

EXCELLENT

DESIGN &

INNOVATIVE

THOUGHTS

卓越設計 創新思維

— Swift Company llc 斯威夫特有限責任公司 —

公共領域

斯威夫特公司之所以投身公共區域的建設是源自這樣一個理念——精心打造的杰出空間是公共設施的基本所在。它們支撐着日常生活，甚至推動了全社會的運動場地建設，是民主中必不可少的組成部分。斯威夫特公司認為，社區是通過長期對高性能公共空間的交替使用而發展起來的，而寬敞的公共區域可塑造健康活力的社區形象及自豪感，因而他們是在此基礎之上展開公共工程。

在一個豐富生動的解決方案中，社區參與度是主要因素。它給項目賦予三層內涵，將其轉變為一個包納過去、服務現在且探索未來的場所。這需要以下幾種能力：清晰表述複雜主題、仔細聆聽和激發討論（揭示並整合主題、知識點及關注點）。斯威夫特公司的著名之處在於其超凡卓越的社區建設技能，包括持股人參與策略的開發、面向大眾的成功演示、市政設計與制度設計審查及諮詢實體。

斯威夫特公司相信，任何項目都能反映地方本質和客戶價值。土地生態格局（水文、地勢、土壤、植被、光線和不斷變化的天氣系統）相互間有着強烈影響，奠定了感受與體驗的基礎及區域內場所的核心特性。它與住宅史和文化史共同打造了情緒景觀和物理景觀——即幻景與實景。

生態修復+自然系統哲學

數十年來首次見到老鷹狩獵於牧場之上，其價值何在？偶然發現一個內置元素奇跡般地向外生長，是何等愉悅？生態修復能令環境功能變得豐富多樣，對持續發展的未來是至關重要的。不論是否有人類參與，環境總是在不斷變化的。盡管過去無法重塑，但一個複雜的活力生態體系却是可以被重建的。

斯威夫特公司有幸參與了美國西部一些最具價值及挑戰的荒地建設，其範圍涵蓋大拿拿高地草原至大提頓國家公園和西北太平洋的低地森林，大受喜愛

的“城市荒地”——西雅圖探索公園也在其中。不論在何種情況下，建設方法中必須包括對起作用的體系及其交互作用和發展軌迹的清晰了解。

如何與現有格局相協調，拓展生態結構的多樣性並打造出豐富、愉悅、詩意而美好的體驗，是一個嚴峻的挑戰。

該工作使斯威夫特公司對自然系統有了深刻了解，這從根本上影響了其處理各個項目的方法。項目範圍包括城市設計指導、歷史建築保護和多模式交通基礎設施。同荒地一樣，城市環境也具有生態體系的功能。且附加了歷史發展、政治活動、社會需求及金融與文化期望等層面。將已知的生態體系作為城市設計的出發點進行建設，增強這些相互作用的層面，如此便能形成可滿足多重功能並實現社區價值的多彩方案。

人們能直觀地識別出哪些地方被濫用或遭污染，也同樣會被極具感染力的景觀所吸引。震撼於它們的美感與力量。受其約束，人類必將詩意地棲息於大地。

城市場地設計+市民中心

凱文·林奇說：“城市景觀雖然擁有多重身份，但同樣需要賞心悅目並令人印象深刻、欣喜愉悅。”斯威夫特公司對此表示同意。它應當是包容萬象、帶有人文氣息且富於質感與活力的。城市景觀集個體與文化於一體，且必須與地區性質相一致。

為建造都市社區而在公共場所投注精力引來了私人投資並為針對當地發展問題的永續策略提供了支持。巴拉德社區服務中心與圖書館是股份投資的出色代表。創造出豐富多彩、切實可行的城市生態體系和健全的社區環境。

校園規劃+設計

學術校園在全社會擁有獨特地位，包含着文化社區的更高理念。托馬斯·杰斐遜將美國大學設想為一座同周圍社區與環境緊密結合的學術村莊。這便形成了一些坐落於顯著學術環境中且美國式特征明顯的學術、居住及娛樂設施。在世界任何地方，校園規劃都必須與當地的環境、歷史和傳統相呼應。普及海灣地區和卡斯克德山東部的許多校園便是這一形式的出色範例。隨着它們的持續發展成熟，新舊建築的整合與景觀類型學為豐富的社區體驗提供了潛在的可能。

在校園規劃與設計中，斯威夫特公司的努力起到了舉足輕重的作用。不同時期在多個校園的工作經歷使其能對任意校園給出恰當的方案。細致的階段安排和優雅的場地規劃使該地經過多年發展後成為一個和諧的整體。斯威夫特公司對華盛頓州校園的建設包括名家規劃、項目設計和執行落實。相關項目包括普及海灣大學的校園景觀框架計劃、榮獲LEED金獎西雅圖大學校友會與招生辦大樓、西雅圖大學科技大樓草圖設計以及在沃特康社區學院和華盛頓大學所進行的多個項目。

多模式公共交通

高效的公共交通體系通常是一個健全社區日常生活的基礎所在，斯威夫特公司並對該地區的了解進行了重新定義。在西北太平洋地區，該體系包括渡輪、輕軌、單軌車和巴士。斯威夫特公司所參與的交通項目包括西雅圖單軌車的規劃、華盛頓州渡輪碼頭的設計、一系列海灣輕軌站臺的城市場地設計和一個新的奧林匹亞市中轉中心（服務於當地與局部巴士並為海灣輕軌的北行延伸線制定規劃）的建設。

多功能街道=“超越完美的街道”

艾倫·雅各在《偉大的街道》一書中寫道：“街道即你同人們會面的地方。”街道是公共領域的重要組成部分，在城市環境中平均占據28—30%。因此，斯威夫特公司相信，街道應當經過精心設計，以滿足多重用途並成為快樂的源泉。

街道必須能從容不迫地應對交通擁堵，並在風暴中滯緩雨水，成為一處可供人們會面、交談甚至翩然起舞的場所。斯威夫特公司積極行動，找出事物間的關聯並加以利用，使這一設想成為現實。

文化與藝術

生機勃勃的藝術與文化生活是一個健全社區的終極指標。我們對市民文化的貢獻體現於圖書館及聘請藝術家打造公共領域的行為中。

斯威夫特公司贊成本富蘭克林的言論：「圖書館是民主的基石。」圖書館的重要地位毋庸置疑——畢竟，除此以外，還有什麼地方能夠讓你閱讀消遣，借而不買，參與社區討論，與孩子共享自己的童年，或自信滿滿地找尋問題的答案呢？圖書館是安享靜謐時光之地，擁有無限探索的機會。作為這一代人留給後輩們的禮物，斯威夫特公司相信圖書館及其所處的環境應當是魅力十足且經久不衰的。

藝術家為工作及公共領域注入了重要而獨特的感受，致使斯威夫特公司以別樣的角度來全面思考問題，思考着哪些因素應當被置於環境之中。這一貢獻改變了人們的思維並促成了一個更為豐富多彩的環境，而文化在其中擔當了重要角色。斯威夫特公司長期與藝術家合作共事，創造出適於特定場地的作品。此外公司員工還在社區內通過西雅圖藝術委員會和當地學校進行了大量志願活動。物質發展與環境設計是一筆巨大的資金花費，且代表着社區價值，讓藝術和藝術家做出貢獻，這是再好不過的方式了。

可持續場地設計

可持續場地設計是公司的理念基礎——成功的場地設計都是可持續的。分層整合斯威夫特公司的項目並始終貫徹可持續發展策略，這對他們的設計過程是至關重要的。在有效的生態體系中，真正的可持續方案取決於多重互聯元素和子系統。斯威夫特公司懂得這些關係的根本所在，並樂於找出成功的方案。它必能滿足一切需求，將從水循環到巴士時刻表在內的種種事宜安排妥帖。這促使斯威夫特公司相信：一個項目中的所有元素必能滿足多重需求；材料需是持久耐用的；生態功能應成為城市生活的一部分；客戶和社區應當參與到短期及長期行動中來；簡單的創意策略必須經過整合，創造出更為複雜多樣的環境。

多功能是一項重要策略。在某一城市環境中，綠色屋頂是一個架高的微型排水系統，對雨水的收集、保留和蒸散加以利用。雨水循環接近於一個前期開發狀態，對傳統管道設施和治理設備的財政支持減少了。今后有限的資金可被用於集多重利益為一體的方案。魚鷹安然棲息於斷枝植物之上，狩獵並棲息於工業水域，這傳遞着生態與文化的價值，也轉變了人們對項目期望的陳舊觀點。

The Public Realm

Swift Company's commitment to work in the public realm stems from the belief that successful, beautifully crafted places are basic public infrastructure. They are essential to democracy in the ways that support daily lives, and they help to even the playing field for the full society. Swift Company approaches public work with the understanding that community is developed over time through the overlapping use of high functioning public spaces, and that a generous public realm fosters healthy, resilient community identity and pride.

Community engagement is central to a rich vibrant solution. It informs and transforms the project into a place embedded in the past, serving the present, and engaging the future. This requires the ability to clearly communicate complex issues, listen carefully, and facilitate discussions to expose and integrate the issues, knowledge and concerns. Swift Company is known for exceptional community-building skills, including the development of stakeholder involvement strategies and successful presentations to the public, to municipal and institutional design review and to advisory entities.

Swift Company believes that any project reveals the nature of its place and the client's values. The powerful quality of the land with the rich interplay of ecological patterns - hydrology, topography, soils, vegetation, light, and constantly changing weather systems - sets the foundation of experience and the core quality of a place within a region. This and the history of habitation

and culture form an emotional and physical landscape - the illusive and solid.

Ecological Restoration + Natural Systems Philosophy

What is the value of seeing hawks hunting over a meadow for the first time in decades? What about the pleasure of coming upon a built element that appears to have miraculously grown out of the place? Ecological restoration for diverse and rich environmental function is vital for a sustainable future. Environments change constantly with or without human presence, and while the past cannot be restored, a complex and resilient ecology can be reestablished.

Swift Company has the honor to work in some of the West's most challenging and valued wild lands, ranging from the high prairies in Montana, to Grand Teton National Park to a lowland forest of the Pacific Northwest, and the much loved 'urban wilderness' of Seattle's Discovery Park. In all cases the approach involves a clear understanding of the systems at play and their interaction and trajectory. The critical challenge is to work with the existing patterns, expand ecological structural diversity, and create experiences which are rich, resilient, poetic and beautiful.

This work has provided Swift Company with a deep understanding of natural systems which has fundamentally influenced their approach to work in all projects, ranging from urban design guidelines and historic preservation to multi-modal transportation infrastructure. Like wild lands, urban circumstances function as ecological systems with the added layers of historical development, politics, social needs, and financial and cultural aspirations. By using the given ecosystem as the starting point for urban design and building on it to amplify these contextual layers, rich and beautiful solutions are structured to meet multiple functions and community values.

Humans understand intuitively when a place has been badly used or denigrated. We are drawn to extreme and powerful landscapes for their beauty and force. With this is an obligation to be graceful in the way we inhabit.

Urban Site Design + Civic Places

Kevin Lynch says: "The urban landscape, among its many roles, is also something to be seen, to be remembered, and to delight in." We agree - it should be generous, humane, and rich in texture and life. The urban landscape binds individuals and culture with a place, and is inextricably meshed with the nature of a region.

The commitment on the part of the public to create urbane communities results in private investments and provides a backbone of sustainable strategies addressing issues of regional growth. The Ballard Commons and Ballard Library represent an exceptional example of shared investment creating a rich, viable urban ecosystem and a healthy community.

Campus Planning + Design

The academic campus holds a unique place in all societies, encompassing the higher ideals of our cultures and communities. Thomas Jefferson conceived of the American university as an academic village with strong ties to the surrounding community and context. This has resulted in a distinctly American form of academic, dwelling and recreational facilities set in a significant landscape context. Campus planning anywhere in the world must be responsive to the context, history and traditions of a region. Many campuses within the Puget Sound region and east of the Cascade Mountains are exceptional examples of this form, and as they continue to mature, the integration of historic and new architectural and landscape typologies offers the potential for rich community experience.

Campus planning and design comprises an important part of Swift Company's

effort. Work on multiple campuses over extensive periods of time informs the approach to each campus project. Careful phasing and graceful site planning create a place that feels whole as it develops over the years. Our work on campuses throughout Washington State ranges from master planning to project design and implementation. Relevant projects include a campus landscape framework plan for the University of Puget Sound and the Seattle University Alumni and Admissions Building (LEED Gold), Seattle University Science Building Predesign, and multiple projects at Whatcom Community College and the University of Washington.

Multi-Modal Public Transportation

High functioning public transportation systems are often the basis of a healthy community's daily life, and they redefine our understanding of a region. In the Pacific Northwest, this includes ferries, light rail, monorails and busses. Swift Company has been involved in transportation projects ranging in scale from planning efforts for the Seattle Monorail and Washington State Ferry landings to urban site design for a series of Sound Transit light rail stations, a new transit center for the City of Olympia serving local and regional buses and planning for Sound Transit's northbound light rail extensions.

Multi-functional Streets = "Beyond Complete Streets"

In *Great Streets*, Allen Jacobs writes "Streets are where you meet people." Streets make up a significant part of the public realm, constituting 28-30% of the average urban setting. For this reason Swift Company believes streets should be designed to serve multiple purposes and be a source of pleasure.

Streets must function with grace during rush hour traffic, capture and slow rain water in a storm, and be the place where people meet, talk and maybe even dance. Swift Company pushes to find and employ the connections and relationships that make this possible.

Culture and the Arts

A vibrant arts community and cultural life are the ultimate indicators of a healthy community. Our commitment to civic culture is expressed in our libraries and the engagement of artists in crafting our public realm.

Swift Company agrees with Ben Franklin who said, "Libraries are the cornerstone of a democracy." Libraries occupy a place of critical importance - where else can you browse and linger, borrow and not buy, engage in community discourse, share your own childhood with your child, or ask any question with the confidence of an answer? Libraries are places to enjoy quiet moments where the opportunities for discovery are limitless. As a gift from this generation to the next, we believe libraries and their sites should be inviting and designed for longevity.

Artists bring a critical and unique sensibility to work and the public realm, causing us all to think differently and holistically about the questions and issues which should be integrated into the built environment. This contribution shifts thinking and results in a richer environment in which culture assumes an important role. Swift Company has a long tradition of working with artists to create site-specific works ranging from peer collaborators to support. As individuals, we have given extensive volunteer time to support arts within the community through the Seattle Arts Commission and the local schools. Physical development and environmental design are a huge capital expense and represent community values. What better way for art and artists to contribute?

Sustainable Site Design

The concept of sustainable site design is basic to our philosophy; successful site design is sustainable. The integration of sustainable strategies throughout as a layered aggregate of Swift Company's projects is essential to their

design process. As with functioning ecosystems, truly sustainable solutions are dependent on multiple interconnected elements and subsystems. Swift Company understands the basis of these relationships and delights in finding successful solutions which must meet the requirements of everything from the water-cycle to a bus timetable. This drives Swift Company's belief that all elements of a project must meet multiple needs; that the materials be durable; that ecological function be part of urban life; that clients and communities be engaged in the short and long term implications of actions; and that simple innovative strategies must be integrated to create more complex and richer environments.

Multiple function is a critical strategy. In an urban environment, a green roof is an elevated micro-drainage system, taking advantage of rainwater capture, retention and evapotranspiration. The rain water cycle is closer to a predevelopment condition and the financial demand for traditional infrastructure of pipes and treatment facilities is reduced. The future's limited dollars can be used for solutions which integrate multiple benefits. Osprey hunting from snag perches on industrial waterfronts communicates ecological and cultural value, shifting the historic perception of what should be expected from a project.

公司簡介 Company Profile



斯威夫特公司成立於1982年，致力於美國太平洋西北地區公共景觀與開放空間的設計規劃。該公司憑借其卓越設計、創新理念、成功方案、清晰溝通和涉及多重利益的有效協助贏得了良好贊譽。

公司由12名技藝純熟的景觀設計師和城市設計師組成，風格獨特，個性十足，且與客戶擁有長達數十年的合作關係。斯威夫特公司致力於為客戶提供長期服務，並因自身的策略整合思維、動感活力和積極行動而頗受對方重視。主觀上，他們願意與提供基本公共服務的客戶進行合作，不論其是國企還是私企。對公共工程的熱衷和基於根本地方感之上的情境化設計是斯威夫特公司的動力源泉。而對有關社會、文化和生態的多元主題的興趣則催發了一系列成功作品的誕生，其範圍涵蓋荒地修復和城市設計。從詳細的場地設計到一流的策劃方案，從設計規劃到工程管理，公司的綜合服務得到了客戶的青睞賞識。

Founded in 1982, Swift Company has focused on the planning and design of public landscapes and open spaces in the Pacific Northwest region of the United States. The firm has earned a valued reputation for design excellence, innovation, successfully implemented solutions, clear communication and effective facilitation involving diverse interests.

Swift Company is a group of twelve skilled landscape architects and urban designers committed to a highly personalized practice with client relationships spanning decades. They are committed to clients for the long haul and are valued for strategic integrated thinking, energy and action. They intentionally pursue work that involves clients engaged with providing essential public services, be they public or private. Swift Company is powered by a deep commitment to public work and context-driven designs that build on a fundamental sense of place. An interest in complex social, cultural and ecological issues has fueled a broad range of successful work from wild lands restoration to urban design. Clients appreciate the integrated services ranging from detailed site design to master planning and from programming to construction administration.



暮色中，透過湖畔的松樹、白楊和柳樹林能隱約看到坡形屋頂下發光的住宅空間。階梯和露臺上青草點綴的沙礫小徑在住宅和場地間形成過渡。At dusk, the house is an illuminated space under the sloped roof seen from the lake through a forest scrim of pine, aspen, and willow. Stairs and decks make the transition between the house and the site with grass gravel paths. (Photo by: Nic Lehoux)

采石灣森林花園 Stone Quarry Bay Point House

Credits:

Project Title: Stone Quarry Bay Point House

Project Location: Flathead Lake, Polson, Montana, USA

Project Type: Residential

Client: Private

Project Size: 30 acres (12 hectares)

Landscape Architect: Swift Company LLC

Chief Designers and Project Team: Barbara Swift and Melanie Davies, Swift Company LLC

Other Consultants: Bohlin Cywinski Jackson, Architect; Martel Construction, General Contractor;

Doepker Landscape, Inc., Landscape Contractor

Cost: Private

Project Work Duration: 1999-2002

Awards: Best Private Plots 10 Honorable Mention, Die besten Gärten, 2010; Honor Award for Design, Washington Chapter, American Society of Landscape Architects, 2005; Home of the Year Award, Architecture and Metropolitan Home, 2004

美國西部的森林花園

在北美的西部邊緣，遼闊的野生美景令人陶醉。雖然定居在這片神奇土地上的入口不多，但大規模的伐木、採礦和休閒項目開發依然極大破壞了當地的生態平衡。為了保護和改善這片獨特的土地，制定全新的發展模式可謂迫在眉睫。

斯威夫特公司受私人別墅主人的委托，在野生森林的中心區域打造花園。花園周邊環繞着優美的自然景觀，可供家人舉辦各類公共活動。環保理念、地理環境和生態環境都是花園設計的靈感來源。花園並非一處靜態景觀，而是固有景觀結構和進化中的生態系統的擴充。此外它還是一個富於活力的生態系統。設計師以一雙妙手對景觀進行細致打造，將平凡之景轉變為非凡之境。

采石灣森林花園是蒙大拿州弗拉特黑德湖西岸私人別墅的一部分，充分體現了可持續發展模式，重視土地和野生生物的保護管理。獨特的生態功能，唯美別致的手法和簡約的住宅設計最大程度地利用了空間和生態環境。公園設有一系列集聚會、休閒娛樂和西方傳統默禱功能為一體的活動場地。

調查大綱

由執着的环境保護者組成的大家庭制定了別墅為期一年的大綱，以利于本地景觀和野生生物的照顧管理。同時設計着重於擴充生態系統，從而能够在一年四季舉行家庭朋友的聚會，增進彼此的感情。

對於建築風格和花園形式，客戶和設計團隊攜手合作，細致分析了一年內各種不同的戶外生活，盡可能地達到內外空間的一致。聚會、野餐、閒談、傾聽音樂和演講均可以在室內外進行。即使在冬季，觀光、漫步、聚會和滑雪也是不錯的活動形式。

項目的關鍵在於加強野生環境的美感和生態平衡。客戶和設計團隊共同提出了一系列問題

來引導項目設計的發展方向，以此測試每一個方向的準確性。

- 公司是否創造了真實且正確的景觀？
- 固有和新興景觀，室內外景觀是否真正地融為一體？
- 設計過程是否兼顧了藝術和生態？
- 項目建設是否符合生態系統的可持續性循環軌跡？
- 設計方案的表現手法是否簡潔？

設計的整個過程以自然為主，人工為輔，實現人類與自然的和諧統一。

項目背景

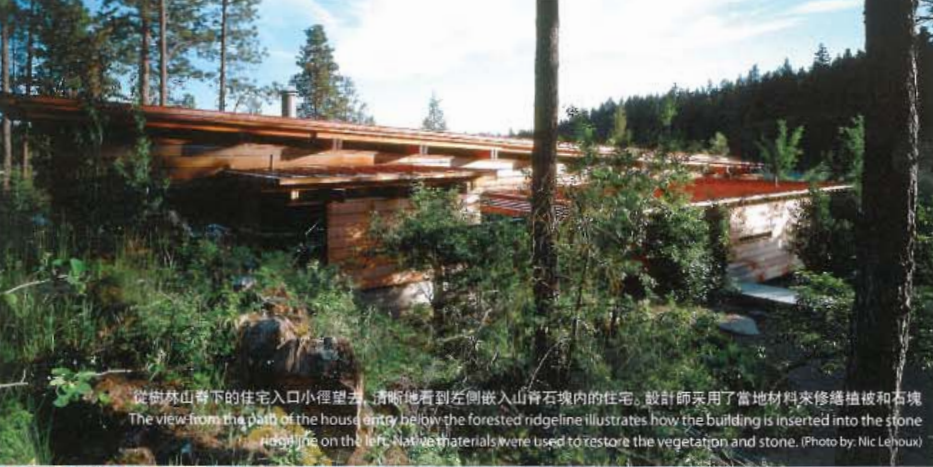
采石灣位於蒙大拿州弗拉特黑德湖西南岸的海洋森林生態體系中心。弗拉特黑德湖是美國密西西比河西岸最大的淡水湖泊，坐落於落基山的兩個山脈之間。采石灣處於弗拉特黑德湖西岸，寧靜的香蒲淺灣棲息着各種水生生物。30英畝（12公頃）的海岸沿綫包括險峻的密林山坡、濕地、平坦的森林草甸和一個朝南的岩石半島。

成熟的森林生長在湖畔的粉質土壤中，周圍環繞高聳的碎石岩層及灰黑色的石英岩和頁岩山脊。天然的松樹、冷杉、杜松、白楊、柳樹混交林基本不用防範松甲蟲的侵襲，有利於北美洲西部上千畝的森林生長。森林地表覆蓋有松草、原產草莓、雜類草、雪瑞和原生玫瑰等，每一個水平層面都體現了簡約質樸的森林景觀。



項目整體環境圖

A view of the site's surrounding context
(Photo by: Barbara Swift)



從樹林山脊下的住宅入口小徑望去，清晰地看到左側嵌入山脊石塊內的住宅。設計師採用了當地材料來修繕植被和石塊。
The view from the path of the house entry below the forested ridgeline illustrates how the building is inserted into the stone ridge line on the left. Native materials were used to restore the vegetation and stone. (Photo by: Nic Lehoux)



房屋入口處的庭院被經過整修的天然景觀所簇擁，自然植物、草地石鋪路和現存的保護森林組成了一片悅目美景。
The house entry court is surrounded by a restored landscape of native plants, a grass gravel road, and protected, existing forest. (Photo by: Nic Lehoux)

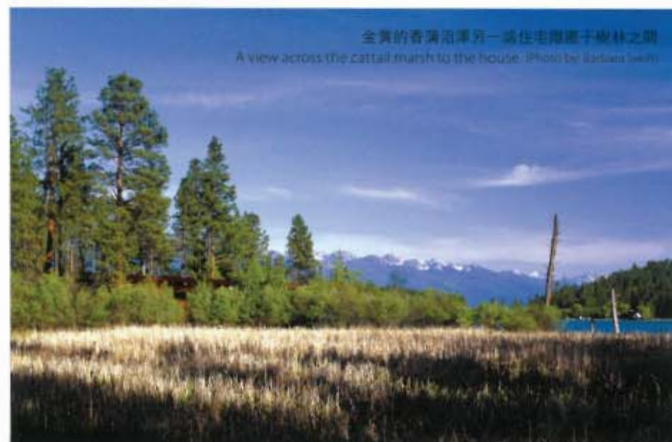
場地內棲息着廣泛的野生動物，包括金雕、黑熊、黑尾鹿、魚鷹和海狸。它們的棲息地從場地內的森林高地一直延伸到鄰近的自然保護區。

此外，場地內包括一個大型工作室、護林員宿舍、主要住宅區和碼頭。森林花園位於湖邊的半島上，周圍環繞着沿海黃松木以及冷杉木林。

設計過程：形式和功能的結合

設計團隊希望生態功能同時具有美感的升華，通過對現存景觀的限制規劃和放大，最終達到了這一完美效果。粗獷的線條和茂密的森林與岩石山脊綫和濕地形成和諧的景觀，定義出清晰簡約的輪廓。在設計師深思熟慮的設計中，場地的天然結構得到全面的保護與改善。景觀設計師同心協力，將建築物細緻地嵌入現存景觀。

場地設計運用了地形特點，岩石、平臺與有序分布的開放和掩映景觀。建築物四周環繞着青草點綴的沙礫小徑，由於場地的地勢分級，它們隱匿在自然景觀之中，分層岩石山脊擴展並逐漸嵌入建築物，構成獨特的地貌。全新的石雕聳立於地面，巨大的岩石突兀而起。總體規劃包括草叢間的砂石小路。



全質的香蒲沼澤另一處住宅隱匿于樹林之間。
A view across the cattail marsh to the house. (Photo by: Barbara Swift)



上圖：印第安部落湖畔花園
Above: The garden at the shoreline of Flathead Lake. (Photo by: Barbara Swift)

下圖：從住宅通往森林花園的沙礫小徑
Bottom: One of the gravel paths that lead from the house through the Forest Garden. (Photo by: Barbara Swift)

小路蜿蜒曲折，靜靜地通向叢林深處。弧形的污水處理系統隱藏在高大的樹木和低矮的白漿果、牧草與松草之間，形成景觀的鮮明對比。



當地石塊構成的鋪地和座椅，圍合成沙礫基質中的圓形篝火場地。
Native stone forms the paving and seating for the fire circle which is located within a grass gravel matrix. (Photo by: Barbara Swift)

The Point House位於場地中心，是石脊頂端的一處細長涼亭。湖畔與住宅間種植的柳樹和松樹隱約地描繪出湖畔風景，而透明的南外立面將湖光美景盡收眼底，門窗和甲板成為美景的陪襯。堅實的北側牆體延伸到山脊，形成住宅與公共區域間的屏障。設計團隊將住宅和自然美景緊密融合，創造了完美的森林涼亭。

精心選擇的原生植物提煉了場地的優雅自然和簡約風格，強化了生態系統功能。植樹造林有利於森林生態的健康發展，其結構的多樣性形成天然的庇護，為野生生物提供了珍貴的棲息場所。設計所用的材料皆來自於場地或半徑50英里（80公裏）的範圍內，其中包括了平頭湖盆地的原生物種。

為了進一步保護場地的自然原生態，施工範圍嚴格控制在建築物周圍的5英里（8公裏）範圍內。考慮到施工的長遠發展，場地內所有的樹木均得到妥善保存。在施工範圍以外，自然景觀同樣受到良好的保護。此外，設計團隊循環利用了場地的表層土壤和森林覆蓋物。項目竣工後，策略種植和修剪完善了湖畔的美景，人們能夠欣賞到更為遼闊的景色。后期管理包括與森林管理部門的定期協商，松樹甲蟲防範和區域內的適當調整。

嚴格控制場地內車輛的進入，從而有利於自然景觀的保護，讓人們少受干擾，更多地融入其中。小型推車和步行是唯一的交通方式。場地內的道路由碎石和草地構成，而非特意鋪就，旨在最大程度保護自然景觀。

環境和社會的可持續發展

場地的精心保護和恢復以及生態功能是整個項目的重點。開發的每一個步驟都盡可能地樸素和簡約。生態功能的維護和養分的更新至關重要。黑熊悠

閑地在林間穿梭，時而休憩于甲板之上，魚鷹放心地在屋頂安家。通過客戶的周全考慮，管理範圍廣泛涉及松樹樹皮甲蟲防治和外來物種的預防等生態健全化管理。保護生態功能的具體行動包括蒙大拿州西部土地保護和恢復的參與成員聚會，共同制定這一獨特地域的管理政策和方法。

值得一提的是，該項目通過精緻簡約的審美表達充分展現了原始野生景觀的獨特魅力。這一森林花園體現了私人花園的全新形式，是生態系統和人類居住環境協調相融的重要代表性設計。

植物列表

喬木

Rocky Mountain Juniper (*Juniperus scopulorum*)
Ponderosa pine (*Pinus ponderosa*)
Quaking aspen (*Populus tremuloides*)
Western red cedar (*Thuja plicata*)

灌木

Serviceberry (*Amelanchier alnifolia*)
Low Oregon grape (*Mahonia nervosa*)
Nootka rose (*Rosa nutkana*)
Sandbar willow (*Salix exigua*)

地被植物

Kinnickinnick (*Arctostaphylos uva-ursi*)
Wild strawberry (*Fragaria virginiana*)

A Wild Garden in the American West

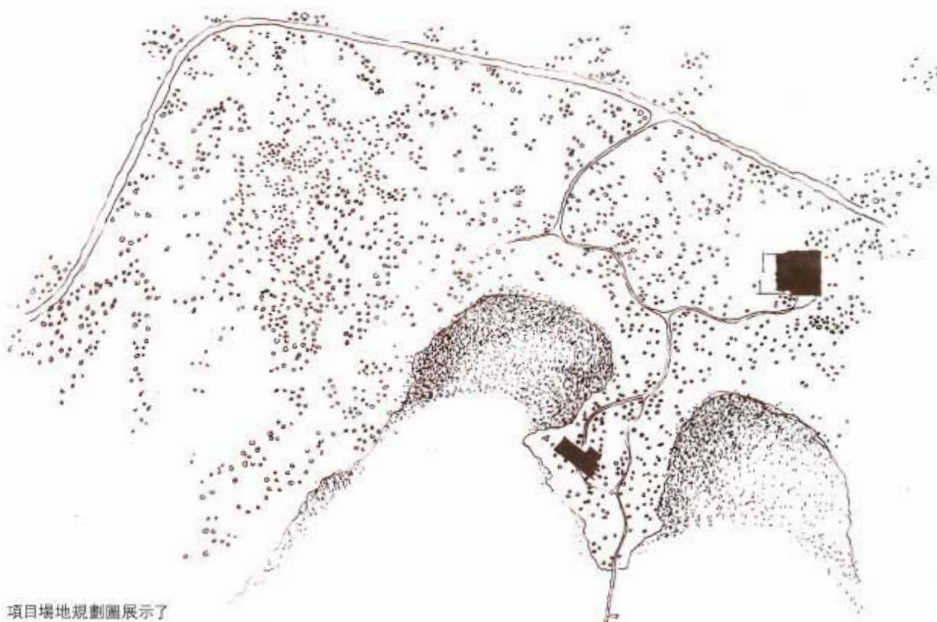
In the western reaches of North America, powerful and vast wild landscapes capture the soul. For those who choose to inhabit these extraordinary lands, where human populations are small but where large-scale deforestation, mining and recreational developments have chipped away at ecosystems' health, decisions about new development must be consciously made to protect and enhance these special places.

For a private residential client, Swift Company had an incredible opportunity to create a "garden" in the midst of a wild place. The garden is a deeply generous place for the communal activities of a family embraced by a powerful natural landscape. The garden grew out of the conversation between the values and aspirations of an environmentalist client, the circumstances of place, and the ecosystem in which the garden resides. This is not a static imprint on the landscape, but an amplification of the inherent structure of the landscape and its ever-changing systems. The garden continues to evolve as a resilient ecological system. The mundane has been shifted into the sublime with a careful and light hand on the landscape.

The Stone Quarry Bay Point House, part of a family retreat on the western shore of Montana's Flathead Lake, exemplifies a sustainable development where



透過樹林從花園看到的湖畔景致 A view through the garden to the lakeshore. (Photo by: Barbara Swift)



項目場地規劃圖展示了

場地周圍的環境，寬廣的樹林荒地一直延伸到印第安部落湖畔的香蒲濕地中

The site plan illustrates the project's surrounding context of forested wildlands abutting cattail marshes at the shores of Flathead Lake. (Drawing by: Barbara Swift)

management of the land and wildlife is paramount. The client's vision for exceptional ecological function, aesthetic refinement, and dwelling is realized in a minimalist design that amplifies the spatial organization and ecology of the site. A series of connected places for gathering, recreation, and contemplation support living in the western tradition.

Investigation and Program

The client, comprised of an extended family of sophisticated and committed environmentalists, set a program of a year-round retreat to be subordinate in all aspects to the management and care of the native landscape and wildlife. The design focuses simultaneously on amplifying the patterns of the ecosystem and fostering gatherings of family and friends in all seasons of the year.

It is essential to the client and design team that the architecture of the house and the form of the garden work together to allow for several kinds of "outdoor living" throughout the year, and to blend the inside and outside spaces. Gathering, eating, talking, and listening to music and presentations are the uses which slip both inside and out. Winter uses include viewing, walking, gathering, and skiing.

Enhancing the aesthetics and ecological health of a wild place took center stage in the development of the program. A series of consistent questions shared by the client and designers guided the



場地內簡約的景觀設計營造出完整的西部生活環境，將住宅與花園融合成自然、和諧的整體
The intentionally minimalist design on the landscape creates a fully integrated form of western living to meld the site and home into a natural, harmonious whole. (Photo by: Barbara Swift)

development of the program and design, and these were used to test each direction:

- Are we creating an inherently real and right place?
- Is there a true continuum between the existing and the emerging, and the inside and outside?
- Do these actions couple art and ecological restoration?
- Will these actions support a sustained ecological trajectory?
- Is this the simplest gesture?

The ongoing intent is the subordination of the hand of human to that of nature, and for graceful coexistence of people and nature.

Site and Context

Stone Quarry Bay is located in the heart of a maritime forest ecosystem on the southwestern shore of the glacier-carved Flathead Lake in Montana. Flathead Lake is the largest freshwater lake in the United States west of the Mississippi River and sits between two mountain ranges that are part of the larger Rocky Mountain geography. Stone Quarry Bay is on the lake's western shore. The calm, shallow waters of the bay are inhabited by native cattails and freshwater animal species. The 30-acre shoreline

site includes steep wooded hillsides, marshes, level forested meadows, and a rocky peninsula facing south.

The undisturbed site is composed of a mature forest growing on silty lake soils amid uplifted broken stone shelves and ridges of gray-black quartzite and shale. The mixed forest of pine, fir, juniper, aspen and willow is healthy and largely free of pine beetle infestation, which has adversely affected hundreds of thousands of acres of forest in the North American West. The understory varies from a simple matrix of pine grass, native strawberry, and forbs to snowberry and native rose masses, each naturally creating a horizontal datum in the visually simple forest landscape.

A broad range of wildlife, including golden eagle, black bear, mule deer, osprey, and beaver use the site as part of a habitat continuum that connects the shoreline with the forested upland and the adjacent Nature Conservancy reserve.

The family compound includes a large workshop and caretaker's quarters, the main residence and a dock. The residence, the Point House, is located on the peninsula which extends into the lake, surrounded by ponderosa pine and fir forests.

Design Approach: Form and Function Working Together

The design couples exceptional expectations for ecological function and aesthetic refinement. The result reflects an intentional restraint and amplification of existing patterns. The simplicity of line and form of the forest establishes an elegant matrix with the stone ridgelines and marsh lands defining clear, simple datums. With considered effort, the landscape architect protected and reformed the inherent structure of the site. Collaboration with the architect included the careful insertion of the building into the existing landscape.

The site's form is created using landform, stone, platforms, and filtered screens in an intentional sequence of open and sheltered spaces in the landscape. Starting with site grading, the building and paths are submerged in the landscape. Existing layered stone ridges are extended and imbed the buildings in the landform. In gathering areas, new stonework is profoundly rooted in the land, and large stones arise from the surface of the soil. The site plan includes a grassed gravel road and trails which slip quietly into the topography. The septic system is a sculpted arc which disappears in the simple landscape of tall trees and transparent masses of low growing snowberry, forbs, and pine grass. The result is the antithesis of the object in the landscape.

The Point House, the center of gathering, is a slim long pavilion inserted into a stone ridge on the point. The building is set back from the shoreline of the bay with views of the lake through a screen of willow and pine

trees. While the south side of the house is transparent with numerous penetrations of doors, windows, and decks, the north wall is opaque, extending the ridge line and separating the public from private. The design creates the experience of a forest pavilion and site melded together, without separation of building and site.

Native plant communities were selectively used to refine the naturally elegant and minimalist character of the site and to augment ecosystem function. Reforestation activities were implemented to focus on the health and regeneration of the forest ecosystem, its structural diversity, and habitat value while creating filtered screens. The materials were all derived from the site or within a 50-mile radius, including the use of all native plant species from the Flathead Lake basin.

To further honor the sanctity of the site's natural state, construction impact was held within a maximum of five feet of the building. All existing trees on site were protected for the duration of construction. Outside of the building construction limit, the native landscape was protected and augmented. Site topsoil and forest floor mulch is reused. Upon completion of construction, strategic planting and pruning created slivers of views to the lake and the Mission Range beyond. Post-construction involvement includes periodic consultation associated with forest management, pine beetle control, and incremental fine tuning of use areas.

To protect the natural landscape and to immerse people in the setting, vehicular access to and within the site is purposely limited; with service by small carts and travel on foot the only allowed modes of transportation. Paths and roads within the site are gravel and grass, not pavement, communicating the intended conservation focus.

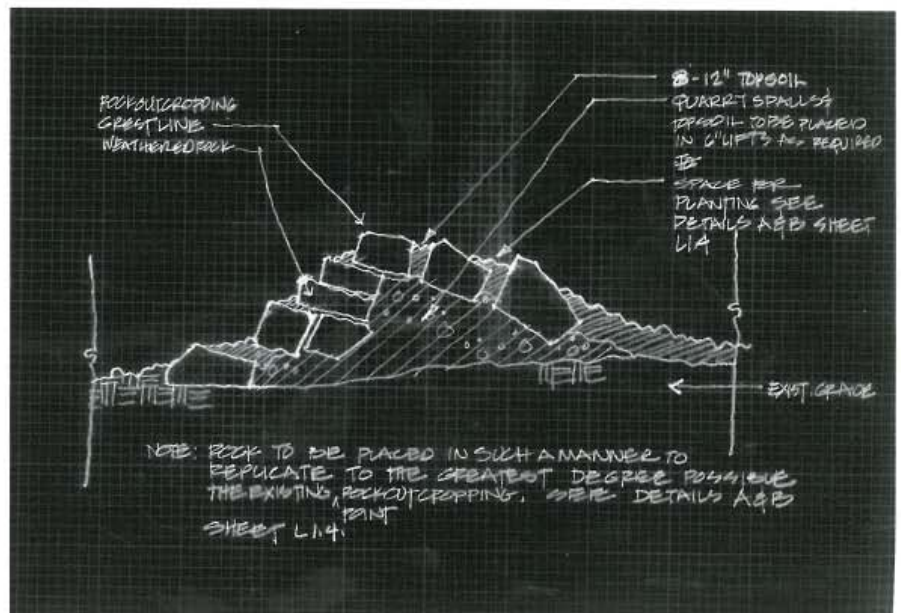
Environmental and Social Sustainability

The protection and careful restoration of the site and its regenerative and ecological function are at the heart of this project. The footprint of development is as soft and minimal as possible. All ecological functions are returned and nutrients are renewed. Black bear pass through the site, periodically stopping on the deck, and osprey nest in a snag above the house. The client has expanded stewardship to include ecologically sound management of pine bark beetle and invasive species. The commitment to conservation and ecological function includes hosted gatherings bringing together people involved with land conservation and restoration in Western Montana with those involved in policy and management to advance stewardship of this unique landscape.

Importantly, this project makes a subtle and simple aesthetic statement about the inherent beauty of a healthy, functioning wild place. This "forest garden" exemplifies a new form of private garden and signifies the importance of design which explores the full and graceful integration of ecological systems with human habitation.



項目總體規劃圖展示了新增的精選樹木及脊狀石塊，以此對場地內的空間結構和生態環境進行改造
Master plan. This study illustrates the selective insertion of trees and stone ridgelines to re-establish spatial structure and ecology.
(Drawing by: Barbara Swift)



石脊修復對角度、直線和深度進行了研究，以復制出現有的外置岩層
The stone ridge restoration study details the angle, alignment and depth of placement of stones to replicate the existing rock outcrops. (Drawing by: Barbara Swift)



巴拉德圖書館和巴拉德休閒廣場總平面圖 Site plan of Ballard Library and Ballard Commons (Photo by: Swift Company)

巴拉德休閒廣場 The Ballard Commons

Credits:

Project Title: The Ballard Commons
Project Location: Seattle, WA, USA
Project Type: Neighborhood Civic Park
Area: 1.4 acres (.56 hectares)
Client: Seattle Department of Parks and Recreation
Landscape Architect: Swift Company LLC
Swift Company Role: Prime consultant, urban design and landscape architecture.
Chief Designers: Barbara Swift and Lisa Corry
Project Team: Melanie Davies, Caitlin Evans, Cindy Cloud
Other Consultants: Magnusson Klemencic Associates, civil Engineer; Artist Valerie Otani, artist; Candela | Sparling, lighting design / electrical engineer; Airspeed Skate parks and Grindline Skate parks, Inc, Skate park design; Mechanical Fountain Design Roman Fountains, mechanical fountain design; Will Stewart, irrigation design; Architect ARC, architect; PCL Construction Services Inc, contractor
Cost: \$1,535,449 (U.S. Dollars)
Design Period: 2003—2004
Construction Period: 2005
Awards: International Making Cities Livable "Healthy Communities for All" Urban Plazas Award, 2012; Special Mention Award for Design, WA Chapter, American Society of Landscape Architects, 2012; Commendation for Design Excellence, Seattle Design Commission, 2005

巴拉德休閒廣場位于西雅圖市中心，是華盛頓古老的斯堪的納維亞城市社區，經濟發展迅速。這個休閒廣場採納公眾倡議，可謂眾望所歸。社區希望打造一個老少皆宜的休閒廣場，男女老少聚集于此，舉行各類慶典和日常活動。斯威夫特公司成功設計了全新的優美廣場，既體現了市民的想法，又表達了社區的意願。

斯威夫特公司認為精美的公共空間，比如巴拉德休閒廣場，屬於必需的基礎設施，有利于建設健康的彈性社會并改善市民的生活質量。巴拉德休閒廣場空間寬敞，擁有濃厚的人文氣息和多彩的結構層次，活力十足，其時空環境帶有強大的吸引力。巴拉德歷史悠久的文化與生態遺產巧妙地融入了廣場的設計。

項目背景

巴拉德休閒廣場代表了西雅圖充滿活力的公共生活。傳統的西雅圖社區充斥着平房，地上停車場和低矮的倉庫，在過去的15年間，巴拉德的人口激增，成為人口密集的活力社區。西雅圖的規劃發展和公共區域的財政預算均包含在2002年巴拉德市中心總體規劃中，全新的圖書館，社區服務中心和巴拉德廣場是社區的中心部分。

總體規劃將急需的公共開放空間布置于社區中心/工業河濱與住宅區之間。項目選址位于原雜貨店和志願者組建臨時滑板場地的停車場。停車場周邊分布有高層住

房、購物區、文化中心和宗教中心。

基于市民的社區規劃竭力保護自然資源，故巴拉德被稱為西雅圖的城市村落。城市村落關注人口密度的增長和公共生活的改善，致力于有效控制城市擴張。綜合規劃和財政措施與公共基礎設施緊密相連，包括全新的圖書館、社區服務中心和休閒廣場。公共資產網絡奠定了私營企業投資房地產的基礎。公寓住戶的涌入為社區迎來了形形色色的人群。巴拉德休閒廣場是規劃投資的杰出案例。

巴拉德休閒廣場隨社區的規劃發生相應改變，城市擴充為社區增添了新的內涵。以公共綠色空間為主的總體規劃反映了工人階級斯堪的納維亞社區的歷史文化。喧嘩的公共環境伴隨著多年打造的公共廣場和服務水平低下的滑板社區之間的爭論。公共會議梳理出兩者的共同點並認為包容和共存是最佳的選擇。最終的設計方案創造了一個活力十足的中心廣場，其功能的多樣性豐富了整個社區。社區對於休閒廣場的願景代表了觀念的成熟和明確，不同于傳統功能單一的廣場。

項目設計

巴拉德休閒廣場是一個有容乃大的公共空間，具有永恒的簡約風格且富含韻味，為人們提供共享空間。人們可以盡情地交談和嬉戲。占地1.4英畝（0.56公頃）的廣場通過創新的組織、分級和多功能設施兼容了主觀與客觀的利用空間。

廣場的設計簡約，線條分明。其整體結構為樹木環繞的弧形地面，創造了露天的休閒競技場所。碗狀滑板場巧妙地嵌入斜坡，廣場上設計有噴泉和優質的定制工藝品，完美地與街道相融合。在街道的兩邊緊密地種植了一圈植物，環繞着整個廣場將行人和車輛分隔開來，營造了輕松寧靜的氛圍。

廣場與新圖書館和社區服務中心呈對角分布，均由斯威夫特公司擔任設計。新圖書館和社區服務中心共享一條人行街道，是社區的主要公共區域。寬廣的人行道環繞廣場的四周，人行道旁還種植了茂密的樹木，形成了天然屏障。自行車架和休閒長椅將廣場和人行道融合為一體。

在這個以步行為主的社區，巴拉德休閒廣場為行人考慮周到。廣場的對角路徑便于人們前往目的地。道路徑加強了社區間的聯系。人們能够在廣場道路并排漫步，談笑風生，其無障礙設施令殘障人士也可享受這份樂趣。

廣場上隨處可見的優質定制工藝品反映了斯堪的納維亞的寶貴文化。廣場的設計和布置創造了適宜的環境，一年四季皆適合前往游玩。稍感疲倦時，人們能够在貼牆座椅、石墩、靠背木質鉛座以及無靠背木質鉛座或草坪上安然休憩。傾斜的小道、貼牆座椅和碗狀滑板場周邊的臺階便于旁觀的人群觀看滑板愛好者的精彩表演。

廣場的噴泉和貝殼石雕受到男女老少的青睞，可供人們休閒娛樂。噴泉的設計靈感來自于普吉特海灣的海洋環境。為了融入意義豐富的文化體驗，設計團隊來到附近的碼頭和海灘尋覓設計靈感。優美的噴泉最終呈現在公眾眼前，成為廣場的中心元素。

細長而低矮的石雕描繪了一條自由游動的鮭魚和一艘船體輪廓，72塊來自中國的圓弧形“蝴蝶藍”花崗岩表面的雕刻栩栩如生。其中5塊嵌入制作了壁龕。每個壁龕都具有防滑性。水流緩緩從石頭冒出，匯入景觀小溪。



巴拉德廣場的草地劇場緊挨着廣場噴泉、圖書館和娛樂場所
Ballard Commons grass amphitheater overlooking the fountain, play space and library beyond (Photo by: Swift Company)

貝殼石雕間的7個噴嘴增添了廣場的生氣，夜間由垂直光線照明，唯美夢幻。飲水臺旁的出水口噴涌出水花，滋潤了藝術家Valerie Otani的貝殼石雕。孩子們着迷于玉螺殼中盤旋而下的水流和海膽裏噴射而出的水柱。

噴嘴噴射的水在石制噴泉中積聚，直至到達排水口得高度。當水面靜止時，依稀能倒映出噴泉的輪廓，然而孩子們的嬉戲經常會打破這份平靜。通過廣場下方的儲水池循環利用噴泉用水，用于水源淨化的泵防掩映於蔥綠的樹林。

不論白天黑夜，巴拉德休閒廣場都人潮湧動。不同生活方式

和背景的人們參與各種各樣的活動，饒有趣味。噴泉和碗狀滑板場是廣場的主要景點。廣場豐富多彩的活動提高了社區居民的生活品質。除日常個人以及小型團體活動外，這一開放空間每年也會舉辦大型的社區活動。如：巴拉德海鮮節、巴拉德城市野餐以及挪威獨立日慶祝活動。目前的工作日下午，你可在巴拉德廣場見到如下場景：一個青年盤坐在草坪上靜靜冥想；一家三口在長椅上休息；一位老人聚精會神地閱讀；祖孫三代人正在水中嬉戲；青少年在碗狀滑板場盡情地滑板；一群十幾歲的女孩坐在臺階上吃零食；人們手捧書，肩背着包，休閒地遛狗閑逛。社區成功打造了一個包容、積極的休閒廣場，這對於每個人而言，都是令人矚目的成就。

在未來的五十年到一百年間，巴拉德休閒廣場將服務於社區。只有詳細的項目規劃和不朽的設計才能滿足廣場的高要求和密集使用。設計利用了可持續性材料和靈活的設計手法，有容乃大的空間標志了一座城市的成熟。巴拉德休閒廣場提升了西雅圖的知名度，保證了未來的可持續發展，從而成為幾代人的共同回憶。

The Ballard Commons is the heart of Seattle, Washington's historic Scandinavian neighborhood and burgeoning urban village. This civic park is the culmination of years of public advocacy. The community wanted a civic commons for all — a place for diverse people to gather alone or in large groups, for celebrations and daily life. Swift Company successfully designed an elegant new park which embodies the civic ideals and expressed desires of the community.

Swift Company believes that beautifully crafted public open spaces like the Ballard Commons are essential infrastructure that foster a healthy resilient society and improve the quality of life of all citizens. Generous, humane, rich in texture and life—the Ballard Commons evokes the powerful quality of the circumstance of its time and place. The historic and evolving cultural and ecological heritage of Ballard helped shape the design of this popular park.

Neighborhood context

The Ballard Commons represents Seattle's commitment to the vision of its vibrant public life. Traditionally a Seattle neighborhood filled with bungalows, surface lots, and low-slung warehouses, Ballard's explosive population growth of the last 15 years has created a vibrant dense community with people on the streets. Seattle's planned growth, coupled with a financial commitment to the public realm, resulted in the 2002 Ballard Civic Center Master Plan, a new library and neighborhood service center, and the Ballard Commons—the center piece of the community.

The Master Plan set the aspiration for a much-needed civic open space located between the neighborhood downtown / industrial waterfront and the residential district. The project site is located on a former grocery store site and



巴拉德圖書館和社區街景局部環境
Local context of Ballard Library and neighborhood streetScape (Photo by: Swift Company)



巴拉德休閒廣場雕塑、噴泉與玩樂區

Ballard Commons Park sculptures, fountain and playspace (Photo by: Swift Company)

parking lot that hosted a temporary skate bowl built by volunteers. Multistory housing, shopping, and cultural, civic and religious centers surround the park.

Citizen-based neighborhood planning efforts to protect natural resources resulted in Ballard's designation as one of Seattle's urban villages. Urban villages focus on increased density and improved civic life in an effort to reign in urban sprawl. Comprehensive planning and fiscal commitments were linked to provide public infrastructure, including a new library / neighborhood service center and the civic commons. Public commitment to the "capital web" established the foundation for the private sector investment in housing. The immediate neighborhood's infill of condominium and apartment dwellers brought a more diverse population. Ballard, with the Commons at its center, is a brilliant case study for smart planning and investment.

The community's vision for the Ballard Commons changed over time, as urban infill brought new voices to the table. The Master Plan vision was of a

simple civic green marking the area's history as a working class Scandinavian community. A raucous public process ensued with debate between those who spent years planning for a more passive civic commons and the displaced, underserved skate-boarding community. Public meetings teased out the points of commonality and determined that inclusiveness and cohabitation were the highest priority. The process redefined the program, and the resulting design created a vibrant central park that integrates diverse uses in support of the full community. The community's aspiration for a civic commons represents a maturation and clear departure from traditional parks programmed as single use facilities.

Form and design

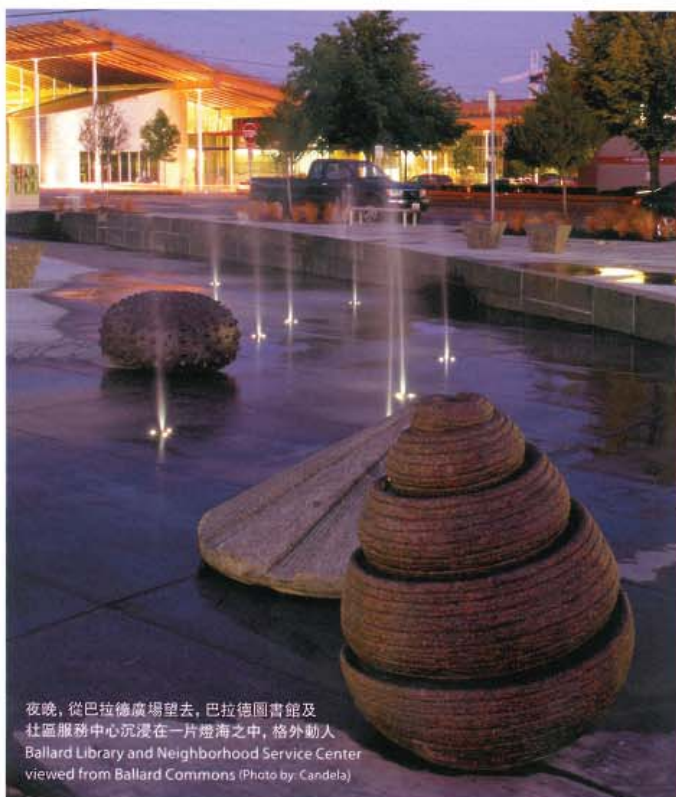
The Ballard Commons provides generous civic open space with a timeless simplicity, where the senses are engaged, and where there are ample opportunities for communion with others. The physical organization of the 1.4 acre park supports cohabitation of seemingly conflicting active and passive uses through creative site organization, grading, and multiple use furnishings.

The park design celebrates simple form and line. The park's structure is a sequence of arced forms in land and trees, creating an informal lawn amphitheater facing the sun and a plaza. A skate bowl is tucked into the slope, and the plaza with a fountain and high quality, custom furnishings anchors the site and flows into the generous street environment. Wide, dense plantings with street trees partially enclose the Commons and separate the pedestrian and vehicular environments.

The plaza is kitty-corner to the new library and neighborhood service center, also designed by Swift Company. The two blocks share a design vocabulary of a pedestrian street with gathering areas, and create a unified civic core to the neighborhood. Wide sidewalks encircle the park, and are framed with lush planting areas in large beds with street trees. Bike racks and frequent benches foster use and blur the lines between park and street sidewalk.

The Ballard Commons is designed for pedestrians who flow through this highly walkable neighborhood. Diagonal paths through the commons accommodate desire lines and access to destinations. A mid-block path increases neighborhood connections and breaks down the super block. All paths are wide enough for people to walk and talk together and are ADA accessible.

The park is full of high quality, custom furnishings that reference the neighborhood's Scandinavian heritage. The park design and furnishings are hospitable and encourage use throughout the day and seasons. Seat walls, stone plinths, wood and aluminum benches with and without backs, and lawn



夜晚，從巴拉德廣場望遠，巴拉德圖書館及社區服務中心沉浸在一片燈海之中，格外動人
Ballard Library and Neighborhood Service Center viewed from Ballard Commons (Photo by: Candela)



巴拉德休閒廣場上設有雕塑、噴泉與玩樂區
Ballard Commons Park sculptures, fountain and play space (Photo by: Swift Company)



廣場噴泉旁邊的海膽石雕。出自藝術大師 Valerie Otani 之手
Sea Urchin sculpture by artist Valerie Otani in the Ballard Commons water fountain (Photo by: Swift Company)

offer a variety of seating options. Leaning rails, planting, a seating wall, and steps frame the skate bowl, as do bystanders watching the action.

The park's interactive fountain and seashell sculptures are a magnet for play, entrancing young and old. The local Puget Sound maritime and marine environment inspires the form of the fountain. Fueled by a desire to embed a culturally significant experience in the park, the design team explored the nearby marinas and beaches for inspiration. The result is an elegant composition of fountain elements and site furnishings that create the focal point of the park's plaza.

A long, low stone sculpture is shaped to abstractly represent the flowing lines of a salmon's body or a boat hull. Curves in all the surfaces of this arced form make complex this seemingly simple 72' long form made of cut blocks of "Butterfly Blue" granite from China. Five blocks in the form are recessed to create niches. Each niche is scored for slip resistance, as the water bubbling out of the stone is inviting as it pours down the sculptural rill.

Seven spray jets animate the plaza amid interactive seashell sculptures, and are illuminated to glow at night as vertical columns. A water spigot on the nearby drinking fountain provides water to pour onto the artist Valerie Otani's carved stone seashells. Children are entranced as water swirls down the outside of a moon snail shell or shoots out of the holes in the sea urchin.

The water from the spray jets pools in the arc of the stone fountain, until it reaches the level of the curved trench drain that mirrors the form of the fountain. This shallow pool of water reflects the silhouette of the fountain

when still, but it is usually alive with children splashing. Fountain water is recirculated via a storage tank below the plaza, and a pump house with water purification is set amid evergreen trees.

Throughout the day and evening, the Ballard Commons is full of neighbors with diverse lifestyles and backgrounds engaging in a variety of activities, fun to take part in and equally fun to watch. The fountain and skate bowl are regional attractions. The park supports community life in its variety of forms. While frequented daily by small groups or individuals, this flexible open space also hosts large annual community events, such as the Ballard Seafood Fest, the Ballard Urban Picnic, and Norwegian Independence Day celebrations. The Ballard Commons' success was illustrated on a recent weekday afternoon by the people and activities there: a young man in lotus position meditating on the grass hillside; a homeless trio resting on the benches; an elderly man reading; parents and grandparents with young children playing in the water; teenagers and adult men skating the bowl; a gaggle of teenage girls eating on the steps; and people strolling though with dogs, books and packages. The community's aspirations for an inclusive, active park have been realized. This deceptively simple park is a roaring success for everyone.

Civic facilities like Ballard Commons must endure and serve the community for fifty to a hundred years. The high demand and intense use of the Commons requires thoughtful site planning and timeless design. The importance of detailing with long-lasting materials and designing flexible, generous open spaces fosters the graceful maturation of a place. These contribute to the popularity and usability of a place from the start, and also ensure a future of sustained use and shared memories for future generations.



巴拉德廣場的碗狀滑板場
Ballard Commons skate bowl (Photo by: Swift Company)



大理石長椅，便于讀書愛好者就地閱讀和交流
Custom granite benches in the Ballard Commons provide a reading spot for library visitors (Photo by: Swift Company)



城鎮污水處理中心 The Center for Urban Waters



Credits:
Project Title: Center for Urban Waters
Project Location: Tacoma, WA, USA
Project Type: Brownfield, Institutional science and technology building
Area: 1.2 acres (48 Hectares)
Client: Tacoma Environmental Services (TES) Properties
Owner: National Development Council
Landscape Architect: Swift Company LLC
Chief Designer: Barbara Swift
Project Team: Mike Koski-Harja, Noelle Higgins, Lisa Corry
Other Consultants: Tacoma Environmental Services, City of Tacoma, Owner; Partnership: City of Tacoma, UW-Tacoma & Puget Sound Partnership; Lorig Associates, Owner's Representative; Perkins + Will, Architect; Swift Company LLC, Landscape Architect; AHB, Inc., Civil & Structural, Surveyor; Flack + Kurtz, Mechanical, Electrical, Plumbing; Rushing, Commissioning Agent; Turner Construction Company, General Contractor; Winterbourne Landscape, Landscape Contractor
Construction Cost: \$18,279,181 (U.S. Dollars)
Project Duration: 2006—2010
Awards: Certified LEED Platinum by United States Green Building Council, 2012; Finalist, 2011 Awards of Excellence Finalist, Urban Land Institute, 2011; 2010 Public Project of the Year, Washington State; Chapter of NAIOOP (Commercial Real Estate Development Association); 2008 Civic Design Award, Washington American Institute of Architects; 2008 What Makes It Green Award, American Institute of Architects Seattle

城鎮污水處理中心位於工業地帶沿岸，致力於城鎮安全用水研究，是工業區轉換為可持續發展地區的成功案例。耀眼的紅色建築配置有綠色屋頂和景觀，充分體現了可持續發展設計理念。該中心的創新設計代表了文化價值的歷史性轉變，為重污染環境規劃健康的未來。

斯威夫特公司謹記客戶托付的使命，制定合理的水生態系統管理方案，打造創新型的可持續發展項目。景觀設計詮釋了各類設施的價值所在和環境特色。第一次看到一只魚鷹棲息於樹梢，一只水獺慵懶地休憩於岸邊，不禁讓人眼前一亮。斯威夫特公司將自然系統與建築完美融合，城鎮污水處理中心成為生態設計的優秀案例。

項目背景

該項目坐落於塔科馬港市西拉福斯航道沿岸，塔科馬是太平洋入口——普吉特海灣南部華盛頓州的一個工業城市。西拉福斯航道自古以來便是工業中心和鬧市中心，隨著經濟發展，水體污染問題令人堪憂。1983年，美國環境保護局將西拉福斯航道列為重點整治區，其底部沉積物污染嚴重威脅水中生

物的生存。長達20年的清理工作耗資超過1億美元。改善后的健康環境有力促進了城市的增量轉換，全新的海岸線公園和各類開發項目增添了塔科馬的活力。城鎮污水處理中心是與市區相對的航道東岸重工業區的第一個非工業項目。從市中心眺望，該中心的大膽設計尤為吸人眼球。

塔科馬市環境服務部門、華盛頓塔科馬大學和普吉特海灣合夥企業（與市民、政府、科學家和商人協同合作，恢復和保護普吉特海灣生態的國家機構）這三個組織共同使用實驗室和研發中心。在處理塔科馬市污水的同時，該中心的科學家和技术專家也在不斷研發清理和控制普吉特海灣的新方法。

設計理念

項目設施的定向激發了設計團隊的靈感，努力創造建築物和周圍景觀完美相融的綜合系統。一系列的專業手法實現了景觀、建築和科研設施運作的可持續發展，並獲得了LEED頒發的白金認證。可持續的解決方案依賴於多個相互關聯的子系統和滿足眾多需求的持久元素，城鎮污水處理中心設計將可持續發展策略體現地淋漓盡致。

整個項目設計中，水箱充分體現了水所扮演的重要角色。景觀內設有兩個約為41 000加侖（155 201升）大小的貯水槽，主要收集屋頂徑流雨水及過剩的實驗蒸餾水，以提供抽水馬桶用水和炎熱夏季時半干旱狀態下場地的灌溉用水。生態窪地用於改善雨水水質，也為野生生物創造天然的棲息場地。車道和人行道具有可透水性，有利於地下水的補給。綠色屋頂、透水性道路、雨水花園和其他植被區使得整個場地成為多孔滲水結構。

西拉福斯航道的海岸線狹長，吸引眾多遊客繞過小型草甸來到岸邊游玩，建築物和河岸之間的彎曲瀕水步道引導人們欣賞沿岸風光。小型廣場設有休



容量為41 000加侖的貯水箱提供灌溉和潔淨用水，實現水資源的循環利用。
One of the two 41,000 gallon cisterns show water re-use for building and irrigation. Photo by Swift Company.



閑座椅，為個人和團體聚會提供舒適場地。建築物西南方向的主體廣場鼓勵會議室的人們出外散步，呼吸新鮮空氣，瀕水步道上設有石質基座的木面長椅。石質基座由可回收的花崗岩制成，有序地布置于步道兩側，充分體現了環保主張。

為了讓人們更為親近自然，斯威夫特公司布局了整齊的野生景觀。本地耐旱植物營造了良好的棲息場所。這些物種對水分和化肥的依賴性不強，有利于保護普吉特海灣的生態環境，同時方便了各種鳥類和海岸生物的休憩、捕食和築巢。雪松和道格拉斯冷杉形成天然屏障，排列于步道一側的岩石岸邊，吸引本地猛禽老鷹和魚鷹前來休憩和獵食。五棵三十英尺（9.24米）高的斷枝冷杉聳立于金屬臺柱之上，形似雕塑，引進植物僅兩個月，人們便發現魚鷹在斷枝植物上覓食。隨之水獺、海豹、天鵝和兔子也出現于人們的生活環境中，增添了景觀的生機和活力，豐富了人們的生活。生態景觀和文化景觀完美地融合在一起。對於西婭福斯航道的清理工作而言，野生生物快速地適應場地環境具有重要意義。

鳥類同樣青睞兩層建築12 000平方英尺（1 080平方米）的生態屋頂。生態屋頂景觀蒼翠繁茂，4英寸（10.16厘米）的土層可供各種地被植物、多年生植物、草屬和景天屬植物（包括沿海草莓、西洋薺草、墨西哥羽毛草、金苔景天等多類物種）的種植。此外，考慮到更大區域未來光伏電板的規劃，這些區域種植了大量景天屬植物，以增強其耐旱和耐蔭能力。綠色屋頂接收雨水，從而減少雨水的流失，過濾污染物并減輕熱島效應。屢獲殊榮的綠色屋頂設計取得巨大成功。植被的高覆蓋率成為打造可持續發展項目的主要組成部分，也賦予了建築物深厚的教育涵義。

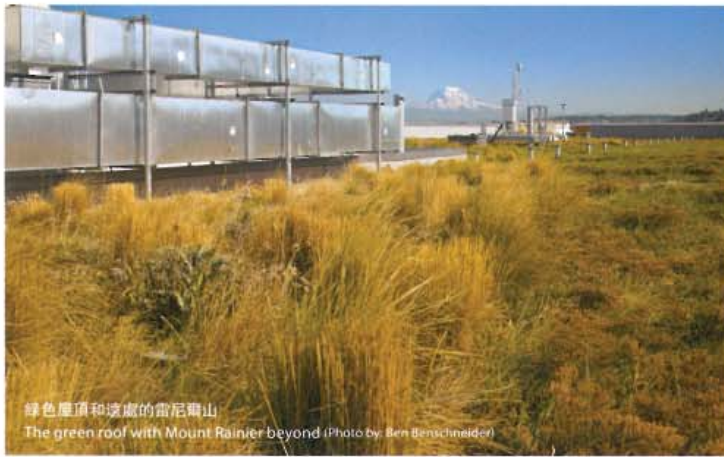
城鎮污水處理中心利用多樣化的綜合技術以減少能源消耗。綠色屋頂便是整個項目設計中環保能源和雨水處理的典型方案。遮陽蓬、自然通風、地熱泵、室內自然光照明等其他環保能源方式和綠色屋頂共同實現了該項目節約能源以及能源管理的良性循環。

城鎮污水處理中心展示了可持續景觀、水質維護工程和綠色建築，讓參觀游客受益匪淺。建築物的運作情況實行電子監控，用戶和公眾能夠通過大廳的實時顯示了解能源、水源在當前以及過去的使用狀況。采用引導標識和一些其他關於綠色屋頂、綠色建築的教育方式以及組織參觀旅游均是設計的特色元素。日常實驗室的科學研究同樣發揮了重要的教育作用。

城鎮污水處理中心深入分析了區域水系統，突出了單一設施在宏觀條件下的關鍵角色。該項目在能源保護和水資源循環利用方面設定了高標準。環保規劃從最初的設計階段便擺在首位。這一創新項目轉變了人們對工業發展的傳統預期，詮釋了生態是美好城市生活不可或缺的一部分。如今城鎮污水處理中心被稱為塔科馬的一大標志，倡導為后代建設環保健康的城市。



貯水櫃下方的耐旱草地和樹木
Drought-tolerant grasses and trees with cistern tanks beyond (Photo by: Swift Company)



綠色屋頂和遠處的雷尼爾山
The green roof with Mount Rainier beyond (Photo by: Ben Benschneider)



花崗岩基柱與木質長條座椅，花崗岩可循環利用，展現環保主張
Custom pine bench mounted on recycled granite roadway curbs (Photo by: Swift Company)

On the shores of a grey industrial area, a bright red building with a green roof and landscape provides a beacon of sustainable design. The Center for Urban Waters has transformed an industrial brown field into a sustainable development dedicated to research on the health of the urban waters. This innovative project represents a historic shift in cultural values toward the reclamation of a heavily polluted environment for a healthier future.

Swift Company took the client's mission of water and ecosystem stewardship to heart and created an innovative, sustainable site. The landscape design illustrates the values of the facility and the circumstances of place. What is the value of seeing an osprey perch outside on a tree snag or an otter slide on the renovated shoreline for the first time? Swift Company's passion for and deep understanding of natural systems, coupled with integration of building and site, make the Center for Urban Waters a shining example of ecologically integrated design.

The Site and Project Context

The project is located on the Thea Foss Waterway in Tacoma, an industrial city in the state of Washington on the southern edge of Puget Sound, an inlet of the Pacific Ocean. The Thea Foss Waterway, which serves the industrial center as well as the city's downtown, was once among the most heavily polluted waters in the nation. In 1983 the United States Environmental Protection Agency listed the Thea Foss Waterway as a Super fund site for contamination of bottom sediments which are harmful to marine life in the waterways. A 20-year cleanup that cost more than \$100 million ensued. The improved environmental health of the area has proven a catalyst for the incremental transformation of the city, with new shoreline parks and a variety of

developments adding to the livability of Tacoma. The Center for Urban Waters is the first non-industrial development in the heavily industrial area on the east side of the waterway opposite downtown. Its bold design is prominent in views from the city center.

Three organizations have partnered to share the laboratory and research center: the City of Tacoma's Environmental Services Division; the University of Washington Tacoma; and The Puget Sound Partnership, a state agency shepherding efforts of citizens, government, tribes, scientists and businesses working together to restore and protect Puget Sound. While monitoring Tacoma's urban waters, scientists and technicians at the Center for Urban Waters are working on methods for cleanup and control of pollution sources on Puget Sound.

Design

The mission of the facility provided inspiration to the design team, who collaborated on fully integrated systems for building and site. All professional disciplines worked together to achieve sustainable strategies in the landscape, building and operations of the research facility and to obtain a LEED platinum certification. Truly sustainable solutions are dependent on multiple, interconnected subsystems and durable elements which meet many needs. The Center for Urban Waters exemplifies this approach on all levels.

As one arrives at the site, the prominence of the cisterns strikes a clear note on the role of water in the project. Two 41,000-gallon tanks hold water collected from the roof and the laboratory pure water system. The water is reused for flushing toilets, and to irrigate the flourishing landscape in the hottest part of the summer when regional semi-drought conditions occur. Strategically located bio-swales provide stormwater quality improvement and wildlife habitat, while vehicular and pedestrian pavements are pervious to allow groundwater recharge. This makes the site almost entirely porous when the green roof, pervious pavement, rain gardens and other planting areas are combined.

The shoreline of the Thea Foss Waterway dominates the long narrow site and attracts visitors along an angular path through grassed berms to the water's edge. A curving esplanade runs between the building and the tidal shore to provide public access along the water. Small plazas with benches offer comfort for individuals and small group gatherings. The primary plaza located at the southwest corner of the building encourages conference room users to spill outside. Sculptural seats of repurposed granite street curbs and wood have an appealing materiality, and are rhythmically organized into groups along the esplanade.

To bring people into closer contact with nature, Swift Company designed the wild but ordered landscape with native and drought-tolerant plants that offer

貯水槽主要收集屋頂徑流雨水及過剩的實驗蒸餾水，可提供抽水馬桶用水和場地灌溉用水
Cisterns for reclaimed roof and lab water for reuse for irrigation and toilet flushing
(Photo by: ben benschneider)





綠色屋頂和西雅福斯航道
Green roof and Thea Foss Waterway
(Photo by: Swift Company)



大樓綠色屋頂景觀一角 One of the building's green roofs (Photo by: Swift Company)



停有魚鷹的斷枝植物
Tree snag with hunting osprey
(Photo by: Karen Bartlett, City of Tacoma)

habitat value. These species were selected to limit water and fertilizer use to protect water quality in Puget Sound, and to provide staging, feeding, and nesting habitat for birds and shoreline animals. Salvaged cedar and Douglas Fir snags placed along the rocky shore beside the esplanade encourage native raptors such as eagles and osprey to perch, roost and hunt along the shore. The five thirty-foot tall snags are mounted on metal posts and look like sculptures. Ospreys were hunting from the installed snag perches within two months of installation. Otters, seals, geese,

and rabbits join humans on the esplanade. All animate the landscape, delight the human users, and communicate ecological and cultural value. The rapid use of the site by wildlife for hunting and nesting is an exciting milestone in the environmental clean-up of the Thea Foss Waterway.

Birds also enjoy the 12,000-square-foot living roof on two levels of the building. The rooftop landscape is lush. The four-inch growing medium supports a variety of ground cover, perennials, grasses, and sedums including Coastal Strawberry, Yarrow, Mexican Feather Grass, Golden Moss Stonecrop, and many more species. Larger areas meant to accommodate future photo-voltaic panels were planted with sedums to provide the greatest drought and shade tolerant coverage. The green roof absorbs rainfall to reduce and delay stormwater runoff, filters pollutants, and reduces the heat-island affect. The award-winning green roofs have been hugely successful. The plantings are fully established, and are an integral part of the sustainable message of the facility and a key point for educational tours of the building.

The Center for Urban Waters utilizes multiple integrated strategies to reduce its energy needs. The green roof is one of the components in the overall project strategy for energy savings and stormwater management. Combined with other energy reduction elements such as sunshades and natural ventilation for cooling, ground-source heat pump for heating, natural day-lighting of interior spaces, the green roof contributes to the whole story for this project of energy reduction and careful resource management.

The Center for Urban Waters educates visitors about sustainable landscape, water quality issues, and green construction. The building performance is digitally monitored and on display in real time in the lobby, providing both current and historic data on energy and water consumption for users and the public. The facility provides signage and other educational communications about the green roof and green building as a whole, and hosts informational tours. Another

layer of the educational function is the research and studies that are carried out on a daily basis as the primary mission of this laboratory facility.

The Center for Urban Waters advances the understanding of regional water systems and the role of a single facility in contributing to the larger context. It set a high standard for energy conservation as well as water use and reuse. From the beginning, the most important value was environmental stewardship. This innovative project shifts the historic perception of what should be expected from industrial development, and illustrates that ecological function is an integral, necessary, and beautiful part of urban life. The Center for Urban Waters is now a visible icon for Tacoma, a city reclaiming its environmental health for future generations.



兩旁種有斷枝植物並設有長椅的河濱步道
The esplanade with snags and benches (Photo by: ben benischneider)



Craig Thomas探索旅游服务中心改建后的草甸景觀。傍晚時刻，景致格外迷人
Craig Thomas Discovery and Visitor Center restored sage meadow at dusk (Photo by: Nic Lehoux)



雲杉及三角葉楊森林之間的走道景觀
Craig Thomas Discovery and Visitors Center walkway through spruce and cottonwood forest
(Photo by: Nic Lehoux)

大提頓國家公園格雷·托馬斯探索旅游中心 Grand Teton National Park Craig Thomas Discovery and Visitor Center

Credits:

Project Location: Moose, Wyoming, USA
Project Type: National Park Visitor Center
Area: 12 acres total (4.8 hectares)
Client: United States National Park Service, The Grand Teton National Park Foundation, The Grand Teton Association
Landscape Architect: Swift Company LLC
Chief Designers: Barbara Swift and Lisa Corry, Swift Company, LLC
Project Team: Allisa Carlson, Allison Maitland Scheetz, Nicolas Morin, Cindy Cloud, Will Stewart
Other Consultants: Bohlin Cywinski Jackson Architects, Architect; Nelson Engineering, Civil Engineer; Renfro Design Group Inc., Lighting Design; William Stewart Landscape Architect, Irrigation Design; Ralph Applebaum Associates, Interpretive Design; Beaudette Consulting Engineers, Inc., Structural Engineer; Gordon Prill Drapes, Inc., Mechanical, Electrical and Plumbing; Renfro Design Group Inc., Lighting Design; Matrix IMA, Snow Country Design; Davis Langdon, Cost Estimating; Greenbusch Group, Acoustical Engineers; Intermountain Construction & Materials, Inc., General Contractor; Precision Landscaping, Landscape Subcontractor; Bitterroot Restoration Inc., Plant Collection and Propagation
Project Duration: 2001-2007
Cost: \$13,200,000 (U.S. Dollars)
Award: Honor Award, AIA Northwest and Pacific, 2011; Green Good Design, The European Center for Architecture and the Chicago Athenaeum, 2010

格雷·托馬斯探索旅游中心

格雷·托馬斯探索旅游中心可使你在古樸的特色大提頓國家公園盡享純粹天然之樂。布局巧妙的道路、庭院、建築和露臺，令旅客陶醉於一片迷人的景觀之中。牢靠的設計框架與團隊合作打造出了一處可持續發展的場地，保留了原生態的環境，以提頓曠野奇妙的生態體系俘獲了旅客之心。

視野

旅游中心的美妙環境令人贊嘆不已。宏偉壯麗的山峰與穀底、未加修飾的自然之美景，都是獨足珍貴的寶藏。斯威夫特公司迅速意識到：絕不能對當地的天然生態進行人工改造。任何人用功能的開發必須服從於景觀。自然必須占據主導地位。旅客行走其間，能近距離與自然親密接觸，仿佛是那山間的動物似的。為維護原始生態體系的純粹與獨到，公司投入了巨大的精力。格雷托馬斯探索旅游中心為這片西部野生景觀的天然文化遺產高歌一曲禮贊。

環境

格雷·托馬斯探索旅游中心位於公園南面杰克遜洞的入口處，毗鄰懷俄明州穆斯社區。處於蛇河與提頓山這兩股強大力量的制衡之下，12英畝（4.86公頃）的場地坐落於一片由山楊、棉白楊和雲杉組成的河邊樹林中，緊貼著山艾草地的邊緣。該地之前曾是蛇河泛濫平原，微妙而起伏的地形呈扇形散開。當地植被令提頓山脉的景色或隱或現。由山楊、棉白楊和雲杉組成的綠化林帶創造出了一片帶有鮮明特征、絕佳體驗和生態功能的區域。

場地的多層特性如地勢、視野、植被和動態的季節變化為場地開發提出了關鍵問

題，包括活動順序、場地干預方法、積雪處理和四季通用的便利設施。場地生態環境和顯著氣候變化為設計奠定了基礎。也為想要給旅客留下深刻當地印象的景觀設計師們提供了條件。

設計框架

景觀設計師、建築師和客戶團隊在早期施工過程中指定了幾項基本設計原則。每項所提議的行動均經過以下核心原則的驗證：

- 原始景觀是體驗的核心所在。
- 系列體驗將會刺激旅客的感官與大腦。
- 將可持續發展的理念運用到基本層面——這裏的每樣東西都可循環往復地使用。

客戶與設計團隊依據其所承擔的環境保護與管理職責嚴格制定了設計過程。由此產生的設計採用了現場改進措施，減輕土地負擔並策略性地展開實施行動。每個行動都簡潔而得體，旨在最大程度發揮景觀的影響力。場地設計中包含當地生態體系和季節變遷因素，完整的設計能令旅客達到超凡脫俗的境界，完全沉浸在周邊壯美迷人的景象之中。現有的場地結構、規模、觀感和固有物資被原封不動地保留下來，並最大程度地展現出去，使旅客能全方位欣賞該地的奇妙景觀。

設計

斯威夫特公司作為景觀設計方，是項目成功的關鍵所在。首先進行的是場地選址，進而展開建設工作。設計旨在為不同旅客打造繽紛體驗，能喚起短暫觀光的家庭旅客和深入遊覽公園的登山者情感上的共鳴。

精心設計的循環道路使人在不同地點都能欣賞連綿不斷的壯麗景觀，橫貫的場地令旅客可行走於多個群落交錯區之間，場地平面圖畫出了抵達與遊覽的線路，令旅客暫別凡俗，感受當下與原生態大自然親密接觸的絕妙體驗。

現有的地勢與植被是循環體系的有機框架。旅客在抵達停車場之後，離開鼠尾草草地，穿過棉白楊和雲杉樹林，提頓山脉消失在他們的視野。停車場與旅游中心之間的距離是有意設置的，為的是讓旅客有機會在步入建築大樓之前飽覽美麗風光。道路是用碎石瀝青封層的，顏色類似於場地土壤，因而在視覺上起到了延續效果。人行道上的融雪加熱令自停車點和下客處通向旅游中心的道路潔淨而安全。從小路所看到的遠景和近景中包含著當地地標，而旅客也可沿路前往杰克遜洞山穀。

旅客走近大樓，庭院便映入眼簾。庭院環境簡潔而幽靜，與恢弘大氣的景觀截然不同，使人在親密氛圍中得到片刻休憩。該空間三面環有可落座的階梯及一個帶頂的門廊，人們能匯集於此查看遊園線路。另一面則通向一小片鼠尾草草地，其四周植有高大的雲杉樹和棉白楊。天然草地所占的比例反映了庭院的空間布局。

旅游中心的屋頂自庭院向上延伸，那參差不齊的頂部模仿著提頓山脉的山脊線輪廓。從木制門廊入口可欣賞到自草地一路向上至冰碛的宏偉景觀以及遠處那不斷變化的壯美山巒。為使旅客能在旅游中心飽覽最為原始的高山景致，場地開發是在

提頓山脉頂峰的直觀視野之外進行的。室外梯田令旅客在芬芳的山艾叢邊與群山進行更為親密的接觸。一系列庭院、建築和梯田平復了旅客的心緒，令其與當地環境和諧相融，並為更為壯美的提頓山觀與山脈體驗做好了心理準備。

將人工改造減到最少可令當地天然環境占據主導地位，而人類世界則退居幕後。人工裝飾如指示牌被刻意減少。在星光點點的漆黑夜幕下，有限的照明為大地投射了斷續的柔和地面光。景觀改造是不動聲色的，為建築環境賦予了公園未加修飾的天然風格。對旅客而言，原汁原味的別樣體驗即刻盡在掌握。

可持續場地方案

場地設計採取的是環保的可持續發展方式，加強了當地固有的特性，對所有場地資源進行利用，降低維護及運作成本並改善景觀功能。

建設過程被加以嚴格控制以確保對現有場地的保護。地表水直接順着地勢流入現有的排水系統，進行水質加工和地下水的補充。多方協調利用可在不知不覺中調節場地影響。

不設路緣的人行道與景觀完美相融，毫不突兀。水流自然地從人行道流入土壤。雨水和雪水從微型排水系統給地下水提供了補給。該地泥土淤積於河邊，擁有很高的滲透性。自然起伏的地表輪廓被用於收集並疏散雨水，該方法類似於前期開發的情形。水流的分布影響了當地的植被格局。盡管植物種類是經過挑選的，但植栽設計有意對地形和排水進行了強調。植物色彩與紋理的變換令景觀發揮了天然功效。在白雪皚皚的季節，松軟地貌上的光影變幻令人十分着迷。

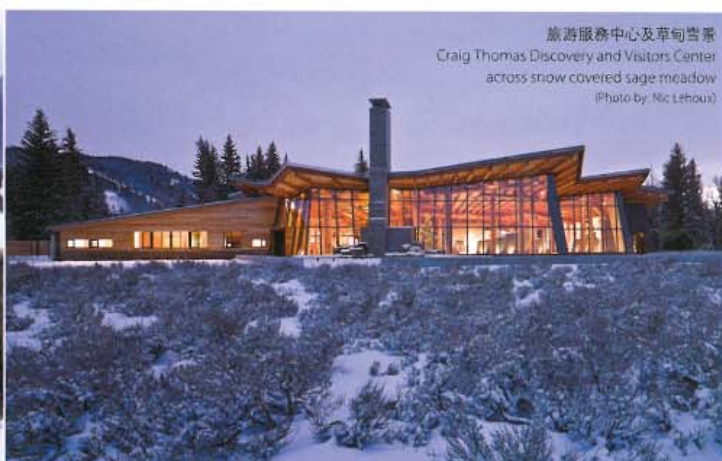
所有景觀改良均源自場地本身，包括所有的土壤、護根物和項目中所用的植物。

在為建設路面、小徑和建築而鋪設石板的區域，該場地的土壤及腐葉層被小心地發掘並保存起來，且盡力保護土壤生物區，直到它們被再度放回原位。這樣的舉動使得土壤中的珍貴天然種子得以存活，增加了栽種的材料。原先郵局周圍的方寸之地中含有非當地物種和野生雜草，為保證當地植物群的整體性，人們移除了那些土壤。喬木和灌木的碎木被收集起來用作護根物。

斯威夫特公司同國家公園管理局的植物學家和生物學家共同協作，以了解當地的植物群並供養當地及外來的野生動植物。保護這片原生生態體系的完整性是至關重要的。生長於當地的植物已習慣於該地區獨有的微觀環境和山地極端的天氣變化。所有新增的植物材料均源自項目地區的母質材料。一些被移植到當地土壤或花盆中的植物被置於苗圃精心照料。

木本喬木或灌木可通過插枝的方式進行培育。種子的收集可用於限制雜草。喬木和灌木的生長，並播種於當地土壤。為使其形成天然的生長模式，人們規避了土壤改良和化肥的使用。

通過對自然條件的認真研究與仔細模仿，大提頓國家公園旅游中心的景觀正如開發前一樣，持續發揮着對西部野生動植物的保護作用。健全的景觀應與當地自然條件相協調，且能自我維持。設計方謹慎地將一大旅游勝地嵌入自然景觀之中，使當地的獨特之美一覽無遺。該項目實現了對景觀的保護與管理。格雷·托馬斯探索旅游中心已成為景觀重建、生態為上和謹慎使用人工的一大範例。



植物列表

喬木類

Subalpine fir (*Abies bifolia*)
Colorado blue spruce (*Picea pungens*)
Lodgepole pine (*Pinus contorta*)
Narrowleaf cottonwood (*Populus angustifolia*)
Aspen (*Populus tremuloides*)

灌木類

Serviceberry (*Amelanchier alnifolia*)
Wyoming big sagebrush (*Artemisia tridentata*)
Oregon grape (*Berberis repens*)
Antelope bitterbrush (*Purshia tridentata*)
Wax current (*Ribes cereum*)
Woods rose (*Rosa woodsii*)
Russet buffaloberry (*Shepherdia Canadensis*)
Mountain snowberry (*Symphoricarpos oreophilus*)

雜草類

Yarrow (*Achillea millefolium*)
Pussytoes (*Antennaria species*)

Arrow-leaf balsamroot (*Balsamorhiza sagittata*)
Common harebell (*Campanula rotundifolia*)
Sulphur-flower buckwheat (*Eriogonum umbellatum*)
Idaho fescue (*Festuca Idahoensis*)
Wild strawberry (*Fragaria Virginia*)
Bedstraw (*Gallium species*)
Sticky purple geranium (*Geranium viscosissimum*)
Fivenerve helianthella (*Helianthella uniflora*)
Oneflower helianthella (*Helianthella uniflora*)
Silver lupine (*Lupinus argeneus*)
Silky lupine (*Lupinus sericeus*)
Littleflower penstemon (*Penstemon procures*)
Needle thread grass (*Stipa cornata*)

草籽

Mountain brome (*Bromus marginatus*)
Hood sedge (*Carex hoodii*)
Blue wildrye (*Elymus glaucus*)
Slender wheatgrass (*Elymus trachycaulus*)
Needlegrass (*Stipa nelsonii*)

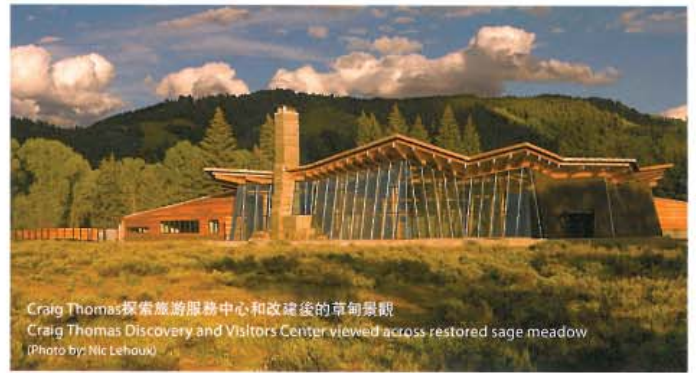
Idaho fescue (*Festuca Idahoensis*)
Prairie junegrass (*Koeleria macrantha*)
Needle and thread (*Stipa comata*)

雜草籽

Bluebells (*Campanula rotundifolia*)
Silver lupine (*Lupinus argenteus*)
Small flowered penstemon (*Penstemon procerus*)
Western larkspur (*Delphinium occidentale*)
Aster (*Aster species*)
Green gentian (*Frasera speciosa*)
White yarrow (*Achillea millefolium*)
Pussytoes (*Antennaria species*)
Arrowleaf balsamroot (*Balsamorhiza sagittata*)
Sulfur buckwheat (*Eriogonum umbellatum*)
Silky lupine (*Lupinus sericeus*)
Showy goldeneye (*Viguiera multiflora*)
Nuttall's larkspur (*Delphinium nuttallii*)
Cinquefoil (*Potentilla gracilis*)



庭院入口景觀及遠處的大提頓山脈景觀
Visitor arrival at interior courtyard of Craig Thomas
Discovery and Visitors Center, Grand Teton range beyond.
(Photo by: Nic Lehoucq)



Craig Thomas探索旅遊服務中心和改建後的草甸景觀
Craig Thomas Discovery and Visitors Center viewed across restored sage meadow
(Photo by: Nic Lehoucq)

of movement, methodologies for site interventions, snow management, and amenities for human comfort through the seasons. The site's ecological context and dramatic climatic variation set the basis for design and the landscape architects' desire to galvanize the visitor's experience of place.

Design Framework

The landscape architects, architects, and the client group established essential design principles early in the process. Each proposed action was tested against these core principles:

- The wildness of this landscape will be central to the experience.
- The sequence of experiences will stimulate the reptile and cerebral brain of the visitor.
- Sustainability will be applied at a fundamental level - everything here will be used and regenerated.

The client and design team's mission of conservation, preservation, and stewardship critically shaped the design process. The resulting design employs site improvements that are light on the land and strategic in their execution. Every gesture is minimal, graceful, and intended to amplify the power of the landscape. The site design integrates local ecological systems and seasonal variations. The completed design invites visitors to leave the mundane and fully immerse themselves in the power of the surroundings. The existing site structure, scale, sensory quality, and indigenous materials are preserved and amplified so visitors can fully appreciate the wonders of this particular place.

Design

Swift Company's role as landscape architect was pivotal in the success of the project. Work began with site selection and continued through construction. The design intention was to create a visitor experience that is as emotionally evocative for a family staying for 45 minutes as it is for mountaineers traveling deep into the park.

Carefully considered circulation sets a progression of stunning views from different vantage points, moving visitors through multiple ecotones as the site is traversed. The site plan formalizes the ritual of arrival and travel, transporting people from the mundane to an experience that is primal, intimate, and "of the moment."

The existing topography and vegetation are the organizing framework for



大提頓山脈一側的露臺上欣賞到的Craig Thomas探索旅遊服務中心景觀。最先映入眼簾的是草甸與森林景觀。
Craig Thomas Discovery and Visitor Center view from the terrace of the Teton
range. Sage meadow and forest are in the foreground. (Photo by: Nic Lehoucq)

The Craig Thomas Discovery and Visitor Center

The Craig Thomas Discovery and Visitor Center offers an authentic experience of nature in the pristine, iconic Grand Teton National Park. The strategic siting of paths, courtyard, building, and terrace structure the sequence of visitor experience for a visceral immersion in the landscape. A strong design framework and team collaboration resulted in a sustainable site that remains as wild as its surroundings and captivates visitors with the wonder and ecological complexity of the Teton wilderness.

Vision

The stunningly beautiful setting of the Visitor Center is breathtaking. The power of the scale of mountain peaks and the valley floor, and untouched quality of the natural landscape, is precious. Swift Company quickly realized that the wild nature of the site must not be domesticated, and that any development for human use must be subordinate to the landscape. Nature must dominate. Visitors are meant to feel like the animals they are, moving through an amplified series of experiences. Enormous care was taken to maintain the purity of the unique and pristine ecosystem. The Craig Thomas Discovery and Visitor Center celebrates the natural and cultural heritage of this wild western landscape.

Context

Located near Moose, Wyoming on the park's southern entry in Jackson Hole, the Craig Thomas Discovery and Visitor Center is poised between two dramatic and powerful forces: the Snake River and Teton Mountains. The 12-acre site lies at the edge of a sagebrush meadow within a riparian forest of aspen, cottonwood, and spruce. As a former floodplain of the Snake River, subtle, undulating landforms fan out through the site. Native vegetation reveals, frames, or blocks views of the Teton Range. Bands of aspen, cottonwood, and spruce trees create zones with distinct character, sensory quality, and ecological function.

The layered characteristics of the site's topography, views, vegetation, and dynamic seasonal changes raised critical issues for site development, including sequence

the circulation system. After arriving at the parking lot, the visitor moves away from the sage meadow and views of the Teton Range, through the spruce and cottonwood forest. The distance between the parking lot and the Visitor Center is intentional to give visitors the opportunity to engage in the landscape before entering the building. The accessible paths are chip-and-seal asphalt in a color similar to the site soils, so they visually recede. Snowmelt heating in the pavement allows a clear and safe path from the accessible parking and drop-off to the Visitor Center. Long and short views from the path reveal regional landmarks and orient the visitor to the Jackson Hole valley.

As visitors approach the building, a courtyard is revealed. The courtyard is minimal and serene, an intimate respite from the vast landscape. The space is embraced on three sides by seating stairs and a covered portico that accommodate gatherings and park orientations. The fourth side opens to a small sage meadow framed by large spruce and cottonwood trees. The proportions of this natural meadow mirror the spatial framework of the courtyard.

The Visitor Center's roof lifts upward and away from the courtyard, its jagged peaks mimicking the Teton ridgeline. Entrance through the wood portico reveals a soaring view across the meadow to the moraines and the spectacular, ever-changing mountain range beyond. Site development occurs outside of the direct view of the prominent peaks of the Teton range from the Visitor Center for an unspoiled view of the mountains. An outdoor terrace invites visitors closer to the mountains at the edge of the aromatic sagebrush. The sequence of courtyard, building, and terrace calms visitors, binds them with the place, and prepares them for the powerful experience of the valley and Teton Range.

Minimal interventions allow the wilderness to predominate and the human world to recede. Human trappings such as signage are intentionally few. Lighting is limited to create intermittent pools of soft ground light under the profoundly dark and glittering sky. The improvements in the landscape are placed with a light and quiet signature to bring the visceral, untamed quality of the park into the built environment. A genuine experience of place is immediately accessible to each visitor.

Sustainable Site Approaches

The environmentally sustainable site design enhances the inherent character of the place, takes advantage of all site resources, lessens maintenance and operations costs, and improves the landscape function.

The existing site was preserved through strictly controlled construction access. Topography directs surface water flow to existing drainages for water quality treatment and groundwater recharge. The comprehensive coordination of utilities mediates site impact to render them imperceptible.

Curbs are eliminated so the pavement feels in the landscape, not on the landscape, and water flows freely from pavement to soils. Stormwater and snowmelt feed the groundwater through micro-drainages. The site soils, deposited by the river, have a high infiltration capacity. The natural undulations of the ground surface are used to collect and disperse stormwater in a manner similar to a pre-development condition. The distribution of water affects the patterns of native vegetation. The planting design intentionally heightened this expression of the landform and drainage through species selection. The variation of plant color and texture make visceral the function of the landscape. During the snowy season, the play of light



庭院內的融雪系統、排水系統景觀，傾斜屋頂有助於收集融雪水以補給地下水系統
A snowmelt system and drainage system below the courtyard and sloped roofs allow snowmelt to recharge the groundwater (Photo by Nic Lehoucq)

and shadow on the soft landforms are entrancing.

All landscape improvements came from the site itself, including all of the soil, mulch, and plant material used in the project.

In areas slated for the development of roadways, paths, and building, site soils and duff were salvaged, stockpiled, and managed to keep soil biota alive until they could be placed back on the site. This allowed the invaluable native seed bank in the soils to survive and augment planted materials. A small area around a former post office contained non-native and weed species, and these soils were removed from site to maintain the integrity of the native plant communities. Wood debris from trees and shrubs was chipped for reuse as mulch.

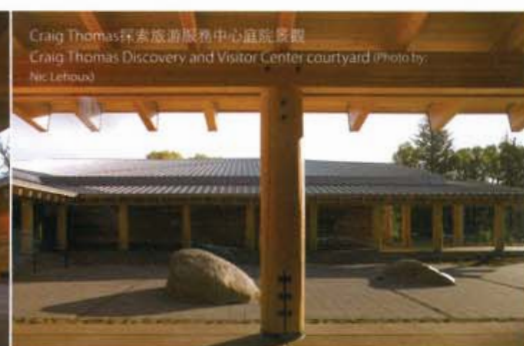
Swift Company worked with botanists and biologists from the National Park Service to understand the native plant communities that sustain the resident and migratory wildlife. Preservation of the integrity of this pristine ecosystem was of paramount importance. The plants growing on the site have adapted to the unique micro-conditions of the site and the extreme weather variations experienced in this mountainous region. To preserve the genotypic purity of this adapted vegetation, all of the plant materials added to the site were grown from parent material from the project site. Some plants were transplanted on site or into pots and cared for in a nursery.

Cuttings were taken for the propagation of woody trees and shrubs. Seeds were collected for contract growing of forbs, shrubs, and trees and for sowing onto site soils. Soil amendments and fertilizers were avoided to allow natural growth patterns to emerge.

Through careful study and mimicking of the natural conditions, the landscape of the Grand Teton National Park visitor center continues to function as it did prior to development to sustain the plants and animals of this wild western landscape. The healthy landscape is shaped to the natural conditions of the site and is self-sustaining. The restraint used in the careful insertion of this major visitor attraction into the landscape allows the story of this unique land to unfold. The project goals of conservation and stewardship are achieved. The Craig Thomas Discovery and Visitor Center has become a model of landscape regeneration, ecological immersion, and careful human use. ■



庭院與雲杉及三角葉楊森林之間的空間景觀
View from Craig Thomas Discovery and Visitor Center through courtyard to spruce and cottonwood forest (Photo by Nic Lehoucq)



Craig Thomas 探索服務中心庭院景觀
Craig Thomas Discovery and Visitor Center courtyard (Photo by Nic Lehoucq)