A Comparison of Design Processes Between Sustainable SITES Certified and Noncertified Urban Open Space Projects

Jennifer A. Wilseman
Utah State University

Follow this and additional works at: https://digitalcommons.usu.edu/etd
Part of the Landscape Architecture Commons

Recommended Citation
https://digitalcommons.usu.edu/etd/5444
A COMPARISON OF DESIGN PROCESSES BETWEEN SUSTAINABLE SITES CERTIFIED AND NONCERTIFIED URBAN OPEN SPACE PROJECTS

by

Jennifer A. Wiseman

A thesis submitted in partial fulfillment of the requirements for the degree of

MASTER OF LANDSCAPE ARCHITECTURE

Approved:

Ole R. Sleipness, Ph.D.  David T. Evans
Major Professor  Committee Member

Chris S. Jones  Mark R. McLellan, Ph.D.
Committee Member  Vice President for Research and Dean of the School of Graduate Studies

UTAH STATE UNIVERSITY
Logan, Utah
2017
ABSTRACT

A Comparison of Design Processes Between Sustainable SITES Certified and Noncertified Urban Open Space Projects

by

Jennifer A. Wiseman, Master of Landscape Architecture
Utah State University, 2017

Major Professor: Dr. Ole Sleipness
Department: Landscape Architecture and Environmental Planning

Many landscape architects implement sustainable design protocols into their design processes regardless of having the objective to gain SITES certification. This exploratory study examines the question, “How do the design processes differ between SITES certified and noncertified urban open space projects?” By analyzing and documenting the presence and nature of differences, this study aims to strengthen the objective of SITES certification for the purpose of recognition and validation of existing sustainable landscape architectural practices.

*Our Common Future*, also known as the Brundtland Report (Brundtland, 1987) proposes a global agenda for how sustainable development can be achieved, and the broader call for sustainability. In response to this report, the Sustainable SITES Initiative was modeled after LEED certification and formed to establish a rating system and comprehensive framework of guidelines for development (Calkins, 2012). SITES,
as it is commonly known, is a collaborative effort between the ASLA, the Lady Bird Johnson Wildflower Center, and the United States Botanic Garden. In June 2016, the Green Building Certification, Inc. of the United States Green Building Council acquired SITES and oversees subsequent certifications. SITES was formed to address the need for a coordinated response between all landscape design professionals, and to work in addition to and synergistically with LEED certification.

This comparative case study analysis compares and contrasts similar projects and their processes through qualitative research. Interviews, literature reviews, site visits and a review of records allows for examination in rich detail the patterns, similarities and contrasts of the design processes of three SITES certified urban open space projects and three noncertified urban open space projects. The three certified and noncertified projects are all in the Puget Sound area, allowing for comparability among variables within design processes.

This study pinpoints the components of sustainable landscape architectural practices and highlights landscape architecture’s commitment to sustainable development. Projects can gain recognition for sustainable practice through marketing projects as SITES certified, as the LEED certification program exemplifies. This study can also inform future concurrent certifications with LEED certifications. SITES currently works synergistically with LEED certification on several components, but increased collaboration will be mutually beneficial.
A Comparison of Design Processes Between Sustainable SITES Certified and Noncertified Urban Open Space Projects

Jennifer A. Wiseman

In response to the World Commission on Environment and Development’s Brundtland Report (1987) and other documents that have brought the need to address environmental, economic, and social issues to the forefront of the awareness of the public, the Sustainable SITES Initiative was modeled after LEED certification and was formed to establish a rating system and comprehensive framework of guidelines for development. It is a collaborative effort between the ASLA, the Lady Bird Johnson Wildflower Center, and the United States Botanic Garden. In June 2015, the Green Building Certification, Inc. of the United States Green Building Council acquired SITES and will oversee future certifications. SITES was formed to address the need for a coordinated response between all landscape design professionals, and to work in addition to and synergistically with LEED certification.

This study investigates the new sustainability rating system while exploring the professional marketplace and the design processes of three landscape architecture firms. The purpose of this study is to answer the question, “How do the design processes differ between SITES certified and noncertified urban open space projects in the Puget Sound area?” There are currently 47 landscape projects across the United States that have been certified by the SITES pilot program rating system.
This is an exploratory study that examines the processes of three landscape architecture firms, with two projects within each firm: one sustainably certified through SITES, one is not certified, for a total of six case studies. By analyzing and documenting the presence and nature of patterns, similarities and differences, this study aims to strengthen the objective of SITES certification for the purpose of recognition and to validate existing sustainable landscape architectural practices.

This study pinpoints the components of sustainable landscape architectural and highlights landscape architecture’s commitment to sustainable development. Landscape architecture has a rich history of incorporating sustainable practices into their work. With this new rating system, landscape projects can gain recognition for sustainable practice through marketing projects as SITES certified, as the LEED certification program exemplifies. This study can also inform future collaborations with LEED certifications. SITES currently works synergistically with LEED certification on several components, but increased collaboration will be mutually beneficial. The SITES certification process is very involved and time-consuming, and with valuable feedback from Landscape Architects, expedited certification can be possible.
ACKNOWLEDGMENTS

I would like to thank my committee members, Dr. Ole Sleipness, Prof. David Evans, and Chris Jones, for their support and invaluable insight throughout this entire process. I also give thanks to my family, friends, and colleagues for their encouragement and advice as I formed this paper into a final concept.

Jennifer A. Wiseman
CONTENTS

Page

ABSTRACT .......................................................................................................................... iii
PUBLIC ABSTRACT ........................................................................................................ v
ACKNOWLEDGMENTS ....................................................................................................... vii
LIST OF TABLES .............................................................................................................. x
LIST OF FIGURES ........................................................................................................... xi

CHAPTER

I. INTRODUCTION ............................................................................................................. 1

II. LITERATURE REVIEW ................................................................................................. 7

   Defining Sustainability .................................................................................................. 7
   Landscape Architecture and Sustainable Practices ..................................................... 11
   Practical Design Process ............................................................................................... 14
   Urban Open Space ....................................................................................................... 18
   The Sustainable Sites Initiative .................................................................................. 25

III. METHODOLOGY ........................................................................................................... 30

   Rationale for Comparative Case Study Method ......................................................... 31
   Selection Criteria ......................................................................................................... 33
   Site Observations and Documentation ......................................................................... 36
   Archival Documentation ............................................................................................... 36
   Interviews ...................................................................................................................... 37

IV. CASE STUDIES AND COMPARATIVE ANALYSIS ..................................................... 40

   Gustafson Guthrie Nichol Projects ............................................................................ 40
   Theater Commons and Donnelly Gardens ................................................................. 40
   Mercer Court ................................................................................................................ 43
   Robert Droll Projects ................................................................................................. 44
   East Bay Plaza .............................................................................................................. 44
   Port Plaza ..................................................................................................................... 47
   Site Workshop Projects .............................................................................................. 48
   Kirke Park ..................................................................................................................... 48
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. SITES 2009 Rating System</td>
<td>26</td>
</tr>
<tr>
<td>2. SITES Credits &amp; Prerequisites</td>
<td>27</td>
</tr>
<tr>
<td>3. Project Selection Criteria</td>
<td>36</td>
</tr>
<tr>
<td>4. Certified Project Scores</td>
<td>41</td>
</tr>
<tr>
<td>5. Methodology Process &amp; Rationale</td>
<td>51</td>
</tr>
<tr>
<td>6. Certified Project Overview</td>
<td>53</td>
</tr>
<tr>
<td>7. Noncertified Project Overview</td>
<td>54</td>
</tr>
<tr>
<td>8. Site Observation Framework</td>
<td>55</td>
</tr>
<tr>
<td>9. Site Observations</td>
<td>58</td>
</tr>
<tr>
<td>10. Archival Documentation</td>
<td>61</td>
</tr>
<tr>
<td>11. Interview Themes</td>
<td>70</td>
</tr>
<tr>
<td>12. Overall Sustainability</td>
<td>76</td>
</tr>
</tbody>
</table>
LIST OF FIGURES

Figure                                   Page
1.  The Newman Design Squiggle               17
2.  Lawson’s design processes                18
3.  Global urbanization                       19
4.  Puget Sound urban lights                  20
5.  Urban parks lead to sustainable cities    23
6.  SITES pilot program project types        28
7.  Area of focus: Puget Sound               34
8.  Theater Commons and Donnelly Gardens     42
9.  Theater Commons plantings                42
10. Mercer Court                              43
11. Mercer Court benches                     44
12. East Bay Plaza northeast corner          45
13. East Bay Plaza southeast corner          46
14. East Bay Plaza                           46
15. Port Plaza entrance sign                 47
16. Port Plaza viewing tower                 48
17. Kirke Park entrance                      49
18. Kirke Park garden shed                   50
19. Ella Bailey Park and Elliot Bay          52
20. Ella Bailey Park                          52
21. Theater Commons permeable paving .................................................................69
22. Theater Commons educational signage ..........................................................59
23. Mercer Court student farm ...............................................................................62
24. Mercer Court pedestrian circulation ...............................................................62
25. East Bay Plaza reclaimed water feature ............................................................63
26. East Bay Plaza pedestrian circulation & native plantings ...............................63
27. Port Plaza drought adapted plantings ...............................................................64
28. Port Plaza material reuse ..................................................................................64
29. Kirke Park material reuse ..................................................................................65
30. Kirke Park educational signage .......................................................................65
31. Ella Bailey Park slope remediation ....................................................................66
32. Ella Bailey Park ..................................................................................................66
CHAPTER I
INTRODUCTION

Landscape architecture has a rich history of sustainable design. Incorporating environmental, economic, and social responsibility into designs is deeply woven into the fabric of the process and practice of many landscape architects and is ingrained in our profession’s cultural ideals. This is evidenced by the succession of work from Frederick Law Olmsted with his iconic designs and ideals of human health and well-being; to Jens Jensen and his naturalistic prairie style, promotion of native plant use, and sourcing local materials; to Ian McHarg who pioneered the concept of ecological design; and Carl Steinitz and his contemporaries renowned for promoting ecological design at large scales. Landscape architects have incorporated ideals of sustainability for many years. As Michael Van Valkenburgh stated regarding McHarg and Steinitz, these individuals “were awakened to a methodology for regional and local planning that firmly placed ecology at its center” (as cited in Calkins, 2012, p. ix). The continued planning for the protection of our valuable ecosystems through responsible development is needed today, now more than ever.

In 2002, the United Nations commissioned the Millennium Ecosystem Assessment in order to conduct a global study on ecosystem changes. The report alarmingly revealed a stark warning that human activity is straining the natural functions of earth and that the ability of the planet’s ecosystems to sustain future generations can no longer be taken for granted (Millennium Ecosystem Assessment, 2005). In response to the current need of ecosystem protection and the warning from documents such as the Brundtland Report (Brundtland, 1987), the Sustainable Sites Initiative (SITES) has
recently developed a comprehensive framework of guidelines and a rating system that will potentially elevate the value of landscapes by defining sustainable sites, measuring and evaluating their performance. SITES is a program and toolkit for developing sustainable landscapes (“Home | SITES,” n.d.).

The rating system measures the components of hydrology, soils and vegetation, material selection, and human health and well-being. These components reflect the economical, environmental, and social aspects of sustainability. This research study compares the design processes of SITES certified and noncertified urban open space projects to determine whether project certification substantially impacts the process by which landscape architects design urban open spaces.

Sustainability, as a design consideration, existed within the practices of many planners and landscape architects even before the term became a staple of conversation within the profession of landscape architecture. Today, the term “sustainability” is often criticized as over-used and misused and has lost its legitimacy and relevance to its original definition, as operationalized in the Brundtland Report (Antrop, 2006; Clayton & Radcliffe, 1996; Kidd, 1992; Sneddon, Howarth, & Norgaard, 2006; Sleipness, 2014, 2016). For the purposes of this study, the term sustainability is used as defined within the Brundtland Report, with adaptation to include the definition used by SITES. Within the Brundtland Report, sustainable development is defined as “…development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland, 1987, p. 43). This definition is based on the premise of finite resources and limits to growth (Meadows, Randers, & Meadows, 2004). SITES has adapted this definition to landscape architecture stating, “Sustainable design is
design, construction, operations and maintenance practices that meet the needs of the present without compromising the ability of future generations to meet their own needs” (Calkins, 2012, p. 2)

Originally, the formation of SITES was a collaborative effort between the American Society of Landscape Architects, the Ladybird Johnson Wildflower Center at the University of Texas at Austin, and the United States Botanic Garden. As of July 2015, the U.S. Green Building Council acquired SITES and is set to oversee all future certifications. The official evaluative categories of the rating system include: Site Context, Predesign Assessment and Planning, Site Design - Water, Site Design - Soil, Site Design - Material Selection, Site Design - Human Health and Well-Being, Construction, Operations and Maintenance, Education and Performance Monitoring, and Innovation or Exemplary Performance. While the above considerations are components of the SITES rating system, arguably, consideration of these categories could also be conceived as components of sustainable landscape architectural design practices that occur independently of project certification (Thayer, 1989; Thompson & Steiner, 1997). In Sustainable Site Design, Dinep and Schwab (2009) showcased six case studies of current, noncertified sustainable projects that present evidence of this assertion.

Given that many landscape architects implement sustainable design protocols into their design processes regardless of having the objective to gain SITES certification (Dinep & Schwab, 2009; Thayer, 1989; Thompson & Steiner, 1997), this exploratory study examines the question: “How do the design processes differ between SITES certified and noncertified urban open space projects in the Puget Sound area?” By analyzing and documenting the presence and nature of substantive differences, this study
aims to strengthen the objective of SITES certification for recognition and validation of existing sustainable landscape architecture practices.

As Francis (2001) stated, “The primary body of knowledge in landscape architecture is contained in the written and visual documentation—that is, stories—of projects, be it well-known ones such as New York’s Central Park, or more modest projects such as a small neighborhood park. Together, these cases provide the primary form of education, innovation, and testing for the profession” (p. 15). This study implements the comparative case study method, which will allow for comparing and contrasting similar projects and their processes through conducting qualitative research. Through the comparative case study method, this study examines and compares the patterns, similarities and contrasts of the design processes of three SITES certified urban open space projects and three noncertified urban open space projects. By analyzing and documenting the presence and nature of significant differences, this study aims to strengthen the objective of SITES certification for the purposes of recognition and validation of existing sustainable landscape architectural practices.

This qualitative research documents preliminary investigations and site visits and observations, as well as informs and enhances the interview section of the study. The study records the interview responses of six project managers responsible for the design and implementation of each selected site in order to obtain in-depth information regarding each project’s design process. Comparisons are made between the processes of each SITES certified project, while contrasts in design processes are observed within each firm from the certified projects and the noncertified projects.
Model frameworks (Calkins, 2012; Dinep & Schwab, 2009), provided the basis for interview questions regarding the design processes and sustainability in landscape architecture and planning. An initial general framework taken from the SITES rating system components informed the structure of the interview questions, which include: site selection; predesign assessment and planning; site design - water; site design - soil and vegetation; site design - materials selection; site design - human health and well-being; construction; operations and maintenance; and monitoring and innovation. These components include ecological, economical, and social health analysis, program assessment, and evaluation.

Selection criteria for projects included in this study were: 1) recent SITES certified projects; 2) projects that are located in the Puget Sound area of Washington State; and 3) sites that are categorically urban open spaces as defined by Francis (2003) as open space in an urban environment that is publically accessible such as streets, markets, squares and plazas, public parks, playgrounds, waterfronts, urban wilderness and any found neighborhood spaces. Based on these criteria, selected SITES certified projects are: 1) East Bay Public Plaza in Olympia, Washington; 2) Kirke Park in Seattle, Washington; and 3) Theater Commons and Donnelly Garden in Seattle, Washington. The three noncertified urban open space projects were determined based upon the recommendation of each landscape architecture firm and will fulfill the following criteria: 1) a noncertified project; 2) projects that are located in the Puget Sound area of Washington State; and 3) sites that are categorically urban open spaces.

Primary results include the discovery of little substantive differences between the certified and noncertified projects, with a few exceptions. There are also findings in
each case study of the existence of sustainable design practices that were implemented regardless of certification. Upon conducting site visits and observations, interviews and archival documentation review, the budgetary expenses and extensive soil testing were consistently mentioned as significant considerations of pursuing certification.

The significance of this exploratory study is to pinpoint the components of sustainable landscape architectural practices and highlight landscape architecture’s commitment to sustainable development. Projects can gain recognition for sustainable practice through marketing projects as SITES certified, as the LEED certification program exemplifies. This study also informs future concurrent certifications with LEED. SITES already works synergistically with LEED certification on several components, but increased collaboration will be mutually beneficial, as the focus on LEED is the building structure, and SITES focuses on the surrounding land and the site context in which the building is placed. Lastly, this study has enhanced the author’s own design process while allowing the connectivity with the marketplace and professional practice.
CHAPTER II
LITERATURE REVIEW

This literature review discusses certain terms and definitions that are relative to this study. Specifically, sustainability, the Sustainable SITES Initiative, urban open space, and design process are defined and operationalized for the context of this study. Relatedly, historical and contemporary uses of sustainable practices in the field of landscape architecture are described.

Sustainability

The term sustainability was first used extensively in the book, *Blueprint for Survival* (Goldsmith, 1972). Since then, many have criticized the term as overused and misused (Antrop, 2006; Clayton & Radcliffe, 1996; Kidd, 1992; Sleipness, 2014, 2016; Sneddon, Howarth, & Norgaard, 2006). While often used to imprecisely describe anything from green practices to procedures characterized as the right way of doing things, Karoly (2011, p. 7) described the current meaning of the word sustainability by stating, “It simply means ‘good’, a synonym for everything that is positive.”

Though criticized as overused, the term sustainability is still relevant within discussions of the local, national, and global scales of environments, societies, and economies. As Charles Kidd (1992) explained, the meaning of the term sustainability has roots in pressure on the environment, rates of population growth, and resource use. The official definition of sustainable development was elucidated by the Brundtland Report in 1987 as “...development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland,
Sustainability and specifically sustainable development addresses what is known as the triple bottom line in accounting terms, which makes up the overlapping areas of a Venn diagram, and is comprised of social equity, economical feasibility, and environmentally sound practices.

Abundant evidence suggests that the world and its constituent landscapes are on an unsustainable trajectory (Benson & Roe, 2007; Brundtland, 1987; Mastny, 2015; Wu, 2013). An approach to combat this trajectory is implementation of each of the three areas of sustainability. First, environmental sustainability is the protection of natural resources and ecosystems in the environment, and provides for a healthy and livable environment for all ecosystems. Goodland (1995) claimed that environmental sustainability seeks to sustain global life-support systems indefinitely. Goodland and Daly (1996, p. 1000) went on to further clarify environmental sustainability by exclaiming that “...holding waste emissions within the assimilative capacity of the environment without impairing it. It also means keeping harvest rates of renewables to within regeneration rates”.

Social sustainability refers to maintaining the capacity for healthy and livable communities. This is the human and cultural side of sustainability. Attributes of a society that provides social capital and thus social sustainability include: “social cohesion, cultural identity, diversity, sodality, comity, sense of community, tolerance, humility, compassion, patience, forbearance, fellowship, fraternity, institutions, love, pluralism, commonly accepted standards of honesty, laws, discipline, etc.” (Goodland & Daly, 1996, p. 1003). Sustainability necessarily includes social aspects. The social processes that shape a society’s interactions and relationships with nature need to be analyzed. It is no
longer deemed sufficient to meet the standards defined by the natural sciences (Littig & Griessler, 2005).

Economic sustainability maintains healthy businesses and commerce. This is the monetary aspect of sustainability. “Economic sustainability is often seen as a matter of intergenerational equity, but the specification of what is to be sustained is not always straightforward” (Anand & Sen, 2000, p. 2029). They continue that, “It should also be noted that any instrumental justification for human development is not gripped by some impersonal objective such as conserving the environment, but relates concretely to people's ability to generate for themselves the real opportunities of good living” (p. 2039). Sustainability that allows for economic balance and “Economic growth not only involves increase in private incomes, but it can also significantly contribute to generating resources that can be collected to improve social services, such as public healthcare, epidemiological protection, basic education, safe drinking water” (Anand & Sen, 2000, p. 2032).

The American Society of Landscape Architects (ASLA) comments on economic sustainability by stating, “In a market-driven economy, cost is a deciding factor in determining whether a project moves forward. To be sustainable, projects must not only provide environmental and social benefits, but also offer economic value. Ecosystem service models can also be used to quantify the inherent economic value of services nature already provides for free” (ASLA, 2016, p. 1). Implementation of all three areas of sustainability will provide for sustainable development.

Sustainability is also systems-based, with the areas of social, economic, and environmental each being a system themselves. Sustainability has also been referred to
as a three-legged stool, wherein if one leg of the stool fails, the rest will fail in turn. They all rely on each other for stability and success. “A systems approach to sustainability entails considering the various agents interacting in the world as systems,” (Clayton & Radcliffe, 1996, p. 12). These individual systems then come together to create a larger system of sustainability. Alexander (1977, p. xiii) stated the following regarding systems and patterns:

“In short, no pattern is an isolated entity.” He then continues, “...when you build a thing you cannot merely build that thing in isolation, but must also repair the world around it, and within it, so that the large world at that one place becomes more coherent, and more whole; and the thing which you make takes its place in the web of nature, as you make it.”

He posited that when the elements of a set belong together because they cooperate or work together somehow, we call the set of elements a system (Alexander, 1965). Sustainability is a system of elements working together at various scales. Clayton and Radcliffe (1996) argued that it seems unlikely to ever have permanent sustainability as environmental, social, and economic conditions are constantly changing and evolving. They did state, however, that “the key to achieving sustainable development is to understand and shape the interaction between complex adaptive natural systems and soft socio-economic systems in order to ensure that we always remain within our survival region at the intersection of the survival regions of all the systems on which we are dependent” (p. 214). However, scale makes it difficult to study sustainability globally and apply local policy. Wu (2013, p. 1000) explained that, “...local ecosystem-based studies tend to be too small in spatial extent to incorporate the environmental, economic, and social patterns
and processes most relevant to sustainable development, whereas at the global scale, it is often impossible to assess essential mechanistic details necessary for guiding local policies”. A landscape or region, consisting of multiple ecosystems over a geographically defined area or a watershed, represents a pivotal scale domain for the research and application of sustainability (Dramstad, et al., 1990; Forman, 2008; Wu, 2013; Wu & Plantinga, 2003). According to this statement, landscapes are the perfect scale to study sustainability. Landscape architects have been designing sustainable landscapes in some form or fashion for as long as the profession has existed, and it is an important part of many landscape architects’ design processes.

**Landscape Architecture and Sustainable Practices**

Sustainable is often an important descriptor of the projects that landscape architects design. Sustainability is ingrained in their practice and they regularly strive for environmental, economic, and social balance. Sleipness (2016, p. 105) opines, “many of the subcategories associated with sustainable site design, particularly regarding topography, hydrology, and vegetation and concepts of nondeclining, sustained yield of natural resources, long predate the modern environmental movement—having formed prominent cornerstones within the disciplines of planning and landscape architecture”.

Thayer (1989, p. 101) also stated the importance of sustainability: “The evolving concept of the sustainable landscape is a welcome and necessary component of the philosophy, theory, and practice of landscape architecture”. Corner (as cited in Thompson & Steiner, 1997) comments on ecology and landscape architecture asserting that the process of which ecology and creativity speak are fundamental to the work of landscape architecture.
Landscape architecture has a rich history of sustainable design. This is evidenced in the United States specifically by the succession of work beginning from Frederick Law Olmsted and his iconic designs that highlighted the ideals of human health and well-being; to Jens Jensen with his naturalistic prairie style that promoted native plant use and sourcing of local materials; to Ian McHarg who pioneered the concept of ecological design; and presently, Carl Steinitz and his contemporaries who are also renowned for ecological landscape designs. As Michael Van Valkenburgh stated regarding McHarg and Steinitz, these individuals “were awakened to a methodology for regional and local planning that firmly placed ecology at its center” (Calkins, 2012, p. ix). McHarg (1995, p. 5) expresses that man must live in harmony with nature and “He must become the steward of biosphere. To do this he must design with nature”.

The importance of sustainability in the field of landscape architecture is further evidenced by the professional organization of the ASLA. The ASLA has written the promise to seek sustainable design solutions in each of their projects into their Professional and Environmental Codes of Ethics. One of many examples stated, “Members should work with clients, review and approval agencies, and local, regional, national, and global governing authorities to educate about, encourage, and seek approval of environmentally positive, financially sound, and sustainable solutions to land-use, development, and management opportunities” (ASLA, 2006, p. 1). Sustainability is revered and promoted regardless if landscape architects are seeking a certification or not.

Rogers (2010, p. 58) discusses in his books several categories of projects headed by landscape architects and the very first category is “Projects that feature sustainable concepts, “green” solutions and LEED certification”. He also explained that “From the
simplicity of capturing storm water in a residential rain barrel to using solar lighting for a park project to promoting alternative modes of transportation by planning of urban greenways to the technical complexities of designing rooftop gardens, landscape architects are involved with sustainable design practices and the “green” building movement. Travella (2012) also defends that landscape architects are literally “greening” up the projects, and also “greening” up properties through implementing sustainable approaches and technologies.

Though sustainability is ingrained in the profession and understood that sustainability as a natural design principle in landscape architecture, Thayer (1989, p. 102) made the argument that, “Designed landscapes frequently overuse energy, water, pesticides, or fertilizers. They often do more to eliminate the potential for floral or faunal species diversity than to preserve or enhance it”. He further conceded that, “...landscape architectural practice is still dominated by the creation of pleasant, illusory places which either give token service to environmental stewardship values, or ignore them altogether”. However, Corner countered by explaining the importance of ecology in landscape architecture, “The cumulative result over the past century, but especially since the original Earth Day, has been the establishment of ecology as a central part of landscape architectural education and practice” (as cited in Thompson & Steiner, 1997, p. 85).

The general public is also becoming more aware of landscape architects as sustainability has become such a popular topic. Martin (2015, p. 1) discussed the importance of landscape architecture:
“This is a time in human history when landscape architecture has something really important to say. We should listen. Landscape architects practice a discipline rooted in holistic thinking. They understand the natural environment, the built environment, and the interface between them. And they are ideally prepared to take leadership in shaping outdoor spaces and framing public awareness about them”.

Some excellent examples of sustainable projects designed by landscape architects are included as case studies in the book *Sustainable Site Design* (Dinep & Schwab, 2009, p. 1). They begin their book by strongly making the case of the connection between landscape, design, and sustainability: “The relationship between and intersection of these three concepts - landscape, design, and sustainability - form the basis for this book and define the role of the profession of landscape architecture”.

To examine how landscape architects incorporate sustainability, this report explores the design process of three landscape architecture firms on six different projects.

**The Practical Design Process**

Design process is an approach to solving design problems through a systematic framework of steps that lead to a solution (Lynch & Hack, 1984). For the ease of explanation, different approaches to design are often described in straightforward ways. However, the reality is quite the opposite (Brett & Schmitz, 2009; Lynch & Hack, 1984). Design process can be undertaken with the aim of proposing intentional change (Steinitz, 1995), and must also be customizable to suit each situation (Schön, 1983).

While varying models of the design process are found within the profession of landscape architecture (Steiner, 2012; Steinitz, 1995; Toth, 1988) many follow a linear process such as the eight-step approach outlined by (Lynch & Hack, 1984, p. 11):
1. Defining the problem
2. Programming and the analysis of site and user
3. Schematic design and the preliminary cost estimate
4. Development design and detailed costing
5. Contract documents
6. Bidding and contracting
7. Construction
8. Occupation and maintenance

This example shows a typical workflow for many landscape architects. This is a logical sequence of tasks, which may involve multiple disciplines executing a problem-solving activity. However, each design process is as unique to each firm as it is to each project. While many incorporate Lynch’s standard steps, the entire process is likely to change from one project to another. When designing a given project, user needs vary, site requirements change and evolve, and desired outcomes are unique, so each approach will be just as varied as the programming. Collaboration is also included in most design processes to allow for input from other professionals, users and stakeholders.

Communication through visualization often aids this collaboration. Visualization guides community members through the design process and provides a focus for a community's discussion of design ideas. It also raises the community’s design awareness and facilitates better communication (Al-Kodmany, 1999). Nassauer and Opdam (2008, p. 633) also discussed their study on collaboration in design, “We conclude that landscape design created collaboratively by scientists and practitioners in many disciplines improves the impact of landscape science in society and enhances the saliency and legitimacy of landscape ecological scientific knowledge”. In their paper on co-creation and design, Sanders and Stappers (2008, p. 9) discussed the design process by stating, “In our experience as researchers and practitioners we have seen that co-creation practiced at
the early front end of the design development process can have an impact with positive, long-range consequences”.

However, having a structured and robust process does not always spell success for the project. Toth (1988, p. 2) proposed:

“It should be clear that a well-structured approach in design does not mean that the final project will be ‘good’ or ‘correct’. Conversely, an attempt to structure one’s search does not mean that the creative capacities of the individual are dulled and that his solutions will lack a ‘spirit’ of their own.

Landscape architecture, as well as other fields in environmental planning and design, requires a balance between reason and intuition”.

Design process is also iterative - the above examples of lists of linear tasks are often cyclical. There are many steps within these steps that lead to the eventual outcome, project, or product. Filor (1994) discussed the design process and stated that it is important to return to the cyclical model and to establish the role of the preconceived image to discuss the elements of design in regard to an extending timescale. Damien Newman (2008) sketched an image that really captures the design process by depicting the iterative nature of the design process in Figure 1.

“Knowledge of a later phase influences conduct of an earlier one, and early decisions are later re-worked. Site design is a process of learning in which a coherent system of form, client, program, and site gradually emerges” (Lynch & Hack, 1984, p. 61).

Lawson (2005, p. 123) asserted, “There is no infallibly correct process”. There are many different approaches and categories of the design process. Lawson’s four-year study revealed three views of the design process: intentions, practices, and aspirations, as
Figure 1. The Newman Design Squiggle. Adapted from Newman (2008).

illustrated below in Figure 2. The ‘Intention’ view “tells us what individuals, practices, large organizations and even whole professions intend should happen when design is done”. The ‘Practices’ view is the steps that are taken in the actual design, or what actually happens in practice. The third view is called ‘Aspirations’. This view reflects what participants in design processes would like to happen (Lawson, 2005, p. 260). For the purposes of this study, I will use the definition of the design process to discuss the ‘Practical’ methods that I will need to use to compare how each firm arrives at their final project. This takes in consideration the idea that design thinking is the creative activity that often leads to ideas and solutions of the project. A similar explanation of this process is, “This resolution has sometimes been referred to as the "staged-process" model, which typically moves through a sequence of steps from defining a problem, analyzing it, and synthesizing a design, to implementing or producing the design” (Crewe & Forsyth, 2003, p. 42). The practical design process is much more clearly operationalized.
Urban Open Space

The core of this study examines urban open space projects in the Puget Sound area. Open space by definition includes, “Any open piece of land that is undeveloped and is accessible to the public” (U.S. EPA, n.d.). This can include green space such as parks, community gardens, cemeteries, schoolyards, playgrounds, public seating areas, plazas, and vacant lots. This space can be streetscapes and any publicly accessible space between buildings, as described by Gehl (2011) in his book, *The Life Between Buildings*. Marcus and Francis (1997, p. 1) spoke about the history of urban open spaces and the importance of piazzas and squares:

“The medieval town square, or piazza, was often the heart of a city, its outdoor living and meeting place; a site for markets, celebrations, and executions; and the place where one went to hear the news, buy food, collect water, talk politics, or watch the world go by. Indeed, it is doubtful that the medieval city could have functioned without its piazza or town square”.

*Figure 2.* Lawson’s design processes. Adapted from Lawson (2005, p. 260).
Urban open space then would be any open piece of land that is undeveloped and is accessible to the public in an urban area. According to Kuo (2010, p. 4):

“parks are such an essential component of livable, sustainable, communities that it is difficult to image a truly livable sustainable community without parks, trails, and other recreational resources and the positive changes such parks create for the entire neighborhood”.

Close to 80 percent of the U.S. population (220 million people) lives in urban areas (USDA Forest Service, 2010). These numbers are growing and calling for the need to plan for this growth. Figure 3 below shows large areas of the nighttime lights of urbanization across the globe.

Figure 3. Global urbanization. Adapted from Aubrecht et al. (2010).

Urban areas are habitat for half of the human population. Cities will absorb more than 90 percent of future population growth (United Nations Population Fund, 2007).

“Rapid population growth concentrated in urban areas has significant implications for the long-term outlook for people and the
planet. Urban areas are increasingly subject to new challenges and rising social and environmental inequities, especially in poor countries; but urbanization offers opportunities for developing sustainable solutions to pressing global environmental and social issues” (Sánchez-Rodríguez 2005).

The Puget Sound region is also growing rapidly (Figure 4). “By 2020 the population of the Central Puget Sound region is expected to reach 4.14 million, a 51 percent increase from 1990” (Puget Sound Regional Council, 1995). Similar trends have been documented in Maryland, New Jersey, and other regions (Enger, 2005).

![Puget Sound urban lights](image)

*Figure 4. Puget Sound urban lights. Adapted from Aubrecht et al. (2010).*

Anthropogenic climate change occurs predominantly in urban areas. The need for open space and areas that promote ecosystem services has increased with the increase of global urbanization (Turner, Nakamura & Dinetti, 2004). National globalization holds just as much importance in protecting and restoring natural resources (Napieralski & Carvalhaes, 2016). Urbanization and the desire for protected open space in Seattle began in the 1960s. The Johnson administration began the circulation of a magazine,
Trends in Parks and Recreation by Park Practice Program that exemplified the growing popular opinion regarding public space. “Trends echoed Johnson’s conservation agenda...prompting the burying of unsightly power lines and regulating billboards to creating nature reserves and vest-pocket parks for the inner-city neighborhoods” (Sanders, 2010, p. 109).

With regard to density and open space, Brander and Koetse’s (2011, p. 2771) study stated:

“...the value of open space increases with population density. The population density variables in both models are positive and significant. This variable may represent demand for open space as well as the scarcity of open space. In both cases we would expect a positive relationship with open space value, and this is confirmed by our results. This finding suggests that remaining open spaces in densely populated urban areas are highly valued and therefore may warrant preservation”.

Olmsted created a theory regarding the importance of open space in the urban environment. Beveridge (2000, p. 1) described Olmsted’s realization about the positive unconscious influence of urban open space:

“Olmsted realized that he had learned much about scenery from his father's silent appreciation of it, and soon combined his own experience with the theories of Zimmermann and Bushnell to produce his own theory of the effect of scenery on man. Scenery, he decided, worked by an unconscious process to produce relaxing and "unbending" of faculties made tense by the strain, noise and artificial surroundings of urban life. The necessary condition for such an experience was the absence of distractions and demands on the conscious mind.”

Historically, urban open space has provided places for respite from the city, recreation, restoration, and ecosystem services. “Open space in urban environments provides many advantages: formal and informal sport and recreation, preservation of
natural environments, provision of green space and even urban storm water management. Thus green space must be a key consideration in urban planning if the health of a city and its people are both considered important” (Parallelus, 2016, p. 1).

Seattle has strong ties to Olmsted. His two sons, John and Frederick Jr., designed a system of boulevards, green spaces and parks for Seattle. Their comprehensive parks and boulevard plan that included Seward Park and Green Lake defined the way that Seattleites began to experience their city with open spaces and nature. Also, the proposed Fort Lawton project hoped to bring a sense of calm and gentle order to the city, however, this project was never realized (Sanders, 2010).

The most important, overarching desire or concern among metropolitan residents is for the urban environments to be ‘humanized’ as much as possible (Ghanbaran & Mousavi, 2014). Urban open space provides these humanized spaces. The social and cultural values of open space include attitudes towards nature and the desire for contact with it; contemporary understandings of ecology offer new insights into ways to serve both human needs and the broader ecological framework of urban open space structures (Thompson, 2002). Open space in the urban environment provides livability. Cities are fundamentally places where people live out their lives, in households, neighborhoods and communities.

Human health and well-being is at the core of designed urban open spaces:

“Olmsted profoundly understood that the parks and campuses he and colleagues designed were for human well-being: cultural, physical and social. He instinctively knew that the architect and the landscape designer, the road builder and the house builder, were contributing as much as any physician—perhaps more--to the health of all” (Jackson, 2001, p. 1).
These spaces allow for active and passive social interaction, exercise through physical play and activity, and connection to nature through relaxation and contemplation. Besides many environmental and ecological services, urban nature provides important social and psychological benefits to human societies, which enrich human life with meanings and emotions (Chiesura, 2004). She goes on to add, “Beside aesthetic, psychological and health benefits, natural features in cities can have other social benefits” (p. 1). Nature can encourage the use of outdoor spaces, increases social integration and interaction among neighbors (Coley, Sullivan & Kuo, 1997).

Thompson (2002, p. 70) exclaimed “urban open space must provide a place for the meeting of strangers and a place where one can transcend the crowd and be anonymous or alone. And in all of this, the urban park will continue to serve a central function in society’s self-definition”.

Urban open space also helps contribute to the sustainability of the city, in addition to the surrounding area. As Chiesura (2004) explained and diagrams in Figure 5, the value of urban nature as provider of social services essential to the quality of human life, which in turn is a key component of sustainable development. Parks can also become a catalyst for revitalizing entire neighborhoods and communities (Kuo, 2010), which further adds to the city’s sustainability.

![Figure 5](image-url)  
*Figure 5.* Urban parks lead to sustainable cities. Adapted from Chiesura (2004).
There are certain criteria for planning a successful urban open space. Shrimpton-Smith (1997, p. 231) described the following regarding quality urban open space: “A list of 10 basic design principles were comprised: safe and comfortable pedestrian networks; a central neighborhood square; human scale urban spaces; visual enclosure fostering a sense of belonging; natural elements to increase sensual enjoyment; intricacy and variety to stimulate curiosity and encourage exploration; intimate and personal territories beside significant structures to contribute to meaningful experiences; spatial definitions; appropriately designed seating locations and arrangements”.

People have made their opinions known regarding the value of open space clear by speaking out for open space conservation. The demand for public preservation efforts is evident from the number of referenda that deal with open space conservation held at the state, county, and district level in the United States. In the five-year period between 2001-2005 there were 880 ballots on open space conservation measures, and around three quarters of these were passed (TPL, 2006). Americans also express strong support for anti-sprawl policies. For example, a poll commissioned by Smart Growth America in 2000 found that 78 percent of Americans support efforts by government to curb sprawl (Wu & Plantinga, 2003). “Recent trends impart a new urgency to planning for parks and open spaces now if we are to continue to enjoy their benefits in the future. These trends suggest that we cannot simply view open space as the land left over after other uses have been planned and developed. Open space lands are disappearing at an increasingly rapid rate” (Enger, 2005, p. 2). This data supports the increasing value for open space in urban areas and the prevalence of urban open spaces in Seattle, specifically, which is the reason for its inclusion and focus in this study.
The Sustainable Sites Initiative

In 2007, the ASLA, The Lady Bird Johnson Wildflower Center at the University of Texas at Austin, and the United States Botanic Garden collaborated efforts to form the Sustainable Sites Initiative. A distinguished and diverse group of eleven experts helped to guide the initiative and form technical committees to develop benchmarks in the areas of soils, human health and well-being, materials, hydrology and vegetation (Rogers, 2010). The initiative aims to guide the design and maintenance of sustainable built landscapes by providing certification as a metric for environmental, social and economic best practices. They focus on a systems-based approach of protecting, restoring and providing for living ecosystems and our environment. Windhager et al. (2010, p. 114) explained that “the concept of ecosystem services may be used to identify processes and products deemed important or essential and to provide a framework around which we may create a short list of performance goals for particular sites”.

In 2002, the United Nations commissioned the Millennium Ecosystem Assessment in order to conduct a global study on ecosystem changes. The report (Millennium Ecosystem Assessment, 2005) alarmingly revealed at the heart of the assessment was a stark warning. Human population and its associated activity is putting such an enormous strain on the natural systems of earth that the ability of the planet’s ecosystems to sustain future generations can no longer be taken for granted.

In acknowledgment of the current need of ecosystem protection and the warning from the Millennium Ecosystem Assessment as well as other documents such as the Brundtland Report, SITES developed a comprehensive framework of guidelines and a rating system aimed at elevating the value of landscapes by defining sustainable sites,
measuring and evaluating their performance, and providing a mechanism for branding projects as sustainable.

SITES published its first set of performance benchmarks and guidelines and launched its pilot program in 2009 after a preliminary report in 2008. During their initial launch, the pilot program phase ran from 2010 to 2012, and was a collection of 150 project types of all varieties that applied for certification. The initial hierarchy of the rating system ranged from One-Star to Four-Star certification, with a total of 250 points, explained above in Table 1 (SITES, n.d.).

<table>
<thead>
<tr>
<th>Star Rating</th>
<th>Point Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>One Star</td>
<td>100 Points (40% of total points)</td>
</tr>
<tr>
<td>Two Stars</td>
<td>125 Points (50% of total points)</td>
</tr>
<tr>
<td>Three Stars</td>
<td>150 Points (60% of total points)</td>
</tr>
<tr>
<td>Four Stars</td>
<td>200 Points (80% of total points)</td>
</tr>
</tbody>
</table>

*Note.* Point total out of 250 possible.

The SITES pilot program tested the system’s benchmarks and solicited feedback from participating organizations. Table 2 illustrates the nine categories and sections of credits and prerequisites in the rating system (SITES, n.d.).

One hundred and fifty projects were submitted during the initial launch of SITES, including a variety of project types. Of those 150 projects, 47 have been certified (USGBC, 2015).
Table 2

SITES Credits & Prerequisites

<table>
<thead>
<tr>
<th>Section</th>
<th>Credits and Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Site Selection</td>
</tr>
<tr>
<td>2</td>
<td>Predesign Assessment and Planning</td>
</tr>
<tr>
<td>3</td>
<td>Site Design - Water</td>
</tr>
<tr>
<td>4</td>
<td>Site Design - Soil and Vegetation</td>
</tr>
<tr>
<td>5</td>
<td>Site Design - Materials Selection</td>
</tr>
<tr>
<td>6</td>
<td>Site Design - Human Health and Well-Being</td>
</tr>
<tr>
<td>7</td>
<td>Construction</td>
</tr>
<tr>
<td>8</td>
<td>Operations and Maintenance</td>
</tr>
<tr>
<td>9</td>
<td>Monitoring and Innovation</td>
</tr>
</tbody>
</table>

Figure 6 below details the pilot program project types and their distribution percentages. Urban open space is a critical context for sustainability, as discussed by Travella (2012) and Ahern (2012). Urban open spaces offer opportunities for resiliency and for the incorporation of environmental, social, and economic components (Haq, 2011). Urban open space can be models of sustainable development for cities. As so many cities are growing and the trend for people seeking urban living environments is increasing, this study focuses on the urban open space typology as a unit of study in the SITES typologies.

SITES has received many awards for its initial pilot project. These include: the 2012 H. Clark Gregory Award given by the U.S. Composting Council for its role as a
Figure 6. SITES pilot program project types. Adapted from USGBC (2015).

major proponent for the creation and maintenance of healthy soils and sustainable landscapes; the 2011 Gold Medal Award given by the Professional Grounds Management Society for its contributions to the green industry as well as its campaign to promote sustainability; the 2010 Program Excellence Award given by the American Public Garden Association for their innovation and development of new programs involving public horticultural institutions; the 2010 Green Public Relations/Marketing Award given by PR Week Magazine for best public relations and communication efforts among all nonprofit organizations; the 2010 Community Stewardship Award given by Envision Central Texas for recognition in innovative approach to growth challenges; the 2009 Environmental Stewardship Award given by the Texas Chapter of the ASLA for promoting positive quality of life for society at large; the 2009 Top 25 Newsmakers given by Engineering News Record for Frederick Steiner for his collaborative work on the SITES program; the 2009 Green Business Award given by the Washington Business Journal in the Education/Outreach category; and the 2008 Olmsted Medal given by the
ASLA for its bold move to develop sustainable standards for landscapes nationwide” (SITES, n.d.).

These awards are evidence that the green community and its included collaborators have acknowledged SITES’ efforts in their plight to improve the quality of life through best management practices in landscape planning and design.

This study explores six urban open space projects: East Bay Plaza, Port Plaza, Kirke Park, Ella Bailey Park, Theater Commons and Donnelly Gardens, and Mercer Court. In order to understand the design process of a certified site versus a noncertified site, this study compares the steps that each firm needed to take in order to achieve certification and answers the question, ‘how do the design processes differ between SITES certified and noncertified urban open space projects’. The next chapter discusses the methodology of the study and illustrates the process of the research.
CHAPTER III

METHODOLOGY

This thesis is an exploratory comparison of design processes between SITES certified and noncertified urban open space projects in the Puget Sound area. The comparative case study method uses a triangulation of data analysis from a variety of sources. This study examines six projects implemented by three landscape architecture firms located in the Puget Sound region of Washington; three of which are SITES-certified, and three of which are noncertified. The research is qualitative in nature, addressing the general question how SITES certification impacts the design process of projects relative to project for which certification is not pursued. Mishler (1990) acknowledged that ultimately qualitative studies aim to explain and describe relationship patterns, a process that requires conceptually specified categories. Consequently, the study documents and evaluates the character of the built works associated with each project, evaluates archival documentation associated with each project, and employs focused interviews with design professionals affiliated with each of the selected cases.

The focus area of this study is the Pacific Northwest, specifically the Puget Sound region. This area was chosen for clear reasons: 1) this area is rich in landscape architectural practice, both historical and contemporary; 2) this area contains 100 percent of the projects certified by SITES in the state of Washington; and 3) all of the projects chosen are urban open spaces, which is a selection criterion for the examined case studies.
The case study method is used in this study to obtain a real world experience and perspective, and to gain a holistic understanding of SITES and projects in the Pacific Northwest.

**Rationale for Comparative Case Study Method**

The case study method is an established method of research that is employed by professionals in many fields. This type of research allows for an empirical inquiry and is heavily context-based (Yin, 2013). This method is all encompassing and involves many variables. “The case study is a research strategy which focuses on understanding the dynamics present within single settings” (Eisenhardt, 1989, p. 534). A comparative case study compares more than one single setting, as this study does. This study compares six case studies, including three related pairs for consistency. The individual landscape projects selected are examined in this study and represent the selected cases.

Case studies are an effective way for landscape architects to inform colleagues and to tell the story about their projects. Case studies have regularly been used in research and education in landscape architecture because they are an effective way to critically document and evaluate projects and issues. They also make the research accessible and easily adapted by practitioners, students, teachers and researchers. Additionally, case studies are usually used to evaluate and/or describe a project or process Francis (2001) which is the basis of this research and a fitting approach to comparing or evaluating the differences between certified and noncertified projects.

There are several typical data collection methods for case studies that include, but not limited to, observations, questionnaires, interviews, archives and surveys Eisenhardt
This study incorporates site observations, interviews, as well as archival documentation review and analysis, as illustrated in Table 4. According to Yin (2013), case study research, when done correctly, follows systematic procedures and thorough review of phenomena.

This study utilizes the comparative approach to the case study method. Comparative case studies answer questions about contribution and causation when it may not be appropriate or feasible to use or create a control or comparison group (Delwyn, 2014). Delwyn (2014) provides the following suitable circumstances for using the comparative case study method:

- When ‘how’ and ‘why’ questions are being posed about the processes or outcomes of an intervention.
- When one or more interventions are being implemented across multiple contexts, and there is little or no opportunity to manipulate or control the way in which the interventions are being implemented.
- When there is an opportunity for iterative data collection and analysis over the time frame of the intervention.
- When an understanding of the context is seen as being important in understanding the success or failure of the intervention.
- When experimental and/or quasi experimental designs are unfeasible for practical or ethical reasons, or to supplement evidence from such evaluation designs.

This study provides the criteria for using the comparative case study method with regard to answering ‘how’ or ‘why’, as well as using more than one intervention across multiple contexts. Exploring these differences and similarities of each firm’s process will help create an understanding and holistic view of how landscape architect firms
achieve sustainability, whether certified or not. Additionally, evaluation of the differences between design processes for SITES certified and noncertified projects will provide fodder for discussion on the role of project certification in the professional practice of landscape architecture.

This research employs triangulation of data collection (Eisenhardt, 1989). Within the study, triangulation of data includes observation and documentation of each selected project, site observations, semistructured interviews with the professionals affiliated with the design process for each selected site, and review of archival documentation associated with each case. The term triangulation actually stems from mapping, military practices, and navigation wherein three sighting lines would intersect. The term has since been widely used as a metaphor for multiple data collection techniques by researchers (Berg, 2001). The use of multiple sources of evidence in case study research allows the researcher to explore a broader range of issues. The evidence is strengthened and finding a conclusion becomes more accurate by producing converging lines of inquiry (Yin, 2013).

Selection Criteria. The SITES pilot program has 47 certified projects dispersed throughout the United States; the state of Washington encompasses three of those certified projects. A map of the study area is shown in Figure 7 (Google Maps, 2016).

The three certified projects in the state of Washington were chosen for this study due to their proximity to one another and accessibility for site visits and observations, and their typology. Each of these three projects is classified as an urban open space. In addition to the urban open space typology, the projects needed to have been SITES
certified within the past twelve years and be located within the Puget Sound area. Therefore, the basis for my selection criteria was 1) built projects that were recently SITES certified from their pilot program; 2) projects that are located within the Puget Sound area of Washington State; and 3) sites that are categorically urban open spaces as defined by the EPA’s definition of: “Any open piece of land that is undeveloped and is accessible to the public” (U.S. EPA, n.d.).

Based on the selection criteria, the SITES certified projects three projects were selected: 1) East Bay Public Plaza, Olympia, Washington - Landscape Architect: Robert W. Droll; 2) Kirke Park, Seattle, Washington - Landscape Architecture firm: SiteWorkshop; and 3) Theater Commons and Donnelly Garden - Landscape Architecture firm: Guthrie Nichol (GGN). Based on the selection criteria, these three projects represent all SITES certified urban public open space projects within the study area at the time of this writing. In order to compare the design processes of these SITES certified projects, comparable noncertified projects of a similar profile were selected. The
specific selection criteria for comparable projects was: 1) SITES noncertified projects; 2) projects that are located within the Puget Sound area of Washington State; and 3) sites that are categorically urban open spaces (see Table 3).

Points of contact were made for each SITES certified project; these individuals were the project managers responsible for each respective project within each firm or other firm representative with particular knowledge of the project. These managers were asked to aid in case selection by identifying a comparable project within their offices that were of a similar profile but did not have SITES certification. With the recommendation from these three project managers, three comparable projects were chosen that fulfilled the selection criteria for noncertified projects and are as follows: 1) Port Plaza, Olympia, Washington - Landscape Architect: Robert W. Droll; 2) Ella Bailey Park, Seattle, Washington - Landscape Architecture firm: SiteWorkshop; and 3) Mercer Court, University of Washington, Seattle, Washington - Landscape Architecture firm: GGN. It was important to select the certified and noncertified projects from within the same firms, so an objective, equally comparable analysis could be made of differences between the application of each firm’s presumably comparable standard design process. As design processes from other landscape architecture firms would reduce comparability, both pairs of certified projects and noncertified projects were selected from the same respective firms. Each firm’s design process and their system of progression through projects from the beginning to completion was a critical keystone for the research inquiry.
Table 3

*Project Selection Criteria*

<table>
<thead>
<tr>
<th>Certified Projects</th>
<th>Noncertified Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>SITES certified built projects from pilot program</td>
<td>No certification sought</td>
</tr>
<tr>
<td>Projects located within Puget Sound area of Washington State</td>
<td>Projects located within Puget Sound area of Washington State</td>
</tr>
<tr>
<td>Categorically urban open space</td>
<td>Categorically urban open space</td>
</tr>
</tbody>
</table>

*Site Observation and Documentation.* The first form of data collection is that which was collected from on site observation and documentation of each case during site visits. A description and overview was obtained from a project representative of each case study. This allowed the author to examine each project in their context and to understand the scope and background of the built work. Field notes were taken on each site to document the observations and each case was documented photographically. The site observation framework (see Table 8) provided a list of items that were reviewed during each visit, and was compiled from recommendations by Calkins (2008); Dinep and Schwab (2009); and Lynch and Hack (1984). Observational site visits to each of the six projects was also conducted. Photographs and field notes document sustainable site elements and furnishings, context, and planting materials to help create a better understanding of the built project.

*Archival Documentation.* The second form of data collection used is archival documentation. Many sources of documents were obtained in this phase of research. Master plans of each project illustrated the design, its context and primary elements used. These plans were typically retrieved from the project managers of each project. Scopes
of service were also obtained for each project. These are lists of tasks or steps each firm performed in order to complete the design. The Scope of Service is typically an exhibit to the contract between the client and landscape architect. According to ASLA (2006, p. 1), the contracts “include the fundamental provisions needed, broadly summarized - to define the responsibilities of the client and the landscape architect, manage client expectations, and manage liability”. These documents provided excellent data on the process of each firm. Articles and documents written about the projects were also obtained. These were primarily obtained from the Sustainable SITES Initiative website and the archived website. Certification level achievement and sustainable elements were also obtained.

**Interviews.** Interviews were conducted with each project manager for certified and noncertified projects. The interviews were conducted via four video teleconferences and one telephone conference. A set of interview questions was structured around the research question and is attached as Appendix R. Using semistructured interviews, Merriam and Tisdell (2016), the interview protocol was structured with specific data required from all respondents, with the flexibility to pose additional follow up questions. The structured interview questions included in this study were prepared in advance of the conduction of all interviews, and follow up questions were generated in an improvised fashion as needed during interviews. In contrast to the highly structured interview model of the U.S. Census Bureau survey, that allows for no flexibility in questions, and informal interview protocols using open-ended questions, conversational flows, and is used primarily for participant observation, the selected interview protocol is situated midway between these two methods.
All forms of data collection were then reviewed through content analysis. This was accomplished by thorough review of all documents and notes. Coding enabled classification of themes and patterns in data. These steps are further delineated using Berg’s (2001) protocol:

- Data are collected and made into text (e.g., field notes, transcripts, etc.).
- Codes are analytically developed or inductively identified in the data and affixed to sets of notes or transcript pages.
- Codes are transformed into categorical labels or themes.
- Materials are sorted by these categories, identifying similar phrases, patterns, relationships, and commonalities or disparities.
- Sorted materials are examined to isolate meaningful patterns and processes.
- Identified patterns are considered in light of previous research and theories, and a small set of generalizations is established.

Content analysis is the quantitative, systematic, and objective analysis of data (Neuendorf, 2002). The analysis utilized within-case as well as cross-case analyses. Eisenhardt (1989) explained that within-case analysis typically involves detailed case study write-ups for each site. One tactic of cross-case analysis is to select pairs of cases and then list the similarities and differences between each pair. This tactic forces researchers to look for the subtle similarities and differences.

The research process follows the grounded theory technique with an inductive approach. According to Glasser and Strauss (1967, p. 1), grounded theory “is a general method of comparative analysis”. This approach allows for discovery if the research is not entered into with preconceived notions (Saldaña, 2010). Corbin and Strauss (1994, p. 23) explained, “A grounded theory is one that is inductively derived from the study of the phenomena it represents”. Newspapers, historical documents, and all kinds of
documents, along with interviews, video recordings and field observations are all considered sources of data in qualitative research and specifically for grounded theory research (p. 274). This study utilizes the grounded theory method to analyze archival documents associated with each selected case.
CHAPTER IV
CASE STUDIES AND COMPARATIVE ANALYSIS

This study examines the processes of three landscape architecture firms. Each is unique in scope and specialty, with a broad range of project types. Each firm agreed to participate in this research thesis.

GGN

GGN is a landscape architecture firm located in Seattle, Washington. Founded in 1999 by partners Jennifer Guthrie, Shannon Nichol, and Kathryn Gustafson, the firm’s work reflects a broad range of scale as well as type, with a special focus on high-use and complex urban contexts. Notable works include the Millennium Park’s Lurie Garden, the Bill and Melinda Gates Foundation campus, the National Museum of African American History and Culture, as well as many other award winning projects (2016).

Overview of Selected Cases

Theater Commons and Donnelly Gardens. Theater Commons and Donnelly Gardens (Figure 8), located at the Seattle Center in Seattle, Washington, is one of the three SITES certified projects in this study. This 1.6-acre urban plaza located at a north entrance to the Seattle Center campus is defined by a series of bio-retention swales that capture and filter stormwater runoff from adjacent theater buildings. Educational signage is placed in convenient locations to inform visitors of the landscape performance features of the site. Native and climate-adapted plant species (Figure 9) are used throughout the space. Permeable paving and crushed gravel paving also allows for
stormwater infiltration. The area provides for social gatherings as well as private contemplation. During the SITES pilot program, Theater Commons scored a total of 112 points out of 250 possible points (see Table 4) (SITES, n.d.).

Table 4
Certified Project Scores

<table>
<thead>
<tr>
<th></th>
<th>East Bay Plaza</th>
<th>Kirke Park</th>
<th>Theater Commons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Selection</td>
<td>21/21</td>
<td>16/21</td>
<td>16/21</td>
</tr>
<tr>
<td>Predesign Assessment + Planning</td>
<td>4/4</td>
<td>4/4</td>
<td>4/4</td>
</tr>
<tr>
<td>Water</td>
<td>24/44</td>
<td>21/44</td>
<td>15/44</td>
</tr>
<tr>
<td>Soil + Vegetation</td>
<td>17/51</td>
<td>19/51</td>
<td>25/51</td>
</tr>
<tr>
<td>Material Selection</td>
<td>6/36</td>
<td>14/36</td>
<td>9/36</td>
</tr>
<tr>
<td>Human Health + Well-Being</td>
<td>15/32</td>
<td>28/32</td>
<td>18/32</td>
</tr>
<tr>
<td>Construction</td>
<td>6/21</td>
<td>4/21</td>
<td>5/21</td>
</tr>
<tr>
<td>Operations + Maintenance</td>
<td>14/23</td>
<td>10/23</td>
<td>4/23</td>
</tr>
<tr>
<td>Monitoring + Innovation</td>
<td>0/22</td>
<td>8/22</td>
<td>8/22</td>
</tr>
<tr>
<td>Pilot Participation Points</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Total Points</td>
<td>115</td>
<td>132</td>
<td>112</td>
</tr>
</tbody>
</table>

Note: High score per category =
Figure 8. Theater Commons and Donnelly Gardens. Photo taken March, 2015 by author.

Figure 9. Theater Commons plantings. Photo taken March, 2015 by author.
Mercer Court. Mercer Court, located on the University of Washington campus, is the noncertified case study for this firm. This project is a 4.5-acre urban open space that was built as part of the campus dorm project led by architect Ankrom Moisan. This project did not seek SITES certification, however the building within the project was involved in LEED certification which was spearheaded by the architect. Urban farming is a large feature of the site (Figure 10), with student maintained and harvested agriculture plots placed in between each dorm building. The site is also irrigated via a 125,000-gallon stormwater collection cistern. The cistern also provides water for washing clothes in the laundry rooms of each dorm. Three bands of landscaping interweave between the thin dorm buildings. The site also connects to a pedestrian trail that leads to various areas of campus with benches provide along the way (Figure 11).

Figure 10. Mercer Court plaza. Photo taken October 2015 by author.
Robert W. Droll, Landscape Architect

Robert W. Droll, Landscape Architect is the second landscape architecture firm that agreed to participate in this study. Located in Lacey, Washington, this firm specializes in a wide range of project types from sports fields, to community design, and master planning. They have won several awards for their thoughtful designs and creative solutions. They do not have an official mission statement.

Overview of Selected Cases

*East Bay Public Plaza.* East Bay Public Plaza (Figure 12) is a 1.6 acre SITES certified project that is the plaza for two buildings: the Olympia Hands on Children’s
Museum to the north, and the Wet Science Center to the west. The plaza’s design features tie these two buildings together visually by connecting the main water feature across both building facades (Figure 13). The main water feature is a reclaimed water creek that encourages both active and passive play and social interaction (Figure 14). The site is a reclaimed brownfield that once housed an old lumberyard and several industrial buildings. The project features a green roof and high solar reflectance products. This pilot program project earned an overall score of 115 points out of 250.
Figure 13. East Bay Plaza southeast corner. Photo taken March 2015 by author.

Figure 14. East Bay Plaza. Photo taken March 2015 by author.
**Port Plaza.** Port Plaza is a noncertified urban open space project and is a 1.6 acre plaza in the Port of Olympia. A local restaurant, office buildings, and a 500 square foot dock surround the site. The site offers views of the port and marina with many surrounding shops and local farmers’ market. A viewing tower allows users to climb the stairs to the top to take advantage of a bird’s eye view (Figure 15). Native plantings with marine features such as beach-like paving patterns and concrete inlaid starfish and seashells create a maritime sense of place (Figure 16). Existing features of the site were utilized as focal pieces of art such as old anchors, chains and ropes.

*Figure 15.* Port Plaza entrance sign. Photo taken October 2015 by author.
SiteWorkshop

Founded in 2000 by Mark Brands and Robert Shrosbree, SiteWorkshop has a wide range of landscape architecture projects primarily in the Puget Sound area with strong ties and brand in the local community. They are advocates of artful transformation of the public realm (SiteWorkshop, 2015). They incorporate sustainability into each project and that is evidenced in their marketing literature. SiteWorkshop has received many awards since its inception and continues to create memorable urban spaces.

Overview of Selected Cases

Kirke Park. Kirke Park in the neighborhood of Ballard (Figure 17) is an award winning SITES certified project. This compact site contains multi-generational
amenities, natural play opportunities and a community garden. Local artist were commissioned to incorporate natural elements that double as art and as play structures. Paved and gravel paths move throughout the space and offer opportunities for passive and active social interaction. Constructed play structures, a small turfgrass area and a community garden engaged people of all ages. Community gardening is a way to transform vacant empty lots into public open space and incorporate sustainability.

Figure 17. Kirke Park entrance. Photo taken March 2015 by author.

Community gardens build social capital not only by reclaiming or preserving urban space, but also by fostering collaboration among nearby residents across racial and generational lines (Schukoske, 1999). A community garden was an important element for Kirke Park. While the city provided support, the community built the new gardens
Neighbors came together to envision, design, and eventually construct a unique garden that met their needs and reflected their neighborhood identity. Thus, community commitment through volunteering is the primary factor in assigning plots in a new garden (Nyland, n.d.).

![Kirke Park garden shed](image)

*Figure 18. Kirke Park garden shed. Photo taken March 2015 by author.*

Remnants of the previous structure, which housed a fringe church, group and commune, still remain to give definition and interest to the site. This pilot program project earned an overall score of 132 points out of 250 (see Table 5), highest of all the projects selected in this study.

**Ella Bailey Park.** Ella Bailey Park (Figure 19) is a neighborhood park located in the Magnolia area of Seattle. It was open for use in May of 2007 and has attracted people all over Seattle since then. The site design was complicated by environmentally
critical slopes and was cleared of invasive blackberries. The firm was able to have no export of soil during construction and repurposed existing asphalt into sub-base for new walkways. The space provides areas for activities such as soccer and skateboarding, as well as picnicking and taking a stroll throughout the site (Figure 20).

**Comparative Analysis**

This study employed a comparative analysis method (Delwyn, 2014) that compares and contrasts the processes of each landscape architecture firm, and the processes applied to the design of each project within each firm. To compare processes across all cases, triangulation of data included site observations and field notes, archival...
documentation review, and semi-structured interviews. Table 6 shows an overview of the certified projects.

Figure 19. Ella Bailey Park and Elliot Bay. Photo taken by SiteWorkshop.

Figure 20. Ella Bailey Park. Photo by SiteWorkshop.
Table 6
Certified Project Overview

<table>
<thead>
<tr>
<th>Location</th>
<th>East Bay Plaza</th>
<th>Kirke Park</th>
<th>Theater Commons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Category</td>
<td>Urban Open Space</td>
<td>Urban Open Space</td>
<td>Urban Open Space</td>
</tr>
<tr>
<td>Project Size</td>
<td>1.6 acres</td>
<td>.90 acres</td>
<td>1.6 acres</td>
</tr>
<tr>
<td>Project Type</td>
<td>Public Plaza</td>
<td>Neighborhood Park</td>
<td>Public Plaza + Native Plant Garden</td>
</tr>
</tbody>
</table>

Site visits and observations. The initial investigation into each case began with site visits to each project and observations. A description and overview was obtained from a project representative of each case study. This allowed the author to examine each project in their context and to understand the scope and background of the built work. Field notes were taken on each site to document the observations. The site observation framework (see Table 7) provided a list of items that were sought out during each visit, and was compiled from Calkins (2008); Dinep and Schwab (2009); and Lynch and Hack (1984). The analytical requirements of SITES also helped form the framework.

The site features were examined according to the framework (Table 8). The context was examined for the possible existence of critical or sensitive areas.
Table 7  
*Noncertified Project Overview*

<table>
<thead>
<tr>
<th></th>
<th>Ella Bailey Park</th>
<th>Mercer Court</th>
<th>Port Plaza</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Location</strong></td>
<td>Magnolia Neighborhood,</td>
<td>University of Washington,</td>
<td>Olympia, WA</td>
</tr>
<tr>
<td></td>
<td>Seattle, WA</td>
<td>Seattle, WA</td>
<td></td>
</tr>
<tr>
<td><strong>Project Category</strong></td>
<td>Urban Open Space</td>
<td>Urban Open Space</td>
<td>Urban Open Space</td>
</tr>
<tr>
<td><strong>Project Size</strong></td>
<td>3.8 acres</td>
<td>4.5 acres</td>
<td>1.6 acres</td>
</tr>
<tr>
<td><strong>Project Type</strong></td>
<td>Neighborhood Park</td>
<td>Public Plaza + Urban Farm</td>
<td>Public Plaza</td>
</tr>
</tbody>
</table>

The presence of water features as well as protected natural waterways was important to note. The qualities of soil including drainage and slope were taken into consideration. Also noted were any users and their activities.

Attention was given to whether there was availability of equal access to the site for everyone or alternate routes under the accessibility category. The materials used were inspected; plantings were observed and identified as native or climate-adapted, if possible. The presence of educational signage or way finding was documented, as was the presence or provision of recycling bins for users to place their trash. Finally, the site was examined for areas of pedestrian and vehicular circulation and connectivity to homes, businesses, work, etc. Elements were photographically documented and evaluated in conjunction the text.
Table 8
*Site Observation Framework*

<table>
<thead>
<tr>
<th>• Context</th>
<th>• Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Water - natural or built features</td>
<td>• Plantings</td>
</tr>
<tr>
<td>• Slope/Topography</td>
<td>• Signage - educational or wayfinding</td>
</tr>
<tr>
<td>• Users/Activities</td>
<td>• Circulation - vehicular and pedestrians</td>
</tr>
<tr>
<td>• Accessibility</td>
<td>• Recycling Opportunities</td>
</tr>
</tbody>
</table>

*Archival documentation.* Many documents were gathered throughout this study. This phase of research began with each firm’s website, documenting each of the two projects, as well as each firm’s representation of their work. As the selected cases were public projects, their associated records are subject to Washington State public records regulations. Any documents that were of legal record, as well as the archived SITES scores were collected. Archived web (April 14, 2014) was used in the analysis of archival data because when the U.S. Green Building Council assumed custody of SITES some information originally published and viewable online by SITES was removed and no longer publically available. In addition to the above-mentioned data, some firms provided master plans, scopes of service, contracts, and any other documents they deemed pertinent to this study regarding each project.

*Interviews.* The interviews were arranged with the project manager for each project within each firm. Skye was utilized for videoconferences, with two interviews conducted via telephone conference. The questions for the interviews were formed around answering the primary research question of design process. They were also
formed focusing on whether the project was SITES certified or not. Respondents discussed the firm’s processes at length. The questions were semi-structured, with follow up probing questions where applicable (see Appendix R).

The next phase involved coding all data that was collected, looking for patterns, themes, similarities and differences. Patterns included the repeated reference to social interaction and human health and well-being, for example. Sometimes the patterns were observable across all forms of data collection; sometimes the patterns emerged strongly in only one area of data collection. Systematic review of each area of sustainability category, as listed in Table 9 in the Discussion section, was reviewed for each area of data collection within each project and within each firm to identify the similarities and differences. This allowed for a holistic understanding of each project, as well as how they related within each firm.
CHAPTER V
FINDINGS & DISCUSSION

Findings

The findings were derived through thorough analysis of all data sets, using the comparative analysis method. This section is defined into categories according to the data collection method. This allows the data to show unique themes that run through each category. The same framework was used to show sustainable categories within each data collection method to keep organization consistent, with slight differences in the Site Observation table, due to the nature of observable/nonobservable elements.

Site visits and observations

As stated above, the framework was broken down into 10 categories. From these 10 categories, patterns are apparent (Table 9). Context of the site was the first category, which may relate to critical or sensitive areas, degraded sites, and surrounding community. Each project was built on a degraded site and has addressed and provided for ecosystem functions, site users, and the surrounding community (“Introduction to the SITES Program | U.S. Green Building Council,” n.d.).

Theater Commons, East Bay and Port Plaza were the projects that had notable efforts made to maximize use of precipitation and conserve water, as exampled in Figure 21 and the signage in Figure 22 below. The other projects may have, but at this point, the observation did not lead to that conclusion.
### Table 9

**Site Observations**

<table>
<thead>
<tr>
<th>Context</th>
<th>East Bay Plaza</th>
<th>Port Plaza</th>
<th>Kirke Park</th>
<th>Ella Bailey Park</th>
<th>Theater Commons</th>
<th>Mercer Court</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water - Natural or Built Features</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Slope / Topography</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Users/Activities</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Accessability</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Material</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Plantings</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Signage - Educational or Wayfinding</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Circulation - Vehicular + Pedestrian</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Recycling Opportunities</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
</tbody>
</table>

*Note: Certified projects = •*
Figure 21. Theater Commons permeable paving. Photo taken March 2015 by author.

Figure 22. Theater Commons educational signage. Photo taken March 2015 by author.
Slope and topography was addressed and considered in all projects except East Bay and Kirke Park, where no significant slope was evident that needed to be addressed (Figure 31). Users and activity was observed in Mercer Court, Port Plaza, Kirke Park, and Ella Bailey Park. People were interacting, playing and moving through these spaces when visited. All projects provided for these activities, but no users were noted at Theater Commons and East Bay Plaza (seasonal conditions considered).

All projects provided for equal accessibility to all users, allowing no more than 5 percent slopes on circulation surfaces. Reuse of materials was observed in East Bay Plaza, Port Plaza (Figure 29), and Kirke Park (Figure 30). Native or climate-adapted plantings were used in all projects (Figure 33). Areas were maximized for vegetation and pervious surfaces, as shown in Mercer Court student garden (Figure 24).

Educational signage and way finding was provided throughout each project (Figure 23 and 31). Adequate and well-considered circulation for pedestrians and vehicles was present (Figure 25 and 27). All projects focused on pedestrian circulation and connectivity. It was also noted that each project provided for the opportunity to place trash in recycling receptacles.

Archival documentation

The data that was collected for this method included: scopes of service, master plans, contracts and contract excerpts, cut-sheets, and data from archived websites, including SITES pilot program score cards for certified projects (Table 10).
Table 10  
Archival Documentation

<table>
<thead>
<tr>
<th></th>
<th>East Bay Plaza</th>
<th>Port Plaza</th>
<th>Kirke Park</th>
<th>Ella Bailey Park</th>
<th>Theater Commons</th>
<th>Mercer Court</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Selection</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Predesign Assessment + Planning</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Water</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Soil + Vegetation</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Material Selection</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Material</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Human Health + Well-Being</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Construction</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Operations + Maintenance</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Monitoring + Innovation</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
</tbody>
</table>

*Note:* Certified projects =

Scopes of Service are essentially lists of tasks performed by each landscape architecture firm. However, it is assumed from the data, that because the SITES pilot program was a first-time experience for all firms that these actual tasks were not built into their Scopes of Service. During the interviews, some firms stated that they had
performed the certification pro-bono and had not billed for the hours and fees accrued, so it would not show up in the Scopes of Service.

Figure 23. Mercer Court student farm. Photo taken October 2015 by author.

Figure 24. Mercer Court pedestrian circulation. Photo taken October 2015 by author.
Figure 25. East Bay Plaza reclaimed water feature. Photo taken March 2015 by author.

Figure 26. East Bay Plaza pedestrian circulation and native plantings. Photo taken March 2015 by author.
Figure 27. Port Plaza drought adapted plantings. Photo taken October 2015 by author.

Figure 28. Port Plaza material reuse. Photo taken October 2015 by author.
Figure 29. Kirke Park material reuse. Photo taken March 2015 by author.

Figure 30. Kirke Park educational signage. Photo taken March 2015 by author.
Figure 31. Ella Bailey Park slope remediation. Photo taken October 2015 by author.

Figure 32. Ella Bailey Park native plantings. Photo taken October 2015 by author.
That was echoed in the data, having limited information about certification given in the Scopes of Service.

Master plans reinforced the site visit observation. Contracts provided limited information, but in some instances provided data regarding maintenance and operations as well as topography and stormwater management, as discussed below.

**GGN.** The greatest occurrence of theme in the Theater Commons data was the collaboration and Predesign Assessment category. The documentation included a Master Plan, cut sheet, Scope of Service, and contract excerpts. Theater Commons is the certified project. The theme of water is repeated often, but not as often as plant materials and research. Material selection was an important topic, but not quite as frequently noted as accessibility and human health + well-being. Construction is not mentioned in these documents; neither is monitoring + innovation.

Mercer Court was the noncertified project and has strong appearance of urban farm and community connections under the human Health + well-being category. The documentation included a Master Plan, LEED scorecard, cut sheet, contract attachments, and website documentation. Plant selection was also another strong topic. It should be noted that this project, while it did not seek SITES certification, GGN was the sub prime contractor in this project and the architect did see LEED certification for the entire project. This affects the data, as Site Selection, Material Selection, and Construction were not mentioned in the archival data for this case.

**Robert Droll Landscape Architect.** East Bay Plaza showed content in all categories. Documentation included a Scope of Service, Master Plan, and website
documents. The reclaimed water creek is the main focus for this project and it was mentioned several times in the documentation. Human Health + Well-Being was also of particular prominence due to the fact that the creek promotes social interaction, physical activity and plays a part in strengthening the community and providing education about water quality. East Bay Plaza is the only firm that mentions SITES certification in the Scope of Service.

Port Plaza showed content in most categories. Documentation included Scope of Service, web documents and photos by Robert Droll. Site selection was not mentioned in any document.

SiteWorkshop. Kirke Park is the certified project for this firm. The documentation included a Master Plan, contract, design program and website documents. Kirke Park has data mentioned in every category. The site selection included information about the site’s historic use as a defunct fringe church. Site analysis was discussed, as was the addressing of irrigation for the water category. Soil + Vegetation was covered as well as each of the remaining categories. Ella Bailey Park is the noncertified of the two cases for this firm. The documents for this project included a Master Plan, design program, contract, bid set documents, and website documents. Site selection and predesign assessment was discussed, noted collaboration and context. Water and Soil + Vegetation was addressed by discussing invasive plant removal and irrigation. Human Health + Well-Being was addressed in play and picnic areas. Construction, operations and monitoring were all addressed in the design program.
Interviews

The interviews were the most informative of all the data collection methods. This method illuminated answers of the thesis’ research question as well as allowed the respondents to expand on their answers and also give additional information that was not asked for in the structured questions. The content of interviews was transcribed and subjected to content analysis in order to identify themes and patterns. Subsequently, this content was summarized and arrayed for comparison. The summary content of the interviews is displayed in Table 11.

Several main takeaways emerged through coding the interviews. One of the takeaways was that SITES requires many more soil tests than the firms typically would submit. The firms stated that they already submit several soil samples for each of their projects, but the certification process required many more, which created a significant difference in their process compared to projects that did not seek certification. The hours of documentation added up to approximately $25,000 - $30,000, which when added to the project cost is a significant increase from the cost of their noncertified projects. Documentation required the firms to also have their vendors document all of the sources of their materials, which was time-consuming for them as well. Some firms suggested this was a positive aspect in the long run to get the vendors logging and documenting where their materials are coming from as this could possibly reduce carbon footprints in the future.

Each of the firms acknowledged that their actual design process was minimally changed for the certification process. Each firm proclaimed that they strive for the most sustainable projects as possible, and as each client allows. Several respondents stated
that it was important to know how to communicate sustainability to their clients and to explain why sustainable elements were used in their projects. One firm stated that SITES has given them a framework and a language to use that helps communication with their clients and stakeholders.

Table 11

<table>
<thead>
<tr>
<th>Interview themes</th>
<th>East Bay Plaza</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No written mission statement, but inherent in their work; sustainability is related to cost and money; always conduct a thorough predesign analysis; reduce water use; re-use of materials; soil reclamation and soil testing; low-water use plants; some SITES credits difficult to obtain due to nature of site; certification is client-driven; cost driven; documentation is arduous, takes many hours; we are sustainable even without certification; material selection; collaboration; community involvement; do not encourage accreditation; SITES certification is an investment; SITES has not impacted design process; certification process will improve with USGBC; will apply for SITES again.</td>
</tr>
</tbody>
</table>

| Port Plaza                | No written mission statement, but inherent in their work; sustainability is related to cost and money; always conduct a thorough predesign analysis; reduce water use; re-use of materials; soil reclamation and soil testing; low-water use plants; some SITES credits difficult to obtain due to nature of site; certification is client-driven; cost driven; documentation is arduous, takes many hours; we are sustainable even without certification; material selection; collaboration; community involvement; do not encourage accreditation; SITES certification is an investment; SITES has not impacted design process; certification process will improve with USGBC; will apply for SITES again. |

| Kirke Park                | No mission statement; sustainability varies from project to project; firm is above average in sustainability; what sustainable elements are incorporated depends on whether they are the lead or the sub on a project; always collaboration input from stakeholders influences sustainability; important to education client re: sustainability; rain gardens; permeable paving; water infiltration; cost and maintenance affect sustainable elements; SITES has impact design process; has given language and framework to communicate to clients; public vs. private; sought certification |
after construction; soil samples; maintenance; preexisting points for mere nature of site; material reuse; community garden; natural play components; plantings availability; potable water; $25,000 for certification was biggest challenge; will use SITES again.

Ella Bailey Park  No mission statement; export as little as possible from site; reuse of materials; firm seeks to be as sustainable as possible on all projects; reuse of materials/trees; open minded collaboration; they do encourage sustainable credentials; huge effort to track all materials for SITES; challenging to find the value in certification beyond marketing; SITES has helped firm communicate sustainability to clients; sustainable green roofs were built 12 years ago - much before SITES; landscape architecture is already sustainable; still focus on sustainability even though not seeking certification; design process was only different because of documentation for Kirke Park; invasive species eradication; taking no soil off site; stormwater management; native plantings; may have used less turf grass; SITES has been a positive marketing tool; USGBC will improve popularity of SITES; will seek SITES in the future.

Theater Commons  No stated mission statement, but address sustainable issues in the beginning of each project; site analysis; high level of commitment to sustainability; high value on collaboration; problem solving; design iterations; SITES has no affect on process; SITES has not elevated level of sustainability; has improved marketability on projects; certification is client driven; certification was post-construction; documentation was huge difference in certification; additional soil testing; water calculations were unexpectedly lower according to SITES; most challenging was the time it took for certification; positive marketing tool; aids in communication with clients.

Mercer Court  Sustainability is inherent in their design process; sustainable elements depend on each project; Mercer Court addressed environmental, social, and economical sustainability issues; sustainability is inherent in their work; GGN is comparably sustainable to other firms in the area; sustainability is built into their process; process always involves analysis and research, context, and environmental history; process is different with regard to public vs. private; programming depends on client requirements; Mercer Court has strong community elements; SITES has not impact their design process; accreditation does not make project more sustainable; firm does encourage sustainability certification; SITES certification is client-driven due to high cost; certification is
Essentially, the actual design process by which design decisions were made was not what changed, but the actual Scope of Service within that process that reflected the biggest differences in documentation. However, these differences were not reflected on the written Scope of Service, due to the issues discussed earlier, regarding this was such a new and introductory program. Most firms identified the presence of this documentation activity within their interviews, but this substantial amount of work was not yet reflected in the Scopes of Service documents. Formal documentation was something that seemingly would come about through the repetitive certification process. All firms stated that they would seek SITES certification again if their clients were supportive of that decision.

**Conclusion**

As Thayer (1989, p. 101) stated, “The evolving concept of the sustainable landscape is a welcome and necessary component of the philosophy, theory, and practice of landscape architecture.” This study shows that sustainability is an inherent part of landscape architecture as it is practiced by firms work examined in this study and not necessarily a new concept in the design of built landscapes.

Table 12 reveals an overall visual distribution of the prevalence of each sustainable category throughout the data collection from medium to very high according to theme, pattern, and frequency. Water, soils, and vegetation are emphasized. This is
an interesting point as this is the foundation of all landscape architecture projects. Operations and maintenance and monitoring were on the lower end of occurrence, but as previously stated they are of medium occurrence on the overall spectrum. One firm stated that site monitoring was a completely separate issue that the owner would have to decide upon and that could be built into their scope of service, but at the time of this writing, no firms in this study engaged in that practice for the selected cases.

This study addresses ‘how’ the design processes differ from SITES certified and noncertified urban open space projects and illustrates that for the firms participating in this study, SITES’ primary impact on design process is on documentation and satisfaction of bureaucratic requirements of the certification system. Exploring the differences and similarities of each firm’s process has helped to create an understanding and holistic view of how landscape architect firms achieve sustainability, whether certified or not. Additionally, the evaluation of the differences between design processes for SITES certified and noncertified projects provides discussion on the role of project certification in the professional practice of landscape architecture.

According to the data collected within this study, each selected landscape architecture firm is and has always, and continues to actively strive for sustainability in their work. The notion that sustainability in landscape architecture is a new idea based on the new emergence of a sustainability rating system is misguided. While sustainability is often presented as a new topic in popular media, within the discipline of landscape architecture the concept is not a new idea. Instead, the new framework and rating system is a new way to express and communicate that long, rich history of sustainability within landscape architecture to our clients, stakeholders, and policymakers.
The SITES rating system has proven to be a positive marketing tool for landscape architecture firms. The rating system has allowed them to build credibility with their clients in the area of sustainable development. Each firm has used their certified projects as positive marketing tools. It brands their designs as a superior product to those projects that have gained no certification.

A major consideration is that although SITES provides a brand for sustainability, since its acquisition from USGBC, the transparency of certification has been greatly reduced through the removal of previously available data from the SITES website, specifically individual project scorecards. While USGBC was contacted during this research study for information regarding the certified pilot program projects, they declined all requests for information which was historically available on the Sustainable SITES website, including the scorecard which showed each sustainable category, subcategory scores, and point total. This lack of transparency takes away the critical opportunity to educate the public about the specific categories that contribute to each respective SITES certified project. The label of SITES certification remains, yet how projects measure up within these categories is now veiled. This phenomenon, its origins, and impacts on the educational and outreach component of project certification are valid topics for further research.

Money is also a major factor in project certification, as the certification process is very time-consuming and consequently demands a large number of hours for firms, subcontractors, and suppliers to complete. Each firm estimated approximately 300 hours were spent on documentation alone for each of the certified projects. One interview respondent reported that the success of SITES may be achieved by finding a
way to recoup the costs it takes to obtain certification. The average cost of certification, as stated earlier, was estimated between $25,000 and $30,000. Consequently, interview respondents said that the client was the driver of certification, because the expense becomes a tradeoff when the same tangible sustainability goals are achievable on the ground without the added recognition afforded by expensive certification.

Another benefit of the sustainability framework and certification is that it provides landscape architecture firms with a structure and a language to lead the conversation regarding sustainable development and its importance in responsible landscape design. It builds credibility with some clients to have a project already certified. It speaks of experience and authority in sustainable development.

Just as communicating sustainability with stakeholders is very important, they must also understand the importance of striving to protect our ecosystems. Education is part of sustainable development and it is important that the stakeholders as well as the general public understand this. The clients and stakeholders are responsible for whether a firm applies for certification or not. It is our responsibility to make sure that they are educated on the subject and can in turn make educated decisions about the design process.

Furthermore, with regard to the list of tasks performed by landscape architecture firms, each processes differed only minutely. The major differences are found in the cost of certification, the many hours spent on documentation, and the extensive soils testing that certification requires. The significance of the SITES rating system is that it serves as a handbook and a resource for designers, contractors, engineers and landscape architects for future projects.
Table 12

**Overall Sustainability**

<table>
<thead>
<tr>
<th></th>
<th>East Bay Plaza</th>
<th>Port Plaza</th>
<th>Kirke Park</th>
<th>Ella Bailey Park</th>
<th>Theater Commons</th>
<th>Mercer Court</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Selection</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Predesign Assessment + Planning</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soil + Vegetation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Material Selection</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human Health + Well-Being</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operations + Maintenance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monitoring + Innovation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: Level of sustainability = Medium =High =Very High*

**Further Research**

Due to the fact that there has been no previous research found regarding the impacts of SITES certification on design process, the area for future research is ripe with opportunity. Now that more cases are scheduled for certification, a greater number of certified projects will be available for research. Examining only three SITES certified projects, this study covered 100 percent of the certified projects in Washington State.
Future research studies that are similarly geographically concentrated will likely be able to examine greater numbers of cases. Also, with funding and additional resources, visiting each site and making observation could be much easier.

Another area for possible future research would be to investigate the differences in the certification from the pilot program to the administration by the USGBC. This would provide some insights into the struggles that were encountered in the pilot program and help facilitate future certification processes. Also, as discussed earlier, the removal of publically available information regarding the scores of specific project dimensions and their impacts on project certification eliminates transparency. Consequently, due to the lack of transparency, SITES does not fully take advantage of opportunities to educate the public and other designers on which specific features are most impactful on a given project’s sustainability score.

However, these issues, as well as previously identified questions, related how LEED and SITES are working synergistically with each other, and how to absorb the costs of project certification, provide a wealth of potential research inquiry.
REFERENCES


Google. (n.d.). [Google Maps location of Puget Sound, Washington]. Retrieved from https://www.google.com/maps/place/Puget+Sound/@47.2199832,-122.9562007,8.39z/data=!4m5!3m4!1s0x54903e54b09738e1:0x3390a64604d67e01!8m2!3d47.7236535!4d-122.4713352


APPENDICES
Appendix A.

Theater Commons SITES Score Page

THEATER COMMONS AND DONNELLY GARDENS AT SEATTLE CENTER

One-Star Certified Pilot Project

Location: Seattle, Washington
Project Size: 1.6 acres
Project Type: Open space - Park
Site Context: Urban
Former Land Use: Greyfield
Terrestrial Biome: Temperate Broadleaf & Mixed Forests
Budget: $5,000,000
photo by: Gustafson Guthrie Nichol

Project Overview

Theater Commons and Donnelly Gardens is a highly visible sustainable demonstration project at a major entry to Seattle Center, a 74-acre urban park and cultural/arts center in downtown Seattle. The design transformed an existing 1.6 acre parking lot, service road, and isolated lawn area between the Intiman and Repertory Theatres into a welcoming, green, and pedestrian-focused entry for the Seattle Center campus. The site is used on a regular basis by visitors, staff and theater patrons, and during the many outdoor festivals that Seattle Center hosts throughout the year.

Appendix B.

Theater Commons Cut Sheet

Theater Commons and Donnelly Gardens
Seattle, WA

Theater Commons and Donnelly Gardens, part of GGN’s Theater District master plan, transformed a 1.6 acre parking lot, service road, and isolated lawn area into a welcoming, green and universally-accessible pedestrian entry for the Seattle Center campus. In a unique collaborative process, GGN led the conceptual design and sustainable concepts in the planting design, and then the native plant garden was designed, selected, and installed by Seattle Center landscaping/gardening staff.

For this highly visible public gateway, the project team developed a simple, durable, replicable, and affordable precedent for unifying pedestrian streets at Seattle Center. Permeable vehicular paving systems were developed to respond to varying conditions throughout the urban campus. Bio-retention gardens and evaporation gardens were designed to collect run-off from both the non-permeable site surfaces and the adjacent theater roof.

In March 2013, Theater Commons and Donnelly Gardens received certification from the Sustainable Sites Initiative™ (SITES™). It was one of the first 15 national and international projects to be certified.
Appendix C.

Theater Commons Master Plan
Appendix D.

Theater Commons Scope of Service

EXHIBIT A
SCOPE OF SERVICES Theater Commons
BASIC SERVICES
The following scope of work comprises the Basic Services for this Agreement.
DESIGN DEVELOPMENT:
Management (GGN Prime)
Update/track project schedule
Correspondence and records
General administration
Design Effort
Conform drawings from Client DR review
Develop site components
Develop site stormwater system with Civil
Develop lighting concept with Lighting/Electrical
Grading & drainage refinement with Civil
Site materials identification/research with Civil input
Plant identification/research
Structural Retaining wall locations with Structural
Develop Gateway piece with Architect
Develop Architectural Canopies with Architect
Coordinate utility requirements w/exist utilities
Review and comment on site survey
Review geotech report
Permitting
Permit coordination w/design team
MUP Preapplication meeting with City
Code confirmation
Design Meetings
Project Team meetings (bi-weekly): in person
Constituents Update #1 11/13/08
Constituents Update #2 TBD
TCET Meeting #4- Jan TBD
TCET Meeting #5- DD sign off- March TBD
Public Agency Review: Design Commission #1 12/4/08
Public Agency Review: MUP PreApplication Meeting TBD
Intiman Board Meeting- 1/5/08
Rep Facilities Meeting- 12/11/08
Rep Charette- 12/12/08
WPA Coordination Meeting- 12/16/08
Planting Coordination with Beth Duncan (x2) (#1 12/5/08)
Deliverables (100% document submittal)
Cover sheet with Context plan/legend
Civil drawings
Demolition plan
Rough grading & drainage plan
Preliminary cut & fill calculations
Schematic Utility Plan
Landscape drawings
Materials plan
Grading plan
Planting plan
Irrigation zoning plan
Site sections
EXHIBIT "A"
Theater Commons Page 2 of 2
12/3/2008
Paving Details
Wall Details
Site Amenity Details (Site Furnishings- handrails, bollards, bike racks, bench attachments, etc.)
Planting Details (Trees, Shrubs, and Groundcover)
Architectural Drawings
Canopy plan *
Canopy Details *
Gateway Plan *
Gateway Details *
Structural drawings
Terrace Slab diagrams
Retaining Wall locations and footings
Structural drawings for canopies *
Structural drawings for Gateway *
Lighting drawings
Preliminary lighting layout drawings
Lighting calculations
Preliminary fixture schedules
Catalogue fixture cutsheets
Electrical drawings
Preliminary site electrical diagrams
Design calculations
Outline Specifications
Design narrative (100% DD)
Civil
Landscape
Architecture *
Structural
Electrical/Lighting
Cost Estimate
Cost Estimate review (Design Reconciliation)
Cost Estimate Review (100% DD)
NOTE: Dates that are underlined [x/x/xx] are meetings that have already occurred or are already scheduled.
* All listed drawings will be developed to the DD level. Depending on client evaluation of scope for Phase 1, starred items may not be included in the Phase 1 Construction Document package.
Appendix E.

Theater Commons Contract Excerpt

Jennifer,

Sorry for the delay. It's been very crazy around here. I pulled this language directly from the Consultant contract:

"The scope for this Design Reconciliation Phase will include analysis, review, and revised documentation to update the 2003 Theater Commons Plan – Schematic Design, for the purpose of procuring an updated cost estimate. The landscape scope includes:

1) Streetscape – Approach to interface with Mercer Street, August Wilson Way. Schematic treatment of 2nd Avenue within the site.

2) Hardscape – General layout and function of paved gathering and circulation spaces.

3) Softscape – General layout and function of planted areas and trees.

4) Architectural Elements – Schematic-level description of any architectural treatments or elements within the landscape.

I've also attached an Exhibit from the contract. That's pretty much all we have.

Gina Owens

Administrative Staff Analyst

Seattle Center Redevelopment Office
Mercer Court & UW Farm

4.5 acres | 2013

Client
UW Housing and Food Services

Project Team
Gustafson Guthrie Nichol, Landscape Architect
Ankrom Moisan, Associated Architects
Feilden Clegg Bradley Studios, Design Architect
KPFF, Consulting Engineer
Perbix Bykonen, Structural Engineer
Glumac, Lighting Designer and MEP

Services Provided
Design–Construction Administration
Awards + Certifications
LEED Gold

Mercer Court is a new model of urban farming and student housing in the West Campus neighborhood of the University of Washington. Situated on 4.5 acres with a capacity for over 1000 students, this student community relates to the existing mixed-use neighborhood, creates unique community connections, and integrates an urban farm.

The housing is designed as a series of five slim, light-filled ‘fingers’ that allow southern sunlight to fill the terraced slopes of the UW Farm. The landscape design weaves through these terraces as three bands with distinct character.
The Burke-Gilman Band features lush shade and woodland plantings, integrating a popular bicycle trail. The Horizon Plaza Band, at the mid-level, ties together a series of courtyards and social spaces. Finally, the Urban Agriculture Band, at the base of the slope, includes the UW Farm that is run by volunteers, the bulk of which are students. Raised beds, terraces, and vine walls allow for a variety of crops from fruit trees, fruiting vines and shrubs, vegetables, and herbs.
The University of Washington purchases produce from the UW Farm to use in their cafes and dining halls.
Appendix G.

Mercer Court Scope of Service

March 3, 2011

Ankrom Moisan
Associate
Architects 117
South Main
Street
Seattle, WA 98104-3428

Attention: Dave Heater

SUBJECT: HOUSING – MERCER HALL
PROJECT NO. 203247
ADDITIONAL SERVICE NO. I AND NO. I

Dear Mr. Heater:

Pursuant to the Agreement for Architectural Services for the Housing – Mercer Hall project by and between the University of Washington and your firm, dated February 9, 2011 and to Article III Section B of the Conditions of the Agreement, Additional Services described in the Scope Attachments and Scope Attachment Summary are hereby authorized.

This authorization is above and beyond the scope of the basic services outlined in your Agreement. Compensation shall be a lump sum amount of $94,177.00, on the basis of the rate guidelines set forth in Attachment A of your Agreement and the Scope Attachments dated February 10, 2011.

The following summary identifies authorizations to date:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Services Authorization</td>
<td>$1,224,195.00</td>
</tr>
<tr>
<td>This Additional Service</td>
<td>$94,177.00</td>
</tr>
<tr>
<td>Total Additional Services to date</td>
<td>$ 94,177.00</td>
</tr>
</tbody>
</table>
Subconsultant

At the end of the schematic design the University assessed the landscape design and determined that after repeated requests and opportunities for Murase Associates (Murase) to address the University’s comments and concerns regarding the landscape design that sufficient progress had not been made and that it was in the best interest of the project to replace Murase with a new landscape design firm. Several firms were considered and Gustafson Guthrie Nichol (GGN) was interviewed by the University and Ankrom Moisan Associated Architects and it was determined to be the most qualified firm for this work. Included in this proposal for GGN are costs to perform a new schematic design. This task was previously performed by Murase. Also included in this proposal is the reconciliation of the cost differential between Murase Associates and GGN for the subsequent design phases. This scope of work includes schematic design (includes a review of the program to confirm scope and design direction), design development, construction documents, bidding negotiation, and construction administration phases as outlined in Attachment B of the Contract.

Scope:

Task Breakdown required for Consultant and Subconsultant

COMPENSATION (Unless otherwise indicated below, all hourly rates must be consistent with the rates included in Attachment A of the Agreement)

<table>
<thead>
<tr>
<th>A.S.#</th>
<th>DESCRIPTION</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1</td>
<td>Landscape Design Services</td>
<td>$71,319.00</td>
</tr>
<tr>
<td>#2</td>
<td>Elevator Design Services</td>
<td>$22,858.00</td>
</tr>
</tbody>
</table>

cc: Bob Baldwin, Shelly Marriott, Capital Projects Accounting

University Facilities Building   Box 352205   Seattle, WA 98195-2205
206.543.5200  cpo1info@u.washington.edu  www.cpo.washington.edu/html/index.htm

TOTAL AUTHORIZATION TO DATE $1,318,372.00
Article I. Date:  February 10, 2011

Project Name:  Site 29W Student Housing Phase II

Project Number:  203247

Prime Consultant:  or Subconsultant

Scope:

Task Breakdown required for Consultant and Subconsultant

COMPENSATION (Unless otherwise indicated below, all hourly rates must be consistent with the rates included in Attachment A of the Agreement)

<table>
<thead>
<tr>
<th>Task</th>
<th>Hours</th>
<th>Avg Rate</th>
<th>Extension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schematic Design</td>
<td></td>
<td></td>
<td>$58,475</td>
</tr>
<tr>
<td>Design Development</td>
<td></td>
<td></td>
<td>$1,957</td>
</tr>
<tr>
<td>Construction Documents</td>
<td></td>
<td></td>
<td>$15,506</td>
</tr>
<tr>
<td>Biddine</td>
<td></td>
<td></td>
<td>&lt;$1,335&gt;</td>
</tr>
<tr>
<td>Construction Administration</td>
<td></td>
<td></td>
<td>&lt;$3,284&gt;</td>
</tr>
</tbody>
</table>

Total for Consultant  $0
Total for SubConsultant  $71,319
Consultant Mark-up (per Attachment A)  $0
Reimbursables (per Attachment A) $0
Total Compensation $71,319

(Attachment to the Additional Services Worksheet)

Article II. Date: February 10, 2011

Project Name: Site 29W Student Housing Phase II
Project Number: 203247
Prime Consultant: or
Subconsultant: Provide Elevator design services. Scope includes Design Development, Construction Documents, Bidding Negotiation, and Construction Administration phases.

Task Breakdown required for Consultant and Subconsultant
COMPENSATION (Unless otherwise indicated below, all hourly rates must be consistent with the rates included in Attachment A of the Agreement)

<table>
<thead>
<tr>
<th>Task</th>
<th>Hours</th>
<th>Av Rate</th>
<th>Extension</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMAA</td>
<td></td>
<td></td>
<td>$0</td>
</tr>
</tbody>
</table>

Total for Consultant $0
Total for SubConsultant $21,362.75
Consultant Mark-up (per Attachment A) $1,495
Reimbursables (per Attachment A) $0
Total Compensation $22,857.75
**Project Name:** Site 29W Student Housing Phase II

**Project Number:** 20324

**Prime Consultant:** or Subconsultant

**Scope:**
Task Breakdown required for Consultant and Subconsultant

**COMPENSATION** (Unless otherwise indicated below, all hourly rates must be consistent with the rates included in Attachment A of the Agreement)

<table>
<thead>
<tr>
<th>Task</th>
<th>Extension</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Design Development:</strong></td>
<td>$3,580</td>
</tr>
<tr>
<td>a. Meet with ANKROM MOISAN ARCHITECTS and discuss scope of work for designing the new elevator(s). This will include meeting to:</td>
<td></td>
</tr>
<tr>
<td>i. Development and design of different type of elevator(s) that will suit each application as to cab interior, door finish, fixtures, fixtures finish and all items pertaining to the design of new elevators for the Project.</td>
<td></td>
</tr>
<tr>
<td>ii. Review revised building drawing as submitted by ANKROM MOISAN ARCHITECTS.</td>
<td></td>
</tr>
<tr>
<td>iii. Provide list of items that will be required by other Crafts or Trades (Structural/Electrical/Mechanical) as relating to the new elevators.</td>
<td></td>
</tr>
<tr>
<td>iv. Define/discuss and review machine room size, hoistway size, clear overhead, pit depth, lobby size.</td>
<td></td>
</tr>
<tr>
<td>v. Verify elevator(s) installation complies with:</td>
<td></td>
</tr>
<tr>
<td>c. ADA Requirements.</td>
<td></td>
</tr>
<tr>
<td>vi. Up-date elevator construction schedule and estimated cost for elevator installation.</td>
<td></td>
</tr>
</tbody>
</table>
### Construction Documents:

| b. | Prepare an Elevator Warranty Preventive Maintenance Contract Specifications as part of the Elevator Technical Specifications. | |
| c. | Review and assist ANKROM MOISAN ARCHITECTS in designing standard or any custom elevator cabs. Provide information required for designing cabs relating to ASME A 17.1 Code. | |
| d. | Provide all building reaction loads for the equipment. | |
| e. | Review Technical Specifications with ANKROM MOISAN ARCHITECTS for approval. | |
| f. | Review entire ANKROM MOISAN ARCHITECTS Project Manual Documents to ascertain all items are included that would be required by Other Crafts and Trades-(Structural, Electrical, Mechanical). | |

### Bidding Negotiation:

| a. | Provide assistance on any bidding matter. Such assistance shall include: | $813.75 |
| i. | Consultations on bidding procedure. | |
| ii. | Review bid costs from Elevator Contractors. | |
Construction Services:

<table>
<thead>
<tr>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>b. Review entire project to ascertain that all items that will be provided by Other Crafts/frades are included in the Building Construction Phase as relating to the elevator equipment.</td>
</tr>
<tr>
<td>c. Conduct on-site during construction progress reviews to determine the elevator work is proceeding in accordance with Contract Documents and in general conformity with the intent of the elevator design concept. Written reports will be submitted to ANKROM MOISAN ARCHITECTS that includes the following:</td>
</tr>
<tr>
<td>i. List items of nonconformity.</td>
</tr>
<tr>
<td>ii. Percentage of equipment and components on job-site and installed.</td>
</tr>
<tr>
<td>iii. Percentage of overall elevator(s) completion.</td>
</tr>
<tr>
<td>iv. Identify elevator(s) equipment or components not on job-site, which could affect elevator installation schedule.</td>
</tr>
<tr>
<td>d. Attend job-site meetings, as required, to assist in resolution of elevator(s) problems/concerns.</td>
</tr>
</tbody>
</table>

| Consultant | $0 |
| SubConsultant | $21,362.75 |
| Consultant Mark-up (per Attachment A) | $0 |
| Reimbursables (per Attachment A) | $0 |
| Total Compensation | $21,362.75 |
Appendix H.

East Bay SITES Score Page

EAST BAY PUBLIC PLAZA

One-Star Certified Pilot Project

Location: Olympia, Washington
Project Size: 1.6 acres
Project Type: Open space - Park
Site Context: Urban
Former Land Use: Brownfield
Terrestrial Biome: Temperate Conifer Forests
Budget: $3,375,000
photo by: Eric J. Williams

Project Overview

The LOTT Clean Water Alliance has been actively producing, distributing, and using class A reclaimed water since 2005. LOTT’s reclaimed water public education program has been enhanced significantly over the past three years with a series of water features in the downtown Olympia, Washington area. The East Bay Public Plaza is a truly unique new public space and represents a small slice of the Puget Sound region in the heart of Olympia. With its educational elements and sustainable features, it serves as the soul of the East Bay District, which has been experiencing significant redevelopment from a polluted industrial brownfield into a vibrant re-energized attraction area. LOTT built this plaza next door to its central Budd Inlet Treatment Plant/WET Science Center specifically for educational purposes – primarily to showcase reclaimed water in a positive and uniquely participatory way. The plaza features a water theme, celebrated through a flowing reclaimed water
Appendix I.

East Bay Master Plan
Appendix J

East Bay Scope of Service

Exhibit A

East Bay Civic Plaza

Scope of Work

This assignment includes the work to be performed by the Design Team of Robert W. Droll, Landscape Architect, PS, and our subconsultants (hereinafter RWD) for Phase 1 of the East Bay Civic Plaza (Project) Improvements on behalf of the LOTT Alliance (hereinafter LOTT). The Phase 1 Project improvements consists of a stream water feature, plaza paving and surfacing, interpretive features, site amenities, utilities, topsoil, irrigation and vegetation plantings.

Consultant Services for this project consist of the Master Site and Grading Plan for the full development of East Bay Civic Plaza (see Task 1.07), plus the 30%, 60%, 90% and 100% Design Submittals/Construction Documents, permitting, Bidding Services, Construction Administration and Project Close-Out for Phase 1 Improvements.

Basis of Proposal

This Scope of Services and Fee Proposal is based upon written documentation provided during the Request for Qualifications process and on-going discussions and written communications with LOTT Staff, LOTT Plaza Partners and the City of Olympia Planning and Public Works Staff. It is understood that the Maximum Phase 1 Project Development Cost of $1,823,325 includes design, clean-up, construction, taxes, contingencies, fees and all costs necessary to fully construct Phase 1 improvements.

Exhibit A, this document, is the written narrative describing the Scope of Services and is supported by Exhibit B which is a spreadsheet defining cost per Tasks.

RWD proposes the following Scope of Services to accomplish the work necessary for the preparation of Contract Documents.

Scope of Services

<table>
<thead>
<tr>
<th>Task 1</th>
<th>30% Design Submittal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task 1.01 Existing Data / Design Status Review</td>
<td></td>
</tr>
</tbody>
</table>
RWD will review all Design data prepared as of Contract Date and all future Design progress for adjacent projects, Geotechnical Recommendations, hazardous material reports, design surveys and all related reports. LOTT will responsible for supplying all relevant information in a format useful to RWD.

Task 1.02 Base Map Compilation
RWD will compile design survey information provided in ACAD format form LOTT into a base map that defines existing and proposed improvements.
Task 1.03 Pre-Submission Conference
Based upon the Master Plan prepared by RWD for the RFQ, RWD will prepare for and attend a Pre-Submission Conference with the City of Olympia.

Task 1.04 Design Charrette with Partners
RWD will prepare for and conduct a three hour, morning Design Charrette to further explore and refine design concepts with LOTT Partners.

Task 1.05 Title Sheet
Prepare Title Sheet with Location/Vicinity Map, General Notes, Legend, Abbreviations, list of LOTT Board Members and Staff.

Task 1.06 Existing Conditions & Demolition Plan
RWD will prepare LOTT supplied Design Survey illustrating existing conditions and those site features to be cleared, grubbed, removed, protected and/or salvaged.

Task 1.07 Master Site & Grading Plan
RWD will prepare Conceptual Site and Grading Plan illustrating type, size and location of all improvements and highlighting the Phase 1 improvements. A rough grading plan illustrated by contours, drainage arrows and drainage features will be shown.

Task 1.08 Phase 1 Site and Grading Plan
RWD will prepare a Site and Grading Plan of Phase 1 improvements with a Maximum Phase 1 Project Development Cost of $1,800,000 (includes design, clean-up construction, taxes, contingencies, etc.). A rough grading plan illustrated by contours, drainage arrows and drainage features will be shown.

Task 1.09 Utilities and Storm Water Plan
Prepare conceptual drainage design plan. It is assumed that drainage will be collected and directed to an existing outfall pipe into the adjacent bay. However, if treatment is required, design of treatment system is within the Scope of Services. Prepare conceptual utility plan. Utility plan to include required potable water service, reclaimed water service for flush water and sewer connections for restroom.

Task 1.10 Water Feature Plan
RWD will prepare a conceptual plan providing more detail and information (piping, pumping, treatment, etc.) regarding Confluence Creek, Artesian Springs, Cutbank Hard Pan Seeps and all Master Plan Water Features.

Task 1.11 Electrical Site Plan
RWD will work with LOTT in selecting lighting components and levels for the Plaza. Provide an Electrical design for the plaza (lighting calculations, receptacle layout, restroom power connection). Coordinate with the various trades for lighting layout and underground utilities. Coordinate with PSE for electrical service to the site.
Task 1.12 Conceptual Site Features
RWD will generate concept sketches of Site Features.

Task 1.13 Restroom Plans, Elevations and Details
- Review project for code compliance and add family bathroom if required
- Coordinate with Owner on any design changes needed
- Disseminate CAD base drawings to all consultants
- Coordinate test boring and soils report with Geotechnical Engineer
- Coordinate footing design with structural engineer based on Geotechnical Report
- Coordinate with mechanical and electrical engineer
- Meet with Owner to discuss fixture and finish options
- Complete LEED Checklist to determine point parameters
- Develop Cross Sections
- Develop preliminary details
- Design Tile pattern
- Select Colors

Task 1.14 Interpretive Design
Sea Reach will take the concepts and design suggestions developed by Aldrich Pears and Bob Droll Landscape Architects and approved by the Client and project partners, and research the interpretive content and potential fabrication materials for use in the Plaza.

Sea Reach will conduct interviews with key project partners (as directed by Client) and experts in the field of water treatment, reclamation, LOTT history, watershed, maritime history (the Port’s and local Tribes), and stewardship. Sea Reach will develop and refine the interpretive content for the Plaza. The interpretive content may be eclectic in nature—incorporating ideas from all the project partners—so our task will be to isolate and enhance a couple of strong themes so that the experience is cohesive, understandable, and rewarding.

Although the overall treatment of the interpretive material will be driven by the site plan and desire to make the interpretive components implied (not literal) and discovery driven—Sea Reach will work with the Client and Bob Droll Landscape Architects to ensure the final product has meaning.

Sea Reach will also research and begin assembling samples of materials appropriate for outdoor use. This will allow our designers to design to the appropriate medium. We want the materials to be durable and long lasting. Knowing the materials will also make it easier in Task #2 to develop a preliminary cost estimate.

After the Client has approved the interpretive content, Sea Reach will work with Bob Droll Landscape Architects to identify what are the interpretive elements, how will they interact with the site plan, where will they reside, and what will be accomplished in phase I versus remaining phases.

Task 1.15 Estimate of Probable Costs
RWD will prepare an itemized estimate of probable cost for all project improvements and costs.
Task 1.16 Client Review
RWD will meet with LOTT to review 30% Design Submittal.

Task 1.17 Plaza Partners Review
RWD will prepare for and conduct a Design Review meeting with LOTT Plaza Partners (Port of Olympia, Hands On Children’s Museum, City of Olympia) to garner their comments on Design Progress.

Task 1.18 Site Plan Revisions
RWD will revise Master and Phase Site Plans based upon LOTT’s and LOTT Partners’ comments.

Task 1.19 Coordination with Port and Olympia-Sidewalk Alignment
RWD will work with LOTT and City of Olympia to resolve the Sidewalk alignment proposed in the Plaza Master Plan with City of Olympia’s Street Standards.

Task 1.20 Design Project Management
Manage the contractual elements, scheduling, billing and timing of project. Manage the coordination of consultants and the execution of the Project Schedule.

<table>
<thead>
<tr>
<th>Task 2</th>
<th>60% Submittal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tasks 2.01 to 2.23 are the same as similar Tasks described in Task 1 except Tasks are at a 60% design completion level. The following provide greater definition of some Tasks.</td>
<td></td>
</tr>
</tbody>
</table>

Task 2.03 TESC Water, Sewer and Storm Design Plans and Report
Same as Task 1.09 except at a 60% completion level.

Task 2.04 Electrical Site Plan
RWD will work with LOTT in selecting lighting components and levels for the Plaza. Provide an Electrical design for the plaza (lighting calculations, receptacle layout, restroom power connection). Coordinate with the various trades for lighting layout and underground utilities. Coordinate with PSE for electrical service to the site.

Task 2.05 Water Feature Site Plan
RWD will prepare a conceptual plan providing more detail and information (piping, pumping, treatment, etc.) regarding Confluence Creek, Artesian Springs, Cutbank Hard Pan Seeps and all Master Plan Water Features.

Task 2.06 Site Plan
RWD will prepare a detailed Site Plan defining materials, horizontal dimensions and call-outs of all Plaza features.

Task 2.07 Grading Plan
RWD will prepare Grading Plan defining the vertical relationships, drainage and drainage components of all site plan features.
Task 2.08 Surfacing Plan
RWD will prepare a plan defining the location of all surface types.

Task 2.09 Water Feature Plan Enlargement & Details
RWD will prepare Site Plan Enlargements, cross sections and details of all water features associated with Confluence Creek.

Task 2.10 Site Enlargements, Sections & Details
RWD will prepare Site Plan Enlargements, cross sections and details of all site plan features.

Task 2.11 Restroom Plans, Elevations and Details
- Finalize floor plan, reflected ceiling plan, roof plan & exterior elevations
- Coordinate with all consultants
- Prepare interior elevations
- Prepare door schedule
- Finalize detail design, fixture and Furnishing Schedule
- Prepare specifications
- Update LEED checklist, provide assistance with templates, coordinate with specifications
- Perform quality control review with all consultants

Task 2.12 Topsoil Placement Plan
RWD will prepare a topsoil placement plan illustrating topsoil types, depths and locations.
RWD will fill out City of Olympia topsoil forms.

Task 2.13 Reclaimed Water Irrigation Plans & Details
RWD will prepare Irrigation Plan using Reclaimed Water, defining point of connection, controller, mainlines, laterals, valves, heads and all improvements necessary for a fully operational automated irrigation system.

Task 2.14 Landscape Plan
RWD will prepare Landscape Plan defining type, size and location of proposed plantings and other landscape improvements. Seeding mix and application area will be defined.

Task 2.15 Interpretive Plan

Exhibit Content
Once we have all agreed on the basic design and received review comments from the Client and project partners, Sea Reach will finalize the design.

Exhibit Layout and Mock-ups for Review
Following the guidelines established by the schematic design, Sea Reach will refine the design for the individual exhibit elements.

The design development package will be submitted and revised as many as three (3) times during this phase. All mock-ups will be submitted in color on 11” x 17” paper and will represent the exact placement of the exhibit elements—sculptures, tiles, textures, cut-outs, text, graphics, materials, and colors (when applicable). If at any time during the exhibit design process you wish to see a larger layout, Sea Reach can provide a full size print-out as...
well. Some clients prefer to receive interim reviews electronically, for this, we can send pdfs via e-mail.

During this task, Sea Reach will refine the cost estimate so that it represents a more accurate accounting of the final costs associated with the fabrication and installation of all parts.

**Final Design & Fabrication Details**

The final sign-, material- and, performance specifications & the legend plan will be developed in this final task. Sea Reach will recommend the most cost-efficient and effective methods for fabrication. We will also be prepared to discuss the advantages and disadvantages of various materials for this application. Scaled structural drawings will represent all the technical information required for this project to go to bid.

**Production-Ready Package**

Upon receipt of approved paper proofs, Sea reach will finalize all digital files and produce a production-ready package specific to the kind of fabrication required.

**Task 2.16 Outline Specifications**

RWD will prepare Outline specifications and project manual in CSI format.

**Task 2.17 Estimate of Probable Costs**

RWD will prepare an itemized estimate of probable cost for all project improvements and costs.

**Task 2.18 SEPA, JARPA, Shoreline and Site Plan Permit Submittals**

RWD will prepare SEPA, JARPA, Shoreline and Site Plan Submittal applications and forms and will pursue permit approval.

**Task 2.19 Client Review**

RWD will meet with LOTT to review 60% Design Submittal.

**Task 2.20 Plaza Partner Review**

RWD will prepare for and conduct a Design Review meeting with LOTT Plaza Partners (Port of Olympia, Hands On Children’s Museum, City of Olympia) to garner their comments on Design Progress.

**Task 2.21 Presentation Plan and Aerial Sketch**

RWD will prepare a color presentation Site Plan and an Aerial Sketch of East Bay Civic Plaza. Hard copy poster boards and electronic files will be delivered.

**Task 2.22 LOTT Board Presentation**

RWD will prepare for, and attend briefing of the Plaza Design to the LOTT Board.

**Task 2.23 Design Project Management**

Manage the contractual elements, scheduling, billing and timing of project. Manage the coordination of consultants and the execution of the Project Schedule.
<table>
<thead>
<tr>
<th>Task 3</th>
<th>90% Submittal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task 3 are the same Tasks as 2 except Work is at a 90% completion level.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Task 4</th>
<th>100% Submittal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task 4 are the same Tasks as 3 except Work is at a 100% completion level.</td>
<td></td>
</tr>
<tr>
<td>Task 4.20 Incorporate City Comments</td>
<td></td>
</tr>
<tr>
<td>RWD will incorporate negotiated City Review Comments into Contract Documents.</td>
<td></td>
</tr>
<tr>
<td>Task 4.21 Assemble and Package Bid Documents</td>
<td></td>
</tr>
<tr>
<td>RWD will assemble and organize all contract documents and deliver to reprographic company for reproduction and distribution.</td>
<td></td>
</tr>
<tr>
<td>Task 2.22 LEED and/or Site Initiatives Certification Submittal</td>
<td></td>
</tr>
<tr>
<td>RWD will prepare application submittals for LEEDS Certification for the Restroom and site Initiatives for the whole Plaza.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Task 5</th>
<th>Bidding Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attend Pre-Bid Conference and answer Contractor questions. Prepare Addenda as necessary to clarify or revise Contract Documents. Respond verbally to Contractor inquiries that require clarification but do not necessitate an Addendum. Attend Bid Opening, tabulate bids, check references and recommend award.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Task 6</th>
<th>Construction Administration</th>
</tr>
</thead>
<tbody>
<tr>
<td>RWD will observe Construction Quality, respond to contractor’s inquiries, administer pay applications, and conduct the following.</td>
<td></td>
</tr>
<tr>
<td>Pre-Construction Conference</td>
<td></td>
</tr>
<tr>
<td>Submittal Review</td>
<td></td>
</tr>
<tr>
<td>Construction Observation</td>
<td></td>
</tr>
<tr>
<td>Pay Estimates/Change Orders</td>
<td></td>
</tr>
<tr>
<td>Punchlists and Final Walk-Thru</td>
<td></td>
</tr>
<tr>
<td>Electronic As-Built Drawings</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Task 7</th>
<th>Project Close-Out</th>
</tr>
</thead>
<tbody>
<tr>
<td>RWD will conduct Project Close-Out checklist.</td>
<td></td>
</tr>
</tbody>
</table>
Additional Services, Excluded Services

Specific items that are not within the scope of work/services include, but are not limited to, the following. RWD can provide these services upon request.

- Utilities are available directly adjacent to the site. Utility plan for this phase and subsequent phases include reclaimed water, domestic water and sewer services only. Off-site utility or main line utility design is not included.
- The plaza design and construction will be phased. However, infrastructure improvements will be constructed within the first phase to avoid future cutting and disruption of installed hardscapes and other features. Therefore, we have not assumed phasing for the infrastructure design.
- RWD is not providing services related to site contamination clean up. Site cleanup design will be provided by others.
- RWD will provide graphics and support information regarding the water features, however, RWD is not in a position to provide water quality technical data related to approval of reclaimed water as interactive water feature.
- Traffic studies, Traffic Analysis
- LEEDS and Site Initiatives Certification Fees
- Demand analysis/economic modeling
- Design Development, Construction Documents or Proposed Design of any off-site improvements or building improvements other than the elements described herein.
- Legal Descriptions of easements, Rights-of-Ways, etc.
- Hydrology Studies, Environmental Studies
- Material Testing
- RWD assumes design of natural gas, communications and methane gas services will be by the corresponding utilities; RWD will coordinate with these utilities but has not accounted for their services within this Scope.
- Wildlife investigations, Endangered Species Documentation or Biological Assessment
- Web-site preparation and hosting, visual impact analysis, photo-simulations, perspective character sketches
- Tree valuation, noise studies, air quality studies
- Public Meetings, neighborhood meetings, Hearing Examiner meetings, etc. other than identified in Scope of Services.
- Final Bid Document Printing and Distribution will be accomplished by a local reprographics firm.
- Boundary and ALTA Surveys

Professional Fee

Professional Fees to accomplish the Scope of Services for LOTT East Bay Civic Plaza are shown on Exhibit B. RWD and Project Team will perform the Scope of Services on a Time and Materials Basis.
Client’s Responsibilities

Client shall provide the following information or services as required for performance of the work. **RWD** assumes no responsibility for the accuracy of such information or services and shall not be liable for errors and omissions therein. Should **RWD** be required to provide services in obtaining or coordinating compilation of this information, such services shall be charged as Additional Services.

- **LOTT Public Works Standard Drawings, Regulations and Specifications**, including “Boiler Plate” Bidding Information
- Legal Descriptions of LOTT owned property, easements, etc.
- Existing as-built site engineering and utility base information.
- Provide all Design Survey and Progress design by others that have an impact on this Project in ACAD format.
- Provide Geotechnical Investigations
- Pay all Fees associated with permits
Appendix K.

Port Plaza Master Plan
Article III. Executive Director Port of Olympia

915 Washington St., SE Olympia, WA 98501-6931

Article IV. RE: Port Plaza, Final Design

Landscape Architectural Services Proposal

Dear _____________,

Thank you for the opportunity to be of service on this worthy endeavor. From review of the information sent to me and discussions with you, I have prepared a Consultant Fee Proposal. This letter will serve as the proposal and agreement for services for the above referenced project. Let me assure you professional services provided by Robert W. Droll, Landscape Architect, PS (RWD) will be of high quality and exceed the canons of the Landscape Architectural profession.

This proposal and agreement reflects RWD’s understanding and scope of your project assignment. If I do not fully capture the project’s intent and scope, please call me at 360.456.3813 so we may negotiate and fine tune.

Article V. Scope of Work

This assignment includes the review of site conditions, engineering plans and the Port of Olympia’s requirements for the design of the Port Plaza. The Scope of Work consists of:

- consolidating all design work previous accomplished into one Master Site Plan (ACAD),
- preparing a concept design for the north end of the plaza,
preparing a set of Design Development, Final Design and Contract Documents plans, specifications and estimates for the completion of the Port Plaza design and

developing a Phasing Plan from the Contract Documents.

The Port Plaza is envisioned to incorporate seating, walls, paving, drainage, signage, landscape, lighting, irrigation, pedestrian circulation and fire access improvements in an effort to aesthetically and functionally accommodate a wide range of urban waterfront recreation and commercial opportunities.

Article VI. Scope of Work

RWD proposes the following Scope of Services to accomplish this assignment. A full accounting of the Tasks/Hours/Costs are shown in Attachment A.

As-built review, utilities research, base sheet set-up. RWD will review site conditions, review local ordinances, and prepare project design sheets.

Topographic and Planimetric Survey. Already complete by others.

Geotechnical Investigation. Existing investigations from other projects will be used.

Article VII. Design Development - 50% Review. Final Design - 95% Review.

Contract Documents - 100% Review

Specifications & Estimate of Probable Costs, Assemble Project Manual/Contract Documents

Advertisement, Bidding and Negotiations-Award. RWD will answer telephone inquiries regarding landscape and irrigation issues during the bidding period. RWD has not
accounted for attending Bid Openings, preparing Bid Tabulations or Bid Recommendations.

Project Management. RWD will meet with Client as required to coordinate and review design intent/direction up to the hours proposed.

Specifications & Estimate of Probable Cost. RWD will prepare specifications in WSDOT format. RWD will prepare Estimate of Probable Cost in a unit quantity basis.

Article VIII. Segment Construction Documents into Phased Improvements.

Construction Observation & Inspection. This service will be billed on a time and material basis if the service is requested.

Post-Construction Monitoring. This service will be billed on a time and material basis if the service is requested.

Article IX. Additional Services, Excluded Services

Tree valuation, geotechnical investigations, public presentations, visual impact analysis, photo-simulations, sketches/presentation perspectives, additional meetings, color plans/drawings, landscape and irrigation design for wet pond areas are services we can provide as an additional service. Conditional use, SEPA and all permits will be an additional service. Wildlife, wetland and archaeological investigations will be conducted by others.

Article X. Professional Fee

Professional Fees to accomplish the Scope of Services is projected to be as shown in Attachment A. This project will be on a Time & Material Basis founded on the Scope of Services.

For your information our hourly rates are as follows.

Article XI. Hourly Services

<table>
<thead>
<tr>
<th>Category</th>
<th>Hourly Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal</td>
<td>$82.00</td>
</tr>
</tbody>
</table>
In an effort to be competitive and provide clarity of Scope of Work, this proposal is based upon the following understanding and conditions.

1. Client will supply all base data and mapping on ACADR14.

2. Client to submit program requirements, project budget (landscape, hardscape, irrigation) and design schedule at project onset.

3. Direct expenses are an estimate only and shall be reimbursable.

**Article XII.  Project Timing**

I am prepared to begin work immediately upon receipt of a signed contract. I propose the following Project Schedule.

Days from Notice to Proceed

- 50% Submittal 30
- 95% Submittal 60
- 100% Submittal 90

**Article XIII.  Client’s Responsibilities**

Client shall provide the following information or services as required for performance of the work. RWD assumes no responsibility for the accuracy of such information or services and shall not be liable for errors and omissions therein. Should RWD be required to provide services in obtaining or coordinating compilation of this information, such services shall be charged as Additional Services.

- Topography and boundary survey.
- Legal Descriptions.
- Soils Testing and/or engineering
- Existing site engineering and utility base information.
Article XIV.  Revisions

Any revisions to the Site Plan after the 50% Submittal Review which affects RWD’s design work, will require additional compensation. Plan revisions due to: change in program, relocation of site elements, or field revisions shall be compensated as Additional Services at the hourly rates herein. The Client is responsible for assuring Client Requests are within the Scope of Services and acknowledging when Request for Services is beyond the contracted scope.

As with all projects, I am cognizant of the desire to limit consultant cost and has proven to be successful in performing my services in an expedient manner: you may expect the same level of service. My job is to clearly present design concepts and documents and communicate with the Client to achieve the Client’s goals. The Client, in turn, is responsible for responding to design concepts, budget concerns, and consultant inquiries.

Article XV.  Billing

RWD bills monthly on work accomplished. The invoice will delineate the project budget, the invoice total for billing period (month), previous billing (paid and unpaid) and the remaining budget. This information helps both of us monitor the project costs.

Should you find this proposal acceptable, please incorporate this letter into the Port of Olympia’s Standard Consultant Agreement. Please call me at (360) 456-3813 if you should have questions. Thank you again for this opportunity, I look forward to serving the Port of Olympia on this important endeavor.
Appendix M.

Kirke Park SITES Score Page

1. Site Selection 16 / 21
2. Predesign Assessment+ Planning 4 / 4
3. Water 21 / 44
4. Soil+ Vegetation 19 / 51
5. Materials Selection 14 / 36
6. Human Health+ Well-Being 28 / 32
7. Construction 4 / 21
8. Operations + Maintenance 1 O / 23
9. Monitoring+ Innovation 8 / 22
Two-Star Certified Pilot Project

Location: Seattle, Washington
Project Size: 0.90 acres
Project Type: Open Space/Park
Site Context: Urban
Former Land Use: Greysfield
Terrestrial Biome: Temperate Conifer Forests
Budget: $500,000
photo by: Stuart Isett

Project Overview

Located in Seattle's Ballard neighborhood, the development of Kirke Park transformed a defunct site into a vibrant neighborhood park. The relatively small 100x400 foot site is situated mid-block and is surrounded on three sides by single family residences. Originally home to a fringe church group, the compound sat vacant for years prior to acquisition by the Parks Department. The new park was designed to reflect the site's past, as well the neighborhood's future. A community garden will continue the site's history of producing food while the secret garden is tucked inside the preserved walls of the historic church, providing a quiet, introspective space. A gathering plaza contains some of the park's other relics and is connected to the open lawn, providing structure for community events and informal play. Active recreation is further supported through a variety of playground structures and an "adventure trail" that uses logs and boulders to promote a more
Appendix N.

Kirke Park Master Plan
Appendix O.

Kirke Park Design Plan

Section 15.01  Seattle Department of Parks and Recreation

MEMORANDUM

DATE: 7/28/2009
TO: Pro View
FROM: Kellee Jones, Project Planner
SUBJECT: 9th Avenue NW (7th Elect Church site)

2009 Parks & Green Spaces Levy
Project ID: K730077  WC # 007701

ACTION REQUESTED: Approve Draft Design Program and Public Involvement Plan.

I. INTRODUCTION

PURPOSE OF DESIGN PROGRAM
Described below are the scope, schedule and budget along with associated considerations and review requirements. These statements shape design and construction and provide specific direction to the designer and to those staff involved directly in design and construction management.

CIP STATEMENT and PARKS & GREEN SPACES LEVY LANGUAGE

| Allocated Budget for 9th Avenue NW (7th Elect Church site) Project = $800,000 |
1. **CIP Statement**
   Council Bill No. 116274; Ordinance No. 122749; Section 3. A. 1. The scope for each project will be defined in the City of Seattle’s Capital Improvement Program. Council anticipates that the proposed scopes of projects will be developed by the Department of Parks and Recreation through a community process, building upon already developed plans where they exist.

2. **Parks & Green Spaces Levy**
   Council Bill No. 116274; Ordinance No. 122749; Section 3. A. Categories, subcategories and projects: There are four major categories for funding: 1) Acquisition; 2) Development; 3) Environment; and 4) Opportunity Fund. These categories are subdivided into subcategories, and projects, as shown in Attachment A (below).

   **Attachment A**

   The Development category includes five subcategories – development or restoration of: 1) Neighborhood Parks and Playgrounds, 2) Cultural Facilities, 3) Playfields, 4) Major Neighborhood Parks, and 5) Trails.

   Neighborhood Parks and Playgrounds: This subcategory includes improvements to 23 neighborhood playgrounds to bring them up to safety standards, development of parks on top of 4 water reservoir lids, development of 4 skate parks and 3 spray parks, 2 off leash areas and development of 11 specific neighborhood parks.

   7th Elect Church Site: $800,000

   Development of park on land acquired with 2000 parks and open space levy funds.

   Council Bill No. 116495; Ordinance No. 122959; Section 6. The 2009-2014 Adopted Capital Improvement Program is hereby amended to include the following new projects and allocations as described in Exhibit A (below) of this ordinance.

   **Exhibit A – 9th Avenue NW Park Development (7th Elect Church Site)**

   This project provides for park development at 9th NW and NW 70th in Ballard. This site was recently purchased with 2000 Parks Levy and other funds. Existing structures on the site will be removed with remaining 2000 Parks Levy funds previously appropriated for such work. A local park will be developed following the removal of the structures.

**BACKGROUND**

1. **Location**
   9th Avenue NW & NW 70th, Ballard, WA
2. **Area Zoning and Development**  
The 9th Avenue NW site is zoned Single Family 5000 (SF 5000) which allows for one single family residence per 5000 square feet of land. Parks and open space uses are also allowed in the SF 5000 zone.

3. **City of Seattle Comprehensive Plan**  
The 9th Avenue NW site is designated as Single Family Residential Area in the City of Seattle's Future Land Use Comprehensive Plan Map.

**Neighborhood Planning Element (Crown Hill/Ballard) 8.40**

*recreation & open space goal*  
A neighborhood with open space, parks and recreation sites connected by a network of “green links,” that offer a full range of active and passive recreational opportunities to area residents and visitors, throughout Crown Hill/Ballard.

*recreation & open space policies*  
Increase the range of recreation opportunities and types of open space available in the neighborhood. Encourage the development of new facilities, including, but not limited to passive parks, tennis courts, basketball courts, ball fields, play areas, marine and shoreline parks, pedestrian-friendly walkways, trails (including the Burke-Gilman), and gateways.  
Create opportunities for people to experience the natural environment through the preservation of publicly-owned forested areas, encouraging community gardening (P-
patches), and tree planting on private property and in the public right-of-way, and creating access to views and waterways.

4. **Seattle Parks and Recreation – Plan 2000**

*Neighborhood Plan Recommendations (Crown Hill/Ballard) Resolution 29775*

- Develop East Ballard pocket park
- Develop additional P-patches

5. **History**

Sanborn maps show no buildings on the property in 1917, and a residence and church building in 1950. Title information reveals the property was held in trust by Daniel Salwt at the time of his death and after some legal challenges by his sons, passed to the church.

- 1974, unknown, Electrical upgrade
- 1986, Ron Reed, ReeDesign, Construct detached garage
- 1992, unknown, Furnace upgrade
- 1992, Ron Reed, ReeDesign, Replace foundation, windows, interior alterations 1st & 2nd floors.

6. **Population & Neighborhood**

*Article XVI.* The surrounding neighborhood is a mixture of dense single and multi-family housing. The 2000 census indicates that the Ballard neighborhood planning area consists of an 80% white population and 4% Asian population. Of the households in this area, 87% speak English, 6% speak an Indo-European language, 29.2% of the planning area has a disability (primarily people between the ages 21 to 64) and .9% of children ages 5-15. 11% of the population is between the ages of 5-17 and 5% under 5.

The proposed park site is located in the eastern portion of the Ballard, at 7028 9th Avenue NW. An associated residence is located at 7036 9th Avenue NW.

*Article XVII.*

7. **Existing Conditions & Park Use**

The site measures 100’ east to west by 365’ north to south. The property is bounded by 9th Avenue NW on the west and residential properties on the north, east, and south. The ground level slopes to the south approximately 10’ from the northern property line. The site contains extensive mature landscaping and raised vegetable plots. Hedges ranging in size from six feet to nearly twelve feet high obscure the interior of the property from all sides. Concrete letters six feet tall lying on a berm south of the buildings spell out the name Salwt in capital letters. Several varieties of fruit trees and berry bushes are well established and planted in an orderly manner.

On the northern half of the lot is a foundation intended to support a temple that has not been built upon. Its walls and window openings frame views into a formal planting area.
surrounded by the poured concrete. The eastern wall of the foundation serves as a wall for a garden shed/greenhouse, which is approximately 8’ x 20’.

The southern building (church) is a wood-framed, four-story structure clad with asbestos siding, with an attic and full basement. The building measures approximately 75 feet by 25 feet. The windows on all three levels do not relate to windows on the other floors.

A 24-foot by 26-foot single-level, vinyl-sided garage is placed approximately eight feet north of the church building.

The 18-foot by 24-foot L-shaped, two-story residence was built in 1918. The building lies approximately 8 feet north of the garage. The building is sheathed in vinyl siding, and is covered by simple gables on the second level and a hipped porch roof.

An 8-foot by 34-foot wood-framed and wood-shingled, single-story woodshed is located east of the temple foundation. A simple shed roof slopes to the east.

II. DESIGN INTENT

A. PROJECT ELEMENTS
   1. Open space
   2. Children’s play area
   3. P-patch garden
   4. Provide recreation opportunities for all age groups
   5. Restrooms and/or enclosure for Sani-cans. Provide and/or maintain utilities for restrooms so they may be built in the future.

B. KEY ISSUES
   1. Crime Prevention through Environmental Design (CPTED): open sight lines
   2. Attachment A - Seventh Elect Church in Spiritual Israel, Historical and Cultural Resources Report provided to Seattle Landmarks and Preservation Board (L&PB) to resolve the property’s status.

III. DESIGN SERVICES

IV. This project will be designed by an outside consultant.

V. PROJECT SCHEDULE
<table>
<thead>
<tr>
<th>Event</th>
<th>Purpose</th>
<th>Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PLANNING</strong></td>
<td></td>
<td><strong>July 2009 - August 2010</strong></td>
</tr>
<tr>
<td>ProView &amp; Steering #1</td>
<td>Approval of Draft Design Program and Public Involvement Plan</td>
<td>July-09</td>
</tr>
<tr>
<td><strong>COMBINED SCHEMATIC / DESIGN DEVELOPMENT</strong></td>
<td></td>
<td><strong>Sept 2010 –March 2010</strong></td>
</tr>
<tr>
<td>Consultant Selection</td>
<td>Contract for Design Services</td>
<td>Sep-09</td>
</tr>
<tr>
<td>Sign Installation</td>
<td>4’x4’ site sign</td>
<td>Nov-09</td>
</tr>
<tr>
<td>Media Release</td>
<td>Press release, flyers, website</td>
<td>Nov-09</td>
</tr>
<tr>
<td>Public Involvement #1</td>
<td>Site Analysis, Input on Community priorities for Concept Alternatives</td>
<td>Nov-09</td>
</tr>
<tr>
<td>ProView #1</td>
<td>Review Concept Design Alternatives</td>
<td>Nov-09</td>
</tr>
<tr>
<td>Public Involvement #2</td>
<td>Review Concept Design Alternatives</td>
<td>Dec-09</td>
</tr>
<tr>
<td>Pro View #2</td>
<td>Review Schematic Design</td>
<td>Dec-09</td>
</tr>
<tr>
<td>Design Commission</td>
<td>Presentation of Schematic Design</td>
<td>Jan-10</td>
</tr>
<tr>
<td>Public Involvement #3</td>
<td>Review Schematic Design</td>
<td>Jan-10</td>
</tr>
<tr>
<td>Pro View #3</td>
<td>Review Design Development</td>
<td>March-10</td>
</tr>
<tr>
<td>DD</td>
<td>100% Submittal</td>
<td>March-10</td>
</tr>
<tr>
<td>Permit Reviews</td>
<td>Pre-permit review with DPD</td>
<td>March-10</td>
</tr>
<tr>
<td><strong>CONSTRUCTION DOCUMENTS</strong></td>
<td></td>
<td><strong>February 2010 –May 2010</strong></td>
</tr>
<tr>
<td>Master Use Permit (MUP)</td>
<td>Submittal to DPD</td>
<td>April-10</td>
</tr>
<tr>
<td>Proview Tech Review</td>
<td>Construction Documents 65% Review</td>
<td>April-10</td>
</tr>
<tr>
<td>Proview Tech Review</td>
<td>Construction Documents 95% Review</td>
<td>June-10</td>
</tr>
<tr>
<td>Construction Permits</td>
<td>Submittal to DPD</td>
<td>June-10</td>
</tr>
</tbody>
</table>
VI. **BUDGET**
The Parks & Green Spaces Levy provides approximately $800,000 for the planning, design and construction developments for the 9th Avenue NW (7th Elect Church site) park development project. The fees for planning and design, and construction documents will be negotiated with the successful design consultant. $200K of 2008 Parks Levy funds was appropriated by ordinance 122959; $600K will be added in 2010 CIP.

**Ordinance #’s:** 122959 and CB 116539

VII. **REPORTING**
The Project Planner/Manager will include the status of the budget to ProView, as part of the construction document review. The ProView team review shall also confirm with the Design Team that sufficient funding exists in the CIP allocation to accomplish all program elements. Project Steering Committee must approve any significant deviations in the project elements or budget.

VIII. **REVIEW PROCESS**

A. **PUBLIC INVOLVEMENT PLAN**
The Outreach and Public Engagement Toolkit, which includes the Race and Social Justice Initiative and Translation and Interpretation Policy, will be utilized as a resource to ensure coordinated and effective approaches to City engagement activities.

1. **Public Meetings** - A minimum of three public meetings will be held beginning November 2009. Based on the information provided above, the following public involvement plan is proposed.
   i. **Consultant/In-House Design**: A consultant will be hired to perform site analysis, work with the community and Parks to develop schematic design options, a detailed design program, and construction drawings.
ii. **Meeting Announcements** will indicate that “participation by all people is welcomed and accommodations, interpreters and/or real-time captioning will be made available upon request.”

2. Public Notification Method
   i. **Project sign**: One 4’x4’ Public Involvement project signs will be posted on site 3 weeks prior to public meetings being held. Signs will be updated with current meeting notices and construction information.

   ii. **Internet**: At the time the sign is erected, the same information will be posted on the website (by link from the page for a specific park, under the “Projects and Planning” section, and on the Events and Meetings Calendar). Parks’ project web page will be updated with project scope, schedule, budget information, public meeting notices, meeting summary notes, and contact information, including: the contact person for any adopt-a-park agreement, the chair of the nearest Advisory Council, and the community council and district council for the area as shown on the Department of Neighborhoods map.

   iii.

   iv. with project scope, schedule, budget information, public meeting notices, meeting summary notes, and contact information, including: the contact person for any adopt-a-park agreement, the chair of the nearest Advisory Council, and the community council and district council for the area as shown on the Department of Neighborhoods map.

   v. **Mail Notification**: Flyers shall be mailed to adjacent carrier routes. Interested organizations will also be notified. Electronic mailings will be utilized where available. Flyers will be distributed to the nearest branch library, community center, district council, community council, other neighborhood groups that ask to be notified, groups identified in the public involvement plan, neighborhood service center, fire station, and appropriate Department of Neighborhoods neighborhood service center coordinator.

   vi. **Newsletters & News release.** A news release will go to the local community newspaper, all community newspapers serving ethnic, immigrant, and other specific Populations, the Seattle Times, and identified blogs in that sector of the city.

3. **Interested Organizations**
   Ballard Chamber of Commerce
   Ballard Community Center
   Crown Hill Business Association
   Everybody’s Place
   Nordic Heritage Museum
   Ballard District Council
   Ballard Neighborhood Service Center
   Groundswell NW
   Friends of 9th Avenue NW
B. TECHNICAL PROJECT REVIEW
1. Department Review
   The Project Planner and Project Manager will coordinate design reviews by ProView, which meets every Tuesday morning. Changes to the scope, schedule or budget must be reviewed by Project Steering, which meets on the second and fourth Tuesday of each month.

2. Environmental Review
   A SEPA Checklist may be required for the Design Plan, along with an Environmental Clean-up assessment.

C. PERMITS
   The following permits and reviews may be necessary. It is the responsibility of the consultant to determine the needed permits.
   ♦ Landmark Certificate of Approval.
   ♦ Master Use Permit (MUP).
   ♦ Seattle Stormwater, Grading & Drainage Control Code: Investigate to determine whether permits are required at the planning, design or construction phases. Parks is exempt from grading permits, at least under some circumstances; however DPD sometimes requires Parks to get them.
   ♦ Construction Permit: Required for any structures.
   ♦ Street Use Permit(s): Required if work (paving, staging, sidewalk closure, utility work, etc.) is done within non-vacated street rights-of-way. Usually the contractor is responsible for obtaining street use permits; however any design issues must be resolved as part of the construction permit review.
   ♦ Electrical, Plumbing, Side Sewer Permits: Required if scope of work includes work on these items. The contractor will be responsible for obtaining these permits.

D. COMPLIANCE & STANDARDS
   The Department has adopted written Park Standard Guidelines and Specifications for various park elements. The applicable standards should be incorporated into the design and construction documents as appropriate. Copies are available in the Planning and Development Division Engineering/Design Services Section, 3rd Floor, RDA Building, 800 Maynard Avenue S, 3rd Floor, Seattle WA 98134-1336.
E. ENVIRONMENTAL MANAGEMENT SYSTEM PROJECT INFORMATION FORM (PIF)
This is a new internal checklist to be completed for all capital projects. It will be used to determine any potential or probable liability related to the construction site. For a draft copy, contact Jodi Sinclair at 684-7292. The project manager is responsible for completing this checklist and submitting it before the start of design to Jodi Sinclair, Environmental Services Unit, Engineering & Design Section, Planning & Development Division.

Design Program & PIP Prepared by: Kellee Jones, Project Planner, Parks PDD

Project Review
Michael Shiosaki – Deputy Director
Karen O’Conner – Public Information Officer
Aaron Bert - North Parks Resource Manager
Cheryl Fraser – North Recreation Manager
Kathleen Conner – Parks Landmarks
Ed Jackson – Facilities Maintenance
Joe Neiford - Landscape Architect
Don Harris – Property and Acquisition Manager
Marrell Livesay – Environmental Analyst
Kellee Jones – Project Planner

ATTACHMENT A

To determine the scope of the public process the following questions were answered:

A. If the answer to any of the following is YES, the Public Involvement Policy does not apply.
   (No to both)
   ♦ Is the public process for the proposed project guided by a law or separate City policy? If yes, refer to that law or policy. (For example, City's State Environmental Policy Act (SEPA) rules, SMC Chapter 25.05; DPR Policy and Procedure 3.9.1.1, Concession Contracts: Public participation in request for proposal; Non-Park Use Policies and Procedures.)
   ♦ Is the proposal the result of a current emergency situation? If so, no public process is necessary.

B. If the answer to any of the following is YES, there will be at least one public meeting.
   “Yes” to the following:
   ♦ Does the proposal add space to the park system? –
Would the completed proposal substantially change what the park looks like?
Would the proposal involve construction or other activity that would substantially disrupt park activities, or require the closure of the entire park?
Would the completed proposal substantially change what activities can occur in the park?
Was the proposal initiated by members of the community (i.e., is it a Neighborhood Matching Fund project or a neighborhood plan-identified project)?
Would the completed proposal result in demonstrable impacts on surrounding neighbors?
Would the completed proposal result in a demonstrable increase in an existing activity or use?
Will the project affect persons with disability or other special populations?

“No” to the following:

Does the proposal affect an Olmsted park?
Is the proposed project subject to the provisions of the Joint Use Agreement with the Seattle School District?

C. If the answer to any of the following is NO, refer the issue to the Board of Park Commissioners for review.

- Is the proposal consistent with the current year Capital Improvement Plan? – Yes
- Is the proposal consistent with the park's Master Plan, if applicable? - NA
- Is the proposal consistent with the Parks Strategic Action Plan? – Yes
- Is the proposal consistent with the neighborhood plan, if applicable? – Yes
- Is the proposal consistent with the Use Management Guidelines for Park and Recreation Facilities (Policy and Procedure 7.13.1), or with specific use management guidelines for Green Lake, Freeway, Seward/Lake Washington Boulevard, Gasworks, Occidental, Volunteer, Magnuson, Lincoln, Waterfront, Market (Steinbrueck), Stan Sayres/Mt. Baker Rowing Parks? - NA
- Does the Department have the resources to sustain the level of activity in the park? – Not Sure

D. Other factors to consider in deciding the scope of a public process:

- What are the “unintended consequences”?
- Does the proposal respond to a documented need?
  --Safety
  --Recreational
  --Routine maintenance/repair/replacement based on a condition assessment
  --Other – Desire for development of property as outlined in the Neighborhood Plan
- Have scheduled activities (picnics, day camps, ball games, etc.) been cancelled? – N/A
Appendix P.

Ella Bailey Park Design Plan

Seattle Parks and
Recreation Planning
and Development
Division Pro Parks
Levy Program

Draft Design Program and PIP

Magnolia Elementary Field Improvements WC 3100

I. INTRODUCTION
A. PROJECT SUMMARY

Project Title: Magnolia Elementary Field
Improvements Address/Location: 2601 West Smith Street, Seattle, Washington 98199
Scope/Size: 2000 Parks Levy Description: Develop site east of the school into a park.

Consider development of a playfield, gathering area, and other park amenities as part of park development. 2.45 acres

Schedule: Planning and Design 2004-5; Construction 2006; field turf established
10/07 Funding/Ordinance: $1,397,497 (total project budget) Pro Parks Levy Neighborhood Park Development K723003, Ordinance 121333
O & M Costs: $25,209 in 2007

B. DESIGN PROGRAM INTENT - The City of Seattle has certified this as a Levy Fund project. This document outlines the project background, goals and objectives, scope of work, schedule, budget and public information plan. Final scope elements will be finalized with Park staff, consultant, and public involvement.

The Design Program serves as the narrative project guide for the Design Team; which includes a planner, project manager, designer, Parks Engineering & Design staff, Facilities Maintenance Services (FMS Shops), and park resources maintenance staffs from the affected geographic sector. Once ProView and Project Steering Committee approve the Design Program and Public Involvement Plan (PIP), significant changes must be reviewed and ultimately approved in writing by Parks Project Steering Committee.
II. BACKGROUND
1. **Size** - This park site is 296’ x 360’, a total of 106,560 SF or 2.45 acres. Of this amount 250’ x 330’, 82,500 SF or 1.89 acres, is level asphalt with only a one per cent slope from west to east. The remaining 24,060 SF includes steep slopes surrounding the paved field on three sides.

![Image of park site](image-url)

2. **Access** - Pedestrian access into and out of the playfield has been provided on the west or school side by a four feet wide concrete ramp system. The ramps allow pedestrians convenient means to traverse the 35-40% hillside grade along a path whose direction more or less parallels the slope contours. Coupled with switchbacks, this design achieves a 10% slope from the street sidewalks of W McGraw and W Smith. Nevertheless, these walkways remain too steep for a 5% ADA access maximum grade without handrails. Even with handrails and intermediate level rest areas every 30 feet, the ADA grade should be 8.33% or less. The sidewalk slope to these pathways is also steep along W McGraw and W Smith streets. An alternative approach into the playfield is at the north/northeast end of the park along W Smith Street. At this corner the sidewalk elevation and that of the adjacent park are nearly even. However, reaching this entrance along W Smith Street is over a 10% continuous slope along the sidewalk.

3. **Infrastructure** – At the field edge and base of the slopes is an eighteen
inch to two-foot high concrete retaining wall. The exception is the east end of the field where chain link fencing forms a barrier above an steep 80% slope, 35 feet down to 26th Ave W. In addition to the fencing, the playfield is furnished with well-worn and rusted baseball backstops and basketball backboards.

Utilities include seven storm drain catch basins along the east edge of the asphalt. One catch basin is also located on the west side of the field to collect all the storm water flow from the large west slope. This drainage structure connects, via a six inch line, to the slightly lower east drains. And, these direct storm water into 26th Ave W street manholes below the northeast and southeast corner of the park. Water service appears to come from the school, although larger eight inch water lines serve all the surrounding streets. Neither sanitary sewage, nor electric power is present at the site, but they are located in or along the nearby streets.

A small play area is located on SSD property and is open for public use. This SSD play area was built in 1999 for the African American Academy, located at this site on an interim basis. The play area has a large compound play structure cushioned with engineered wood fiber and an entry ramp for ADA access, although access is still difficult to the play area.

4. Site Conditions – Though not settled or broken, the asphalt playfield surface is cracked throughout with weeds pushing up through these fissures. Slopes along the north and south ends of the park are dotted with grasses and invasive plants including Scot’s broom, blackberry and ivy. A large mass of blackberries covers the entire slope from the playfield’s east edge down to the street, appearing to hold in place this steep embankment. The slope between the SSD property and the field is 40%, a 30 feet elevation drop over 70 feet. This is a “no man’s land” of natural and invasive plants, including seven large poplar trees, some four to five feet in trunk diameter. Park’s property line extends twenty two feet up into this 70-foot wide natural belt. The concrete ramp-path access system described earlier transects this area and it is still serviceable, though somewhat overgrown with tree litter and moss.

The difficult grade and overall poor site conditions suggest that significant work lies ahead to prepare the site for use and maintenance. The condition of the water and drainage appears poor and may need complete replacement.

In general this site appears unused and neglected. However, the community throngs to the park on July 1 and New Year’s Eve to watch fireworks because this East Magnolia ridge-top locale offers a panoramic view of downtown Seattle. The magnificent view, coupled with a strong community and Levy funding, offers the potential to reclaim what has been a derelict playfield as a spectacular and vibrant park.

There are no known hazardous materials contained on the site.

III. PROJECT PROGRAM

2000 Parks Levy Description: Develop site to the east of the school into a park. Consider development of a playfield, gathering area, and other park amenities as part of park development.

This project will help build a stronger community and healthy families, one of Mayor Greg Nickels’ highest priorities for Seattle.
Parks will hire a landscape architectural consultant to produce drawings and specifications as outlined in a Seattle Public Works design contract. The design documents will incorporate community input, and comply with Park Standards, City Code requirements, Federal 2002 ADA Recreation Facility 2002 standards, CPSC/ASTM play area standards, and the Seattle Parks Facility Development Scorecard.

1. **Site Preparation and Improvements**

2. **Demolition.** Remove and dispose of old fencing, backstops, asphalt surfacing, decommission and remove unused utilities, and abate of any hazardous materials found in the subsurface. Clear invasive plants from the slopes surrounding the field.

2. **Utilities**
   - Install a new water service including an automatic irrigation system for landscape plants and possible athletic field.
   - Install electrical service for automatic irrigation, security lighting, and other electrical requirements.
   - Install drain lines. Make maximum reuse of the existing catch basins. Consider innovative drain lines and soil media for site storm detention.

3. **Landscaping.** Provide landscaping in support of recreation, viewing, and passive use, e.g. sunbathing or lawn games. Also provide and install landscaping materials prevent erosion on the steep embankments. Soil preparation should meet Park Standards and Specifications. Plantings should be drought and sun-tolerant and easy to establish and maintain.

4. **Vehicle Access & Parking.** Due to the steep westerly approaches to the playfield, the only accessible means of entering the site is from the lower east end of W Smith Street. Park maintenance truck access controlled by bollards, a vehicle turnaround point, and signed ADA parking can be provided at this location. Provide marked routes and paths for disabled visitors to access the park features and amenities from on-street ADA parking. Review available parking and consider additional on-site parking.

5. **Pedestrian Access.** Provide pedestrian access from pathways along the west side of the park with SSD approval. Additional new pedestrian access should also be provided and protected by a curb or other safe means from alternative entry points.
B. Project Elements to Consider
Consider the following site development options during the community planning process.

1. **Sportsfield Development & Furnishings**
   - New natural turf playfield with drainage and automatic irrigation, to support youth soccer on a 54 x 100 yard field. This layout, when divided and the field of play moved 90°, will alternatively support two “Mod” soccer fields, 27 x 50 yards each, including sidelines. During baseball season this field will also support two portable T-ball baseball backstops in the northeast and southwest playfield corners.
   
   - Two portable T-ball backstops, two each of U-11 soccer goals and two sets, four each, of “Mod” soccer goals.
   - Replace site perimeter fencing with concrete mowing curbing in which to anchor fence posts while providing for fence line maintenance including limiting weed infestation of the play surface. Also install playfield fencing.

2. **Ceremonial site for revenue generation.** Develop area for special events that capitalizes on view.

3. **Port-o-let.** Provide area for temporary port-o-let facilities during peak use and playfield season. Design site features to reduce port-o-let vandalism.

4. **Recreation Features.** Include site recreation amenities with input from the community. Suggested options include, but are not limited to the following:
   - Path - A jogging/walking loop path, with a five-foot minimum width, could provide approximately 1/5th - 1/6th of a mile per lap around the flat outside edge.
   - Benches – Benches should also be placed along a loop path to allow for rest stops. Benches at the viewpoints and for viewing playfield activity should also be provided.
   - View Point – Provide an area for viewing the City and Interbay to the south and east.
   - Play area – Provide play area for young children and/or basketball area.
   - Picnic Area – Install two to four picnic tables and BBQ. Parks and ADA Outdoor Developed Area Standards should be followed.
   - Drinking Fountain – Consider drinking fountain with required sanitary sewer line.

C. Additional Design Considerations

1. **Security**
   - **Lighting** – Consider low-level security lighting to current standards from poles 12-15 feet in height and full-cutoff luminaries. These lights do not constitute a change in use or programming for this playfield, as would ballfield lighting. Security lighting does not infer that Parks may eventually install field lights, which would require an extensive
permit process, a significant increase in electrical service, and be a major budget addition.

- **Public View and Security** - Vulnerable features are less apt to be vandalized if they remain in the public eye, e.g. within the easy view by surrounding residents. Since none of the streets are busy streets, at risk features within view of neighboring houses, especially those along lower W Smith Street.

- **CPTED Review** – Review site and final design plans with Seattle Police Officers trained in Crime Prevention Through Environmental Design.

  *Fencing* – Fencing at this site has three purposes. First, fencing will keep balls, soccer or baseballs, from easily flying out of bounds from the playing field. Second, a playfield fence will deter vehicle access onto the turf.

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project sign</td>
<td>March 2005</td>
</tr>
<tr>
<td>Public Meeting 1/3 Kick-off</td>
<td>April 2005</td>
</tr>
<tr>
<td>ProView 1/3 approval alternatives</td>
<td>May 2005</td>
</tr>
<tr>
<td>Public Meeting 2/3 Alternatives</td>
<td>June 2005</td>
</tr>
<tr>
<td>Seattle Design Commission</td>
<td>June 2005</td>
</tr>
<tr>
<td>ProView 2/3 approval of single</td>
<td>July 2005</td>
</tr>
<tr>
<td>Seattle Design Commission</td>
<td>August 2005</td>
</tr>
<tr>
<td>100% Schematic Design</td>
<td>August 2005</td>
</tr>
<tr>
<td>Public Meeting 3/3 Final Schematic</td>
<td>September 2005</td>
</tr>
<tr>
<td>Park Board</td>
<td>September 2005</td>
</tr>
<tr>
<td>ProView 3/3 approval final design</td>
<td>September 2005</td>
</tr>
<tr>
<td>development</td>
<td></td>
</tr>
<tr>
<td>100% Design Development</td>
<td>October 2005</td>
</tr>
</tbody>
</table>

- **Sustainable Design.** The Design Team will use the *Seattle Parks Facility Development Scorecard* as a guide for implementing related design features. Parks will consider joint development programs with Seattle Public Utilities in increasing pervious surfaces, and developing innovative field irrigation and stormwater management areas. Additional considerations include:

  - **Environmental** – Water efficiency and rainwater harvest; stormwater management, e.g. flow control and treatment; materials and resources selection; and habitat conservation and diversity.

  - **Social Benefit** – Inclusive of public involvement; design for future adaptive re-use; building community; crime deterrence; preserving neighborhood character; and improved aesthetics.

  - **Fiscal** – Maintenance costs; component durability; utility costs; revenue-generation capacity; and disposal, e.g. materials recycling.

2. **Maintenance and Operations**

  - **Sustainability** – Materials and topography will be self-sustaining to the extent possible. Include energy, water, drainage control and natural habitat conservation.
• **Durability** – Standardized, long-wearing materials, plus easy maintenance access will ensure reasonable life expectancy for park materials and furnishings.
• **Maintenance Design** – Review each design phase with grounds, building and custodial staff to ensure maintenance considerations are integrated into the design of landscape and structures.

3. **School District Considerations.** The Seattle School District (SSD) has several site amenities adjacent to the site that may be of interest to this park development. These include access paths, a 26-car parking lot, and a small play area and a basketball court. A Memorandum of Understanding allowing Park use of these features may raise a number of added issues like assumption of liability and site ADA access. The parking lot carries potential liability and renovation costs should Parks seek to negotiate use. Any MOU would need to be temporary as SSD appears interested in selling the property to generate income. The most pressing property issue for Parks is gaining control, at least for maintenance and site access, of paths on the overgrown west slope owned mostly by SSD. Schools will be asked to contribute M&O assistance for property improvements.

4. **IV. Draft SCHEDULE (milestones)**

| 65% Construction Documents | November 2005 |
| ProTech 1/2                | November 2005 |
| 95% Construction Documents | December 2005 |
| ProTech 2/2                | December      |
| Warranty walk-thru         | December      |

5. **V. BUDGET** – The total budget is $1,397,497.

As part of the construction document review, the Project Manager will include the status of the budget, confirming that sufficient funding exists to accomplish all program elements. Deviations in the project elements must be approved by Project Steering Committee. Design and construction shall comply with City Codes and Park Standards.

6. **VI. REVIEW PROCESS**
A. PUBLIC INVOLVEMENT

The Design Team will consist of the Landscape Architectural consultant and associated Park staff. This project will be designed with input from citizens and may reflect the desires of multiple stakeholders including nearby neighbors as well as those of community-wide athletic organizations. The Design Team will work to form a consensus among stakeholders for a final design concept that combines active with passive recreation opportunities on a scale appropriate for this neighborhood park. Parks will provide written approval to the Consultant on the preferred design direction. Comments from stakeholders will be coordinated by the Park’s Project Manager to avoid conflicts and to provide clear direction to the Consultant. The Consultant shall not be required to consolidate, or resolve conflicts in comments from multiple stakeholders.

1. **Project Impacts** – The improvements in this project do not change the intended use of the field but they will impact frequency of use and they will include new features for the site to be selected with community consultation. Construction activity is also expected to significantly impact this residential neighborhood.

2. **Parks Naming.** Name site following Parks Naming Policy 1.4.1.

3. **Proposed Public Review Process** - Three public meetings are proposed: a kick-off meeting, design review workshop, and final schematic review meeting. Parks will meet with community groups as needed. **Meeting Notification**
   - Project sign – One 4’ x 4’ Public Involvement Sign is recommended for this work, to be posted at the field at least three weeks prior to the first public meeting.
   - Web Notice - See www.cityofseattle.net/parks/proparks/projects/magnolia.htm
   - Informational Fliers - Fliers shall be mailed to addresses within a three-block residential area around the field, together with interested individuals and organizations.

**Section 17.01 Ongoing Project News**
   - Project Sign – An Announcements section shall be reserved on the sign for project updates.
   - Internet – See above web.

**Section 17.02 Public Notification Method**
   - Informational Fliers – See mailers above.
   - Internet - Post a notice on the Department's Internet information "bulletin board" and construction notices to the media.

**Section 17.03 4. Interested Community Organizations**
   - Magnolia Soccer Club
   - Magnolia Community Club
   - Seattle School District (Director of Facilities and Planning)
   - Seattle Youth Soccer Association
   - Magnolia Little League
   - Magnolia/Queen Anne District Council
   - Queen Anne/Magnolia Neighborhood Service Center (DON)
B. Magnolia Community Center Advisory Council CITY REVIEW

1. Department Review - The Project Manager shall coordinate design reviews by the Project Review Team, with representatives from Shops, District, and Planning & Development staffs.

2. Building and Land Use Permits
   a. Drainage (assume no detention facility necessary?)
   b. Sewer
   c. Plumbing (covered under utility plan?)
   d. Electrical (permit by contractor?)
   e. Land Use None required for the rehabilitation of an existing park use.
   f. Street Use Utilities placement and site entry improvements at the lower end of S Smith St. What about embankment improvements that fall within the ROW?

3. Environmental Review (SEPA) – This work consists of major maintenance rehabilitation of an existing playfield. This work is considered in-kind maintenance that is categorically exempt from SEPA.

4. Drainage Regulation Compliance - This field will not be undergoing a change in use, and as such it is exempt from any State Department of Ecology permits for drainage control, flow or water treatment. Parks is however, still responsible for complying with City drainage codes (SMC 22.800).

5. Design Commission Review – Major design changes of a park facility should be reviewed by the Seattle Design Commission. Though some of the infrastructure in this park is of the WPA 1930's era, neither the park nor any components are listed as having any historic value. As such, no Historic Preservation Board review is necessary.

6. Board of Park Commissioners – Will review this major improvement to a park facility.

C. COMPLIANCE & STANDARDS - The Department has adopted written Park Standard Guidelines and Specifications. See: www.cityofseattle.net/parks/projects/standards.

D. ENVIRONMENTAL MANAGEMENT PROJECT INFORMATION FORM (PIF) - This internal checklist determines any potential or probable liability related to the construction site.

E. PROPERTY ISSUES – Parks must seek Seattle School District permission to maintain the entire natural area that divides the properties and provides pathway access through the SSD property. Coordination is advised with the Seattle School District whose property abuts and who leased the playfield from Parks for the past 54 years.
Project Team
Cheryl Fraser  684-8016  North/West District Manager
Cathy Tuttle  684-7033  Project Planner
Michael Shiosaki  615-0823  Pro Parks Levy Manager

Draft Design Program
Appendix Q.

Ella Bailey Park Site Plan
Appendix R.

Interview Questions

(The interview will be semi-structured. I will ask the below questions with follow up questions as suitable.)

Does your firm have a written mission statement?
   If so, does the mission statement address sustainability explicitly?

How does your firm incorporate sustainable design practices into its work?

   In your opinion, how does your firm compare with other firms in the area, with regard to its commitment to sustainability?

Explain your firm’s process for designing an urban open space project.

   The Sustainable Sites Initiative was developed in recent years. Has the advent of SITES impacted your firm’s design process for urban open space projects? If so, how?

   Does your firm encourage sustainability certification or accreditation of any kind, such as LEED? Why or why not?

   Why or why not did your firm apply for SITES certification on this project?

   Would your design process have been different had you or had you not sought SITES certification? In what way?
If any, what SITES credits/prerequisites were most significant in reaching your sustainability goals? Or, what aspect of your design has the most impact on sustainability?

If any, what SITES credits/prerequisites were found to be the most difficult to achieve?

What was the most challenging aspect of gaining certification?

Has SITES been, or would it have been, a positive marketing tool for you?

How do you anticipate SITES will change now that it is going to be administered by the U.S. Green Building Council?

Do you market yourselves as sustainable practitioners - is it already implied merely by the nature of our profession?

Do you plan to seek SITES certification on future projects? Why or why not?