TRENDS IN RESIDENTIAL DESIGN

JENNIFER G. HORN, RLA


Studio H Landscape Architecture, Inc.

INTRODUCTION

ASLA 2014 TRENDS SURVEY http://www.asla.org/land/LandArticle.aspx?id=42527

Across all categories

Percent Rating Popular or Somewhat Popular:

98.3% lighting

97.7% seating/dining areas

95.4% fire pits/fireplaces

94.3% grills

89.6% installed seating (benches, seatwalls, ledges, steps, and boulders)

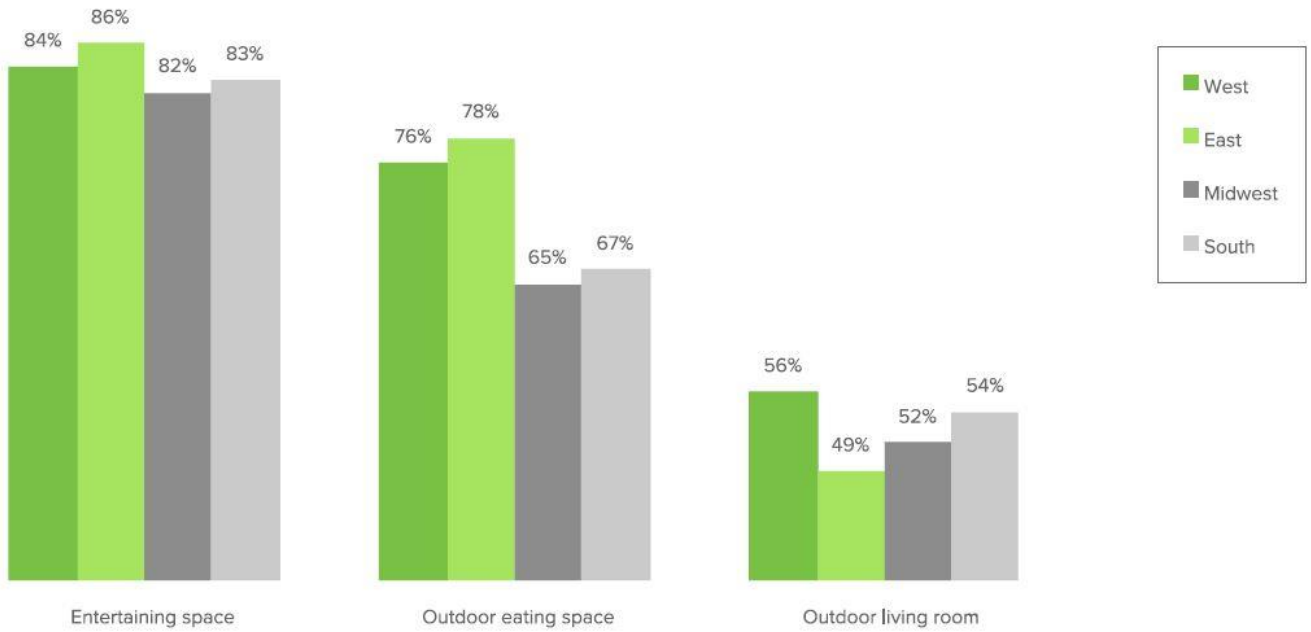
HOUZZ SPRING LANDSCAPING TRENDS STUDY 2014

Outdoor Activity

houzz

Homeowners in the East and West are most likely to use their backyard as an outdoor eating space.

BACKYARD USES

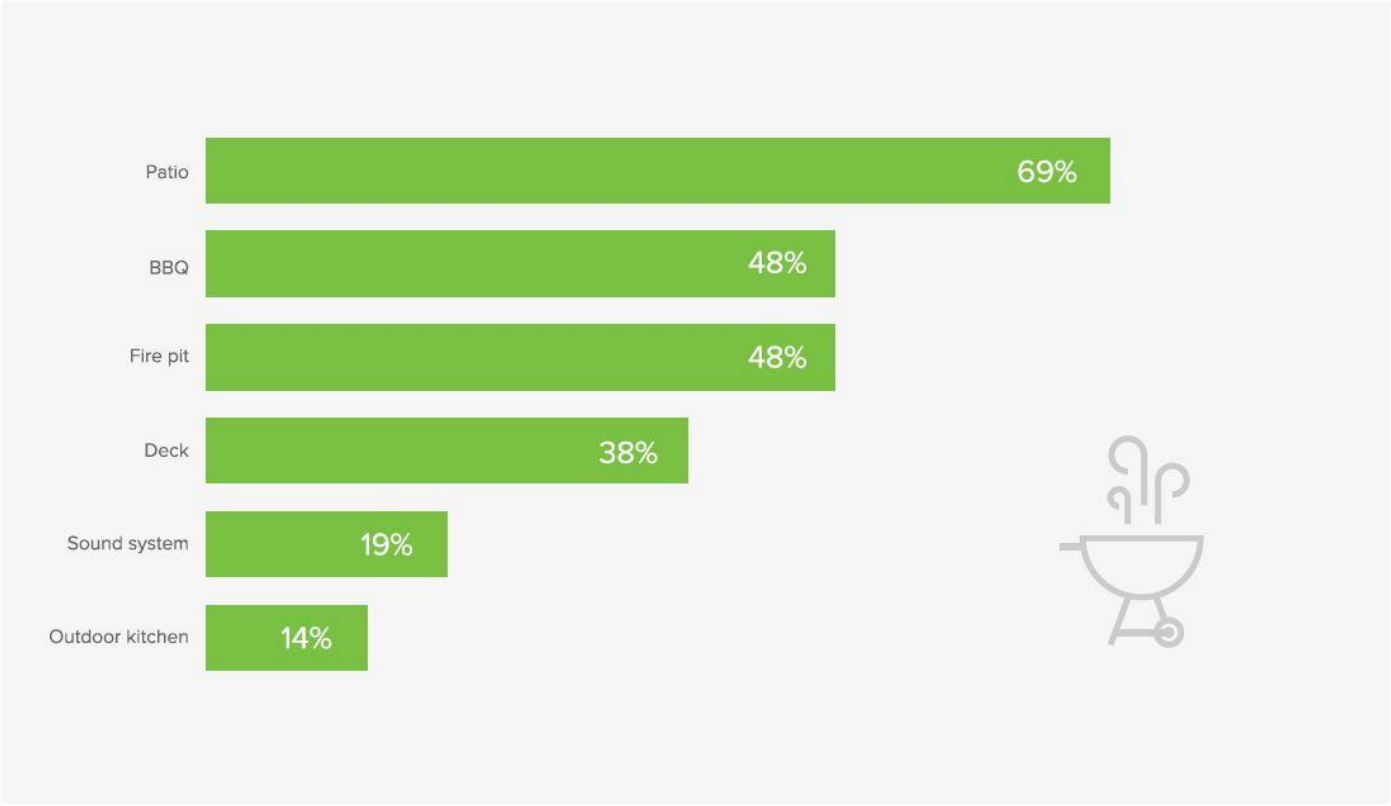


HOUZZ SPRING LANDSCAPING TRENDS STUDY 2014

Entertaining Elements

houzz

Nearly half of homeowners who are undertaking a landscape project are adding a fire pit.



INTRODUCTION

Landscape architect vs. landscape designer vs. landscape contractor

A landscape architect is a person involved in the planning, design and sometimes direction of a landscape, garden, or distinct space. The professional practice is known as landscape architecture.

To be called a landscape architect, an individual must have a state license and most likely received a degree in landscape architecture from an accredited university.

The term landscape designer is sometimes used to refer to those who are not officially qualified or licensed as landscape architects.

They prepare landscape design drawings for masonry, planting, etc. but do not stamp drawings.

A landscape contractor is someone who implements the design that was envisioned by the landscape architect or landscape designer.

Their work can include trades like masonry, lighting, irrigation, and planting.

OUTDOOR COOKING & DINING

JHLA

OUTDOOR COOKING & DINING

ASLA 2014 TRENDS SURVEY

Outdoor Living Features category

Percent Rating Popular or Somewhat Popular:

97.7% Seating/dining areas

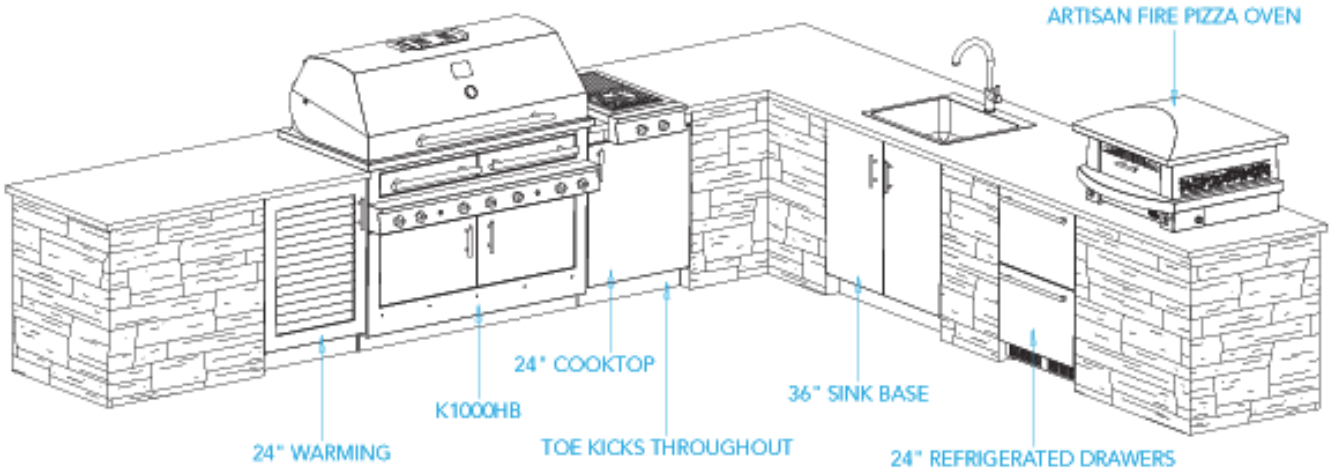
94.3% Grills

75.5% Counter space

OUTDOOR COOKING & DINING

Locating an outdoor kitchen

- Distance from interior kitchen
- Capacity - # of people
- Including the cook in the party
- Counters against the house to reduce utility work



Kalamazoo Outdoor Gourmet

OUTDOOR COOKING & DINING

Functionality

- Designing for the elements
- Overhead shelter
- Countertop temperature
- Night lighting
- Storage
- Maintenance

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OUTDOOR COOKING & DINING

Counter space requirements

- Ample counter space needed around grill and sink in particular
- Stain resistance


Terra Firma Landscapes . Photo by Maren Caruso

OUTDOOR COOKING & DINING

Utilities

- Gas line
- Water supply
- Grease trap / waste water
- Electric / GFI
- Task lighting – grill light or scor

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OUTDOOR COOKING & DINING

Grill surround structure: *Masonry*

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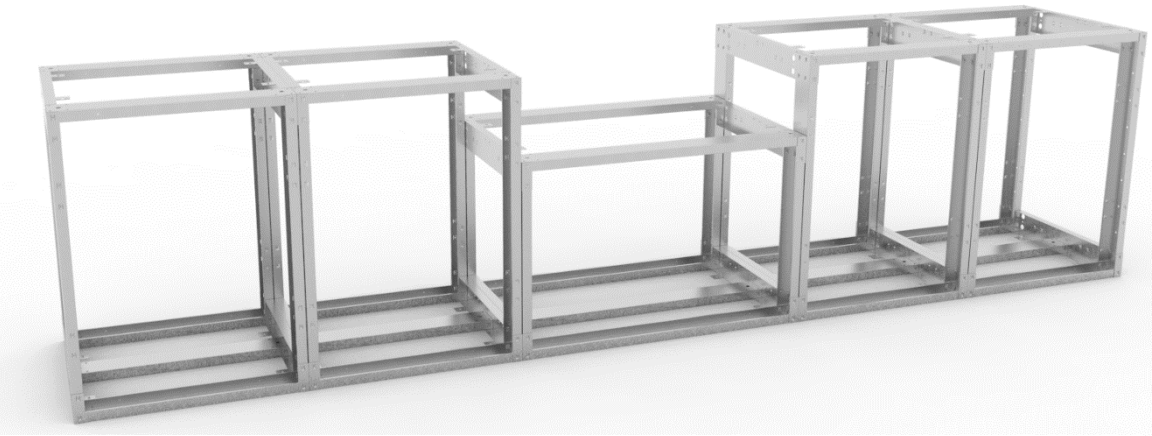
OUTDOOR COOKING & DINING

Grill surround structure: *Steel-framed with cement board*



Fresco Frames

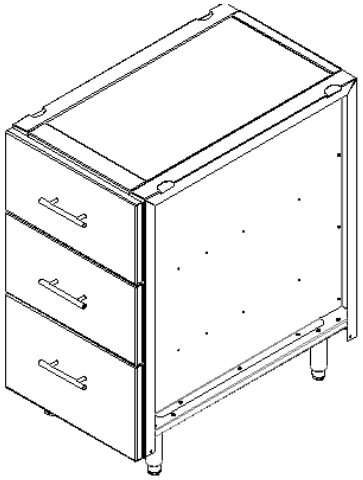
OUTDOOR COOKING & DINING

Grill surround structure: *Masonry*

Pedersen Associates

OUTDOOR COOKING & DINING

Grill surround structure: *Modular units*



Kalamazoo Outdoor Gourmet

OUTDOOR COOKING & DINING

Grills

Gas

Charcoal

Hybrid

Fire Magic, Kalamazoo Outdoor Gourmet

OUTDOOR COOKING & DINING

Other Appliances

Outdoor refrigerator

Big Green Egg

Wine cooler

Ice maker

Smoker

OUTDOOR COOKING & DINING

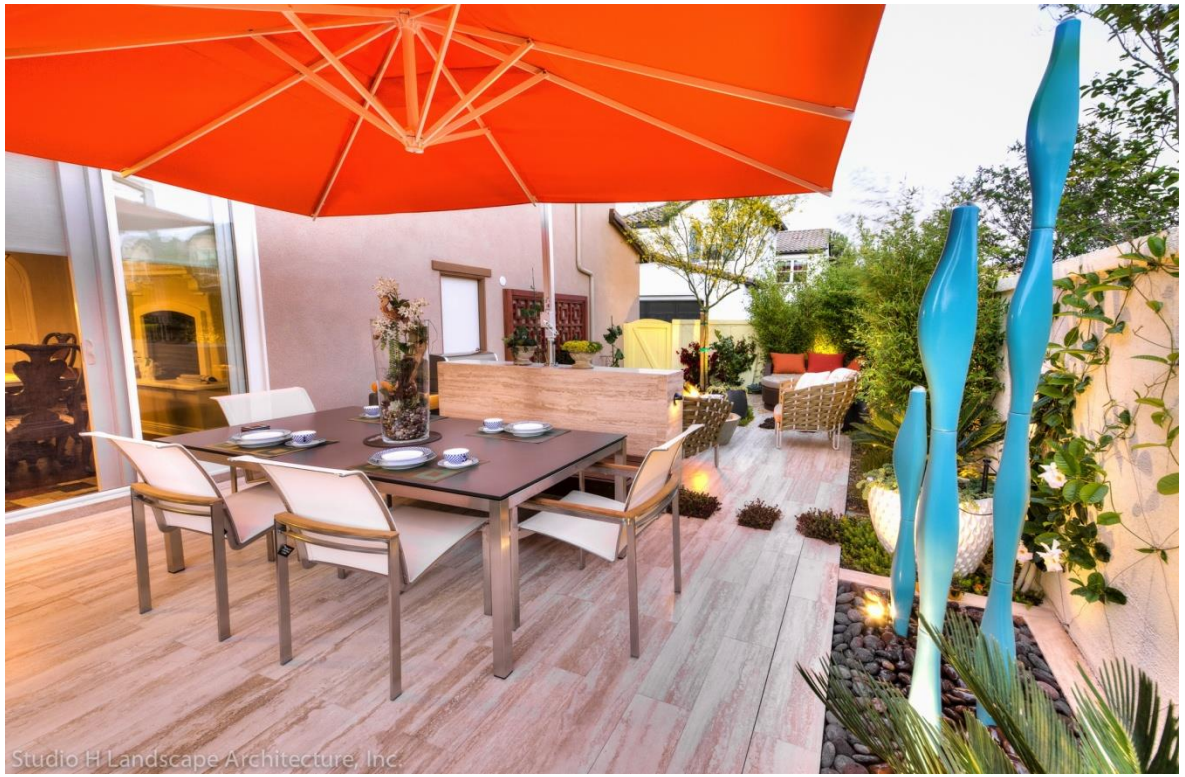
Other Considerations

•Set aside a budget.

•Provide conduit for future connections – gas, water, sewer, etc.

•Locate ideal area for future or phased outdoor kitchen and confirm area within relevant setbacks.

•Consider consistency among indoor and outdoor appliances.



OTHER OUTDOOR FEATURES

Fire pits and **fireplaces** are frequently requested by homeowners seeking to extend their gardens' use into early spring and late fall. These features also function as outdoor focal points.

- Level of warmth provided
- Noise – noticeable gas release
- Ambiance
- Maintenance and safety concerns

WOOD-BURNING FIRE PITS

- Prefabricated
- Custom

Fire Pit Art

William Renninger Associates

GAS FIRE PITS

- Prefabricated
- Custom

Components include:

- Burners
- Burner pans
- Fire glass
- Fire sand
- Ignition switches
- Wall switches and covers

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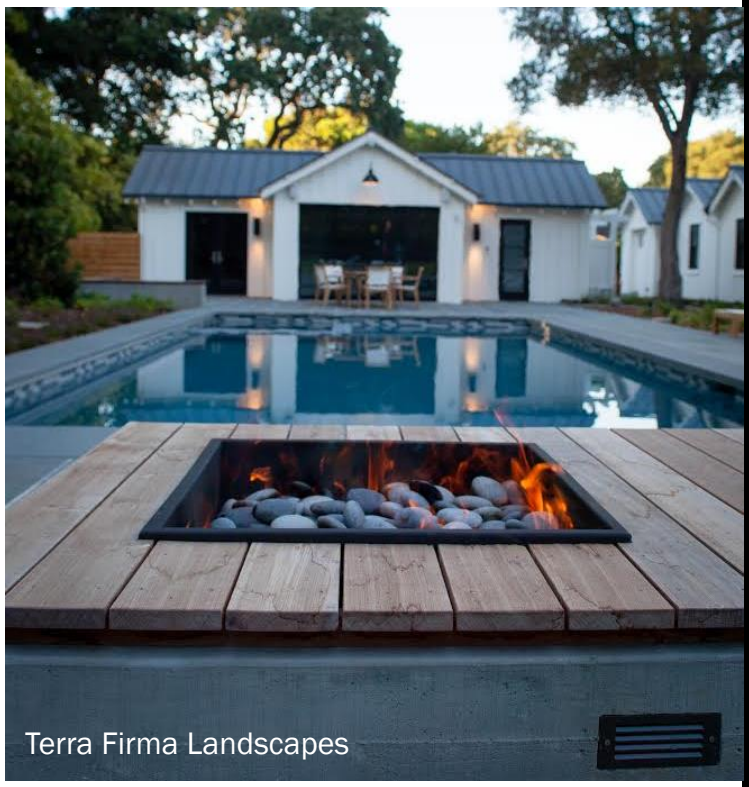

Terra Firma Landscapes

Photo by Rachel Moises

OUTDOOR FIREPLACES

- Prefabricated
- Custom
- Gas
- Wood

Phoenix Fireplaces

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FIRE PIT / FIREPLACE CONSIDERATIONS

- Proximity to trees and overhanging branches
- Wood storage as needed
- Gas availability as needed – natural gas or propane
- Seasonal wind patterns
- Safety and seating plans

RAISED BEDS FOR EDIBLE GARDENS

Lutsko Associates - Photo by Marion Brenner

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RAISED BED CONSIDERATIONS

- Soil testing – not native soil!
- Safe use of chemicals
- Honest assessment of homeowners' desire to garden
- Irrigation and water maintenance
- Sun and shade

WATER FEATURES

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WATER FEATURES

- Favorite landscape features requested by homeowners
- Proven to aid in relaxation
- Buffer unwanted noise
- Recirculating vs. closed systems
- Chemical use with aquatic plants
- Integrated lighting as separate zone
- Living vs. non-living

Can be fountains, waterfalls, living pond systems and bubblers.

WATER FEATURES

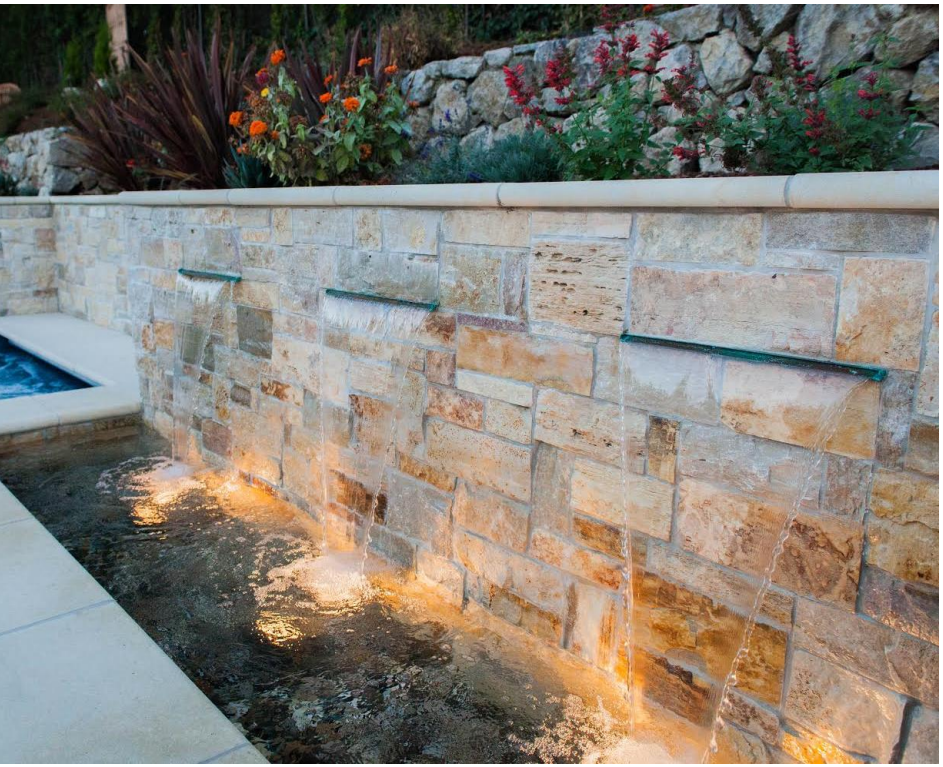
Pedersen Associates

BUBBLERS

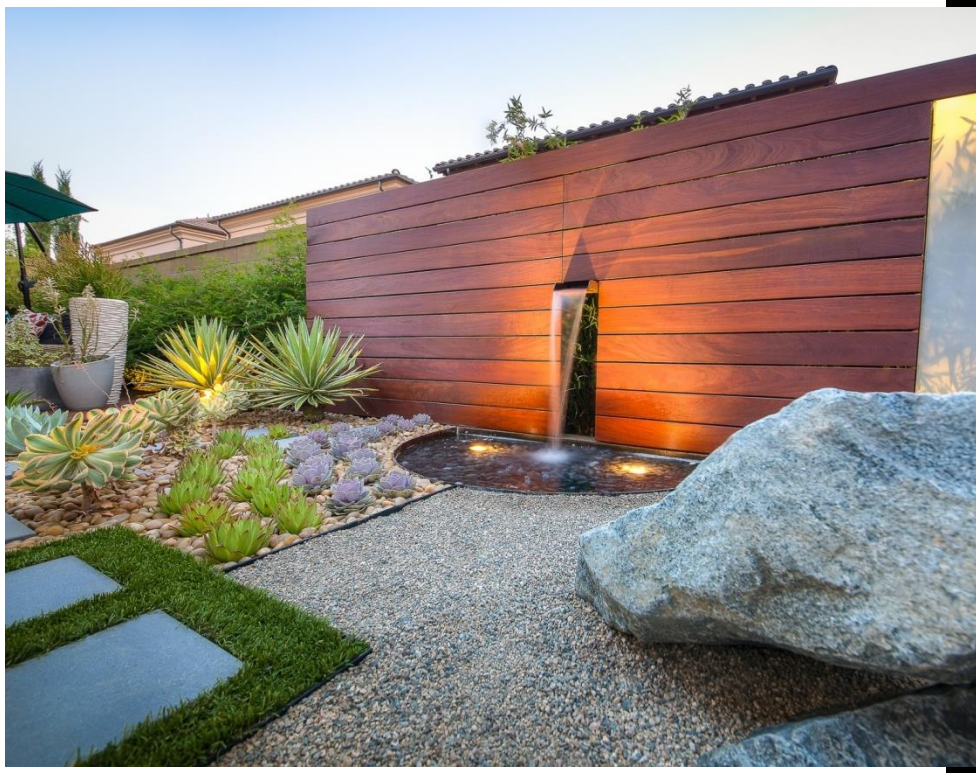
James Hughes Landscaping

Restoration Hardware

FOUNTAINS / ARCHITECTURAL WATER FEATURES



Terra Firma Landscapes. Photo by Rachel Moises.



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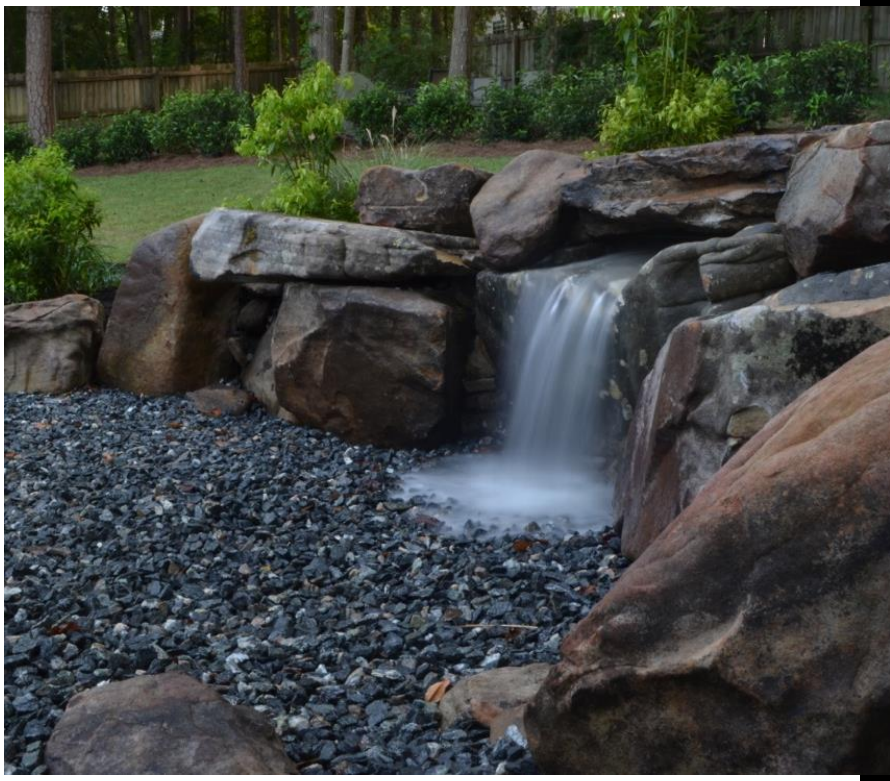
NATURALIZED WATER FEATURES

Broadbooks Associates

LIVING POOLS

Fletcher Studio



James Hughes Landscaping

WATER FEATURES

Components:

- Pump
- Weirs
- Spouts
- Filter (skimmer, biofall, UV filter)
- Auto-fill devices
- Overflows
- Lighting
- Fish

Considerations:

- Cleaning, algae and winterization
- Expense / budget
- Safety
- Drainage and overflow
- Submeter

MUSIC & SOUND SYSTEMS

- Outdoor speakers with wireless control or via phone
- Speaker placement
- Outdoor graded products

Theater One

OTHER OUTDOOR FEATURES

Climate control: Cooling and misting systems

Mist Cooling

OTHER OUTDOOR FEATURES

Climate control: Ceiling fans and outdoor heaters

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Gas vs. electric

Solairia

OTHER OUTDOOR FEATURES

Outdoor furniture

- Moving beyond teak
- Woven synthetics

OTHER OUTDOOR FEATURES

Outdoor furniture: All-weather fabric

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Outdoor furniture: Custom-built

Terra Firma Landscapes. Photo by Maren Caruso

STORMWATER MANAGEMENT

STORMWATER CALCULATIONS

PROPOSED HARDSCAPE TYPES (CN NUMBER) AND SQUARE FOOTAGE:

ROOF (98):	380
CONCRETE PATIOS (98):	0
WALLS (98):	79
LANDSCAPE FEATURES -SUCH AS GRILLS (98):	42
NATURAL STONE ON CONCRETE SLAB (98):	948
STEPS (98):	145
RAISED TERRACES / STOOPS (98):	0
TOTAL SQUARE FOOTAGE AT 98 CN:	1594
PROPOSED ADDITIONAL LAWN (75):	290

3 MONTH STORMWATER CALCULATIONS:

IMPERVIOUS SURFACES:

$S = \frac{1000}{CN} - 10 = .2$

$Q = \frac{(1.25-0.2S) * (1.25-0.2S)}{(1.25 + 0.8S)} = 1$

REQ. STORAGE VOLUME (CF) =

Q/12 X IMPERVIOUS AREA (SF)

1/12 X 1594 = 133 CF

LAWN:

$S = \frac{1000}{CN} - 10 = 3.3$

$Q = \frac{(1.25-0.2S) * (1.25-0.2S)}{(1.25 + 0.8S)} = 0.09$

REQ. STORAGE VOLUME (CF) =

Q/12 X IMPERVIOUS AREA (SF)

0.09/12 X 290 = 3 CF

TOTAL STORAGE VOLUME REQUIRED = 136 CF

10 YEAR STORMWATER CALCULATIONS:

IMPERVIOUS SURFACES:

$S = \frac{1000}{CN} - 10 = .2$

$Q = \frac{(5.1-0.2S) * (5.1-0.2S)}{(5.1 + 0.8S)} = 4.9$

REQ. STORAGE VOLUME (CF) =

Q/12 X IMPERVIOUS AREA (SF)

4.9/12 X 1594 = 651 CF

LAWN:

$S = \frac{1000}{CN} - 10 = 3.3$

$Q = \frac{(5.1-0.2S) * (5.1-0.2S)}{(5.1 + 0.8S)} = 2.5$

REQ. STORAGE VOLUME (CF) =

Q/12 X IMPERVIOUS AREA (SF)

2.5/12 X 290 = 61 CF

TOTAL STORAGE VOLUME REQUIRED = 712 CF

PVC PIPE TO CONVEY WATER FROM NW CORNER OF HOUSE TO DRYWELL AS SHOWN.
CONTRACTOR TO NOTE LOCATION OF EXISTING GAS LINE.

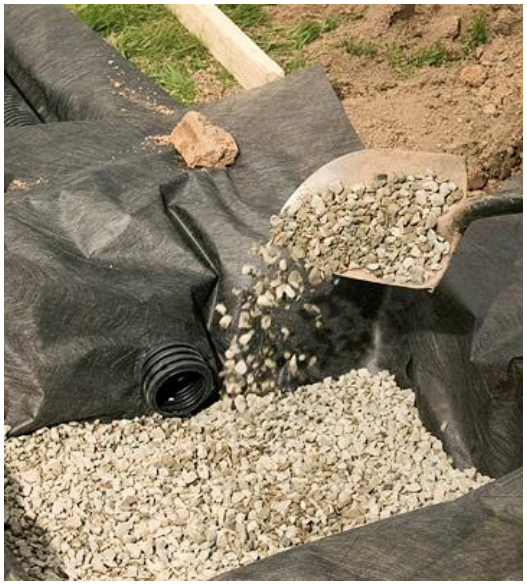
18X18 INLET WITH PVC PIPE TO CONNECT TO DRYWELL.

(6) ATLANTIS D RAIN TANK DOUBLE MODULES, 16.91"X26.97"X34.65"
GROSS WATER STORAGE PER UNIT: 8.69 CF
TOTAL STORAGE THIS LOCATION: 52.14 CF
SQUARE FOOTAGE OF FOOTPRINT: 18 SF

STORMWATER MANAGEMENT

Dry well: Underground cavity that holds storm water until surrounding soil will allow the water to merge with local groundwater.

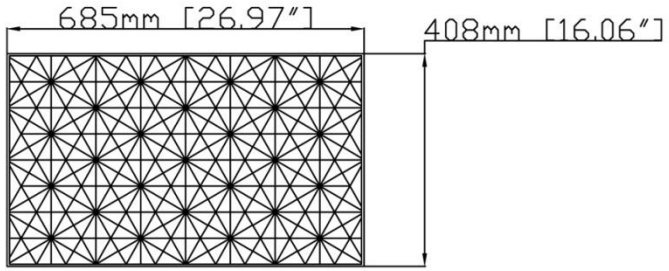
In the Watershed



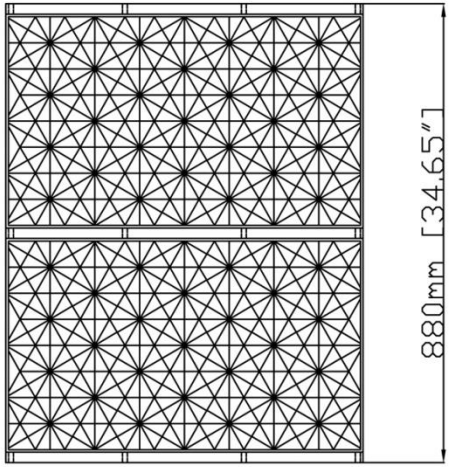
DIY Network

STORMWATER MANAGEMENT

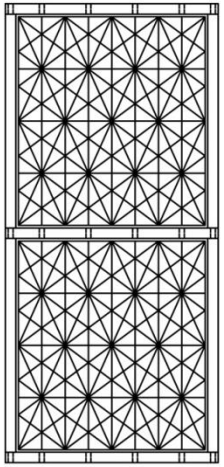
Underground storage tanks



Plan View



Side View



Front View

Drawing No: AOP 0020

Atlantis®
Water Management for Life

Atlantis® Double Matrix® / Flo-Tank® / D-Raintank® Module - *Part No. 70004*

Dimensions (W x L x H)	408mm x 685mm x 880mm	16.06" x 26.97" x 34.65"
Module Footprint	0.2795 m²	3.011 ft²
Ultimate Compressive Strength	24 t / m²	34 PSI
Gross Volume	0.246 m³	8.69 ft³
Storage Capacity	233 L	61.56 gal

19 August 2009

STORMWATER MANAGEMENT

Underground storage tanks

Planted Earth

STORMWATER MANAGEMENT

French drain: a trench filled with gravel or rock or containing a perforated pipe that redirects surface water and groundwater away from an area. Commonly a perforated pipe wrapped in filter fabric set in a bed of gravel.

Matas Paving

Marshalls Group

STORMWATER MANAGEMENT

Rain garden: a planted depression or a hole that allows rainwater runoff from impervious surfaces to be absorbed in to local groundwater in order to improve water quality in nearby bodies of water.

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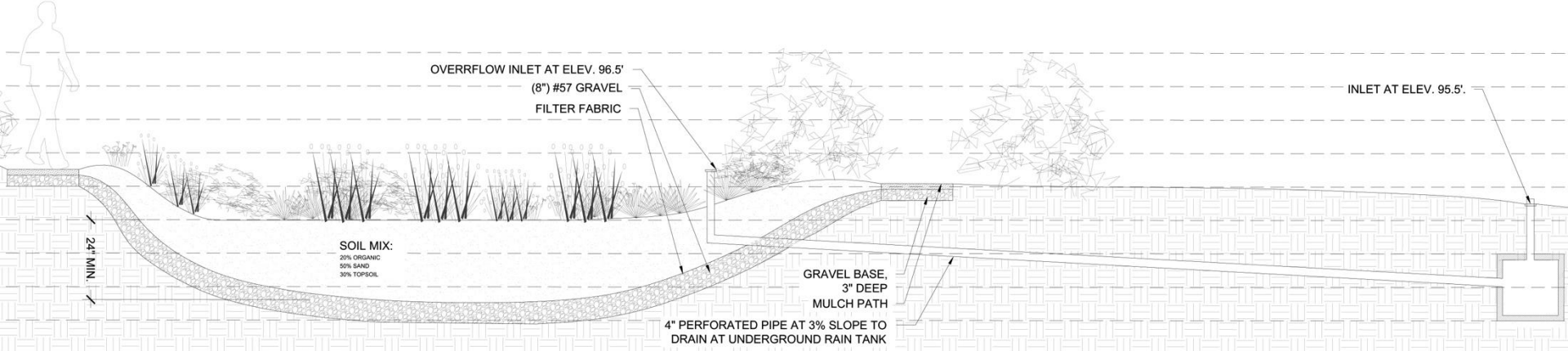
Indianapolis Museum of Art



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STORMWATER MANAGEMENT

Downspouts on houses can be:

- Buried and connected to underground water storage systems
- Routed to daylight away from the house

Hometown Lawn

Buried downspout: deverts water away from house foundation in non-perforated pipe

Local Philosophy

Rain barrel: a system that collects and stores rainwater from your roof that would otherwise be lost to runoff and diverted to storm drains and streams.

STORMWATER PLANNING CONSIDERATIONS

- Calculate change in non-porous surfaces.
- Determine volume of water for various storm events.
- Identify best method to slow or store stormwater
- Consult with a landscape architect, civil engineer or surveyor when planning for stormwater management.
- Water storage requirement depends on size of property and storm frequency.

ECO-FRIENDLY STRATEGIES

Lutsko Associates - Photo by Marion Brenner

ECO-FRIENDLY STRATEGIES

ASLA 2014 TRENDS SURVEY

Landscape and Garden Elements category

Percent Rating Popular or Somewhat Popular:

95.4% low-maintenance landscapes

84.5% native plants

76.4% food and vegetable gardens (includes orchards and vineyards)

ECO-FRIENDLY STRATEGIES

Drip irrigation: Temporary or permanent

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Keep It Green Nursery

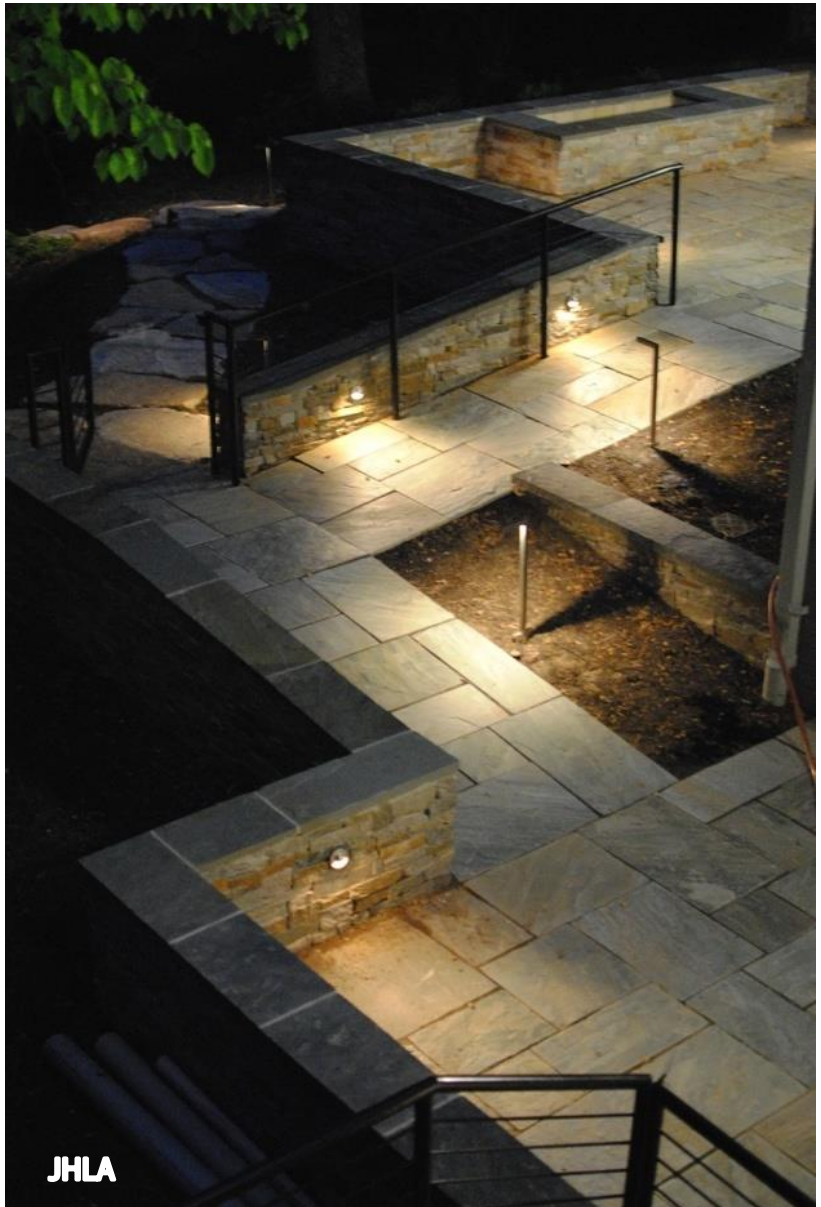
Considerations:

- Backflow
- Timer/clock locations
- Water pressure
- Slope of site
- Shade/sun on site
- Time of day for watering

ECO-FRIENDLY STRATEGIES

LED lighting

- Low voltage
- Easy control with wireless remote
- Longer bulb life



ECO-FRIENDLY STRATEGIES: LIGHTING

Illuminated Concepts

ECO-FRIENDLY STRATEGIES

Wireless lighting control

- Located inside house
- No need for sight line between fixtures and controller

LIGHTING

Alternative lighting options

- Commercial-grade string lights
- Flameless candles / votives
- Grill light
- Architectural sconces
- Safety / motion lights (hardwired)

Lighting Considerations:

- Transformer location
- Conduit for future installations
- Diminutive light to reduce glare

ECO-FRIENDLY STRATEGIES

Permeable paving

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ECO-FRIENDLY STRATEGIES

Carpentry

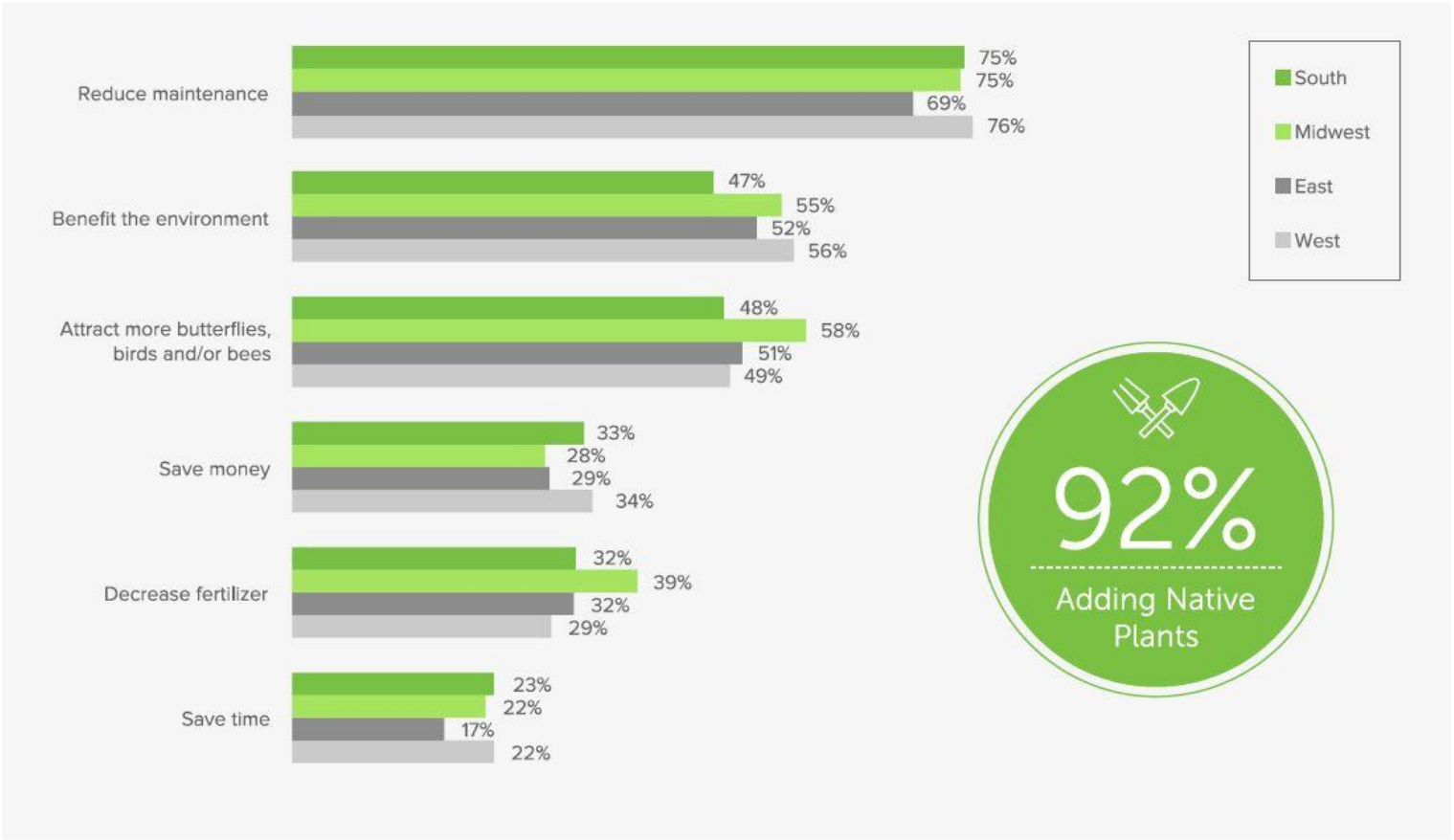
- All lumber should be FSC-certified.
- Composite products (TREX)
- Exotic hardwoods: ipe, sapele, mahogany
- Lumber which does not require chemical stains, sealants or paints
- Forest Stewardship Council prohibits illegally harvested wood.
- Wood from natural forests that were converted from non-forest uses
- Wood from genetically modified trees.

ECO-FRIENDLY STRATEGIES

Going Native with Plant Choice

houzz

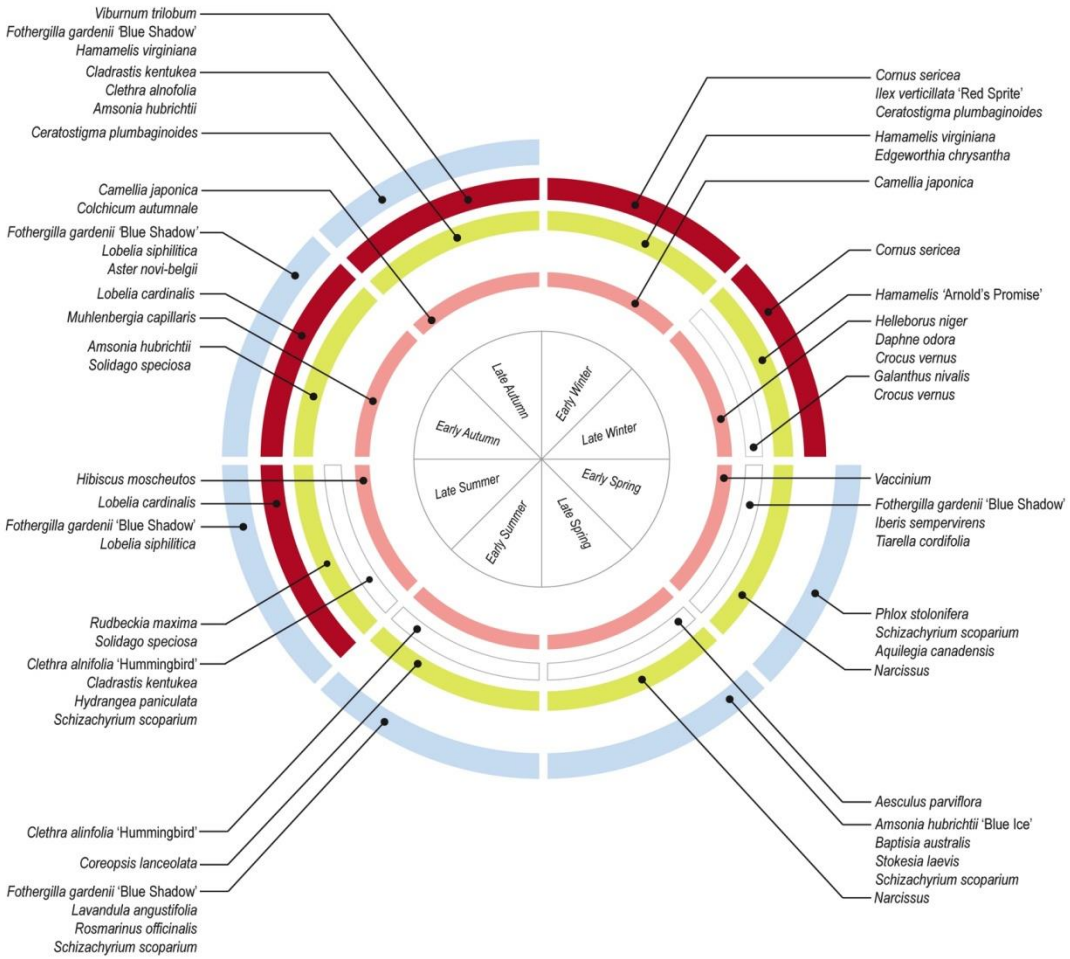
Of those adding plants to their yard, 92% are choosing plants that are native to their region. People are largely choosing native plants for practical reasons like reducing maintenance, helping the environment, as well as attracting more butterflies, birds or bees.



ECO-FRIENDLY STRATEGIES

How native is native?

- North America
- Eastern U.S.
- Mid-Atlantic
- Coastal / Mid-Atlantic



ECO-FRIENDLY STRATEGIES

Alternatives to turf

- Steppable groundcover
- "No mow" turf species
- Clover

Lawn Reform Coalition

CONCLUSION

CONTRIBUTORS

American Society of Landscape Architects www.asla.org

Houzz www.houzz.com

Studio H Landscape Architecture http://www.studioh-inc.com

James Hughes Landscaping http://www.jameshugheslandscaping.com

Terra Ferma Landscapes http://www.tflandscapes.com

William Renninger Associates http://www.williamrenningerassociates.com

Lutsko Associates http://lutskoassociates.com

Fletcher Studio http://www.fletcherstudio.com

Broadbooks Associates http://www.broadbooksapa.com

Pedersen Associates http://www.pedersenassociates.com

Planted Earth Landscaping http://plantedearthlandscaping.com

Illuminated Concepts http://oclights.com

Keep it Green Nursery http://www.plantnurserytampa.com

Fire Pit Art http://www.firepitart.com

Fresco Frames http://www.frescoframes.com.au

Kalamazoo Outdoor Gourmet http://kalamazoogourmet.com

Fire Magic Grills http://www.firemagicgrills.com

Restoration Hardware http://www.restorationhardware.com

Atlantis Water Management http://www.atlantiscorp.com.au

Lawn Reform Coalition http://lawnreform.org

Mist Cooling http://www.mistcooling.com

Hometown Lawn http://www.hometownlawn.com

Solaira http://www.solairaheaters.com