



TYPES OF URBANISM

LANDSCAPE URBANISM

CONTENTS

- What is Urbanism?
- **t** Landscape Urbanism
 - What is Landscape Urbanism
 - Landscape Urbanism Criticism
- Thought Leaders of Landscape Urbanism
 - Charles Waldheim
 - James Corner
- The High Line Park (Case Study)
- Relation to concepts of Sustainability
 - Principles of Sustainable Landscaping
- Applications for Site Design
 - High Line Sustainable Practice
- Relevance to Urban Planning and Design in Doha
 - Aspire Park
 - Qatar University Campus
- Literature and Sources

WHAT IS URBANISM?

• Urbanism is generally defined as <u>the study of cities and urban areas</u>, but different fields focus on different aspects.



WHAT IS URBANISM?

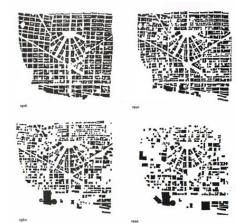
 In urban planning and architecture, urban form and structure is the focus.



 In sociology, urbanism may be more about social interaction and community within the context of cities.



 Historians may be particularly interested in historical patterns of urban growth and change.



What all fields have in common is a concern for the created human habitat and the problems – and potential solutions – that habitat inspires.

TYPES OF URBANISM

New Urbanism

Ecological Urbanism

Future Urbanism

Green Urbanism

Resilient Urbanism

Infrastructural Urbanism

Sustainable Urbanism

Emergent Urbanism

Participatory Urbanism

Walkable Urbanism

Everyday Urbanism

Real Urbanism

Clean Urbanism

Border Urbanism

Exotic Urbanism

2nd Rate Urbanism

Beautiful Urbanism

Brutal Urbanism

Denied Urbanism

Political Urbanism

Middle Class Urbanism

Paid Urbanism

Post-Traumatic Urbanism

Big Urbanism

Agricultural Urbanism

Open Source Urbanism

Opportunistic Urbanism

Instant Urbanism

Unitary Urbanism

Bricole Urbanism

Slum Urbanism

Networked Urbanism

Bypass Urbanism

Gypsy Urbanism

DIY Urbanism

Integral Urbanism

Inverted Urbanism

Vernacular Urbanism

Pop-Up Urbanism

Nuclear Urbanism

New (Sub)Urbanism

Informal Urbanism

Behavioral Urbanism

Temporary Urbanism

Braided Urbanism

Trace Urbanism

Market Urbanism

Propagative Urbanism

Radical Urbanism

Anti-Urbanism

Disconnected Urbanism

Magical Urbanism

Recombinant Urbanism

Guerilla Urbanism

Dialectical Urbanism

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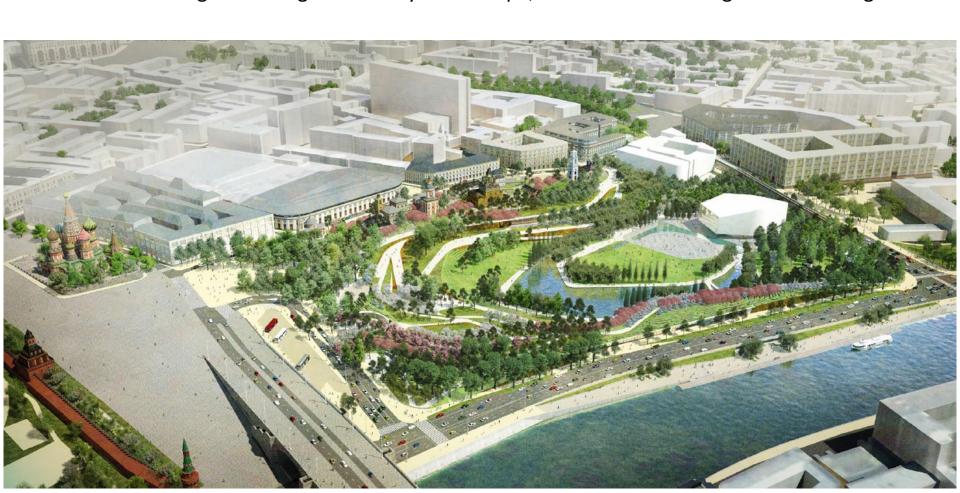
Landscape Urbanism

LANDSCAPE URBANISM



WHAT IS LANDSCAPE URBANISM?

Landscape Urbanism is a theory of urban planning arguing that the best way to organize cities is through the design of the city's landscape, rather than the design of its buildings.



WHAT IS LANDSCAPE URBANISM?

• Landscape urbanism is a response to the limited understanding or portrayal of project and site context currently employed by both architects and landscape architects. It is also a notion put forth strategically by landscape architects as a means for differentiating their profession among the design professions, particularly architecture, and in response to the superficial role landscape architects increasingly find themselves in.



WHAT IS LANDSCAPE URBANISM?

- Landscape Urbanism describes the ability to produce urban effects traditionally
 achieved through the construction of buildings simply through the organization of
 horizontal surfaces.
- The phrase 'Landscape Urbanism' first appeared and emerged as a theory in the mid 1990s.
- Since this time, the phrase 'Landscape Urbanism' has taken on many different uses,
 but is most often cited as a Postmodernist or Post-postmodernist response to the
 "failings" of New Urbanism and the shift away from the comprehensive visions, and
 demands, for Modern architecture and Urban planning.

LANDSCAPE URBANISM CRITICISM

- Landscape urbanism <u>has been criticized</u> as an idea that is only loosely defined from a set of <u>flashy projects</u>. These are expensive schemes with a commercial and esthetic purpose that satisfy a local or regional ambition to invest in ecology or sustainability without posing a more globally applicable approach.
- A true merger of landscape architecture with the field of Urban Ecology lacks.
- From this criticism, Frederick Steiner introduced landscape ecological urbanism as an approach that can include the field of urban ecology.

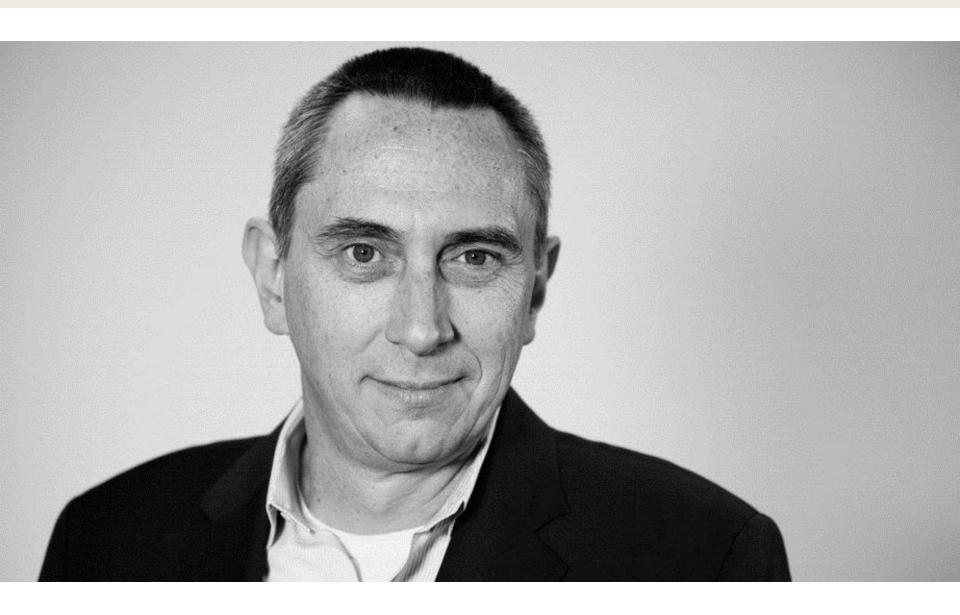
LANDSCAPE URBANISM CRITICISM

- Wybe Kuitert has shown how such integrative planning and management of the city should rely on analysis. Discerning the potential quality of wild nature in the city is a first step to see how new urban ecology might be developed. Potential vegetation maps for a city are the tool to this end.
- One opponent to Landscape Urbanism is New Urbanism, led by Andres Duany, which promotes walkable communities and smart growth with its Transit Oriented Development (TOD) and Traditional Neighborhood Design (TND). In response to landscape urbanism's focus on expansive green space in urban development, Duany stated that "density and urbanism are not the same." Further, "unless there is tremendous density, human beings will not walk." The result is patches of green sprawl that lose connectivity to the greater network.

THOUGHT LEADERS OF LANDSCAPE URBANISM

- People who actively write about the theories of landscape urbanism:
 - James Corner
 - Stan Allen
 - Alex Wall
 - Charles Waldheim
- People who have contributed the most descriptive and actionable/practicable writings about landscape urbanism:
 - Chris Reed
 - Christopher Gray
 - Peter Connolly
 - Richard Weller
 - Jusick Koh

CHARLES WALDHEIM



CHARLES WALDHEIM

- Charles Waldheim is Chair of the Department of Landscape
 Architecture at the Graduate School of Design at Harvard
 University.
- Waldheim's research focuses on landscape architecture in relation to contemporary urbanism. He coined the term "landscape urbanism" to describe emerging landscape design practices in the context of North American urbanism. He is author of Constructed Ground, and volume editor of The Landscape Urbanism Reader and CASE: Lafayette Park Detroit.
- Charles Waldheim, has organized the first Landscape Urbanism exhibition in Chicago in 1997.

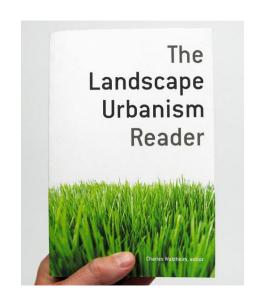


The Landscape Urbanism Reader



THE LANDSCAPE URBANISM READER

- Charles Waldheim is the volume editor of the Landscape
 Urbanism Reader book.
- The Landscape Urbanism Reader is the latest in a trickle of publications that may well turn into a stream, as landscape urbanism is definitely a fountainhead of new thinking in urban landscape architecture. Eight of the fourteen authors collected in the book are landscape architecture academics or practitioners (many are both) and the remainder are architecture academics who draw their inspiration from process-based approaches to design and urban organization.





JAMES CORNER



JAMES CORNER

James Corner is a landscape architect and theorist whose works exhibit a focus on "developing innovative approaches toward landscape architectural design and urbanism."

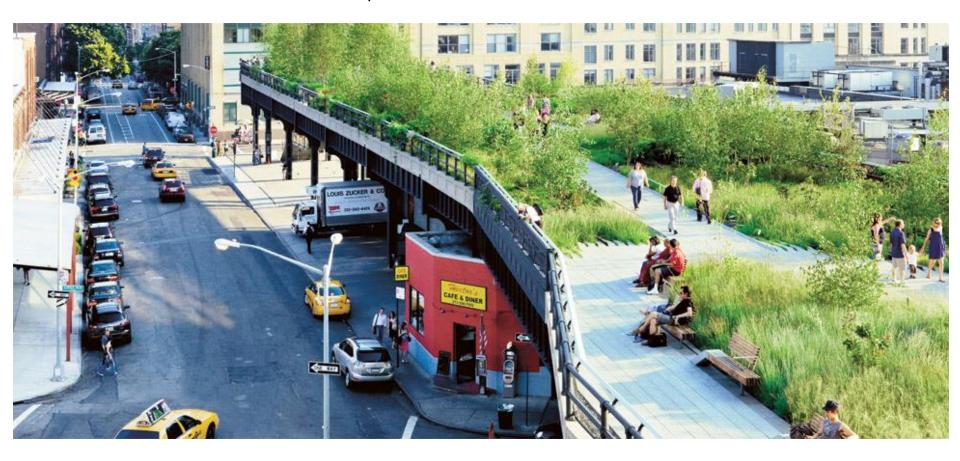
- His designs of note include Fresh Kills Park on Staten
 Island and the High Line in Manhattan, both in New York City.
- Corner is a professionally registered landscape architect and the principal of James Corner Field Operations, a landscape architecture and urban design practice based in New York City.



THE HIGH LINE PARK, NEW-YOUR CITY

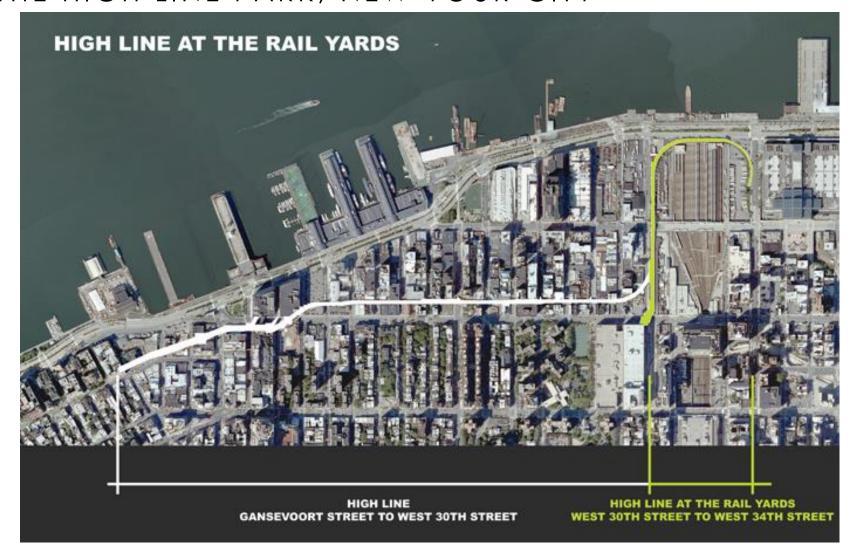


THE HIGH LINE PARK, NEW-YOUR CITY



 The High Line is a public park built on a historic freight <u>rail line elevated above the</u> <u>streets on Manhattan's West Side.</u>

THE HIGH LINE PARK, NEW-YOUR CITY



THE HIGH LINE PARK, NEW-YOUR CITY

- Designer: James Corner Field Operations
- New York, USA Urban Park/ Industrial Reclamation
- Previous Use: Elevated Freight Rail
- Size: 6.73 Acres / 1.45 linear miles
- Construction Cost: \$152 million
- Design Fee: \$15.2 million
- Completed: 2009



THE HIGH LINE PARK, NEW-YOUR CITY



• NYC's High Line is a project that exemplifies effective adaptive urban re-use in a city that is littered with structures and spaces that have since reached the end of their useful life. By turning an abandoned, elevated freight train track into a public park, this project has redefined the New York experience, affording never-before seen views of the city's surrounding natural landscape as well as an expansive and intimate look into one of the world's most dynamic urban environments.

THE HIGH LINE PARK, NEW-YOUR CITY

BEFORE / AFTER







THE HIGH LINE PARK, NEW-YOUR CITY

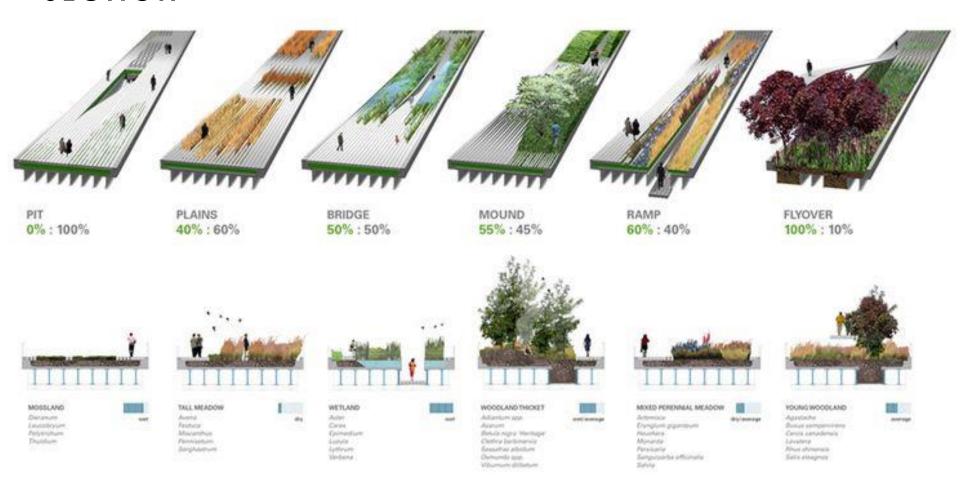
MAP LOCATION & SITE PLAN





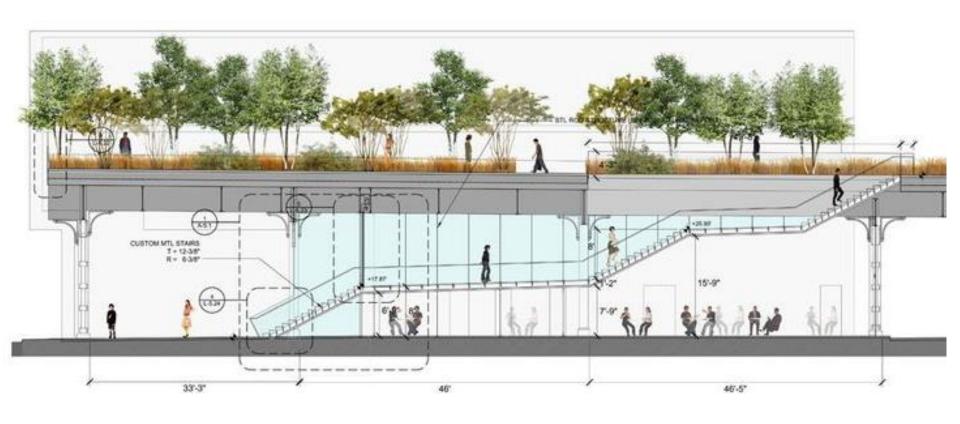
THE HIGH LINE PARK, NEW-YOUR CITY

SECTION



THE HIGH LINE PARK, NEW-YOUR CITY

SECTION



THE HIGH LINE PARK, NEW-YOUR CITY

PARK FURNITURE



PEEL-UP TYPOLOGY

PEEL-UP PLANTER

















THE HIGH LINE PARK, NEW-YOUR CITY

MORE PHOTOS











Video: https://www.youtube.com/watch?v=i-yEb4JT-A8

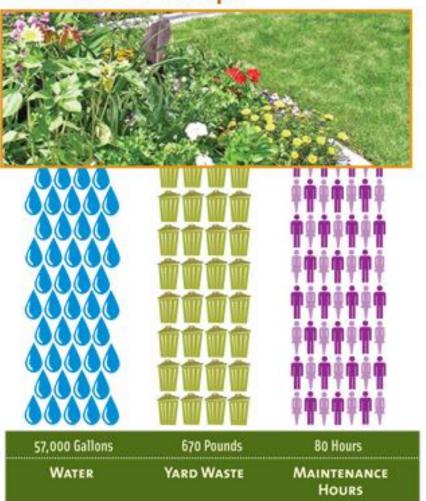
PRINCIPLES OF SUSTAINABLE LANDSCAPING

A Sustainable Landscape is based upon a unique set of design principles. These design
principles are outlined and reflect the different elements to consider when creating a
landscape that minimizes its impact on precious resources like water, but maximizes its
potential for creating long lasting beauty and ecological habitat. A well thought out,
resource efficient design will reduce maintenance costs by working in concert with
natural cycles instead of against them.



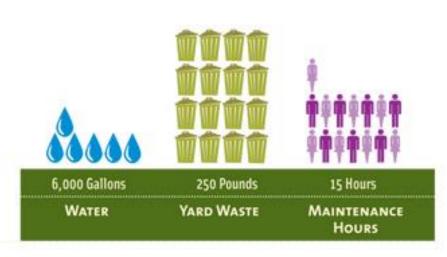
Consumption for one year based on 2005-2006 data.

Traditional Landscape



Sustainable Landscape





- Minimize Impacts on Air, Water, & Fossil Fuels
- Reduce Pesticide & Chemical Use
- Recycle Materials On-Site
- Source Green Building Materials
- Choose Climate Appropriate Plants
- Use Mulch and Control Weeds
- Create Habitat
- Plant Edibles
- Prepare the Soil Properly
- Use Benign Treatments for Pests and Plant Disease
- Consider Plant Placement and Scale
- Integrate Rain Water Recovery Strategies
- Install Water-Efficient Irrigation



HIGH LINE SUSTAINABLE PRACTICES

The High Line's landscape was created in partnership with Netherlands-based planting designer Piet Oudolf. For inspiration, Oudolf looked to the existing landscape that grew on the High Line after the trains stopped running. The plant selection favors native, drought-tolerant, and low-maintenance species, cutting down on the resources that go into the landscape.

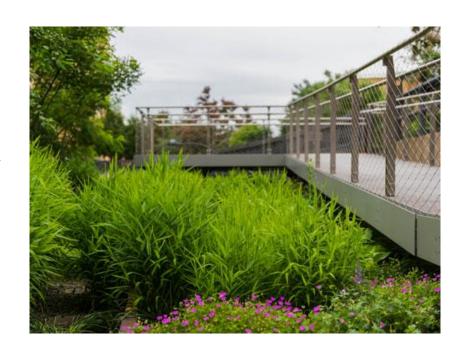


photo of the High Line in 2000 by Joel Sternfeld

HIGH LINE SUSTAINABLE PRACTICES

SITE-SPECIFIC LANDSCAPE

Varied conditions of light, shade, exposure, wind, and soil depth on the High Line in its outof-use state let to an incredibly complex variety of growing conditions, or "microclimates." The current park landscape reflects the original microclimates of the High Line. By basing the planting design on naturally created plant communities, a well-adapted has been created, site-specific landscape, cutting down on water and other resources needed to maintain it.



HIGH LINE SUSTAINABLE PRACTICES

LOCAL SOURCING

Almost half of the High Line's plants are <u>native species</u>, and many were produced by local growers. Locally grown plants are better adapted to grow successfully in our climate, reducing the amount of plant failure and replacement costs. The High Line's ecosystem provides food and shelter for a variety of wildlife species, including native pollinators. Whenever possible, we source materials within a 100-mile radius.



HIGH LINE SUSTAINABLE PRACTICES

WATERING

In addition to rainwater runoff, supplementary watering has been provided. Though <u>drip irrigation</u> is used throughout on the High Line, the gardeners often rely on hand-watering. This way, they are able to tailor the amount of water based on the needs of individual species and weather conditions, and conserve water. Many of the plants are drought-tolerant and need little supplemental watering.



RELATION CONCEPTS OF SUSTAINABILITY

HIGH LINE SUSTAINABLE PRACTICES

WATERING

The current park landscape was created to reflect the original microclimates on the High Line. The High Line's green roof system is designed to allow the plants to retain as much water as possible. In addition, there is an irrigation system installed with options for both automatic and manual watering.



ERIE STREET PLAZA (MILWAUKEE, WISCONSIN)



- The Erie Street Plaza is a waterfront plaza located in the City of Milwaukee. This space is a large open space that was designed to accommodate everyday activities as well as larger events.
- This site is one of many located on the Milwaukee Riverwalk. So this area serves as a rest spot for people walking or biking.

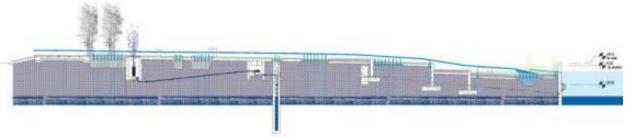
ERIE STREET PLAZA (MILWAUKEE, WISCONSIN)



The variegated surface extends into the steel marsh, which collects and cleans stormwater from the site



Detail of the steel marsh and plaza edge. Slots cut into the bulkhead wall allow for intermittent flooding of the wetland at the high point of twentyyear lake level cycles



Runoff from the site collects in the marsh, irrigating the wetland plants that live there

Stormwater that falls on the plaza is directed into a environmental cycle that adds to the sustainability of the site. This cycle includes sending the water through marshes and wetlands to be cleaned before recharging the groundwater and irrigated other vegetation.

ERIE STREET PLAZA (MILWAUKEE, WISCONSIN)



The plaza surface is a hybrid plazagreen with pavers and lawn surfaces that allow for both intense activities and more passive uses



ERIE STREET PLAZA (MILWAUKEE, WISCONSIN)

Landscape Performance Benefits

ENVIRONMENTAL

- Saves 495 gallons of potable water and \$220 annually
 by <u>using river water for irrigation</u> of planted areas.
- replacing 100% of the asphalt on the site with concrete pavers and plantings. The 121 poplar trees will also cool the plaza by providing shade when they reach half-maturity.



ERIE STREET PLAZA (MILWAUKEE, WISCONSIN)

Landscape Performance Benefits

SOCIAL

 Transformed a former parking lot into a flexible social space used for strolling, jogging, reading, viewing, biking and kayaking,

 Serves 100 weekend adult patrons of the neighboring Sail loft bar and restaurant by providing an outdoor space for games.

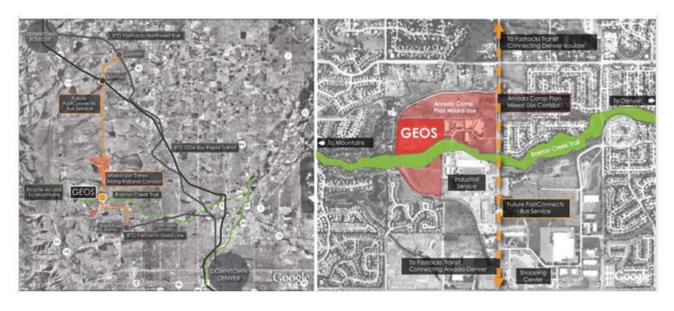
ERIE STREET PLAZA (MILWAUKEE, WISCONSIN)

Landscape Performance Benefits

ECONOMIC

• Contributes to the economic development of the expanding Third Ward district, with 243 condominium units planned and adjacent mixed-use development attracting more than \$120 million in investment capital within a previously derelict area.

GEOS NET ZERO ENERGY NEIGHBORHOOD ARVADA, COLORADO, U.S.A.



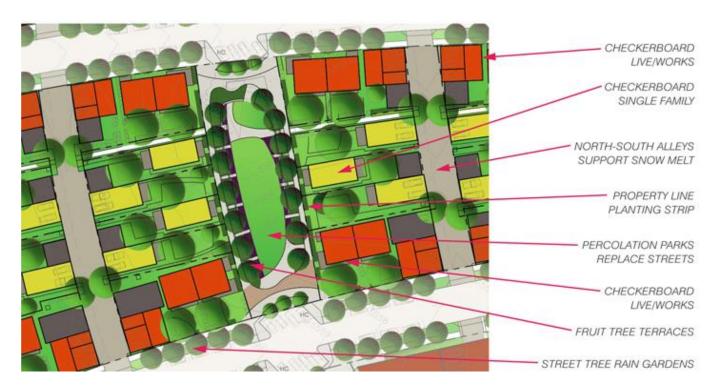
 Geos Net Zero Energy Neighborhood is a <u>residential</u>, <u>mixed-use community</u> that will be built on 23-acres of underutilized industrial land in suburban Denver, Colorado. The project is part of the city's comprehensive plan to intensify development along an established north-south transit corridor in order to reduce sprawl.

GEOS NET ZERO ENERGY NEIGHBORHOOD ARVADA, COLORADO, U.S.A.



 Geos is a vision of sustainable community planning. <u>High-</u> <u>density housing and commercial</u> <u>buildings</u> are laid within a green framework of natural systems, stormwater-fed landscapes, and multi-purpose civic spaces.

GEOS NET ZERO ENERGY NEIGHBORHOOD ARVADA, COLORADO, U.S.A.



Guided by the bold objective of designing a community that <u>produces 100 % of its own energy</u>, the architect and landscape architect worked in collaboration to merge high-performance buildings with <u>energy-efficient landscapes</u>. Checkerboard housing arrangements, allow each unit to gain maximum access to sunlight. This energy-efficient layout is optimal for natural day lighting and passive solar heating.

GEOS NET ZERO ENERGY NEIGHBORHOOD ARVADA, COLORADO, U.S.A.



The roof of each house is equipped with photovoltaic solar panels, which help satisfy all electricity needs.

Deciduous tree species are strategically chosen and placed to shade building facades without blocking the rooftop panels.



Percolation parks located throughout the site function as both neighborhood green spaces and stormwater management systems, given they collect and filter runoff from streets, sidewalks, and plazas. These areas add beauty to the landscape and help frame outdoor public spaces like the mixed-use promenades, playground, etc.

GEOS NET ZERO ENERGY NEIGHBORHOOD ARVADA, COLORADO, U.S.A.



Social programming integrates nature and agriculture into the fabric of everyday life, empowering residents to take active roles in managing their resources and environment. Fruit tree terraces and community gardens are maintained and harvested by adjacent homeowners, providing a reliable source of local food production.

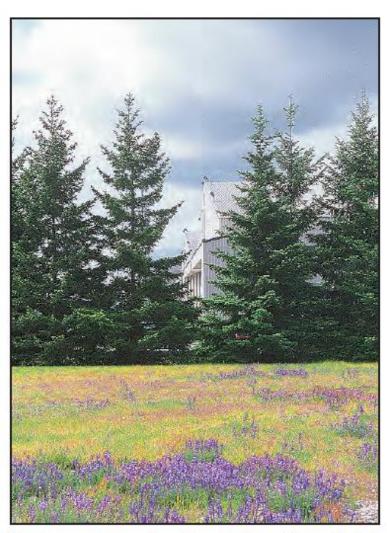
- The coordination and effective use of landscape elements contribute to the overall success of the design. Landscape elements consist of the following:
 - 1. Vegetation
 - 2. Land Forms
 - 3. Water Features
 - 4. Pavement Materials
 - 5. Site Amenities
 - 6. Lighting
 - 7. Signs

1. Vegetation consists of trees, shrubs, ground covers, annuals, perennials,

vines, and turf. They serve many of the following functions:

- Visual Enhancement
- Wind Control
- Erosion
- Noise Reduction
- Climate Modifications
- Energy Conservation
- Glare and Reflection Reduction
- Air Purification
- Wildlife Conservation

Select low maintenance indigenous vegetation that is compatible with the natural character of the area. Select native plants or other vegetation that will thrive with little or no supplemental irrigation, fertilization, or pest control.



Native vegetation is an ecologically sound solution. Once established, it requires little or no maintenance and reinforces an installation's regional character.



Water consumption is a major vegetation selection criterion. Care should be taken to minimize irrigation requirements.

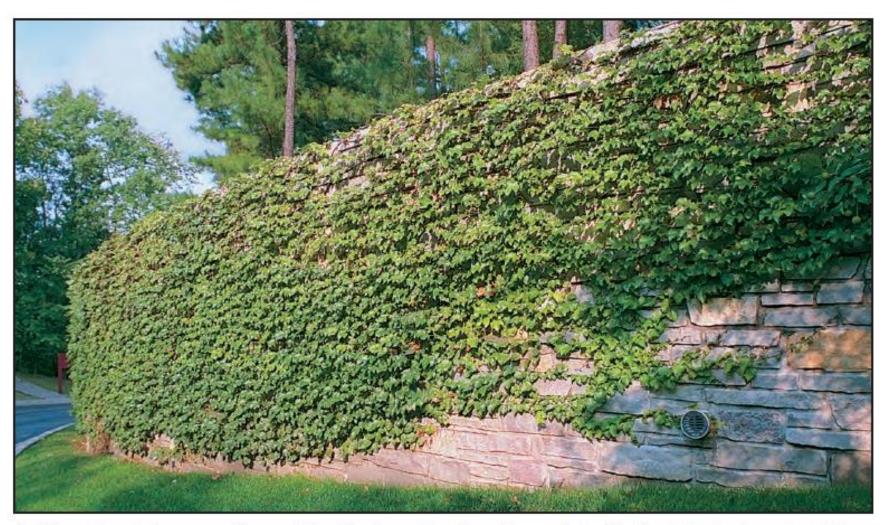
2. Land Forms

Earth berms, terracing, and retaining walls are examples of land form elements. These elements should be in harmony with the site's natural topography or contrast and respond to the architectural form.

- Earth Berms Provide spatial enclosures, screening of undesirable areas, and reinforce architectural forms.
- Terracing Creates useable areas on a sloped site and reinforces architectural forms.
- Retaining Walls Preserve vegetation, minimize grading requirements on steep slopes, and create visual interest.



Use earth berms and appropriately placed vegetation to screen parking areas.

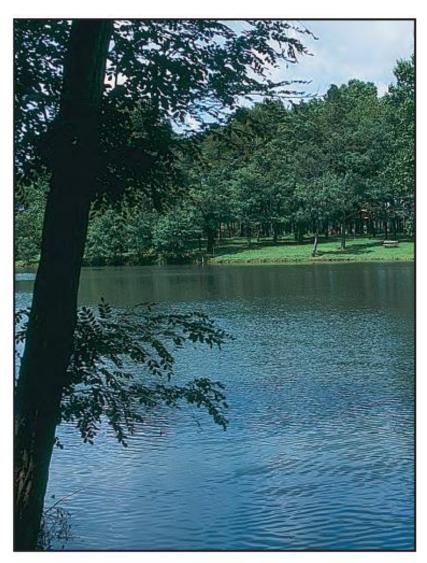


Retaining walls can help preserve existing vegetation. The vines on this wall provide a smooth transition from the hard surface roadway to the natural preserve beyond.

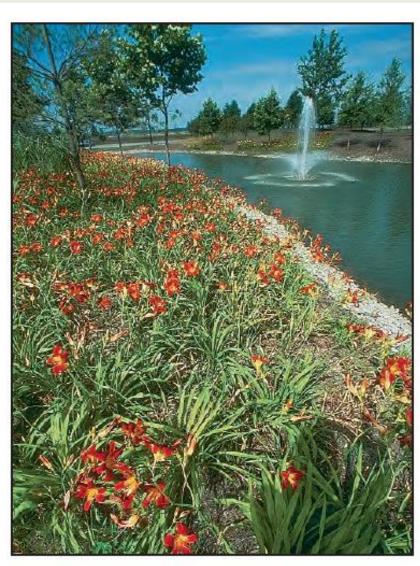
3. Water Features

Water features include ponds, lakes, fountains, and reflective pools. They can be located along green space corridors or in developed plazas. Water features provide the following:

- Visual Enjoyment
- Focal Points
- Auditory Relief
- Micro-Climate Modification
- Native Habitat
- Recreational Opportunities
- Retention Ponds
- Irrigation Reservoirs



Lakes provide visual relief and recreational opportunities.



Fountains provide enjoyment and mask undesirable noise.

4. Pavement Materials

Different types of pavement materials serve various purposes. They can provide

the following:

- Spatial Definition
- Sense of Direction
- Spatial Character
- Warnings



Pavement materials provide interest and variety to this building's entrance.



Pavement patterns and planters direct pedestrian circulation and provide visual interest.

5. Site Amenities

- Site amenities include <u>trash receptacles</u>, <u>dumpsters</u>, <u>benches</u>, <u>tables</u>, <u>mail boxes</u>, <u>vending machines</u>, <u>drinking fountains</u>, <u>telephone booths</u>, <u>bus shelters</u>, <u>kiosks</u>, <u>walls</u>, <u>fences</u>, <u>monuments</u>, <u>memorials</u>, <u>flag poles</u>, <u>gazebos</u>, <u>bike racks</u>, <u>and picnic shelters</u>.
 With proper planning and design, site amenities become a cohesive link that has a positive effect on the overall appearance of the installation.
- Site amenities need to be compatible with the adjacent architectural features,
 blend with the overall character of the installation, and serve the functional needs of the user.



Achieve visual continuity by selecting site amenities that are compatible in color, materials, and character.

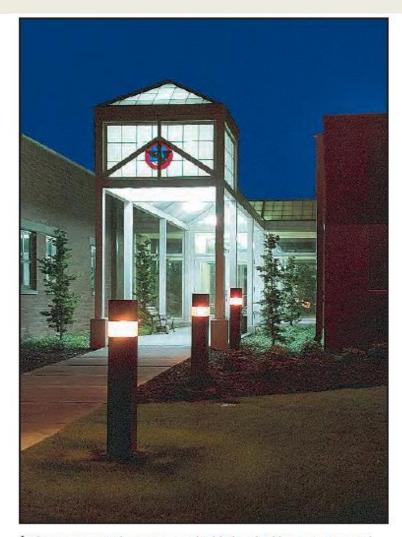


The harmonious coordination of site amenities along with the brick pavers complement the color and style of the adjacent architecture.

6. Lighting

Exterior lighting can be categorized as street, architectural, or walkway and parking lot. Through a variety of applications, lighting serves a number of functions, including the following:

- **Street Lighting** Reinforces street hierarchy by visually differentiating major and minor roads through varied light intensities, fixture types, pole spacing, and height.
- Architectural Lighting Draws attention to the entrance and special features of a facility.
- Walkway and Parking Lot Lighting Provides safety and security, and identifies the routes and intersections.



Lighting can provide orientation, highlight a building entrance, and direct pedestrian movement.



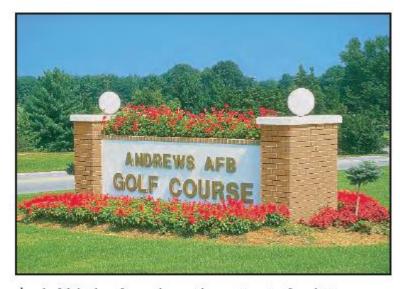
A building's lighting can create an interesting effect, provide security, and direct attention.



Uplighting a prominent tree can create a dramatic nighttime effect.

7. Signs

A simple but effective sign system provides a means of communicating information without compromising the appearance of the installation. Signs are categorized as follows:



A colorful display of annuals provides an attractive foundation treatment.

- Identification Identifies entrance gates and, and different facilities.
- Destination Directs visitors to major activities,
- Regulating Controls traffic, parking, maintains security,
- Informational Provides educational information and directional guidance for visitors.

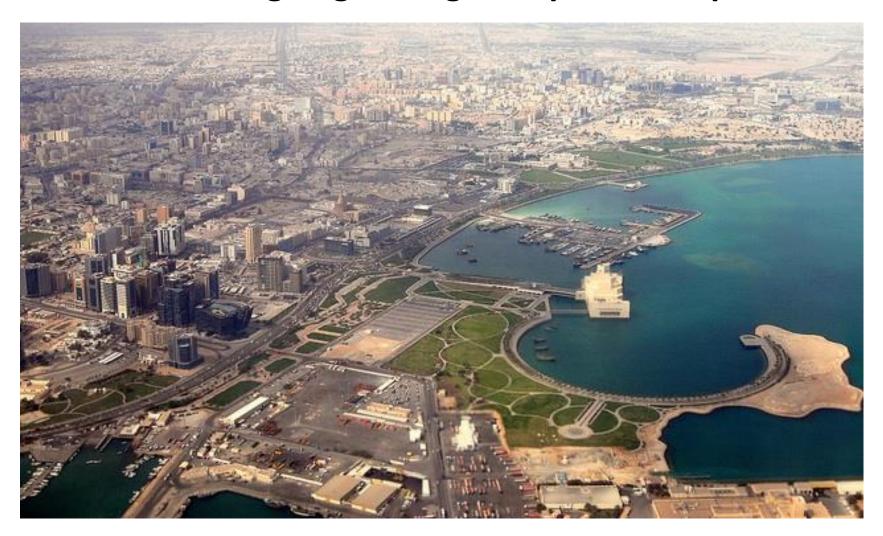
When cities grow, part of their building stock and urban land-use become obsolete, bringing on opportunities to regenerate the city. In the case of Doha, this is especially important. The urban sprawl during the oil boom led to a scattered, lowdensity, urban landscape, caused by the prevalence of suburban typologies and a large percentage of unbuilt land.

Florian Wiedmann and Ashraf M. Salama





Doha has been going through a rapid development!



Aspire Park is one of Qatar's finest landscapes. With 880,000 m², it is one of the biggest and most aweinspiring parks in the Gulf region. Families seek the park for picnics, walking around in harmony with nature, amid the native and exotic trees imported from all around the world. The landscape takes you to a new destination.

The architecture of Aspire Park is unique in its spiral pathways and solar-powered lights in a caring gesture for the environment

ASPIRE PARK



QATAR UNIVERSITY CAMPUS

Soft landscaping scope covers all zones' green common areas in Qatar University. <u>Different</u> types of plants with a concentration on local Qatari plants have been selected to maximize visual appeal while minimizing maintenance and replantation costs. Irrigation water is currently supplied from filtered water and <u>Treated Sewage Effluent (TSE) network.</u> Irrigation water systems implemented throughout QU are limited to sprinkling, dripping, and manual handheld hose systems.



LITERATURE & RESOURCES

- The Landscape Urbanism Reader, Charles Waldheim
- http://www.public.asu.edu/~icprv/Urban%20Concentration/UrbanismCourse/Talensylla bus1.pdf
- http://www.terrafluxus.com/wp-content/uploads/2010/10/final-format-LU-bib-2.pdf
- http://www.junctures.org/index.php/junctures/article/viewFile/92/94
- https://placesjournal.org/author/charles-waldheim/
- http://www.smgov.net/Departments/OSE/categories/landscape.aspx
- https://www.thehighline.org/about/sustainable-practices
- www.qu.edu.qa/offices/avp.../_Doc1__FMP_Rev.4.pdf
- http://www.qatartourism.gov.qa/en-us/thingstodo/activities/parks.aspx
- https://www.wbdg.org/ccb/AF/AFDG/landscape.pdf
- http://www.asla.org/sustainablelandscapes/geos.html
- http://lda.ucdavis.edu/people/2013/KScott.pdf





THANK YOU!

