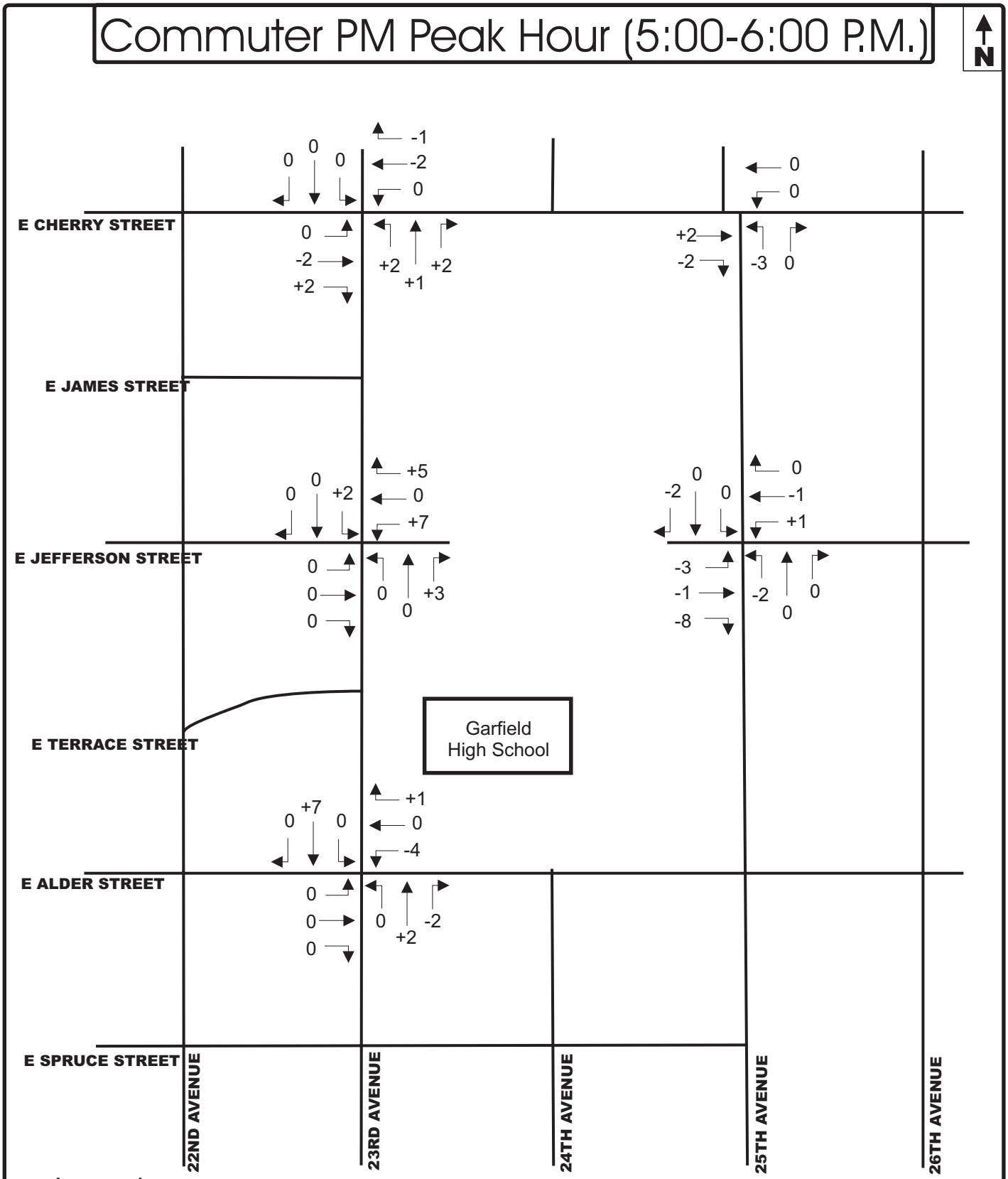

Figure 9
COMMUTER PM PEAK HOUR
PROJECT TRAFFIC ASSIGNMENT
ALTERNATIVE 1

GARFIELD HIGH SCHOOL
RENOVATION & REDEVELOPMENT
ENVIRONMENTAL IMPACT STATEMENT

heffron transportation, inc.

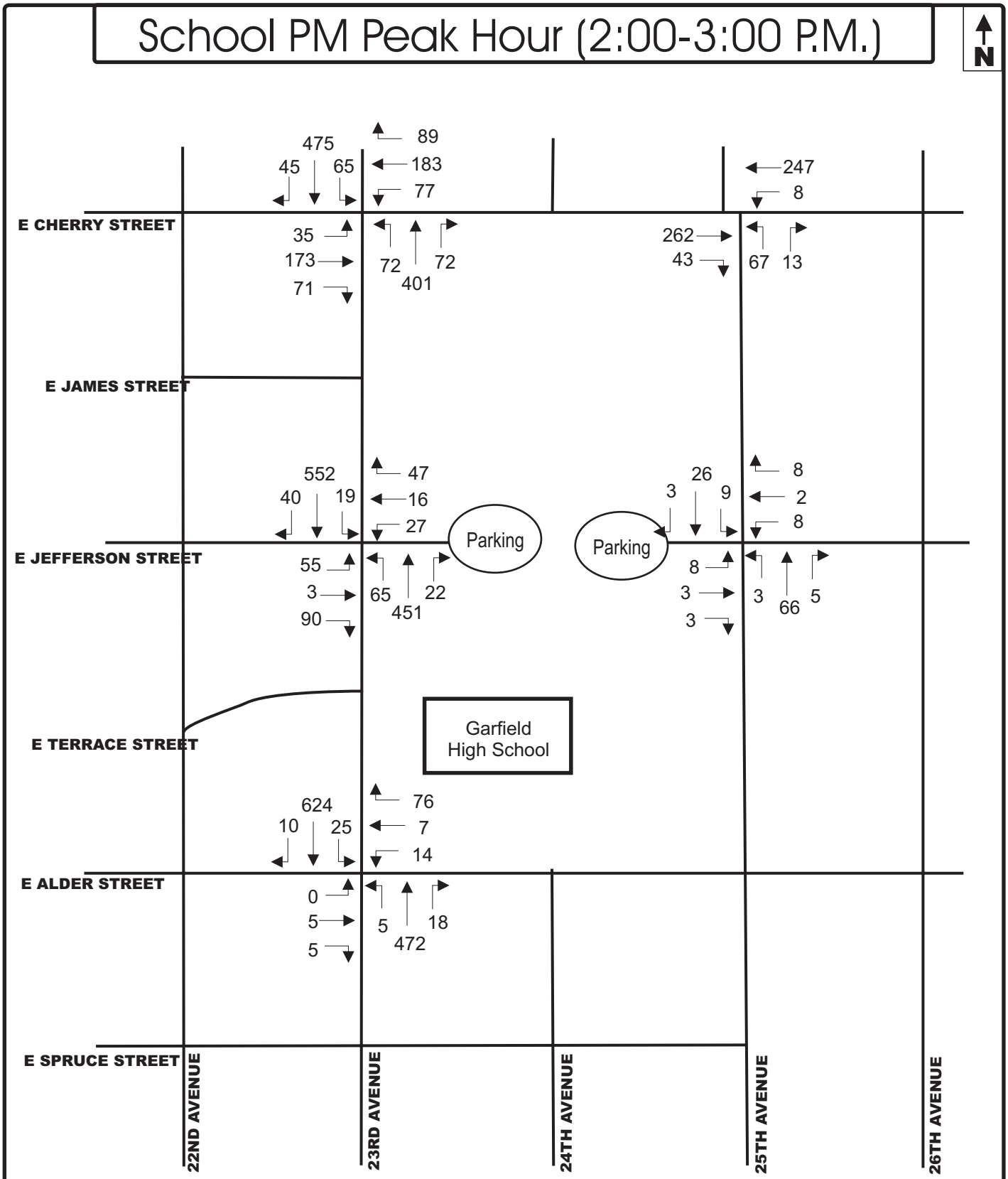

Figure 10

GARFIELD HIGH SCHOOL
RENOVATION & REDEVELOPMENT
ENVIRONMENTAL IMPACT STATEMENT

FORECAST 2008 WITH PROJECT
SCHOOL PM PEAK HOUR
TRAFFIC VOLUMES - ALTERNATIVE 1

heffron transportation, inc.

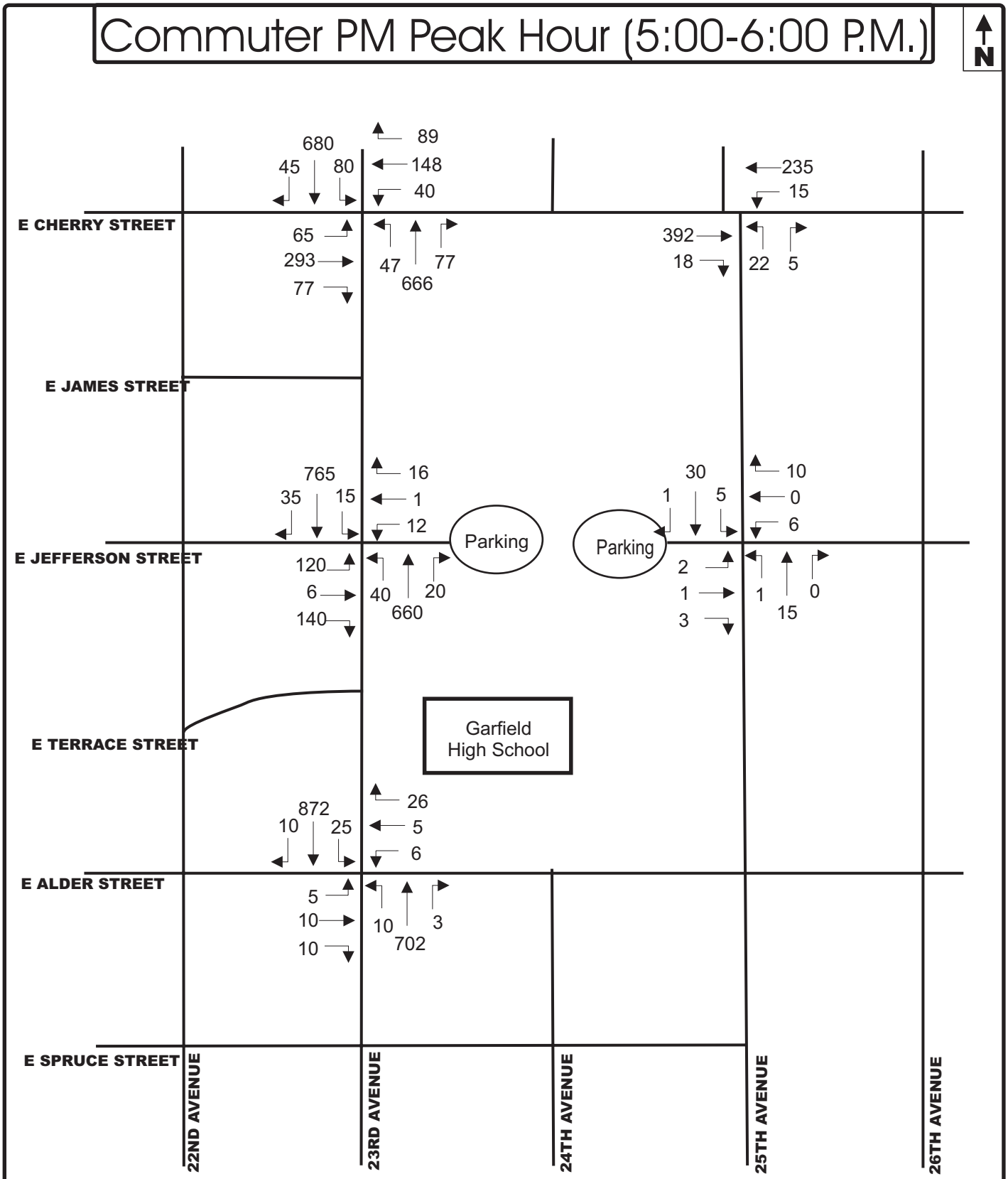

Figure 11

GARFIELD HIGH SCHOOL
RENOVATION & REDEVELOPMENT
ENVIRONMENTAL IMPACT STATEMENT

FORECAST 2008 WITH PROJECT
COMMUTER PM PEAK HOUR
TRAFFIC VOLUMES - ALTERNATIVE 1

heffron transportation, inc.

Traffic Operations

Levels of service were determined for the study area intersections using the forecast 2008-with-project traffic volumes described in the previous section. Table 8 shows the results of the analysis for the school (2:00 to 3:00 P.M.) and commuter (5:00 to 6:00 P.M.) PM peak hours; levels of service for without-project conditions are included for comparison. As shown, both study-area signalized intersections would continue to operate at acceptable levels (LOS D or better). Alternative 1 would add very small amounts of delay—less than one second—to both intersections.

The slight shift in traffic would not degrade operations at any of the unsignalized study-area intersections. Rather, since the project would include a new on-site bus loading area with access directly from 23rd Avenue, it would significantly improve traffic operations at and around the school site during peak school hours. Bus activity that currently causes congestion along E Alder Street, 25th Avenue, and at the 23rd and 25th Avenue intersections with E Alder Street would be reduced or eliminated. The east leg of the E Alder Street/23rd Avenue intersection would be widened and circulation around the site would be enhanced. The change in bus loading would also reduce bus circulation trips through the local neighborhood. Bus trips along northbound 24th and 25th Avenues to access westbound E Alder Street would no longer be required. The project would not result in significant adverse impacts to traffic operations; no off-site intersection improvements would be required to accommodate the proposed project.

Table 8. Level of Service Summary – 2008 Without Project and 2008 With Alternative 1

	School PM Peak Hour (2:00-3:00 P.M.)						Commuter PM Peak Hour (5:00-6:00 P.M.)					
	2008-Without-Project			2008-With-Project Alternative 1			2008-Without-Project			2008-With-Project Alternative 1		
Signalized Intersection	LOS [1]	Delay [2]	v/c [3]	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c
23rd Avenue/E Cherry Street	C	24.7	0.71	C	24.8	0.71	D	35.5	0.87	D	35.5	0.87
23rd Avenue/E Jefferson Street	A	8.6	0.58	A	9.1	0.58	A	9.9	0.76	B	10.0	0.75
Unsignalized Intersection	LOS	Delay		LOS	Delay		LOS	Delay		LOS	Delay	
23rd Ave/E Alder St												
Eastbound from E Alder St	D	27.5		D	27.4		E	46.2		E	46.9	
Westbound from E Alder St	C	24.5		C	24.6		D	30.6		D	26.5	
Northbound left from 23rd Ave	A	0.3		A	0.3		A	0.5		A	0.5	
Southbound left from 23rd Ave	A	1.1		A	1.1		A	0.9		A	0.9	
25th Avenue/E Jefferson Street												
Eastbound from Site Access	B	13.0		B	10.7		A	9.2		A	9.0	
Westbound from E Jefferson St	B	11.8		B	11.0		A	9.1		A	9.0	
Northbound left from 25th Ave	A	1.2		A	0.2		A	1.2		A	0.4	
Southbound left from 25th Ave	A	1.9		A	2.0		A	1.0		A	1.0	
25th Avenue/E Cherry Street												
Westbound left from E Cherry St	A	0.4		A	0.3		A	0.6		A	0.6	
Northbound from 25th Ave	C	16.9		C	16.2		B	14.4		B	14.3	

Source: Heffron Transportation, Inc.

1. *Level of service*
2. *Average seconds of delay per vehicle.*
3. *Volume-to-capacity ratio*
4. *n/a = Not applicable, movement would not exist since driveway would be relocated.*

Since Alternative 1 would move bus trips to the E Jefferson Street/23rd Avenue intersection and would likely shift a portion of the drop-off/pick-up activity to the main lot access from this intersection, AM peak hour traffic operations analyses were performed for this location. Traffic volumes were estimated

based on background AM peak hour traffic counts provided by the City of Seattle and based on the potential shift in school traffic to this location. Based on these analyses, the intersection would likely operate at LOS B during the AM peak hour. This is expected since conflicting AM peak hour volumes on 23rd Avenue are much lower than afternoon peak hour volumes. However, it should be noted that heavy pick-up and drop-off activity may result in congested conditions within the new main lot. This congestion could affect turning movements from 23rd Avenue into the site and bus movements leaving the site. As a result, the Garfield High School administration would develop parent pick-up and drop-off guidelines to maintain safe and efficient operations.

Event Conditions

Spectator events at Garfield High School with Alternative 1 would be similar to those that would occur without the project. Theater events and concerts would continue to occur on site in the new performing arts center auditorium. The proposed performing arts center would seat approximately 75 fewer persons than the existing facility. Therefore, the traffic and parking demand associated with performances at the venue are expected to remain similar to existing levels. However, performances may occur more frequently due to the superior quality of the venue.

Athletics such as basketball (boys and girls), wrestling, and gymnastics would continue to occur on site in the new gymnasium. Gymnasium seating capacity would be increased by approximately 285 seats. This change in seating capacity is not expected to change the attendance at most events held on campus. For example, the existing gymnasium has a capacity of approximately 2,016 persons; however, peak attendance at 'quad' basketball events in 2004 was about 585 persons. It should be recognized that the increase in gymnasium capacity could allow for slightly larger events to occur at the site; however, Seattle Public Schools and Garfield High School staff indicate that no planned school-related events are likely to generate that level of attendance. Possible large events could include very infrequent activities such as graduation ceremonies.

Junior varsity soccer and football would continue to occur at the renovated athletic fields. Varsity soccer (boys and girls), track practice, and possibly some limited small track meets (two-school meets) would likely be moved on site to the new athletic facility. The project is proposing some bleacher seating (capacity of up to 550) for the athletic fields. However, relatively few spectators (35 to 75) are anticipated for the soccer, JV football, and track events that would occur at the site. These activities would not generate significant levels of traffic or parking demand. Baseball and softball would continue to occur at the adjacent Garfield Playfield. Varsity football and most track-and-field meets would continue to occur at one of several School District athletic complexes such as Memorial Stadium, West Seattle Stadium, Rainier Beach, Nathan Hale, Sealth, or Ingraham High Schools. Small track meets and practices would require the use of the adjacent Garfield Playfield to accommodate discus and javelin events.

The renovation of the athletic fields would provide an improved surface for football and soccer and would likely result in increased use for non-scholastic athletics such as adult and youth soccer or other field sports (e.g., ultimate, rugby, and lacrosse) organized through Seattle Parks and Recreation. These activities would occur only after the school has completed use of the fields (generally after 5:00 P.M. or on weekends) and could only extend until dusk (no field lighting is planned). More activity is expected during summer months when daylight extends longer into the evening. A typical activity would be an adult soccer match, which usually results in between 25 and 30 adults on site and each driving alone. Participants are expected to access the site from 25th Avenue or E Alder Street and park on street or in the parking lot between the school building and the fields. This type of typical event generates between 50 and 60 trips (one arriving and one departing trip for each participant) and peak parking demand of approximately 60 vehicles (usually occurring between games when four teams are on-site at once. The traffic and parking demand generated by these activities would occur more frequently with the project. How-

ever, they would not result in significant adverse impacts to traffic operations or parking conditions. The local roadway network together with the parking lots and on-street parking supply would accommodate the traffic and parking demand associated with these activities.

Community use of the Garfield High School campus facilities may also increase. As mentioned previously, the larger gymnasium capacity could result in some events with larger attendance. Very few events are expected to draw capacity attendance in the gymnasium. The annual community-sponsored activities for the Martin Luther King Jr. holiday would likely result in the largest attendance. Traffic congestion and parking demand surrounding the site for such large events could be slightly worse than existing conditions. However, the slight increase in gymnasium capacity is not expected to significantly influence attendance at these types of events. In addition, these large events occur infrequently and as a result, the related traffic and parking impacts would not be considered significant adverse impacts.

The proposed on-site bus loading area could be used for automobile parking for large events and evenings when no bus loading is required. The loading area could provide approximately 22 additional automobile parking spaces for these times.

Parking

No significant adverse impacts to parking are expected with Alternative 1. Alternative 1 would reconfigure parking lots and on-street parking for Garfield High School. A total of 91 parking spaces would be provided in lots with this alternative. Twenty-six (26) spaces would be located in the central parking lot between the existing high school and the athletic fields, forty-five (45) spaces would be provided in the northwestern corner lot (which will be future Seattle Parks and Recreation Department property after the land swap), and 20 spaces would be located on the northeastern corner lot. A joint-use agreement with the Seattle Parks will be required to allow shared use of the three parking lots. It is anticipated that most of the parking would be dedicated for school use during school hours and for large events in the gymnasium or performing arts center. A number of spaces could be reserved or signed for community center patrons using the Medgar Evers swimming pool or other athletic fields during the school day or during special events at the school.

The changes proposed in parking lots would likely result in the displacement of roughly 20 vehicles to on-street parking near the school during peak parking demand periods.

With Alternative 1, on-street parking along E Alder Street would be reconfigured. Parking along the north side between 23rd and 25th Avenues would be modified from parallel to back-in angle parking and bus loading areas would be removed. As a result, the existing parking restrictions for bus loading (between 7:00 and 9:00 A.M. and between 1:00 and 3:00 P.M.) would be removed. These changes are expected to provide a total of 40 parking spaces—a net increase of 17 spaces. Removing the bus loading activity on E Alder results in 40 spaces becoming available for use during bus loading periods. Parking along the west side of 25th Avenue north of E Jefferson Street could also be reconfigured. Slight modifications to on-street parking along the west side of 25th Avenue between E Jefferson and E Alder Streets may be required to accommodate changes in driveways locations. However, these modifications are not expected to change the total amount of on-street parking available.

The parking demand that may be shifted from parking lots to on-street spaces could be accommodated by the new on-street parking capacity provided along the north side of E Alder Street. Since the project would result in approximately the same number of spaces located on site and adjacent to the site, on-street parking in the surrounding neighborhood is expected to remain at existing utilization levels. The combination of parking-lot spaces and on-street parking revisions would help reduce parking overflow to surrounding roadways further from the site during the bus loading periods. The Alternative 1 parking revisions may attract some parking demand closer to the site than current conditions during these bus

loading periods. Overall, parking conditions on roadways one or more blocks from the school would be virtually the same for typical school day conditions and for spectator event conditions.

In order to provide more on-street parking near the site along the north side of E Alder Street, the existing bus loading area would be eliminated. Since the proposed on-site bus loading area would not accommodate all buses serving the site at one time, approximately three buses may be dispatched differently to the site. Alternate off-site staging areas would be required. A potential off-site staging area has been identified along the south side of E Cherry Street just west of 25th Avenue. Spaces along this section of roadway could be designated for school-bus parking for approximately one hour in the afternoon on school days (likely between 1:30 and 2:30 P.M.). Staging for approximately three buses could be required. If this section of Cherry Street is selected for bus staging, there would be adequate space for the three buses. If bus staging is permitted on this section of street, it would displace on-street parking for approximately 6 cars for about an hour each school day afternoon. Based on field observations, this section of on-street parking is not currently highly utilized. Therefore, short-term use for bus staging would not be considered a significant adverse impact.

Although it is not included as part of the Garfield High School project, parking supply near the school could be increased further by reconfiguring 25th Avenue between E Cherry and E Jefferson Streets. Parallel parking that is now occurring on the gravel landscape strip between the curb and sidewalk could be modified to provide back-in angle parking. Typically, SDOT would also require that parallel parking along the east side of this section of 25th Avenue (approximately 12 spaces) be removed to provide two travel lanes on 25th Avenue. The on-street parking reconfiguration along the west side of 25th Avenue could result in a net increase of approximately 26 spaces. The additional parking supply would likely draw more school-related parking demand closer to the school property and away from residential areas to east and south of the school. This modification would require approval from local neighbors and SDOT.

Site Access

Alternative 1 would maintain vehicular site access in predominately the same locations as currently exists. One vehicular driveway would be maintained on E Alder Street to provide access to the 26-space parking lot and the loading area for the school building. The expanded lot on the northwest corner of the site would be accessed from 23rd Avenue at E Jefferson Street similar to the existing Seattle Parks and Medgar Evers Pool parking area. Vehicular access to the northeastern parking lot would occur from two driveways on 25th Avenue. One driveway would be located opposite E Jefferson Street as exists currently. A new second access driveway serving this lot would be constructed approximately 125 feet south of the E Jefferson Street intersection. The third vehicular access driveway on 25th Avenue, which serves the athletic fields, would remain approximately where it exists today. Since the existing main parking lot would be reduced in capacity (from 64 to 20 striped spaces), the volume of traffic entering and leaving the site on 25th Avenue would be reduced. The driveway that serves the athletic field would continue to be used very infrequently. A new inbound driveway would be constructed on 23rd Avenue at approximately E Terrace Street to provide bus access to the bus loading area.

The access driveway on E Alder Street would experience slightly increased traffic compared to existing conditions due to the additional parking capacity. The access to the largest parking lot from 23rd Avenue at E Jefferson Street is also expected to experience higher levels of traffic due to the increase parking capacity and emphasis on making the north face of the school building the main entry point for students and visitors. All site access points are expected to operate at LOS C or better during all peak hours.

Since school bus access to the site would be relocated to the on-site bus-loading area, school bus access and operations are expected to be improved compared to existing conditions and conditions without the project.

Truck access to the school site would occur from the driveway on E Alder Street. A truck loading and garbage/recycling area is proposed along the east side of the main school building. The school will likely continue to receive between six and eight truck deliveries per week. These deliveries include mail, milk, produce, supplies (such as paper and other office materials), and food. These deliveries are typically made in trucks that are approximately 30 feet long. Loading activity and volume of truck traffic are not expected to change with Alternative 1.

No significant adverse impacts to site access are expected with Alternative 1.

Safety

Alternative 1 would reduce the volume of traffic using the parking lot access from 25th Avenue and would likely increase the use of two other site driveways—on E Alder Street and from 23rd Avenue at E Jefferson Street. Although the project would increase some conflicting movements at these locations, the changes in traffic patterns are not expected to result in significantly different accident experience. Since both intersections are projected to operate at good levels of service, the potential for increased accidents would be small. The project would remove bus loading activities that currently block 25th Avenue and E Alder Street. This would reduce conflicts with pedestrians and vehicles along both streets and at the E Alder Street/23rd Avenue intersection and improve overall safety conditions. No significant adverse impacts to safety are expected with Alternative 1.

Transit Facilities and Service

Alternative 1 would construct a new school bus loading/unloading area along the northwest portion of the site. The new school bus facility would be accessed from an inbound driveway along 23rd Avenue at approximately E Terrace Street. Outbound buses would use the east leg of the E Jefferson Street/23rd Avenue signalized intersection to access the local roadway network. The location of the bus driveway together with bus loading activities could create some congestion along 23rd Avenue between E Alder Street and E Terrace Street. This is also the current location of a Metro Transit stop for Routes 4 and 48. The additional school bus activity is not expected to adversely impact Metro Transit service to the area. However, Metro Transit may desire to review the location of stops along 23rd Avenue based on the potential changes to access, traffic turning movements, and the emphasized Garfield High School building access points. No significant adverse impacts to transit are expected with Alternative 1.

Non-Motorized Transportation Facilities

The redevelopment project would include reconstruction of sidewalks surrounding the site. In addition, access points surrounding the site would be improved to enhance pedestrian safety and security at the site. The site's walkway improvements were developed with community input in an effort to increase mobility on and through the campus for local residents and community members. The resulting site plan would likely include an east-west pedestrian walkway along the north edge of the site between 23rd and 25th Avenues, and a north-south walkway along the west side of the athletic facilities between E Alder Street and the E Jefferson Street/23rd Avenue intersection. Other pedestrian access enhancements are proposed along 23rd Avenue between the bus loading areas and the school building and along the north side of the school building. No adverse impacts to pedestrian or non-motorized facilities are anticipated.

IMPACTS OF ALTERNATIVE 2 DEVELOPMENT WITHIN EXISTING SITE BOUNDARY

Alternative 2 would include the following improvements:

- The 1962 gymnasium would be demolished and the interiors of the 1923 and 1929 school buildings would be remodeled.
- The redeveloped school would include approximately 248,000 square feet (sf) of building space.
- An 84,000-sf addition would be located in the northeast corner of the site to house the performing arts center, gymnasium, auto shop, and Teen Life Center. The replacement gymnasium would have bleacher seating capacity for approximately 2,300 persons, the performing arts center would have seating capacity of approximately 600. The auto mechanics shop would be new to the site and would serve students that are currently bused off-site during the day to attend class. The new Teen Life Center would replace the existing Teen Life Center and would continue to be operated by Seattle Parks and Recreation.
- The athletic facilities on the southeast portion of the site would be renovated to include a synthetic football/soccer field, a non-regulation 4-lane practice track with an 8-lane straightaway, and space for field event practices. Bleacher stands (with total capacity of approximately 550 seats) would be provided.
- A total of 63 parking spaces would be provided in parking lots. Twenty-six (26) spaces would be located in the central portion of the site between the existing high school and the renovated athletic facilities. Thirty-seven (37) spaces would be provided at the northwestern corner of the site (10 spaces on Parks and Recreation property and 27 spaces on the Garfield High School site). Access to these parking areas would occur from E Alder Street and 23rd Avenue, respectively.
- This alternative proposes to reconfigure on-street parking adjacent to the site. Existing parallel parking would be converted to back-in angle parking along the north side of E Alder Street between 24th and 25th Avenues.
- A new outdoor plaza would be located on the north side of the main school building just south of the renovated parking lot. The plaza would be separated from the parking lot with rolled curbs and removable bollards.
- A new two/three-lane school bus loading and drop-off area would be constructed on the northwest edge of the site. It would have an inbound driveway from 23rd Avenue and would exit to the signal at E Jefferson Street. The bus loading area would provide space for up to 18 school buses on the site. Since more than 18 buses are required to serve the site, Alternative 2 assumes approximately three (3) buses would continue to load/unload from the north side of E Alder Street.
- The alternative includes reconstructed sidewalks along the school's frontage on E Alder Street, 23rd Avenue, and 25th Avenue; however, these improvements would not include changes to on-street parking configuration or capacity.
- A water line improvement within the 25th Avenue right-of-way extending approximately 640 feet south from E Cherry Street.

Construction

The construction-related traffic impacts of the proposed action would vary throughout the construction process. Most construction activity and related impacts would occur within the project site boundaries. However, some activities would require use of the local roadways and intersections surrounding the site.

For Alternative 2, the truck traffic related to material export would slightly higher than that identified for Alternative 1. Alternative 2 would require export of approximately 500 cy more than Alternative 1. This additional material would require a total of about 30 additional truck trips over the course of the three-month demolition and grading period. Alternative 2 is expected to have similar levels of construction employees and equipment as described for Alternative 1. Therefore, overall traffic and parking impacts would be similar.

A construction management plan (CMP) similar to that described for Alternative 1 would be prepared to address truck routes.

Operation

Roadway Network

Alternative 2 would not require changes to the study area roadway network. Although no changes to the roadway network are necessary to accommodate the proposed Garfield High School redevelopment, one potential modification has been identified as part of Alternative 2. The project would reconfigure on-street parking along the north side of E Alder Street between 24th and 25th Avenues to provide back-in angle parking and would remove the existing bus loading area. These changes are expected to enhance traffic operations. The improvement would result during the afternoon loading period since parked buses on this section of E Alder Street would no longer narrow the roadway width of the street to one lane. As a result, less congestion is expected along this section of E Alder Street and at the intersections with 24th and 25th Avenues. The impacts on local-area parking conditions are discussed in a subsequent section.

The section of E Alder Street between 23rd and 24th Avenues would continue to operate similar to existing conditions (with bus loading on the north side from 7:00 to 9:00 A.M. and from 1:00 to 3:00 P.M.). Reconstruction of the curb and sidewalk along the west side of 25th Avenue, together with the provision of curb cuts to the auto mechanics shop and vehicle storage area, would result in the loss of some on-street parking (up to 10 spaces) between E Alder Street and E Jefferson Street.

The existing main parking lot, which is accessed from 25th Avenue, would be eliminated and replaced by a main parking lot located on the northwest corner of the site. The new main lot would be accessed from the E Jefferson Street/23rd Avenue intersection. Alternative 2 would reconstruct curbs and sidewalks along the school's frontage.

Traffic Volumes

Alternative 2 would accommodate the same level of enrollment as Alternative 1 but would include a smaller main parking lot and would reconfigure only a portion of the on-street parking along E Alder Street to increase capacity. Therefore, the total number of parking spaces in lots and on-street parking spaces adjacent to the school site would decrease with Alternative 2. The potential changes to parking lots and on-street parking are described later in the *Parking* section. The potential shift in traffic on adjacent streets was estimated from the proposed changes to parking. Alternative 2 would result in two off-

setting actions. It would shift some trips from the existing main parking lot accessed from 25th Avenue to the proposed main parking lot, which would be accessed from 23rd Avenue. The remaining trips would be shifted to on-street parking areas surrounding the school site. A small increase in traffic is expected along E Alder Street where a larger parking lot would be provided and a small increase in on-street parking would occur. Slight increases in traffic volumes would also be expected along nearby residential streets east and south of the site since increases in school-related parking would occur in these areas. However, overall traffic patterns surrounding the school would be very similar to existing conditions.

Since bus loading activity for approximately three buses is anticipated to remain on E Alder Street, Alternative 2 would not improve traffic operations and congestion as much as Alternative 1. However, some improvement is expected. Buses would no longer be required to double park along E Alder Street and operations along the roadway should be better than existing conditions. Some bus trips (approximately 3 afternoon trips) would continue to occur along local neighborhood roadways such as 24th and 25th Avenues. This would be required for those buses that continue to load from E Alder Street. Overall, Alternative 2 would reduce the number of bus trips on these local neighborhood streets.

Alternative 2 would include provision of an on-site auto mechanics shop and would eliminate the need for midday bus trips to transport students between Garfield High School and Washington Middle School for class.

Traffic Operations

Traffic operations in the study area would be better than conditions without the project. This alternative would have little effect on traffic volumes but would slightly improve access conditions along E Alder Street. Intersection levels of service would be comparable to those presented for Alternative 1. No significant adverse impacts to traffic operations are expected with Alternative 2.

Parking

Alternative 2 would construct approximately 63 spaces in two parking lots—one on the northwest corner of the site (with 37 spaces), and one in the central portion of the site (with 26 spaces) between the school building and the athletic fields. The existing main lot, currently located on the northeast corner of the site, would be eliminated. Alternative 2 would also slightly change the on-street parking capacity. It would reduce capacity by about by about two spaces during most hours (due to the loss of approximately 10 spaces along 25th Avenue, and a net increase of about eight8 spaces along E Alder Street). On-street parking capacity would increase during the bus loading periods by about 11 spaces due to the removal of the bus loading activity between 24th Avenue and 25th Avenue.

Alternative 2 would increase demand for on-street parking spaces farther from the school site. During peak hours of the school day, approximately 47 vehicles would be displaced from parking lots to on-street parking. When combined with the slight changes to on-street parking along 25th Avenue and E Alder Street, roughly 50 additional vehicles would require on-street parking along local neighborhood streets during peak school hours. While some of this demand may be accommodated by unused on-street spaces along E Alder Street or 25th Avenue, most would be accommodated by spaces further east and south of the school site. This would represent an adverse impact to parking conditions along the local residential roadways. As a result, additional blocks may require RPZ designation to maintain parking supply for local residents.

Event Conditions

The traffic and parking demand associated with spectator events at Garfield High School with Alternative 2 would be nearly identical to those that would occur with Alternative 1 and similar to those without the project. As with Alternative 1, the gymnasium could have more seating capacity, while the performing arts center auditorium would be smaller than the existing facility. Alternative 2 is different than Alternative 1 in that the athletic facilities would not include a regulation track. As a result with Alternative 2, the site would not likely host track meets.

Since less parking would be available immediately adjacent to the site with Alternative 2, parking demand for large events may overflow farther from the school site into the adjacent neighborhood compared to existing conditions, future conditions without the project, or conditions with Alternative 1. This overflow could be mitigated in part through additional review of the RPZ designations to determine if the locations or time restrictions should be changed.

Site Access

Automobile, pedestrian, and truck access to the site with Alternative 2 would be virtually identical to that presented for Alternative 1. However, some bus loading activity would continue to occur along E Alder Street. Since most bus access to the site would be relocated to the on-site bus-loading area, bus access and operations are expected to be improved compared to existing conditions and conditions without the project.

Alternative 2 would include an auto mechanics shop at the northeast corner of the site in place of a surface parking lot. As a result, driveways serving the shop would be located south of the existing driveways and those proposed to serve the Alternative 1 parking area. Traffic into and out of the auto mechanics shop would be very low and very infrequent.

Safety

Alternative 2 would have approximately the same benefits and impacts to safety conditions as Alternative 1.

Transit Facilities and Service

Alternative 2 would have virtually the same impacts to Transit Facilities and Service as for Alternative 1.

Non-Motorized Transportation Facilities

Changes to non-motorized transportation facilities with Alternative 2 would be virtually identical to those described for Alternative 1. No adverse impacts to non-motorized facilities are anticipated.

MITIGATION MEASURES

Several mitigation measures have been incorporated into the project alternatives as options to improve overall transportation, access, bus loading, and/or parking conditions in the site vicinity. Some or all of these mitigation measures could be included with any of the alternatives and include:

- For Alternative 1, reconfigure on-street parking along the north side of E Alder Street between 23rd and 25th Avenues to provide back-in angle parking in place of the existing parallel parking. Remove the school-bus loading signs and parking restrictions along the north side of E Alder Street.

- For Alternative 2, reconfigure on-street parking along the north side of E Alder Street between 24th and 25th Avenues to provide back-in angle parking in place of the existing parallel parking. Remove the school-bus loading signs and parking restrictions along the north side of E Alder Street in this section.

- For both alternatives, parking supply near the school could be increased further by reconfiguring 25th Avenue between E Cherry and E Jefferson Streets. The west side of 25th Avenue between E Jefferson Street and E Cherry Street could be modified to provide back-in angle parking in place of the existing parallel parking. This change could also require removal of parallel parking along the east side of 25th Avenue in this section. This modification could result in a net increase of approximately 26 spaces. This modification would require approval from local neighbors and SDOT.

- Consider utilizing on-street parking along the south side of E Cherry Street just west of 25th Avenue for afternoon school bus staging or loading for three buses.

- For both alternatives, to minimize congestion during school peak drop-off and pick up periods, Garfield High School administration will develop parent pick-up and drop-off guidelines to maintain safe and efficient operations.

- For both alternatives, during design of new on-site bus driveway access to 23rd Avenue opposite E Jefferson Street, work with SDOT and the local community to determine if signal phasing and/or lane channelization changes would be feasible and/or desirable at the E Jefferson Street/23rd Avenue intersection to improve operations, safety conditions, and school access operations during peak arrival and departure times.

- For both alternatives, work with the community and SDOT to determine if additional streets near the school should be added to the RPZ or if the existing restrictions should be modified.

- For both alternatives, prepare a construction management plan that addresses truck traffic and pedestrian control. It would identify truck routes lane closures, sidewalk closures, and bus stop relocations. To the extent possible, the CMP would direct trucks away from residential streets to avoid unnecessary conflicts with resident and pedestrian activity.

SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

None of the project alternatives are expected to result in significant unavoidable adverse impacts to transportation facilities or operations.

ATTACHMENT

Garfield High School

On-Street Parking Utilization Study Results

Parking Supply

Segment	Street Name	Street Segment	Side of Street	Breakdown of On-Street Legal Parking Space by Restrictions						Total Number of Legal On-Street Spaces by Time of Day			
				Residential Parking Zone Number of 2-Hour Parking Spaces 7am-6pm (except Sun/Hol.)	Number of Unrestricted Parking Spaces	School Bus Zone Spaces (weekedays 2-3 pm)	Number of 30 min load/unload Parking Spaces (weekdays 7am - 6pm)	School Bus Zone Spaces (weekdays 7-9am, 1-3pm)	Disabled Parking Stalls	**Weekday** Parking Spaces 9:30 am	**Weekday** Parking Spaces 1:00 pm	**Weekday** Parking Spaces 4:00 pm	**Weekday** Parking Spaces 8:30 pm
A	23rd Avenue	North of E James Street	W	0	0	0	0	0	0	0	0	0	0
B	E James Street	West of 23rd Avenue	N	0	0	0	0	0	0	0	0	0	0
C	E James Street	West of 23rd Avenue	S	0	2	0	0	0	0	2	2	2	2
D	23rd Avenue	North of E Jefferson Street	E	0	2	0	1	0	2	5	5	5	5
E	25th Avenue	North of E Jefferson Street	W	0	15	3	0	0	0	18	18	18	18
F	25th Avenue	North of E Jefferson Street	E	0	10	0	0	0	0	10	10	10	10
G	22nd Avenue	North of E Jefferson Street	W	0	3	0	0	0	0	3	3	3	3
H	22nd Avenue	North of E Jefferson Street	E	0	0	0	0	0	0	0	0	0	0
I	23rd Avenue	Btwn E Jefferson St and E James St	W	0	0	0	0	0	0	0	0	0	0
J	26th Avenue	North of E Jefferson Street	W	0	3	0	0	0	0	3	3	3	3
K	26th Avenue	North of E Jefferson Street	E	0	2	0	0	0	0	2	2	2	2
L	E Jefferson Street	West of 22nd Avenue	N	0	0	0	0	0	0	0	0	0	0
M	E Jefferson Street	West of 22nd Avenue	S	0	0	0	0	0	0	0	0	0	0
N	E Jefferson Street	Btwn 22nd Avenue and 23rd Avenue	N	0	0	0	0	0	0	0	0	0	0
O	E Jefferson Street	Btwn 22nd Avenue and 23rd Avenue	S	0	0	0	0	0	0	0	0	0	0
P	E Jefferson Street	Btwn 25th Avenue and 26th Avenue	N	0	5	0	0	0	0	5	5	5	5
Q	E Jefferson Street	Btwn 25th Avenue and 26th Avenue	S	0	5	0	0	0	0	5	5	5	5
R	E Jefferson Street	East of 26th Avenue	N	0	3	0	0	0	0	3	3	3	3
S	E Jefferson Street	East of 26th Avenue	S	0	4	0	0	0	0	4	4	4	4
T	22nd Avenue	South of E Jefferson Street	W	0	6	0	0	0	0	6	6	6	6
U	22nd Avenue	South of E Jefferson Street	E	0	0	0	0	0	0	0	0	0	0
V	23rd Avenue	Btwn E Jefferson St and E Terrace St	W	0	0	0	0	0	0	0	0	0	0
W	23rd Avenue	Btwn E Jefferson St and E Alder Street	E	0	0	0	0	0	0	0	0	0	0
X	25th Avenue	Btwn E Alder St and E Jefferson St	W	0	57	0	0	0	0	57	57	57	57
Y	25th Avenue	Btwn E Alder St and E Jefferson St	E	0	0	0	0	0	0	0	0	0	0
Z	26th Avenue	Btwn E Alder St and E Jefferson St	W	0	17	0	0	0	1	18	18	18	18
AA	26th Avenue	Btwn E Alder St and E Jefferson St	E	0	18	0	0	0	0	18	18	18	18
BB	E Terrace Street	West of 23rd Avenue	N	0	2	0	0	0	0	2	2	2	2
CC	E Terrace Street	West of 23rd Avenue	S	0	4	0	0	0	0	4	4	4	4
DD	22nd Avenue	North of E Alder Street	W	0	3	0	0	0	0	3	3	3	3
EE	22nd Avenue	North of E Alder Street	E	0	0	0	0	0	0	0	0	0	0
FF	23rd Avenue	Btwn E Terrace St and E Alder St	W	0	0	0	0	0	0	0	0	0	0
GG	E Alder Street	West of 22nd Avenue	N	0	0	0	0	0	0	0	0	0	0
HH	E Alder Street	West of 22nd Avenue	S	0	0	0	0	0	0	0	0	0	0
II	E Alder Street	Btwn 22nd Avenue and 23rd Avenue	N	0	11	0	0	0	0	11	11	11	11
JJ	E Alder Street	Btwn 22nd Avenue and 23rd Avenue	S	0	8	0	0	0	0	8	8	8	8
KK	E Alder Street	Btwn 23rd Avenue and 24th Avenue	N	0	0	0	0	10	0	10	0	10	10
LL	E Alder Street	Btwn 23rd Avenue and 24th Avenue	S	0	0	0	0	0	0	0	0	0	0
MM	E Alder Street	Btwn 24th Avenue and 25th Avenue	N	0	0	0	0	13	0	13	0	13	13
NN	E Alder Street	Btwn 24th Avenue and 25th Avenue	S	0	0	0	0	0	0	0	0	0	0
OO	E Alder Street	Btwn 25th Avenue and 26th Avenue	N	0	7	0	0	0	0	7	7	7	7
PP	E Alder Street	Btwn 25th Avenue and 26th Avenue	S	6	0	0	0	0	0	6	6	6	6
QQ	E Alder Street	East of 26th Avenue	N	0	4	0	0	0	0	4	4	4	4
RR	E Alder Street	East of 26th Avenue	S	0	3	0	0	0	0	3	3	3	3
SS	22nd Avenue	South of E Alder Street	W	0	1	0	0	0	0	1	1	1	1
TT	22nd Avenue	South of E Alder Street	E	0	0	0	0	0	0	0	0	0	0
UU	23rd Avenue	Btwn E Alder St and E Spruce St	W	0	0	0	0	0	0	0	0	0	0
VV	23rd Avenue	Btwn E Alder St and E Spruce St	E	0	0	0	0	0	0	0	0	0	0
WW	24th Avenue	Btwn E Alder St and E Spruce St	W	0	10	0	0	0	0	10	10	10	10
XX	24th Avenue	Btwn E Alder St and E Spruce St	E	0	8	0	0	0	0	8	8	8	8
YY	25th Avenue	Btwn E Alder St and E Spruce St	W	9	0	0	0	0	0	9	9	9	9
ZZ	25th Avenue	South of E Alder Street	E	6	0	0	0	0	0	6	6	6	6
AAA	26th Avenue	South of E Alder Street	W	0	3	0	0	0	0	3	3	3	3
BBB	26th Avenue	South of E Alder Street	E	0	4	0	0	0	0	4	4	4	4
CCC	E Spruce Street	West of 23rd Avenue	N	0	1	0	0	0	0	1	1	1	1
DDD	E Spruce Street	West of 23rd Avenue	S	0	0	0	0	0	0	0	0	0	0
EEE	E Spruce Street	Btwn 23rd Avenue and 24th Avenue	N	0	10	0	0	0	0	10	10	10	10
FFF	E Spruce Street	Btwn 23rd Avenue and 24th Avenue	S	5	5	0	0	0	0	10	10	10	10
GGG	E Spruce Street	Btwn 24th Avenue and 25th Avenue	N	0	11	0	0	0	0	11	11	11	11
HHH	E Spruce Street	Btwn 24th Avenue and 25th Avenue	S	9	0	0	0	0	0	9	9	9	9
III	23rd Avenue	South of E Spruce Street	W	0	0	0	0	0	0	0	0	0	0
JJJ	23rd Avenue	South of E Spruce Street	E	0	0	0	0	0	0	0	0	0	0
KKK	24th Avenue	South of E Spruce Street	W	0	4	0	0	0	0	4	4	4	4
LLL	24th Avenue	South of E Spruce Street	E	4	0	0	0	0	0	4	4	4	4
MMM	25th Avenue	South of E Spruce Street	W	0	4	0	0	0	0	4	4	4	4
	TOTAL			**39**	**255**	**3**	**1**	**23**	**3**	**324**	**301**	**324**	**324**

Garfield High School

On-Street Parking Utilization Study Results

Segment	Street Name	Street Segment	Side of Street	Parking Demand: Total Number of Vehicles Parks by Day and Time										
				Thursday 01/15/04 9:30 a.m.	Friday 01/23/04 9:30 a.m.	(No School) Monday 01/26/04 9:30 a.m.	Thursday 01/15/04 1:00 p.m.	Friday 01/23/04 1:00 p.m.	(No School) Monday 01/26/04 1:00 p.m.	Thursday 01/15/04 4:00 p.m.	Friday 01/23/04 4:00 p.m.	Thursday 01/15/04 8:30 p.m.	Friday 01/23/04 8:30 p.m.	Wed 02/18/04 8:30 p.m.
A	23rd Avenue	North of E James Street	W	0	0	0	0	0	0	0	0	0	0	0
B	E James Street	West of 23rd Avenue	N	0	0	0	0	0	0	0	0	0	0	0
C	E James Street	West of 23rd Avenue	S	2	2	2	3	1	3	2	2	1	1	3
D	23rd Avenue	North of E Jefferson Street	E	3	3	3	5	6	3	2	6	3	1	3
E	25th Avenue	North of E Jefferson Street	W	0	0	0	0	0	0	0	0	0	3	0
F	25th Avenue	North of E Jefferson Street	E	8	8	6	5	4	6	2	2	2	8	2
G	22nd Avenue	North of E Jefferson Street	W	3	3	2	4	3	2	3	2	2	3	2
H	22nd Avenue	North of E Jefferson Street	E	0	0	0	0	0	0	0	0	0	0	0
I	23rd Avenue	Btwn E Jefferson St and E James St	W	0	0	0	0	0	0	0	0	0	0	0
J	26th Avenue	North of E Jefferson Street	W	4	3	4	4	3	4	2	3	2	3	1
K	26th Avenue	North of E Jefferson Street	E	2	2	2	2	2	1	2	1	3	1	2
L	E Jefferson Street	West of 22nd Avenue	N	0	0	0	0	0	0	0	0	0	0	0
M	E Jefferson Street	West of 22nd Avenue	S	0	0	0	0	0	0	0	0	0	2	0
N	E Jefferson Street	Btwn 22nd Avenue and 23rd Avenue	N	0	0	0	0	0	0	0	0	0	0	1
O	E Jefferson Street	Btwn 22nd Avenue and 23rd Avenue	S	0	0	0	0	0	0	0	0	0	0	0
P	E Jefferson Street	Btwn 25th Avenue and 26th Avenue	N	3	7	4	3	7	4	5	6	4	4	4
Q	E Jefferson Street	Btwn 25th Avenue and 26th Avenue	S	5	7	1	3	5	1	2	4	5	8	1
R	E Jefferson Street	East of 26th Avenue	N	1	3	0	3	1	0	1	1	1	1	1
S	E Jefferson Street	East of 26th Avenue	S	1	3	1	2	2	1	1	2	1	2	0
T	22nd Avenue	South of E Jefferson Street	W	5	3	4	5	4	5	4	4	6	4	0
U	22nd Avenue	South of E Jefferson Street	E	0	0	0	0	0	0	0	0	0	0	0
V	23rd Avenue	Btwn E Jefferson St and E Terrace St	W	0	0	0	0	0	0	0	0	0	0	0
W	23rd Avenue	Btwn E Jefferson St and E Alder Street	E	0	0	0	0	0	0	0	0	0	0	0
X	25th Avenue	Btwn E Alder St and E Jefferson St	W	50	57	8	52	55	12	18	14	20	31	8
Y	25th Avenue	Btwn E Alder St and E Jefferson St	E	0	0	0	0	0	0	0	0	0	0	0
Z	26th Avenue	Btwn E Alder St and E Jefferson St	W	12	12	11	9	11	8	7	9	10	13	17
AA	26th Avenue	Btwn E Alder St and E Jefferson St	E	17	15	15	14	12	15	14	13	14	11	12
BB	E Terrace Street	West of 23rd Avenue	N	3	3	2	3	3	2	2	3	1	3	1
CC	E Terrace Street	West of 23rd Avenue	S	4	4	2	5	4	2	0	0	1	2	0
DD	22nd Avenue	North of E Alder Street	W	2	2	0	2	2	0	2	3	2	3	2
EE	22nd Avenue	North of E Alder Street	E	0	0	0	0	0	0	0	0	0	0	0
FF	23rd Avenue	Btwn E Terrace St and E Alder St	W	0	0	0	0	0	0	0	0	0	0	0
GG	E Alder Street	West of 22nd Avenue	N	0	0	0	0	0	0	0	0	0	0	0
HH	E Alder Street	West of 22nd Avenue	S	0	0	0	0	0	0	0	0	0	0	1
II	E Alder Street	Btwn 22nd Avenue and 23rd Avenue	N	9	11	4	11	10	4	7	5	8	8	6
JJ	E Alder Street	Btwn 22nd Avenue and 23rd Avenue	S	7	7	3	8	7	4	6	5	7	4	5
KK	E Alder Street	Btwn 23rd Avenue and 24th Avenue	N	8	1	0	0	1	0	7	3	8	7	0
LL	E Alder Street	Btwn 23rd Avenue and 24th Avenue	S	0	0	0	0	0	0	0	0	0	0	0
MM	E Alder Street	Btwn 24th Avenue and 25th Avenue	N	8	1	1	5	1	1	7	1	5	6	0
NN	E Alder Street	Btwn 24th Avenue and 25th Avenue	S	0	0	0	0	0	0	0	0	0	0	0
OO	E Alder Street	Btwn 25th Avenue and 26th Avenue	N	7	7	0	7	7	0	2	2	3	1	1
PP	E Alder Street	Btwn 25th Avenue and 26th Avenue	S	2	1	0	2	3	0	1	0	1	0	0
QQ	E Alder Street	East of 26th Avenue	N	4	3	0	4	2	0	3	1	1	1	0
RR	E Alder Street	East of 26th Avenue	S	2	3	2	3	2	2	2	2	2	1	1
SS	22nd Avenue	South of E Alder Street	W	1	1	0	1	1	1	1	1	1	0	1
TT	22nd Avenue	South of E Alder Street	E	0	0	0	0	0	0	0	0	0	0	0
UU	23rd Avenue	Btwn E Alder St and E Spruce St	W	0	0	0	0	0	0	0	0	0	0	0
VV	23rd Avenue	Btwn E Alder St and E Spruce St	E	0	0	0	0	0	0	0	0	0	0	0
WW	24th Avenue	Btwn E Alder St and E Spruce St	W	9	11	5	11	11	6	5	2	6	4	4
XX	24th Avenue	Btwn E Alder St and E Spruce St	E	7	8	3	9	8	2	4	3	5	2	4
YY	25th Avenue	Btwn E Alder St and E Spruce St	W	0	5	0	6	5	0	3	1	0	1	1
ZZ	25th Avenue	South of E Alder Street	E	1	2	3	5	5	1	2	2	2	2	3
AAA	26th Avenue	South of E Alder Street	W	3	2	1	3	3	1	0	1	2	1	2
BBB	26th Avenue	South of E Alder Street	E	4	1	2	3	3	2	1	1	1	2	2
CCC	E Spruce Street	West of 23rd Avenue	N	1	1	1	1	1	1	1	0	1	1	1
DDD	E Spruce Street	West of 23rd Avenue	S	0	0	0	0	0	0	0	0	0	0	0
EEE	E Spruce Street	Btwn 23rd Avenue and 24th Avenue	N	10	9	3	10	9	3	4	7	6	5	4
FFF	E Spruce Street	Btwn 23rd Avenue and 24th Avenue	S	6	8	3	10	10	2	1	5	2	4	3
GGG	E Spruce Street	Btwn 24th Avenue and 25th Avenue	N	8	10	3	10	11	4	6	8	6	10	6
HHH	E Spruce Street	Btwn 24th Avenue and 25th Avenue	S	2	7	0	6	7	0	2	3	3	8	6
III	23rd Avenue	South of E Spruce Street	W	0	0	0	0	0	0	0	0	0	0	0
JJJ	23rd Avenue	South of E Spruce Street	E	0	0	0	0	0	0	0	0	0	0	0
KKK	24th Avenue	South of E Spruce Street	W	3	2	1	4	3	0	1	2	3	3	2
LLL	24th Avenue	South of E Spruce Street	E	2	3	0	4	4	0	0	2	2	0	1
MMM	25th Avenue	South of E Spruce Street	W	2	3	2	2	2	1	2	2	3	2	2
	TOTAL			**231**	**244**	**104**	**249**	**241**	**104**	**137**	**134**	**156**	**177**	**116**

Garfield High School

On-Street Parking Utilization Study - Summary of Results

Survey day		Time Period 9:30 AM	1:00 PM	4:00 PM	8:30 PM
Thursday 01/15/04					
	Demand	231	249	137	156
	Utilization	71%	83%	42%	48%
Friday 01/23/04					
	Demand	244	241	134	177
	Utilization	75%	80%	41%	55%
Monday 01/26/04					
	Demand	104	104		
	Utilization	32%	35%		
Wednesday 02/18/04					
	Demand				116
	Utilization				36%
Average School Day Demand =		238	245	136	167
Existing Utilization =		73%	81%	42%	51%
Demand Without School =		104	104		116
Existing Utilization =		32%	35%		36%

Appendix B – Construction Activity Requirements

Construction Activity Requirements

Construction activities, including demolition and removal of materials from the site, are scheduled to last from June 2006 through August 2008. The contractor will be required to implement the following measures to ensure minimal environmental impacts throughout the construction duration:

Construction activities will be conducted in accordance with the City of Seattle's clearing and grading requirements. Erosion and sedimentation control measures will be implemented during all construction activities. Stringent measures would be employed at the site boundaries to minimize the potential for sediment to be transported off-site.

To reduce construction-related erosion and sedimentation, a site-specific erosion and sedimentation control plan will be developed, which will include the following at a minimum:

- Expose soil only in the active construction area. .
- Install straw bales, silt fences, and/or geonetting around the site perimeter.
- Cover stockpiled materials.
- Balance cut and fill on the site as much as possible.
- Revegetate/landscape the area promptly following construction.
- Store absorbent pads and spill containment supplies on-site for use in the event of a leak of hydraulic fluid, oils, lubricants, etc.

To reduce land use impacts associated with construction noise,

- Construction consistent with city codes, including approval of departures from single-family development standards
- Construction activities will be limited to the hours allowed by the City of Seattle Noise Ordinance (SMC 25.08.425).
- Proposed design measures such as lowering the school building and roof heights help to minimize height, bulk, and scale impacts
- Building facades and design will complement historic structures
- Parking lot and security lighting will be designed to minimize spillover

To reduce impacts to historic resources, the following procedural steps will be taken prior to any demolition of designated interior features:

- Murals from former art room and mechanical room will be preserved, if feasible.
- Photographic and written documentation will be completed pursuant to the Secretary of Interior's Standards and Guidelines for Architectural and Engineering Documentation:

Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER) prior to alteration, relocation, or demolition of properties.

- Work with the School District Archives to save important artifacts and memorabilia.

A construction management plan (CMP) addressing traffic and pedestrian control will be prepared to address truck routes and lane closures. This CMP will address lane closures, sidewalk closures, and bus stop relocations, where required. To the extent possible, the CMP should direct trucks away from residential streets to avoid unnecessary conflicts with resident and pedestrian activity.