

# **GREEN LAKE PATH EMERGENCY MARKER DESIGN PROJECT**

## **NEIGHBORHOOD MATCHING FUND PROPOSAL**

Prepared for  
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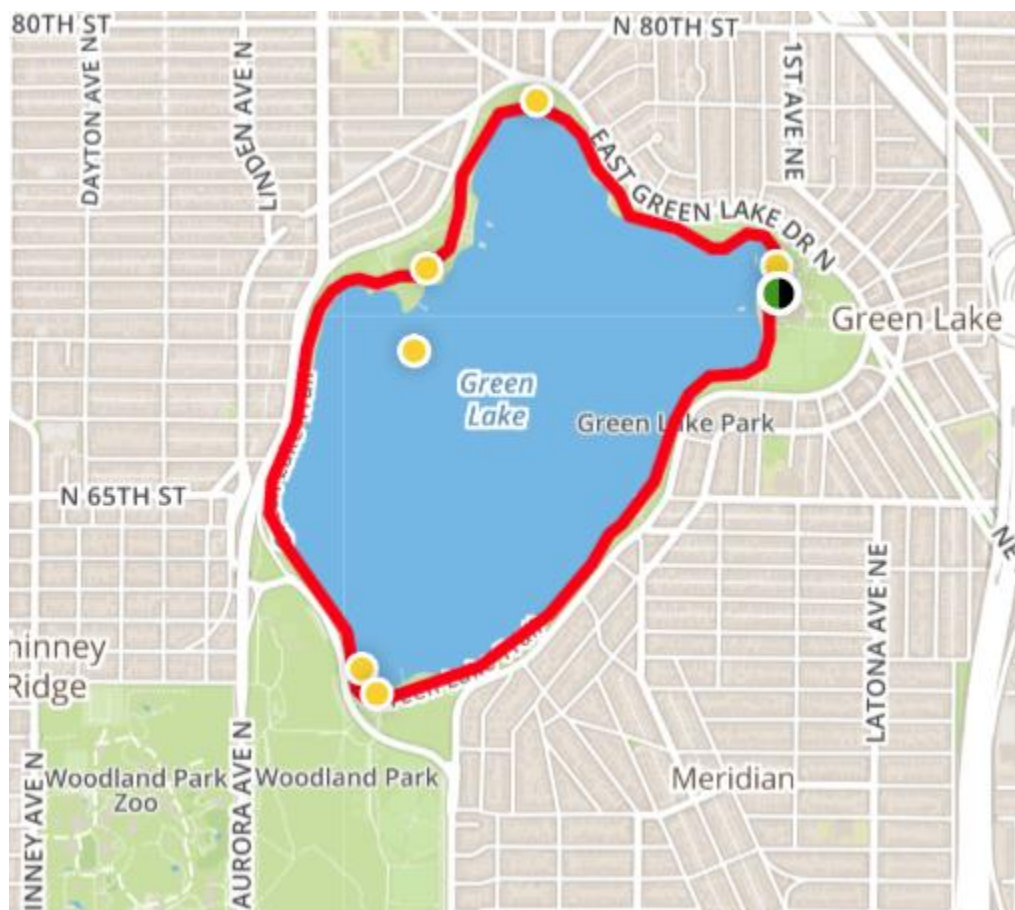
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# INTRODUCTION

Friends of Green Lake (FOGL) is a non-profit association in Seattle, Washington, whose mission is to support projects and activities that benefit both recreation and wildlife in Green Lake and the surrounding park. FOGL is currently registered with the Internal Revenue Service as a 501(c)(3) organization (EIN 33-1212539) and conducts business in accordance with bylaws that were first adopted on April 18, 2006. Membership consists of individuals with an interest in sustaining the mission of FOGL on a volunteer basis, and our membership is open to all regardless of race, color, gender, creed, or handicap.

FOGL prepared this proposal to obtain matching funds from Seattle Neighborhoods for the design of emergency markers along the Green Lake path surrounding the lake (Figure 1). Background information is presented, followed by a description of the design project tasks. If funds are obtained for the design project, then FOGL intends to submit a second proposal to install the markers.



**Figure 1. Green Lake Path Location.**

# BACKGROUND INFORMATION

## Purpose and Need

The purpose of the Green Lake path emergency markers is to assist Seattle emergency services with locating individuals who are on or near the path and in need of emergency services. On numerous occasions, patrons of the park have had difficulties in identifying their location when they call 911. Operators ask for a street intersection to relay to responders. However, street signs are not visible from the path at most locations and the nearest intersection may be as far as 500 feet away. In addition, landmarks near the path typically do not have signs to identify them and patrons inconsistently identify them by different names. Our proposal is to design an emergency path marker system that can be easily used by patrons to obtain a faster response by emergency services and render aid as needed.

## FOGL Project Team

FOGL has established an emergency marker (EM) committee consisting of the following individuals:

- Rob Zisette – FOGL President and EM project manager: [rzisette@herrerainc.com](mailto:rzisette@herrerainc.com)
- Alice Poggi – FOGL Member and EM project liaison: [avpoggi@hotmail.com](mailto:avpoggi@hotmail.com)
- Brian DeLuca – FOGL Recording Secretary and EM project design lead: [ketone64@comcast.net](mailto:ketone64@comcast.net)
- Karen Schurr – FOGL Treasurer and EM project accountant [kmschurr@zipcon.com](mailto:kmschurr@zipcon.com)

Each committee member is fully committed to project success and this project has the general support of other FOGL members. Committee member responsibilities are described below for Task 8 – Project Management.

## Community Support

FOGL has received support for this project from Seattle Parks and Recreation, Seattle Emergency Services, and the surrounding business community. Alice Poggi will continue to gather support and coordinate project activities with Seattle Parks and Recreation and Emergency Services. Brian DeLuca will continue to gather support and coordinate project activities with the business community.

## Seattle Parks and Recreation

Seattle Parks and Recreation (SPR) is very supportive of the project. Support for the project and this proposal has been received from the following SPR staff:

- Kathleen Conner, Strategic Advisor, Superintendent's Office:  
[Kathleen.Conner@seattle.gov](mailto:Kathleen.Conner@seattle.gov)
- Suzanne Rockwell, Interim Planning Manager: [Susanne.Rockwell@seattle.gov](mailto:Susanne.Rockwell@seattle.gov)
- Pamela Kliment, Neighborhood Planner: [Pamela.Kliment@seattle.gov](mailto:Pamela.Kliment@seattle.gov)
- Thomas Whittemore, Community Engagement Coordinator:  
[Thomas.Whittemore@seattle.gov](mailto:Thomas.Whittemore@seattle.gov)

FOGL has received supportive emails from each of these staff, and met with Pam Kliment at the path to further discuss the project and how to proceed with the project proposal.

## Emergency Services

The Seattle Office of Emergency Management (SOEM), Seattle Fire Department (SFD), and Seattle Police Department (SPD) are very supportive of the project. FOGL recently presented the project concept and receive favorable responses at a North Precinct Community Council meeting. FOGL has received support from the following individuals:

- Barb Graff, Director of Seattle Office of Emergency Management: [barb.graff@seattle.gov](mailto:barb.graff@seattle.gov)
- Captain Sean O'Donnell, Director of the Seattle Police Department 911 Communications Section and Commander of the Seattle Police Education and Training Section: Phone (206) 684-0850
- Mary Amberg, Seattle Police Department Crime Prevention Coordinator:  
[mary.amberg@seattle.gov](mailto:mary.amberg@seattle.gov)
- Harold Scoggins, Fire Chief of the Seattle Fire Department: [harold.scoggins@seattle.gov](mailto:harold.scoggins@seattle.gov)

Additional support and information on the benefits and use of emergency path markers has been obtained from:

- Robert Montague, 911 Communications Dispatch Supervisor, Seattle Police Department:  
[Robert.Montague@seattle.gov](mailto:Robert.Montague@seattle.gov)
- Rita Lee, E-911 GIS Analyst, Seattle Police Department: [rita.lee@seattle.gov](mailto:rita.lee@seattle.gov)
- Greg Hough, Captain of Communications, Seattle Fire Department – Fire Alarm Center:  
[Greg.Hough@seattle.gov](mailto:Greg.Hough@seattle.gov)

- Jacob Jawson, GIS Analyst, Seattle Fire Department: [Jacob.Jawson@seattle.gov](mailto:Jacob.Jawson@seattle.gov)

FOGL has received supportive emails from these staff. A letter of support from Captain Sean O'Donnell is presented in Appendix A.

## **Business Community**

The local business community is very supportive of the project. FOGL has received support from the following individuals:

- Clarke Gray, Seattle Boathouse Manager: [clarkemgray@aol.com](mailto:clarkemgray@aol.com)
- Duke Moscript, Duke's Chowder House: [duke@dukesseafood.com](mailto:duke@dukesseafood.com)

A letter of support from each of these individuals is presented in Appendix A.

## **TASK 1 - LANDSCAPE ARCHITECT SELECTION**

FOGL will hire a landscape architect to prepare the final EM design and assist FOGL with each of the following tasks for marker locations, design, manufacturer, installation, maintenance, and community education. FOGL will contact the following landscape architects to assess their experience and obtain a cost estimate:

- MacLeod Reckord located at 110 Prefontaine Place South, Suite 600, Seattle, WA 98104; phone 206-323-7919, email [infor@macleaodreckord.com](mailto:infor@macleaodreckord.com)
- Barker Landscape Architects located at 3002 NW 68th Street, Seattle, WA 98117; Nicolas Morin, phone 206-783-2870, email [nicolas@barkerla.com](mailto:nicolas@barkerla.com)
- J.A. Brennan Associates located at 2701 1st Ave Suite 510, Seattle, WA 98121; Jim Brennan, phone 206.583.0620, email [info@jabrennan.com](mailto:info@jabrennan.com)

FOGL will select a landscape architect based on the information obtained, and prepare an agreement with a scope of work and budget for their services on this project.

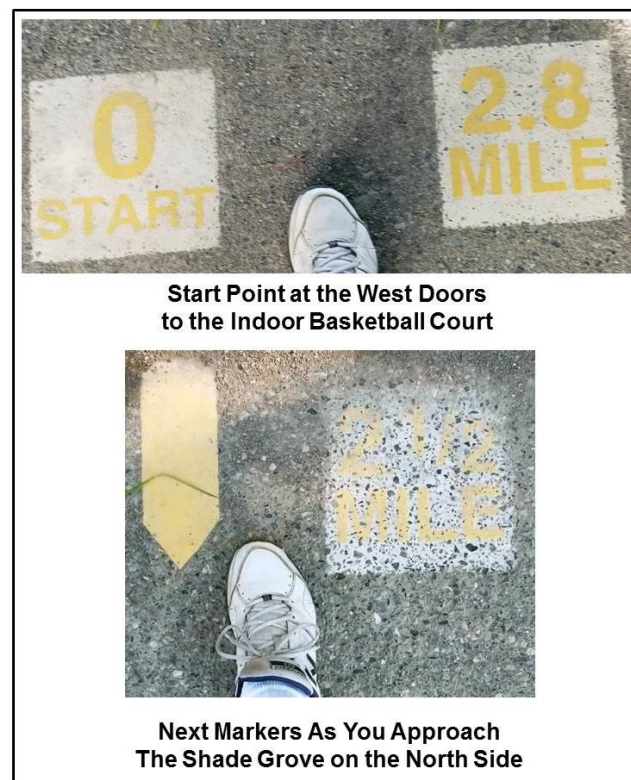
## **TASK 2 - MARKER LOCATION**

The total length of the path is approximately 2.81 miles (14,836 feet). FOGL is proposing to space the markers 150 feet apart. This spacing was selected to provide: 1) a maximum distance of 75 feet to the nearest marker to allow viewing of a marker from any location on the path, and 2) less than 100 markers to not exceed two digits for each marker number. FOGL will work with the landscape architect, SPR, and SOEM to determine the optimum marker spacing.



The path is separated into two lanes by a yellow line down the center with markings for walking on the inside lane and wheel transport on the outside lane. FOGL is proposing to place the emergency markers on the walking inside lane near the center yellow line. The walking lane was selected to minimize potential contact with wheels and a position near the center line was selected to prevent covering of a marker by gravel along the inside edge and prevent potential covering of a marker by repainting of the center line. FOGL will work with the landscape architect, SPR, and SOEM to determine the final marker positioning.

FOGL is proposing to place the first marker at the "0 START" mark painted on the path adjacent to the Green Lake Community Center (Figure 2). FOGL will work with the landscape architect, SPR, and SOEM to determine the optimum marker starting point.



**Figure 2. Proposed Marker Start Location (above) and Example Faded Marker (below).**

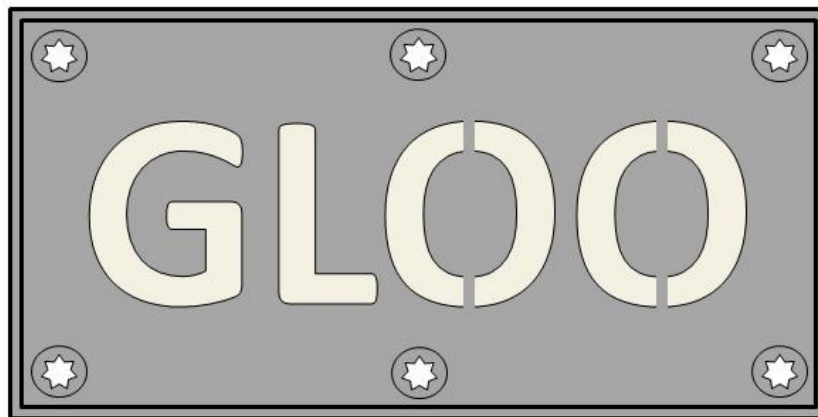
FOGL will accurately survey the position of each marker once the spacing, positioning, and starting point are determined. The survey will be conducted by Rob Zisette and Brian DeLuca using accurate survey equipment on loan from Herrera Environmental Consultants (Herrera), who is Rob's employer. The proposed survey method is as follows:

1. Rob and Brian and walk the lake starting at the "0 START" marker or other selected location.

2. Brian will use Herrera's calibrated distance measuring wheel to locate the exact positions on the path while walking the path in a counterclockwise direction. He will spray a small spot of paint on each position for future reference.
3. Rob will log each marker position, starting with number 00, using a Trimble GeoXH GPS unit. To increase accuracy from submeter to +/- 2 centimeters (1 inch) under trees, an antennae will be added to the GPS unit.
4. Herrera GIS staff will download the GIS data into a spreadsheet with the latitude and longitude position of each marker based on the Washington State Lambert Grid Coordinate System, North Zone, using the NAD83(1991) datum as established in accordance with chapter 58.20 of the Revised Code of Washington (RCW).
5. Herrera GIS staff will prepare a map of the marker positions on the trail using a base map provided by SPR.

## TASK 3 - MARKER DESIGN AND MANUFACTURE

FOGL is proposing the marker design to be 6 inches wide and 3 inches high and constructed of a thin aluminum plate with a thickness of 0.125 inches (3.2 millimeters). Aluminum is proposed over other metals or plastic because of its high durability and low cost. The marker thickness was selected to be thick enough for high durability and thin enough to prevent a tripping hazard. Each marker would be laser cut with beveled edges. Marker numbers would be laser cut into the aluminum, beginning with GL and followed by a 2-digit number (see example in Figure 3). Laser-cut metal markers are proposed over markers painted on asphalt to provide increased durability and longevity and reduced maintenance.



**Figure 3. Marker Conceptual Design Examples.**

The markers are proposed to be manufactured with six beveled counter-sunk holes in each corner and center top and bottom for attachment to the pavement by stainless steel screws. The center screws are to prevent the markers from flexing away from the surface. Each screw is proposed to be stainless steel, self-tapping, #10 size, star drive, and 2 inches long. The plates

would be installed by driving each screw into the asphalt without a need for glue or sealant (see Task 4). FOGL obtained quotes from Specialty Metals (Kent, Washington) for the plates at approximately \$800 for 100 plates and from Tacoma Screw at approximately \$430 for 600 screws.

FOGL will work with the landscape architect and SPR to evaluate other design concepts and finalize the marker design based on benefits and costs. The landscape architect will provide design drawings of the marker locations with details showing the plan and cross-section views. These drawings will be used for ordering materials and selecting an installation contractor during the construction phase of the project.

## **TASK 4 - MARKER INSTALLATION**

The proposed marker installation method is to screw each marker plate into the existing asphalt path at the locations determined in Task 3. A pedestrian safety plan will be prepared for the installation that is anticipated to consist of safety cones in the immediate vicinity of each marker on the foot-traffic side of the path.

FOGL will work with the landscape architect and SPR to determine the preferred marker installation method and pedestrian safety plan. The landscape architect will prepare plans and specifications for locating marker positions and installing the markers to be used by an installation contractor during the construction phase of the project.

## **TASK 5 – MARKER USE**

Accurate positions of the installed marker locations will be prepared and submitted to SOEM in a spreadsheet listing the marker number, latitude and longitude in the format required by SOEM. SOEM will input the marker positions into the system for access by all emergency service personnel. FOGL will consult SOEM to determine specific marker use procedures.

## **TASK 6 - MARKER MAINTENANCE**

The proposed marker design was developed to minimize a need for maintenance. It is anticipated they would be inspected approximately once each year in the early spring to insure they are visible and tightly secured to the asphalt. Maintenance may include occasional cleaning and replacement of screws or plates. FOGL will work with the landscape architect and SPR to develop appropriate inspection and maintenance procedures.

## TASK 7 - COMMUNITY EDUCATION AND INVOLVEMENT

The maker design will include a plan for educating the community about the markers and how to use them. It is anticipated that a simple, small sign will be developed for posting at existing sign locations along the path. FOGL will work with the landscape architect and SPR to design and produce the signs, and to identify alternative or additional marker education activities needed.

FOGL will hold meetings to inform and gather input from the local community about the design project. One meeting will be held at the beginning of the project to describe the project and gather input on the conceptual design presented in this proposal. A second meeting will be held to gather input on the draft design for consideration in the final design.

## TASK 8 - PROJECT MANAGEMENT

Rob Zisette will manage the project for FOGL to insure the project scope of work is properly and fully implemented. He will be responsible for developing and managing a contract with the landscape architecture, and providing progress reports and invoices to Seattle Neighborhoods. Rob has over 25 years of project management experience for an environmental consulting firm.

Alice Poggi will serve as the project liaison and will be responsible for coordinating meetings and gathering input from the various Seattle departments. Alice has over 25 years of experience as an SPR employee that included inter-departmental coordination.

Brian DeLuca will serve as the project design lead and will be responsible for reviewing design plans and specifications. Brian has over 25 years of experience in engineering design with Boeing.

Karen Schurr will serve as the project accountant to include tracking project task hours expended by FOGL members, expenses incurred by FOGL members, invoices and payments for the landscape architect, and submitting invoices and progress reports to Seattle Neighborhoods.

## PROJECT BUDGET

Table 1 presents the project budget by task showing hours and costs of volunteers and a landscape architect for the design project.

Green Lake Path Emergency Marker Design Project Budget											
	Task 1	Task 2	Task 3	Task 4	Task 5	Task 6	Task 7	Task 8	Total	Rate	Cost
<b>FOGL Member Labor Hours</b>											
Zisette	6	14	2	0	0	0	12	12	46	\$ 100	\$ 4,600
Poggi	2	6	2	0	0	0	16	6	32	\$ 100	\$ 3,200
DeLuca	2	10	4	4	4	4	12	6	46	\$ 100	\$ 4,600
Schurr	2	0	0	0	0	0	4	8	14	\$ 50	\$ 700
Others	0	0	0	0	0	0	24	0	24	\$ 50	\$ 1,200
										Labor Subtotal	\$ 14,300
<b>Landscape Architect Labor Hours</b>											
Staff TBD	0	4	24	12	0	6	12	6	64	\$ 180	\$ 11,520
										<b>Total Budget</b>	
										<b>\$ 25,820</b>	



## **APPENDIX A**

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### **Project Support Documentation**





Letter of Support for:  
Friends of Green Lake (FOGL)  
< <http://friendsofgreenlake.org/> >

October 20, 2018

To: Ms. Pamela Kliment and Seattle City Government at large.

I am well familiar with and appreciative of the good work FOGL has done over the years, for the health and well-being of the Lake and surrounding environs. As the lake and the park environs are healthy and safe, so also thrives the many businesses around the park. Many of my Green Lake restaurant patrons arrive before or after their activities in the park.

I have reviewed in detail their proposal to implement location markers on the paved path surrounding the lake. The path is the predominant access and activity location for park patrons. Even those who engage in water sport activities or green belt sports and picnicking make use of the path at some time in their visit. These markers would particularly aid those many frequent park visitors from neighborhoods not otherwise familiar with the streets surrounding the lake.

FOGL's operational concept and design implementation/installation is exactly what the park has needed. FOGL and I understand that inputs are needed from City Officials and Parks Department Architects and installers.

Had this proposed system already been in place, First Responders for several events requiring rapid and accurate location to the point of need would have been performed in a more efficient and timely manner.

Should the markers be implemented, I will prominently post an instructional sign at my North Green Lake site, which explains the location, purpose and use of the path markers. The restaurant staff will also be available to advise our customers about the markers.

Duke Moscrip  
Founder and CEO, Duke's Sea Food & Chowder  
< <https://www.dukesseafood.com/> >

Letter of Support for:  
Friends of Green Lake (FOGL)  
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October 20, 2018

To: Ms. Pamela Kliment and Seattle City Government at large.

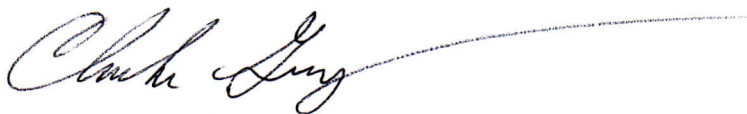
I am well familiar with and appreciative of the good work FOGL has done over the years, for the health and well-being of the Lake and surrounding environs.

I have reviewed in detail their proposal to implement location markers on the paved path surrounding the lake. The path is the predominant access and activity location for park patrons. Even those who engage in water sport activities or green belt sports and picnicking make use of the path at some time in their visit. These markers would particularly aid those many frequent park visitors from neighborhoods not otherwise familiar with the streets surrounding the lake.

FOGL's operational concept and design implementation/installation is exactly what the park has needed. FOGL and I understand that inputs are needed from City Officials and Parks Department Architects and installers.

Seattle should proceed with the needed steps to have this system installed. Myself, my staff, and my equipment have been called upon to assist First Responders for several events requiring rapid and accurate location to the point of need. Had this proposed system been in place, that work would have been performed in a more efficient and timely manner.

Should the markers be implemented, I will prominently post an instructional sign at the Boat Rental facility, which explains the location, purpose and use of the path markers. The staff will also be available to advise lake patrons about the markers.

A handwritten signature in black ink, appearing to read 'Clarke Gray', with a long horizontal flourish extending to the right.

Clarke Gray  
Proprietor, Green Lake Boat Rentals  
< <http://greenlakeboatrentals.net/> >