CITY OF KIRKLAND
Department of Parks & Community Services
505 Market Street, Suite A, Kirkland, WA 98033 425.587.3300
www.ci.kirkland.wa.us

MEMORANDUM

To: David Ramsay, City Manager

From: Jennifer Schroder, Director of Parks and Community Services
Michael Cogle, Park Planning and Development Manager

Date: January 4, 2007

Subject: Ben Franklin Elementary School Park Improvements Plan

RECOMMENDATION

That the City Council approve the attached Park Improvements Plan for Ben Franklin Elementary School.

BACKGROUND

Staff and Park Board have completed the planning for park-related improvements at Ben Franklin Elementary School in the Bridle Trails Neighborhood. The recommended Park Improvements Plan (attached) responds to input received from neighbors, students, school staff, and Lake Washington School District administration.

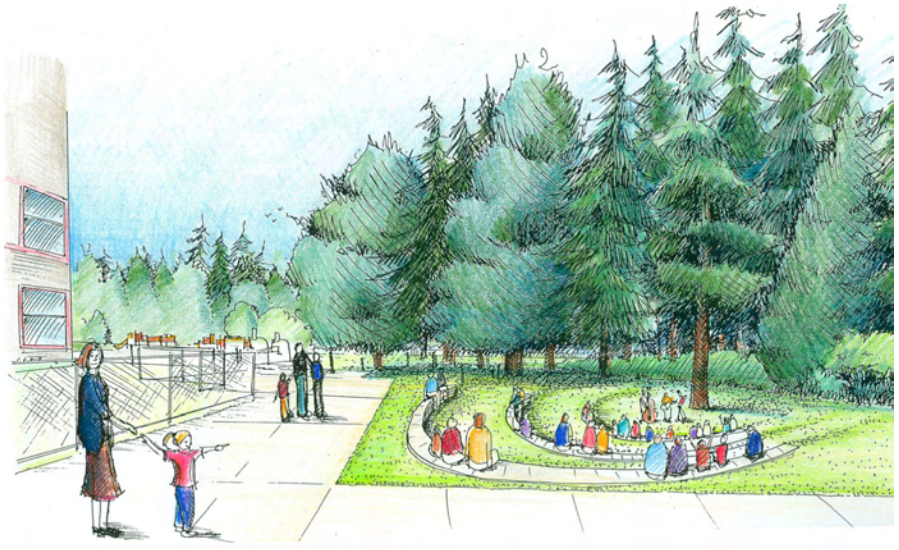
This project is funded via the 2002 Kirkland Park Bond and is the latest partnership project with the Lake Washington School District. Construction is slated for the summer of 2007.

Attachment

BEN FRANKLIN ELEMENTARY

PARK IMPROVEMENTS PLAN

City of Kirkland



WORTHY AND ASSOCIATES, LLC – LANDSCAPE ARCHITECTURE – PARK, RECREATION, AND ENVIRONMENTAL DESIGN

BEN FRANKLIN ELEMENTARY PARK IMPROVEMENTS PLAN

City of Kirkland

FOREWORD

"Employ thy time well, if thou meanest to get leisure." Benjamin Franklin

The Ben Franklin Elementary Park improvements provide an opportunity for healthy and fun community building. The environmentally sustainable enhancements mutually benefit the natural resources and the citizens of Kirkland, students, teachers, and staff.

The following are selections from letters written by Ben Franklin Elementary students regarding developing potential park elements in the forest and areas north of the school.

> "For many years, the residents … have breathed the clean air those trees made and played amongst the trees … and laughter could be heard ringing through the air."

> "…the park should have an eating area because in the summer it's nice to eat outside. For our school it would be nice to use the tables for outdoor activities or to have an end of the year party."

> "In the woods . . . the paths should be outlined … so people know where the paths are and don't cause erosion. We already have two perfectly fine [playgrounds] on school grounds."

BEN FRANKLIN ELEMENTARY PARK IMPROVEMENTS PLAN

City of Kirkland

ACKNOWLEDGEMENTS

City Council

Mayor Jim Lauinger
Deputy Mayor Joan McBride
Dave Asher
Mary-Alyce Burleigh
Jessica Greenway
Tom Hodgson
Bob Sternoff
City Manager David Ramsay

Kirkland Park Board

Chuck Bartlett, Chairperson
Jeff Trager
Cindy Zech
Kevin Hanefeld
Colleen Cullen
Robert Kamuda
Liesl Olson
Michelle Goerdel

Department of Parks and Community Services

Jennifer Schroder, CPRP, Director
Michael Cogle, Park Planning and Development Mgr.
Teresa Sollitto, Park Project Coordinator
Jason Filan, Park Maintenance and Operations Mgr.

Consultant

Worthy and Associates, LLC
Steve Worthy, ASLA, Principal
Carolyn Alcorn, ASLA
Laura Davis, ASLA
Elise Worthy, APA, Planner

BEN FRANKLIN ELEMENTARY PARK IMPROVEMENTS PLAN

City of Kirkland

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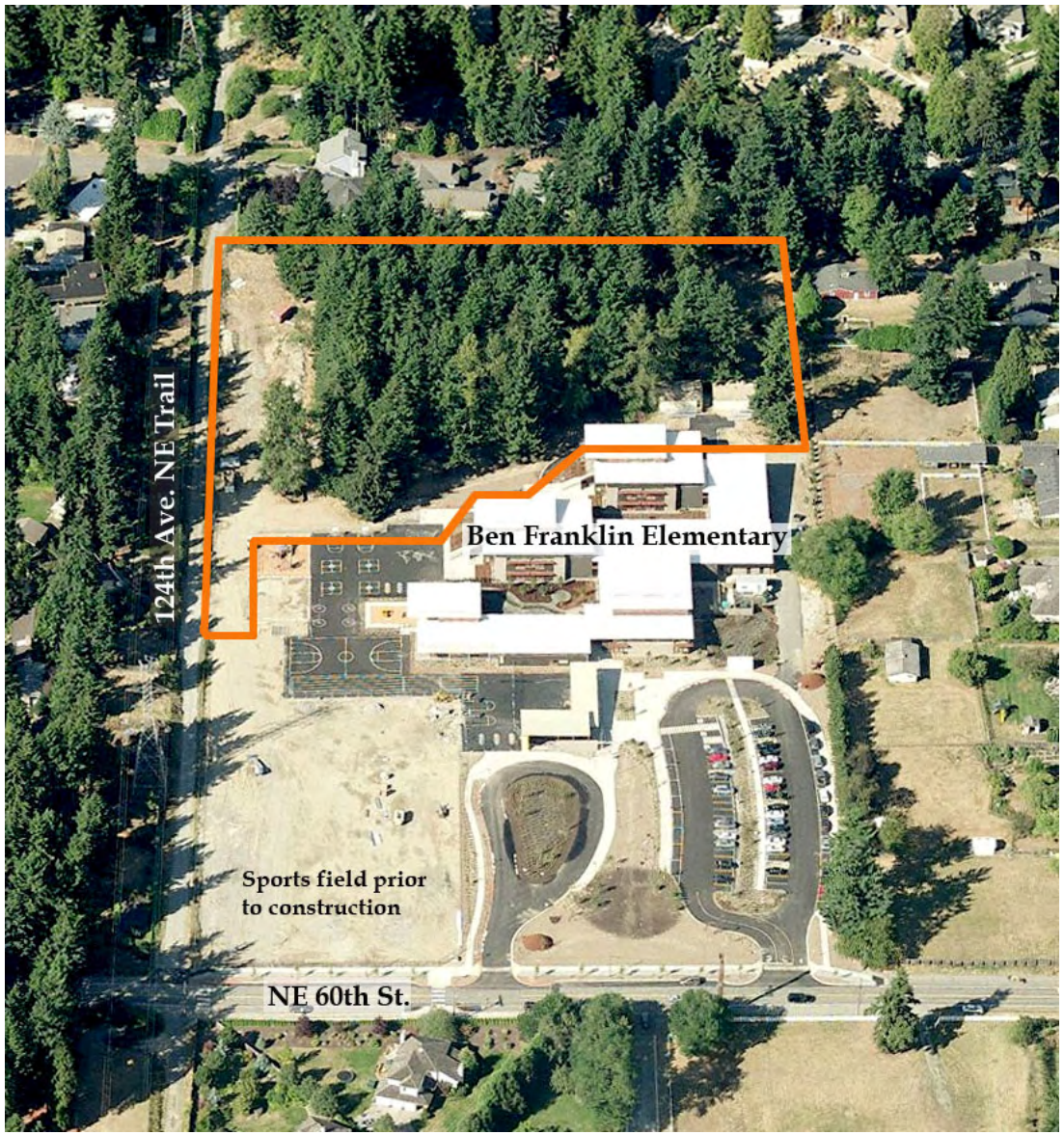
VICINITY MAP

Aerial Photo



SITE DESCRIPTION AND LOCATION

The Ben Franklin Elementary Park Improvements Project encompasses a wooded, 4.3 acre site directly north of Ben Franklin Elementary. The project is located on NE 60th St. between 124th Ave. NE and 125th Ave. NE, as shown on the vicinity map. The project is tucked within a residential neighborhood with single family homes on the north, east and west sides. A recreational trail spans the west side of the site and connects to the regional Bridle Creek trail. Ben Franklin Elementary was recently rebuilt in 2005 as a model for environmentally sustainable design with naturally ventilated and daylit classrooms and a focus on renewable materials. The building was sited to visually connect the students to this forest.

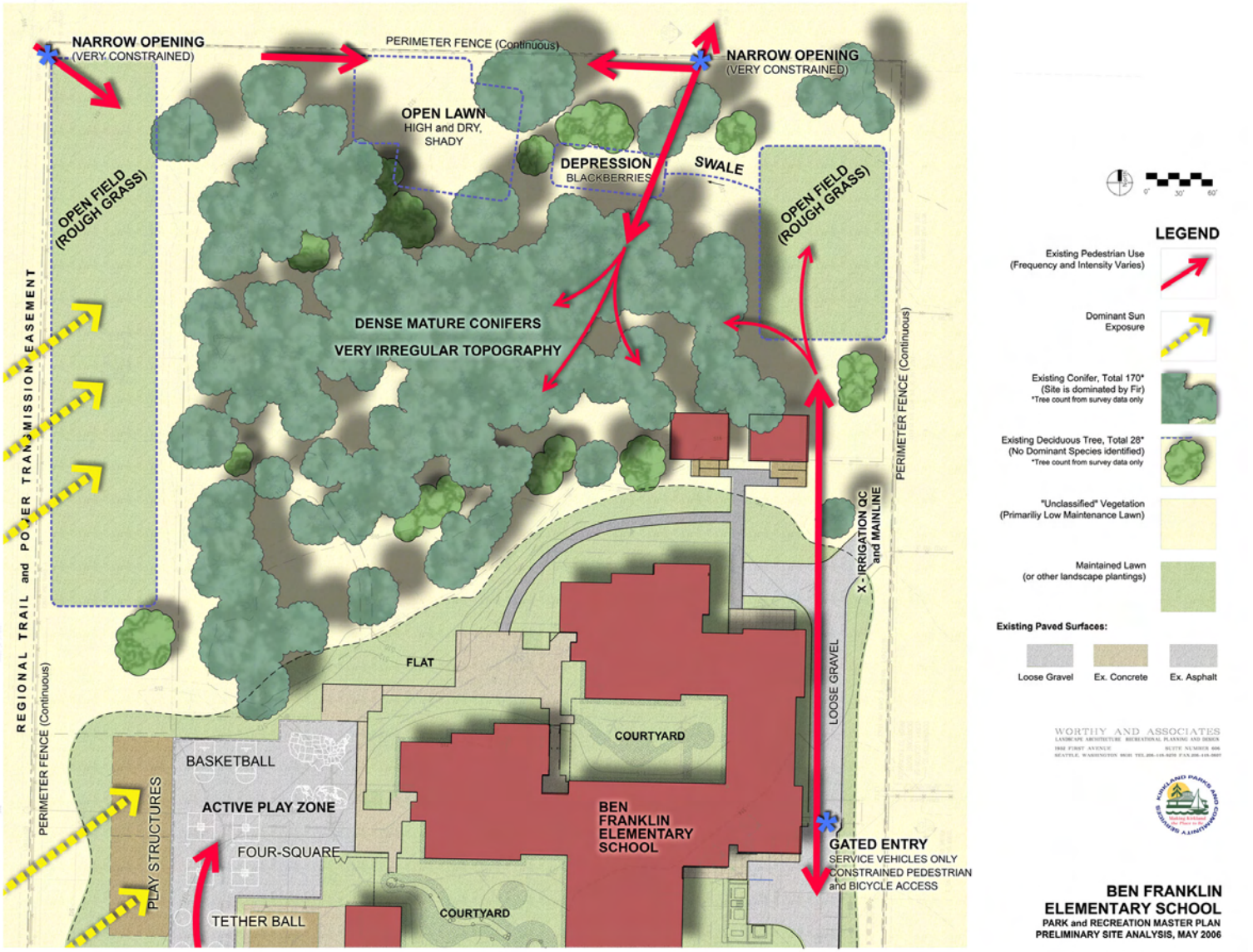
The park will provide a range of outdoor recreational opportunities to meet the elementary school, local neighborhood, and city-wide demands. Planned long-term site enhancements will create a sustainable resource which will serve the City of Kirkland in a multitude of ways from interpretational and educational activities near the forest to use as a community-enhancing gathering and recreation space in the meadows, amphitheater, forest circle seating, and shelters.

West Field

Forest Edge

Forest

SITE ANALYSIS



EXISTING CONDITIONS / ENVIRONMENTAL ELEMENTS

The following is a summary of the existing conditions and environmental elements associated with implementing the Park Improvement Plan.

Earth: The site elevations range between 508 and 520 feet with fairly smooth grades across the meadows and very irregular topography within the forest. There is evidence of minor regrading within the forest for the creation of bike jumps. The forest also has large openings in the understory due to trampling and consequent soil compaction.

Water: The park site is largely covered by vegetation and has minimal offsite drainage. Minimal surface water ponding has been observed in site depressions.

Plants: Dense mature conifers dominate the forest canopy. The most common tree species is Douglas Fir (*Pseudotsuga menzeisii*), but Western Red Cedar (*Thuja plicata*), Western Hemlock (*Tsuga heterophylla*), Black Cottonwood (*Populus trichocarpa*), Pacific Madrone (*Arbutus menzeisii*), Bigleaf Maple (*Acer macrophyllum*), and Red Alder (*Alnus rubra*) are also present onsite. The understory includes a diversity of native plants such as Salal (*Gaultheria shallon*), Red Huckleberry (*Vaccinium parvifolium*), Oregon Grape (*Mahonia nervosa*), Sword Fern (*Polystichum munitum*), and Snowbrush (*Ceanothus velutinus)*, but a few non-native invasive species also exist including Himalayan Blackberry and English Holly. The meadows are composed of minimally maintained lawn grasses and clover with Scot's Broom creeping in on the edges.

Red Huckleberry and Salal

Douglas Fir

Oregon Grape

Animals: No threatened or endangered species are known to be on or near the site. Songbirds and other birds are present and the site is located in the Pacific Flyway migration route. The Pacific Flyway ranges from the tundra of Alaska and Canada to the Gulf of California, as far west as Hawaii, and as far east as the Rocky Mountain Range. Horses can be observed on the adjacent properties to the east.

Noise: Light residential noise, urban automobile traffic, playground chatter, and the buzz of power lines exist in the area but are not expected to affect this project.

Aesthetics: With few built forms and a stand of mature trees, the park site has a rich natural setting. The strongest outside aesthetic influence comes from the adjacent school building. The school building is characterized by slanted roofs and grey earth-toned walls with brick-red accents around the windows. The school is a demonstration project for environmentally sustainable design.

Photo by Benjamin Benschneider

Recreation: The site is currently used for walking, biking, creative play, and informal field games in the meadows. The adjacent playground provides opportunities for basketball, tetherball, wallball, four-square, organized field games, and climbing on the play structures. Additional recreational elements are desired by the community and students and were discussed at the first public meeting.

Creative Play

Bikers in the Forest

Elementary School Playground

Elementary School Fields

Access: The nearest road connection is NE 60th Street which runs east-west on the south side of Ben Franklin Elementary. Currently the park can be accessed through the school property by crossing the playground on the southwest side or by walking up the gravel drive at the southeast corner. The City and School District are to meet to agree upon acceptable access hours and routes to the park. Neighborhood walk-in use is preferred with use of the school parking lot after hours. The park can also be entered through a narrow gap in the fencing in the northwest corner, which connects to the recreational trail, or through another narrow gap on the northeast side, which connects to a neighborhood road. Both of these entrances need to be improved to allow for ADA access.

Northeast Entrance

Northwest Entrance

Southeast Entrance

Southwest Entrance

PUBLIC PROCESS

The City contracted with Worthy and Associates to develop the Park Improvements Plan and serve as facilitators for the planning process.

A summary of key events in the public review process is listed as follows:

May 15, 2006: Park Board Meeting #1 covered the issues of access, signage and parking.

May 23, 2006: Public meeting #1 was held at Ben Franklin Elementary. Attendees brainstormed existing site conditions, uses, and concerns and gave design ideas for the park. Teachers also submitted student input at this meeting in the form of letters and drawings. Worthy and Associates used the feedback gathered from the first public meeting, the park board meeting, and discussions with site users to develop two varied design concept plans.

June 14, 2006: Design Concept #1 "Forest Featured" and Design Concept #2 "Field and Forest" were presented and reviewed at Park Board Meeting #2.

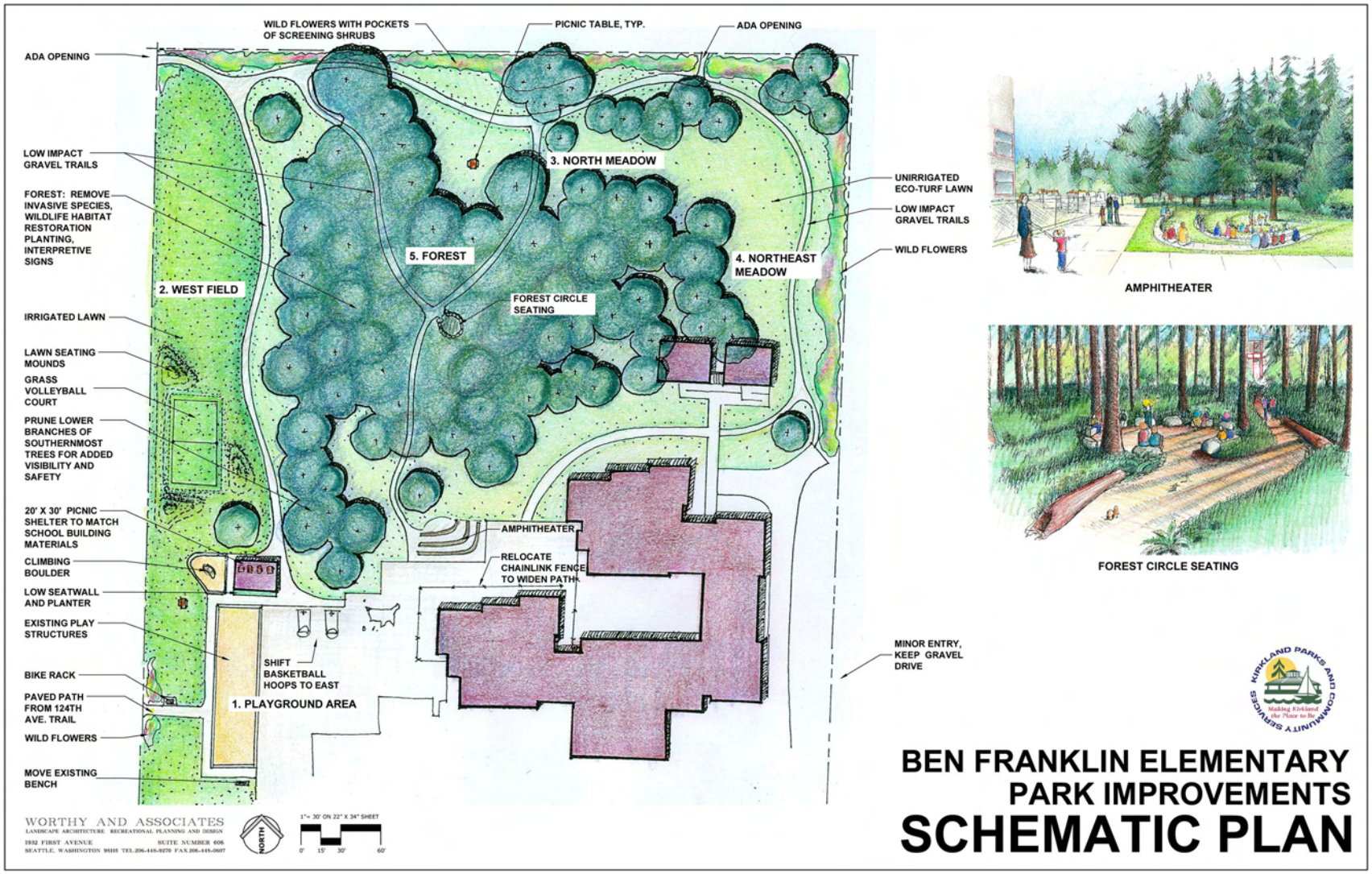
October 24, 2006: Design Concepts #1 and #2 were presented for comment at Public Meeting #2, held at Ben Franklin Elementary. Concept #1 was preferred with the addition of the amphitheater, a volleyball court located closer to the playground, and a direct path through the forest to the school.

October 25, 2006: Design Concepts #1 and #2 were presented the next morning for Ben Franklin Elementary staff. In general, the staff agreed with the feedback received from the public, and added preferences for irrigated lawn in the west field and having one large covered picnic area near the playground.

Based on the input from the design review meetings, different elements of Design Concepts #1 and #2 were combined and modified to create the Schematic Plan, shown in the following pages.

December 13, 2006: The Schematic Plan was presented, reviewed, and approved at Park Board Meeting #3.

PARK IMPROVEMENTS PLAN



DESIGN CONCEPT

The general design concept for the Ben Franklin Elementary Park Improvements Plan is to preserve and enhance the forest while providing increased recreational opportunities in the edges. From the beginning of the design process, the community and students made it clear that the forest is a sacred place not only for its value to native wildlife, but also for the magical experience it provides for people being within nature. The forest habitat will be enhanced through the removal of invasive plant species, additional native plantings, and low impact trails to direct foot traffic. Educational opportunities will be provided by interpretive signage and a forest classroom seating area. The recreational components planned for the edges of the forest include open lawn areas, a grass volleyball court, an amphitheater seating area, picnic tables and benches, a covered picnic shelter, climbing boulders, and trails.

1. PLAYGROUND AREA

- A 20′ by 30′ picnic shelter will be located north of the existing playground to allow good supervision during school recess periods. The design of the structure shall compliment the architectural style of the school.

- Climbing boulders set within ADA accessible wood fiber safety surfacing will enhance the existing play structures.

- Access to the playground will be improved by the addition of a paved path from the existing gate at 124th Ave. Powerline Trail and a widened concrete path just north of the school building

- Benches, picnic tables, and trash receptacles will be located to provide diverse seating and picnicking opportunities for students and the community.

- The existing low basketball hoops on the north end of the playground will be shifted to the east to open up the area in front of the new picnic shelter.

Pre-Manufactured Climbing Boulders

20' x 30' Picnic Shelter

2. WEST FIELD

- The west field will have irrigated lawn for informal active recreation use by the school and community.
- The northwest entrance will be improved with a new gate to allow for ADA access while still prohibiting equestrian and motorbike access.
- A gravel path along the east edge of the lawn area will accommodate the high-use connection between the neighborhood and Powerline Trail to the playground and school building.
- A grass volleyball court with bermed lawn seating will be located at the south end of the west field to allow for supervision during recess periods.

Irrigated Sports Turf

Grass Volleyball Court

Bermed Lawn Seating

3. NORTH MEADOW

- The northeast entrance will be improved with a new gate to allow for ADA access while still prohibiting equestrian and motorbike access.

- A gravel path along the north edge will accommodate the high-use connection between the neighborhood and the Powerline Trail.

- Benches and picnic tables will be sited to offer shadier seating and picnicking opportunities within the park.

- A shrub and wildflower border will provide a sufficient privacy buffer to the neighboring properties.

- Open areas will be restored as dry shade habitat.

Picnic Areas and Wildflowers

4. NORTHEAST MEADOW

- Preserved as a quiet zone to view horses.
- A gravel trail will connect the northeast entrance to the east side of the school and playground.
- Wildflowers will provide a colorful edge along the fence.
- The existing meadow will be fine graded, mowed, and replanted with a natural eco-turf seed mix.

Wildflower Border

Mowed and Unirrigated Natural Turf

Viewing of Horses

5. FOREST

- The forest habitat will be enhanced through the protection of native plant species and the removal of invasive plant species, such as Himalayan Blackberry, English Ivy, and Holly. Additional native plantings will be installed in bare areas of the forest understory as the budget allows.

- Forest paths will be defined with woodchips or gravel and other edge materials to minimize the trampling of the understory and consequent soil compaction.

- Interpretive signage will be added in and around the forest to educate students and the public about native plants and their value to the environment.

Why plant native?

- Native plants have adapted in our region for thousands of years and are the best suited plants for our weather and soil conditions.
- Native plants are the best habitat for animals of the northwest. They provide food, shelter, and nesting area for birds, amphibians, and mammals of our bioregion.
- Native plants prevent erosion by gripping the soil with their roots. They also filter pollution and make groundwater cleaner. Both of these features keep pollution and excess sediment from ending up in our waterways, which helps salmon.
- After they're established, native plants require little attention and less watering than non-natives.
- Some non-native species (called "invasive species") are incredibly aggressive and threaten biodiversity by killing other plants. For example, English Ivy is prolific and spreads easily; so much so that it can climb trees and kill them as well as block out and strangle many other low-lying plants. Other invasive species include the Himalayan Blackberry, English Ivy, Holly, and Scot's Broom.

- A forest seating area sized for one classroom of students will be created in an existing opening of the forest. Teachers will be able to bring their students to this space to learn about forest ecology as well as the abundant art and poetry inspired by nature. After school hours, the seating area will be an attractive place for public use, including family picnics, neighborhood meetings, or for quiet reflection by individuals walking the local trails. Seating will be created with natural materials such as stone or wood. The space will be located toward the center of the forest, but with some tree limbs removed for improved visual connections to the school.

- A terraced seating amphitheater is planned for an existing sloped area on the edge of the forest near the school. This gathering space will be used for larger school and community events. The amphitheater will have two to three tiers of seating with a small stage area at the bottom.

COST ANALYSIS

Opinion of Probable Construction Costs as of November 2006.

Item	Unit	Quantity	$/Unit	$/ Unit Total
Mobilization and General Conditions	LS	1		$15,000.00
Temp. Erosion/Sediment Control	LS	1		$5,000.00
Temp. Construction Fencing through Establishment	LF	1,500	$5.20	$7,800.00
Soil Prep and Enhancement Allowance	LS	1		$20,000.00
Remove/Dispose Invasive Species Plants	LS	1		$4,000.00
Grading Allowance	LS	1		$15,000.00
Seeding and Establishment	SF	30,000	$0.16	$4,800.00
Low Impact Drainage Allowance	LS	1		$5,000.00
Irrigation System Extention	LS	1		$25,000.00
Forest Circle Seating Boulders	TONS	42	$350.00	$14,700.00
Amphitheater Seatwalls	LF	150	$125.00	$18,750.00
Picnic Tables, Benches, and Bike Rack	LS	1		$9,500.00
Crushed Rock Pathways	CY	165	$45.00	$7,425.00
Native Restoration Planting Allowance	EA	500	$15.00	$7,500.00
Wildflower Seed and Establishment	SF	12,000	$0.25	$3,000.00

Organic Soil Amendments	CY	205	$30.00	$6,150.00
North and East Meadow Restoration Allowance	LS	1		$5,000.00
Volleyball Poles, and Net	LS	1		$900.00
HUNA Climbing Boulder, Safety Surfacing, Border	LS	1		$16,512.00
Relocate basketball hoops, chainlink fencing, misc.	LS	1		$2,000.00
Picnic Shelter and Seatwall/Planter	LS	1		$62,500.00
Interpretive Signs and Native Plant Markers	LS	1		$7,400.00
SUBTOTAL				**$262,937.00**
Contractor Overhead and Profit @ 15%				$39,440.55
2007 Inflation @ 8%				$21,034.96
Design and Construction Contingency @ 10%				$26,293.70
SUBTOTAL (Base Construction Contract)				**$349,706.21**
Sales Tax @ 8.8%				$30,774.15
SUBTOTAL (Base Construction Contract + Tax)				**$380,480.36**
Design Engineering @ 15% (of Base Construction Contract)				$52,455.93
Construction Admin. @ 5% (of Base Construction Contract)				$17,485.31
TOTAL (Base Construction Contract, Tax, Design + CA)				**$450,421.60**

All items shown are probable and not guarantees of project costs. Worthy and Associates is not responsible for any discrepancies for differences between estimated costs and actual constructed costs.

PROJECT PHASING

The site elements proposed will be implemented over time subject to grants and other funding. The park will offer many volunteer opportunities in the near future such as restoring the native plants and removing the non-native invasive plants.

NEXT STEPS

- Funding review, permits, and design
- Construction documents and bidding
- Construction— Summer 2007