

Elizabeth Swann, Pirates of the Caribbean
In reference to *Pirata Codex c. 1670*.
Code of the Pirate Bethren

Pirates, hang the Code, and hang the rules!
They're more like guidelines anyway."



LSU Green Laws Seminar
Robert Reich School of Landscape Architecture

Green Laws

Geography of Development Sites

Landscape Ordinances
&
Codes

LSU Green Laws Seminar
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Working With Nature in the City



How We Build

**How
American
Communities
Build**

Codes and Regulations

Municipal Code

Zoning Ordinance

Land Use Code

Subdivision Code

Building Construction

Land Development
Regulations (LDR's)

Landscape Code

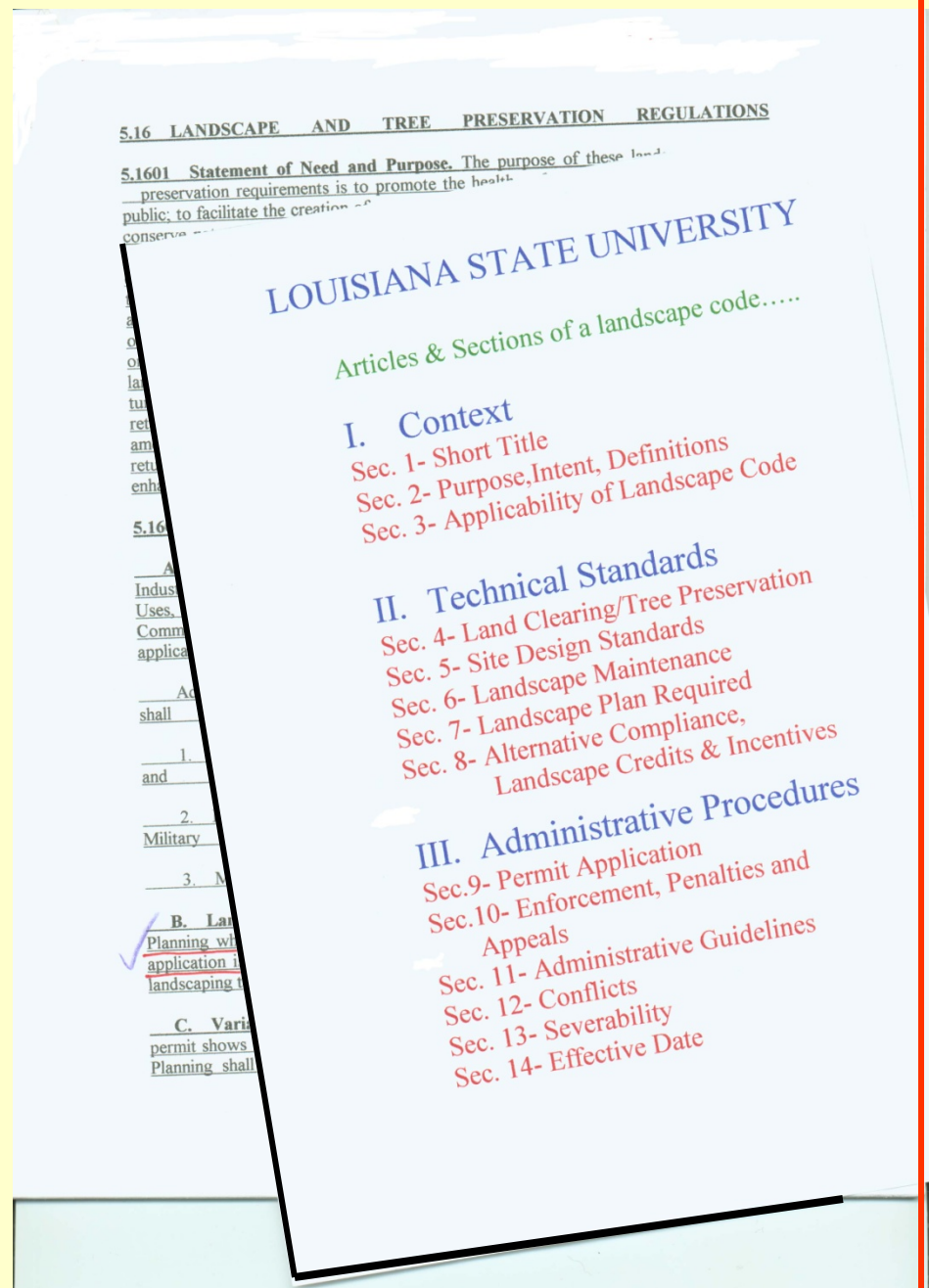
Tree Ordinance

Urban Forestry Ordinance?



The Landscape Code

- A well written landscape code contains many sections which describes each and every action and responsibility of that code.



The Landscape Code

A typical municipal landscape code for includes minimal landscape regulations as design guidelines.

In addition, the ordinance sets forth **“landscape design components”** and “technical standards” and “administrative procedures”.

The list at the right includes the most common site design components.

Street Yard Plantings

Bufferyard Plantings

Site Open Space Plantings

Vehicular Use Area Plantings

VUA Interiors, Screening, Shading

Site Screening

Plant Material Type, Size, Quality and Installation Standards

Tree Credit Standards

Landscape Plan Requirements

Permitting & Plan Review Data

The Landscape Code

Other communities have additional **design components** and standards that lead to better community design.

Some of those standards provide design guidelines for

Street Wall Plantings

Building Façade Plantings

Street Tree Planting Areas

Secondary Building Elevations

Tree Protection Zones -TPZ

Tree Preservation Areas - TPA

Habitat Preservation Areas -HPA

ADA Access Standards

The Landscape Code

‘Technical standards’ based upon simple calculations.

The calculations are easy to verify on the plans as well as in the field.

Compliance with the landscape code means that landscape plans and planting activities must meet specific standards that are set forth in the code.

Some communities do it based upon a ‘point system’.

Technical Design Standards

based upon

Quantities

Linear feet

Square footage

Area

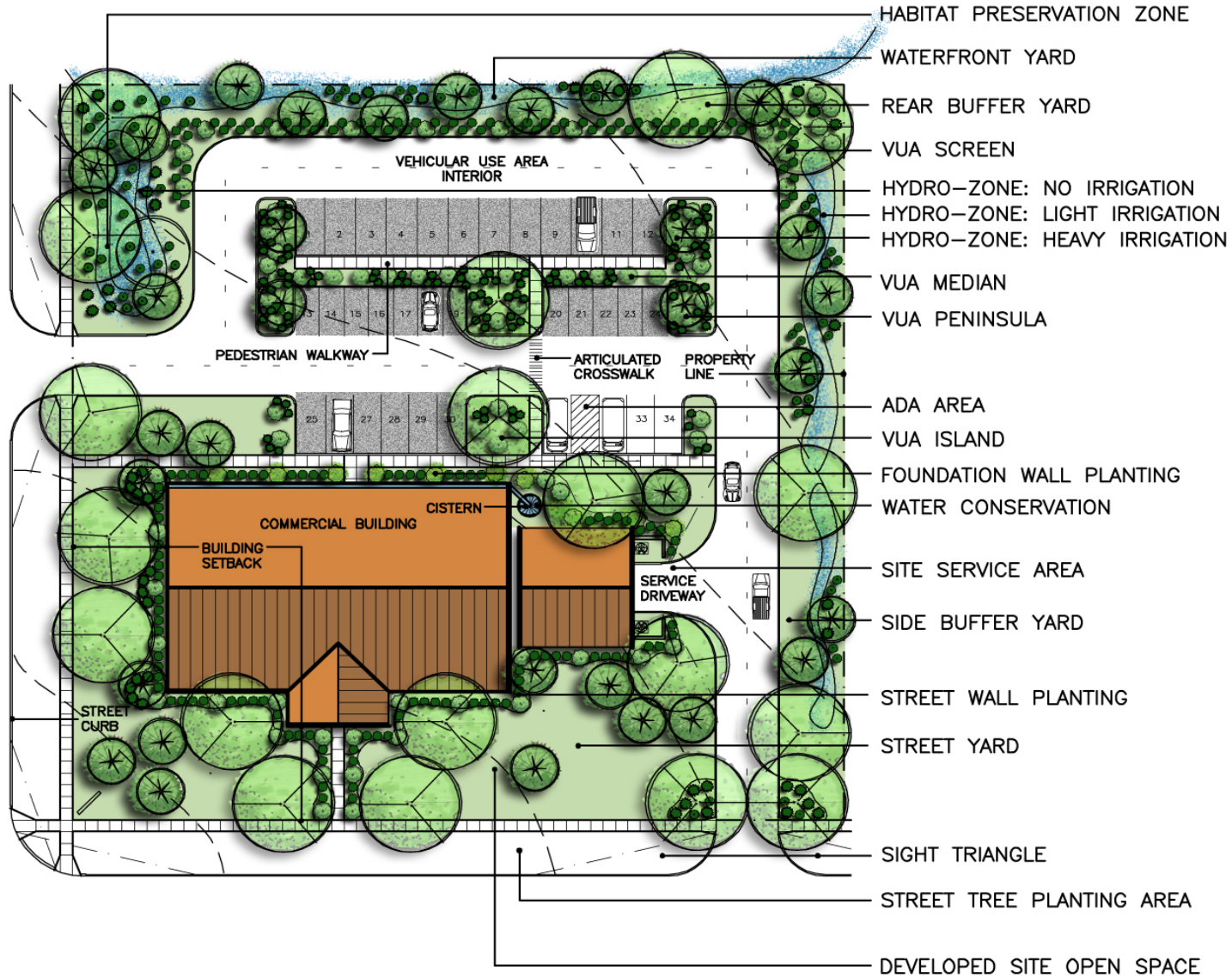
Spacing

Size

Percentages

Volume

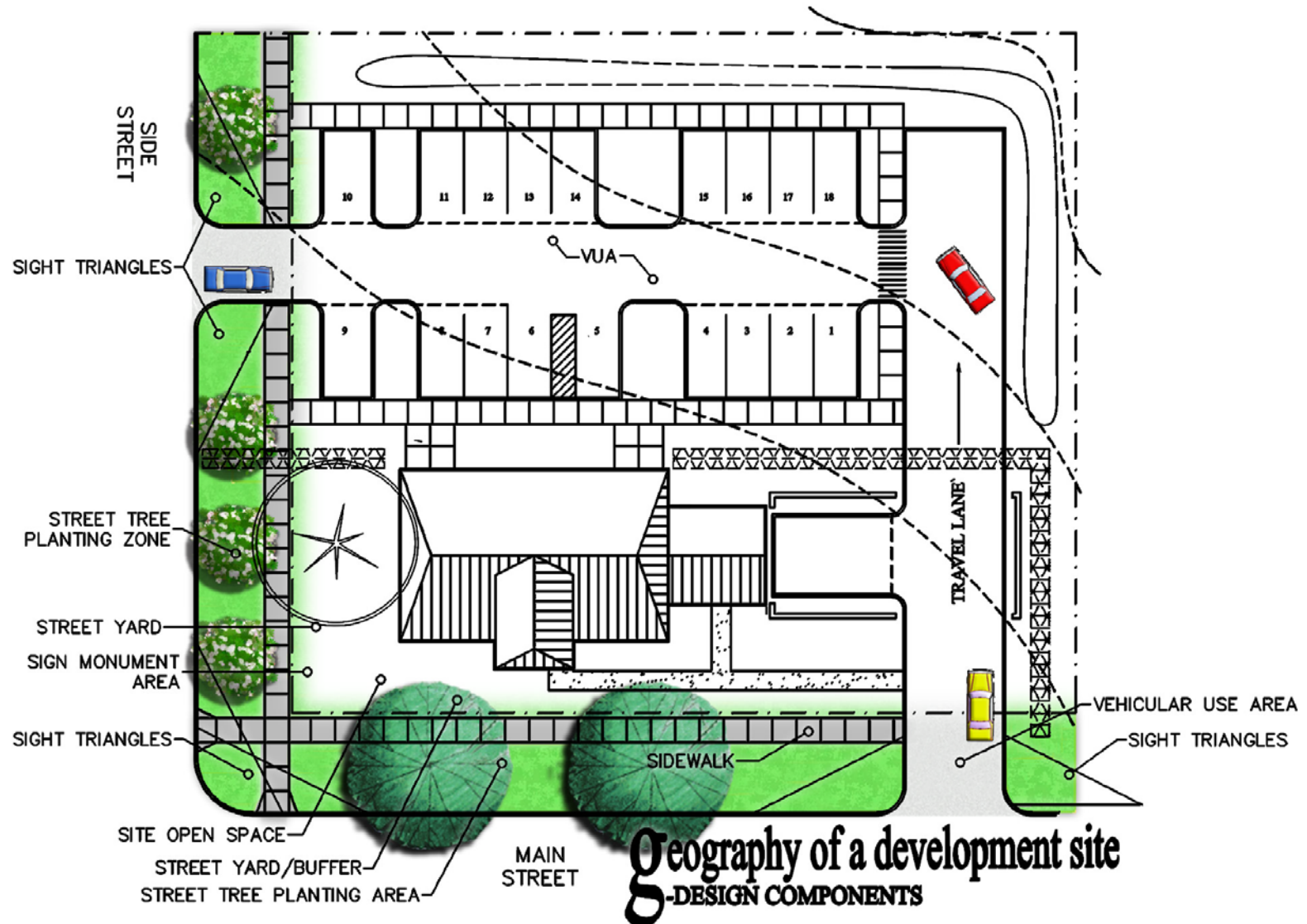
The Landscape Code



View Left

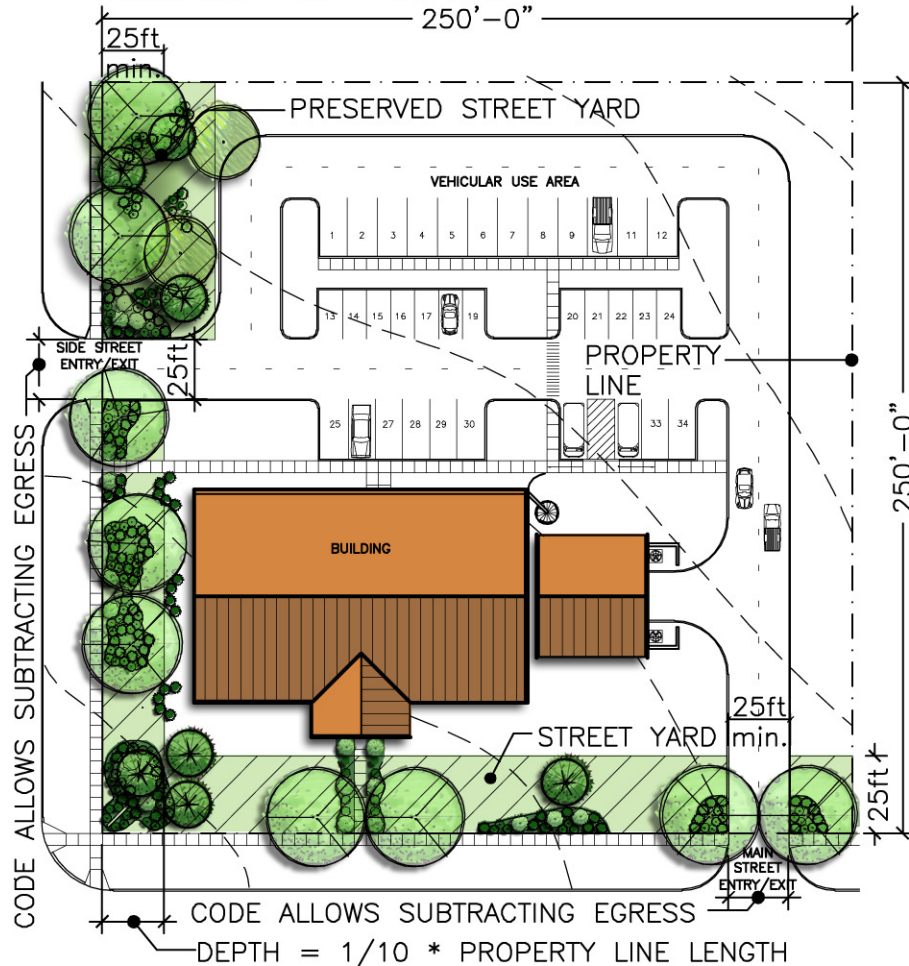


STREET TREE PLANTING AREAS





LENGTH: $250 + 250 - 25 - 25 = 450\text{LF}$
 WIDTH: $250 \div 10 = 25\text{FT}$
 AREA: $450 * 25 = 11,250\text{SF}$

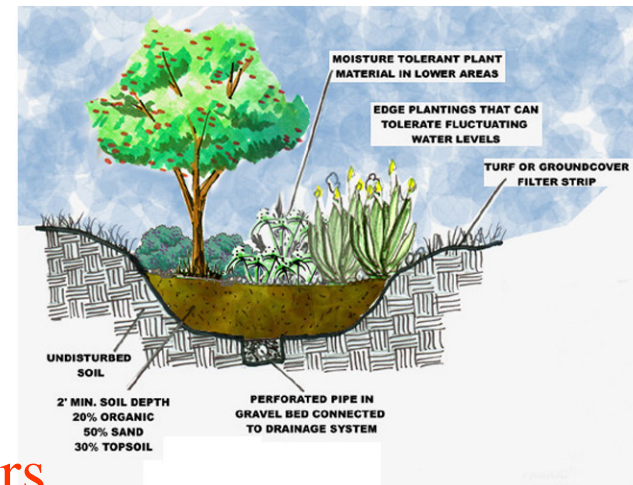


TREES: $\text{LENGTH} \div 50 = 9 \text{ CLASS A}$
 SHRUBS: $\text{LENGTH} \div 2 = 225 \text{ SHRUBS}$
 GROUNDCOVER: $\text{LENGTH} \div 1 = 450 \text{ PLANTS}$

Street Yard Buffers

Street Yard Area: 11,250 sf

Typically, Street Yards are the landscape design component with the largest available area. Required planting help these areas to function as mini-buffers. While this helps to provide the minimum storm water management, several Best Management Practices will work here. Emphasis should be placed on reducing turf grass and draining storm water toward planting beds or detention areas.



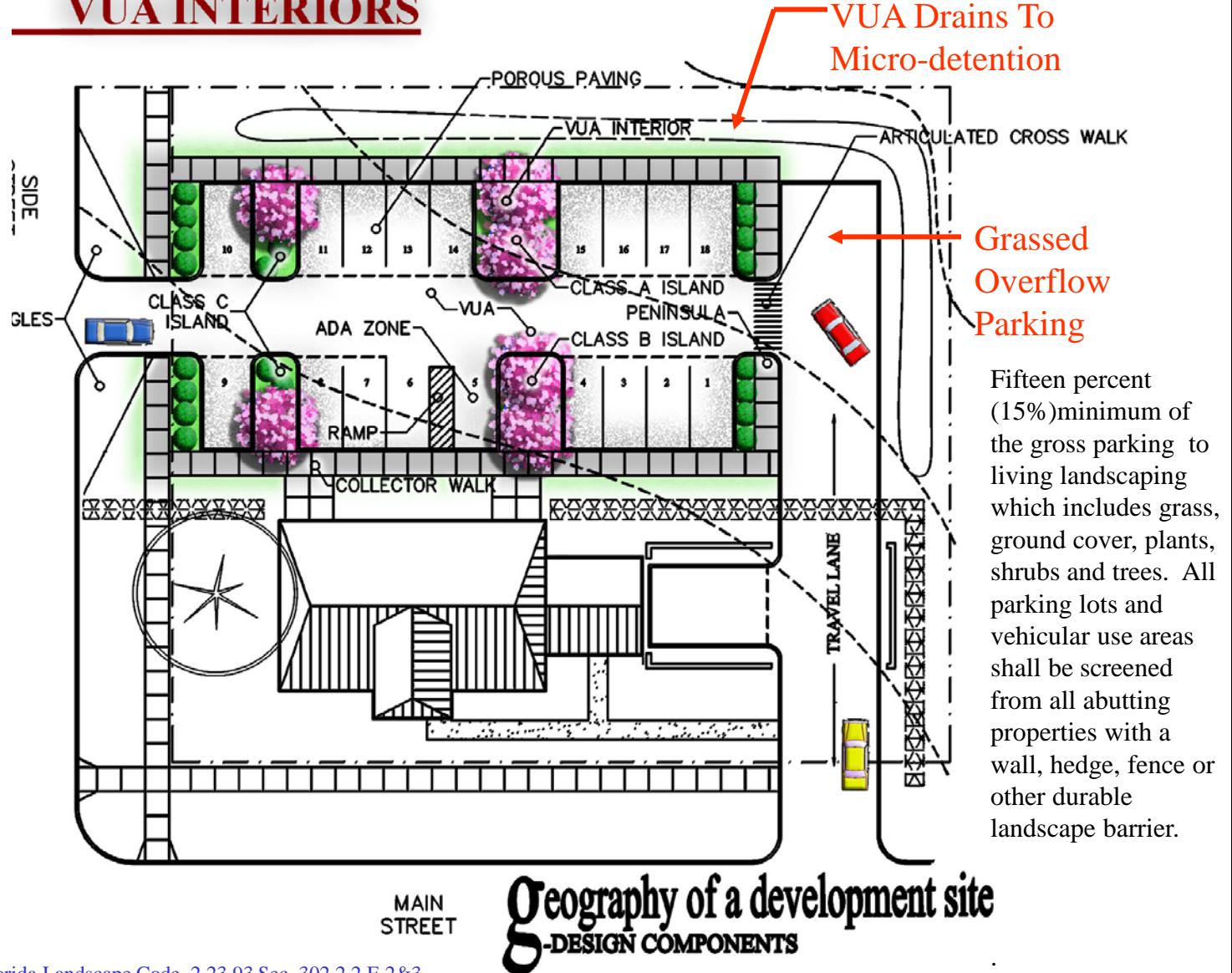


Design Standards-VUA Interiors

VUA INTERIORS

The vehicular use area interior standard is generally based upon a percentage of the parking lot size or number of parking slots.

Parking bays are defined as is the distance from parking slot to a shade tree



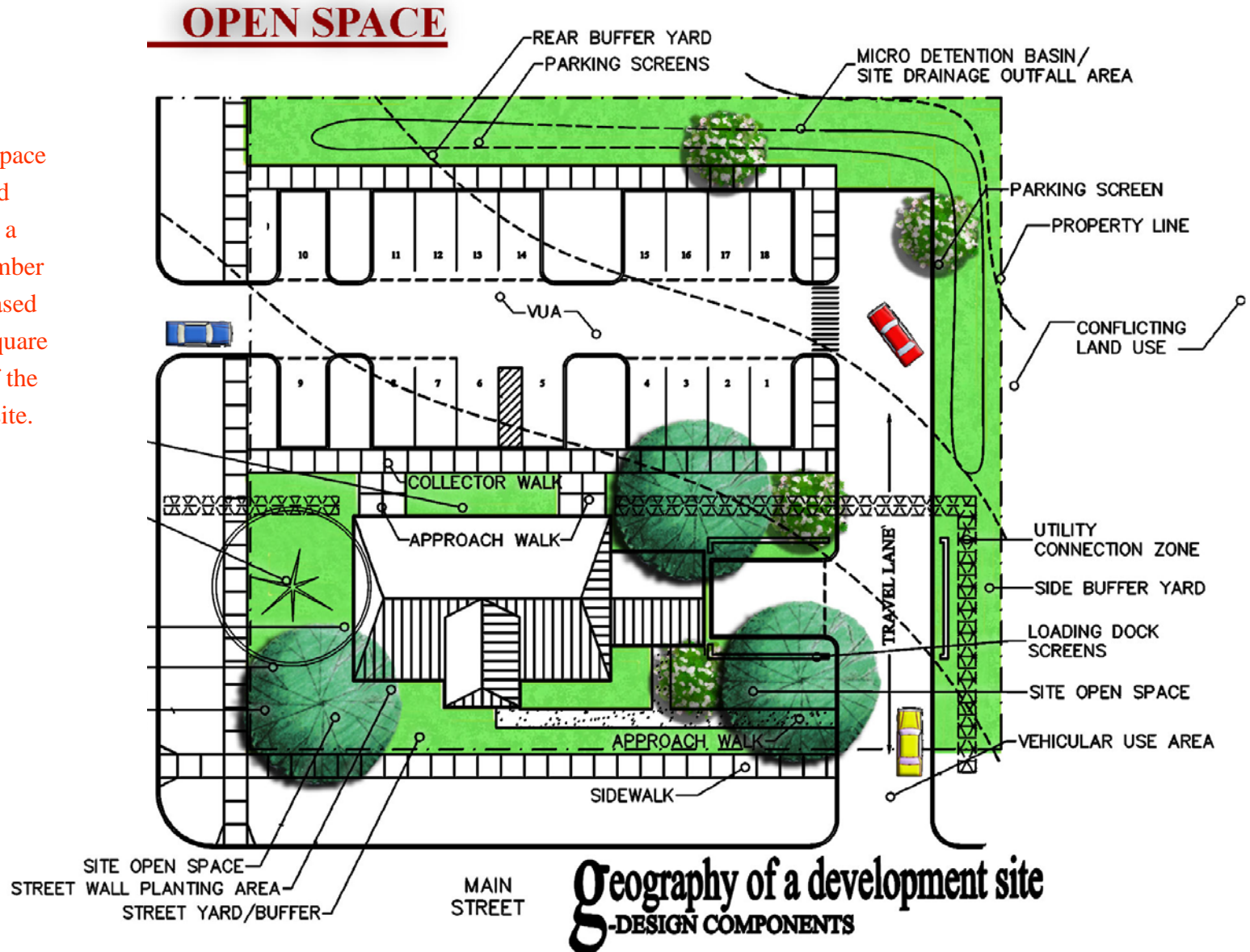






Design Standard-Minimum Canopy Cover- Open Space

The open space standard requires a certain number of trees based upon the square footage of the building site.





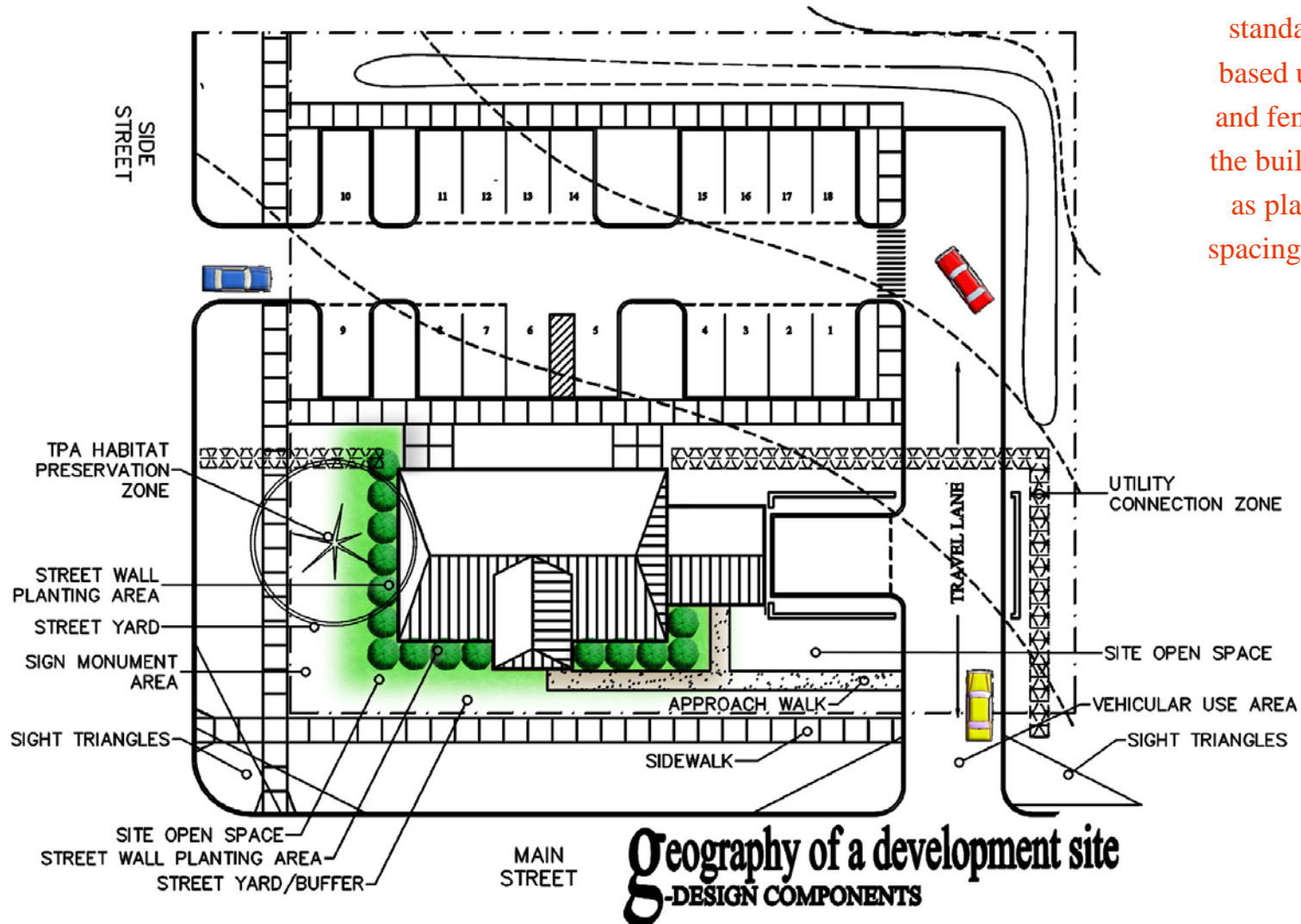




Design Standards-Street Wall Planting Area

STREET WALL PLANTING

The street wall standard is often based upon length and fenestration of the building as well as plant opacity, spacing, and height.

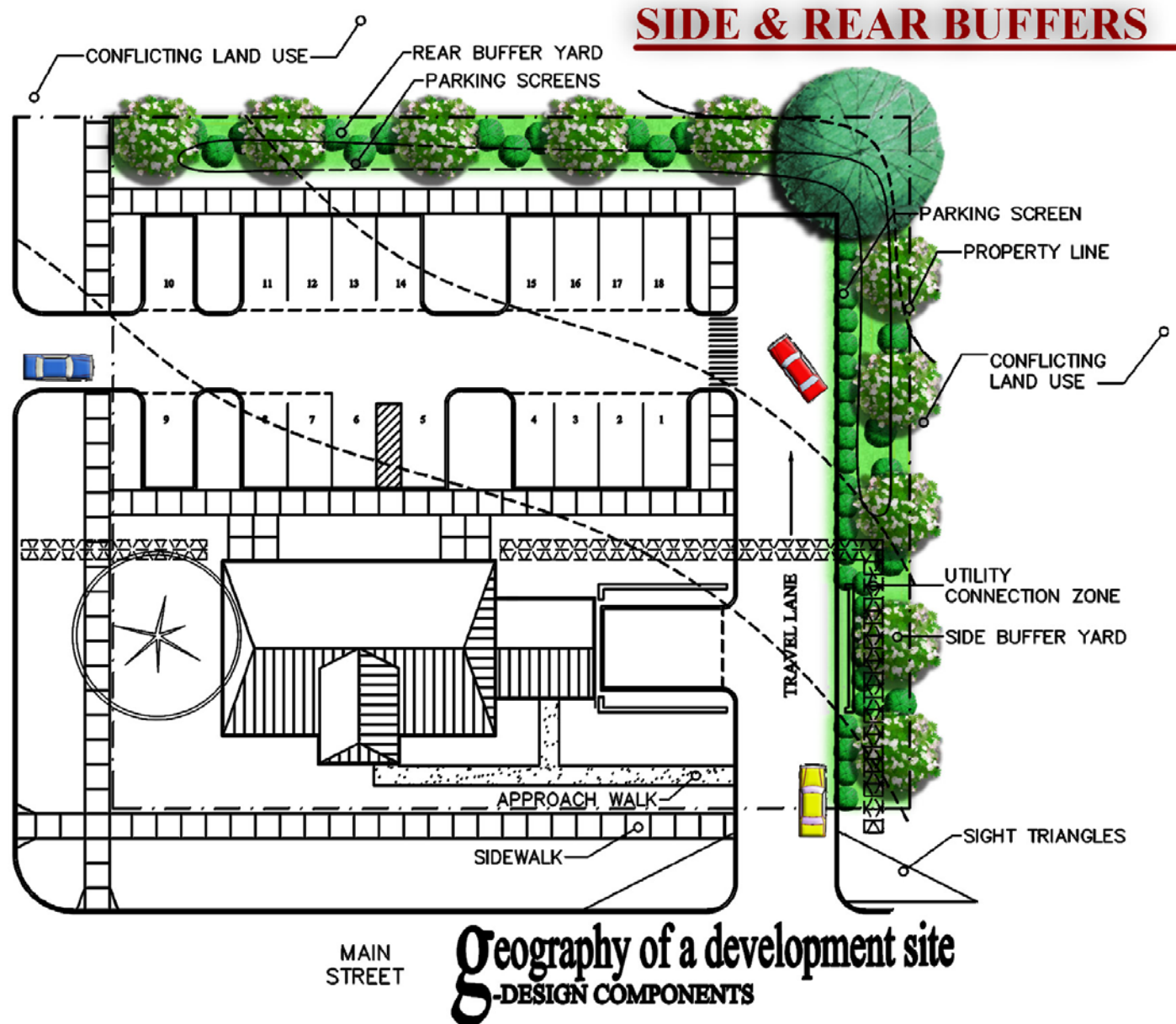




Design Standards-Buffers

The buffer yard design standard is often based upon a prescribed number of landscape plants for each 100 feet of buffer edge.

The width of the buffer is often a function of land use, lot depth or lot width.









Green
Laws

Secondary Business Elevation Drive Thru Service Area

New Code Directions
Emerging Green Law Issues

END OF PART 1

Graduate Class Next Section

New Code Directions

Emerging Green Law Issues

Sustainable Landscape Practices LBMPs

Land Clearing Controls

Habitat Preservation and Tree Protection

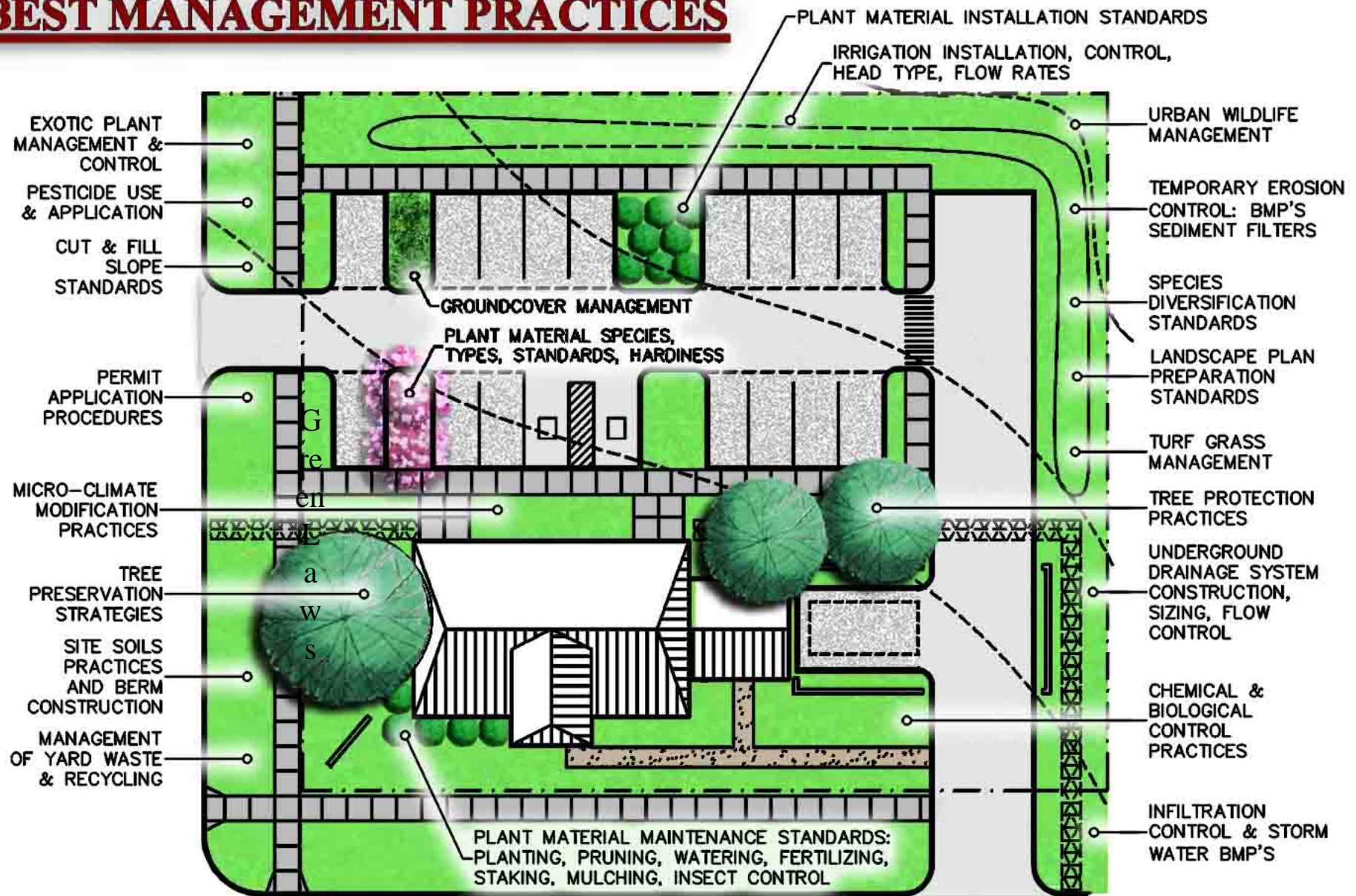
Minimum Tree Canopy Coverage %

Green Parking Design

Xeriscape and Water Conservation

On-site Storm Water Management

BEST MANAGEMENT PRACTICES

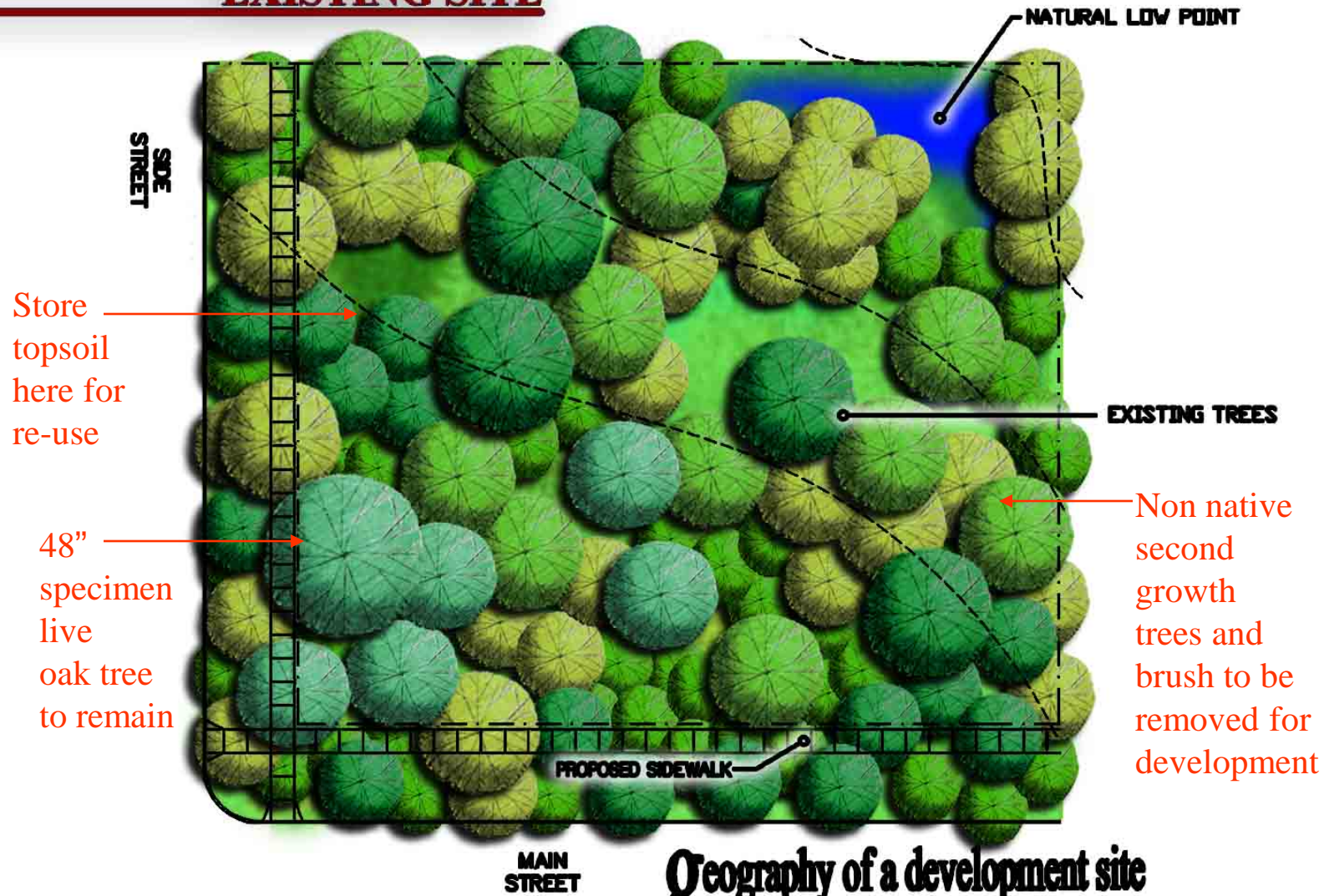


Sustainable Landscape Design
LEED, ASLA SITES

Geography of a development site
LANDSCAPE BEST MANAGEMENT PRACTICES

Land Clearing & Tree Removal

EXISTING SITE



Geography of a development site
DESIGN COMPONENTS

Design Standards-Selective Clearing

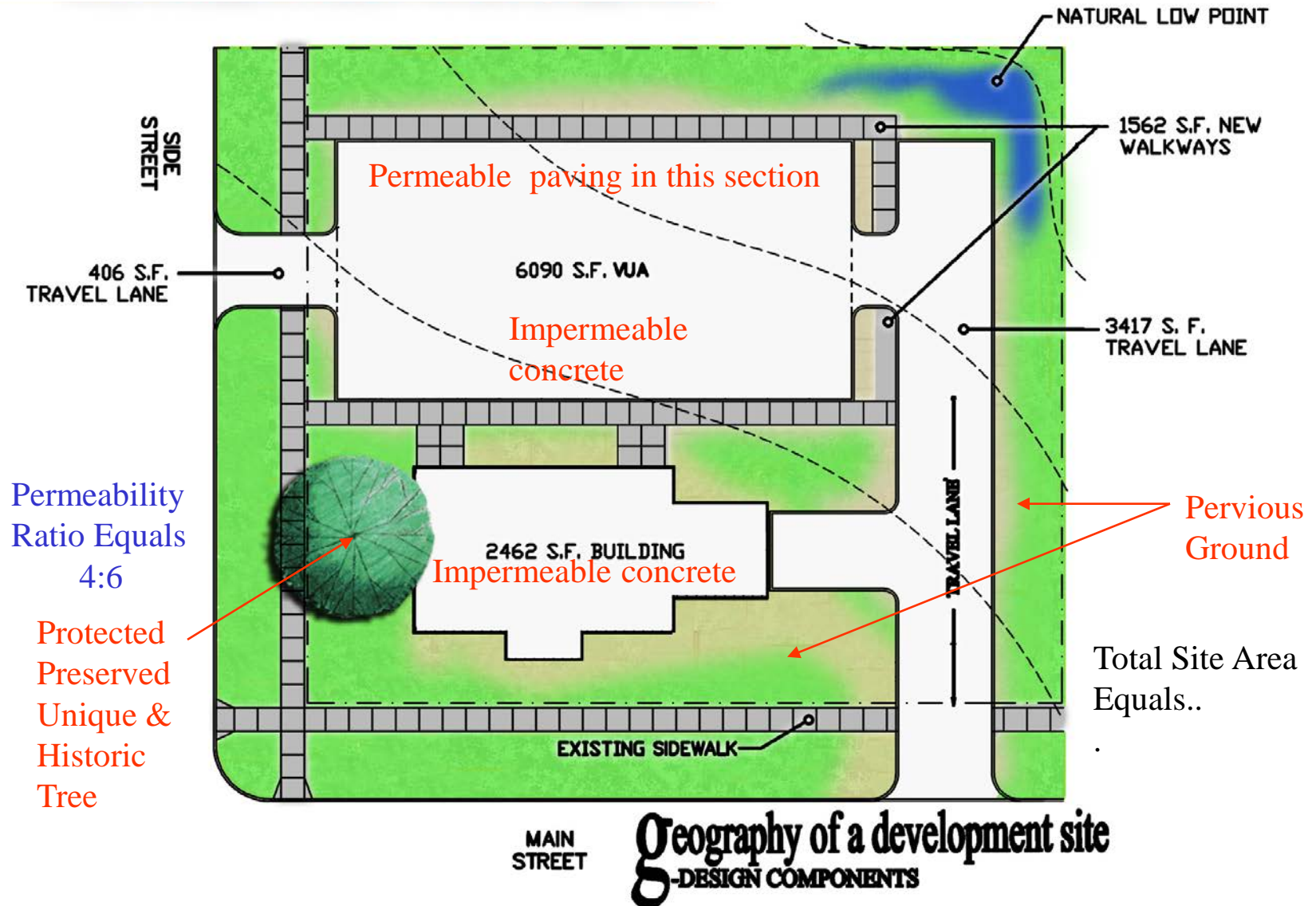
SELECTIVE CLEARING



Design Standards-Envelope Clearing



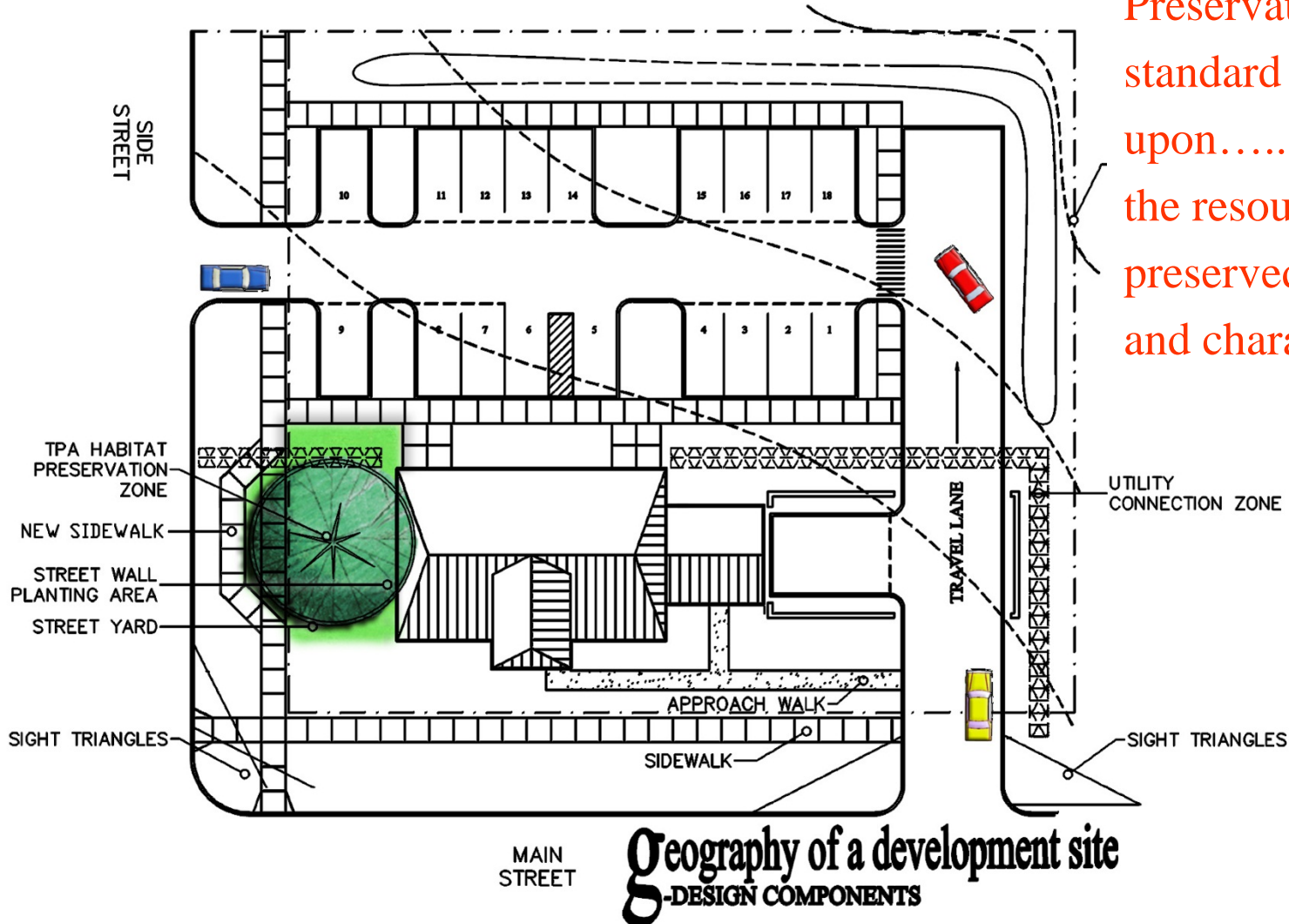
Construction Foot Print-Permeability



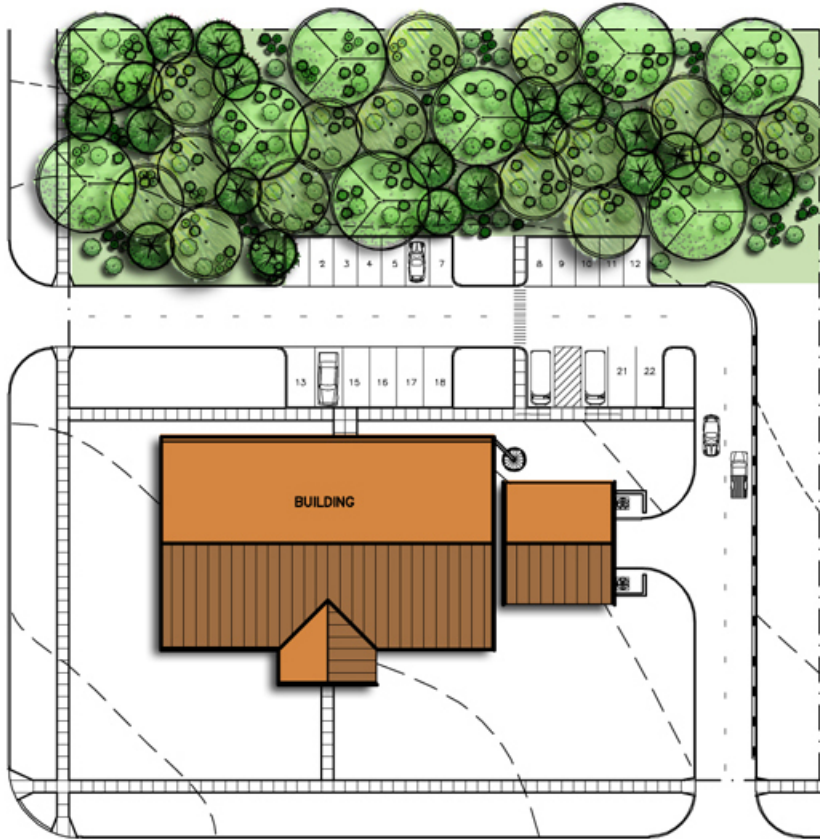
Design Standards-HPZ

HABITAT PRESERVATION ZONE

The habitat Preservation zones standard is based upon.....
the resource to be preserved, its size and character.



Tree Protection Areas (TPA)



One of the most effective methods for controlling storm water is probably the most overlooked. Delineating area for conservation helps to preserve existing hydrologic cycles, ecosystems and reduces construction costs. Municipalities that require planted buffers and tree preservation facilitate landscape design and storm water management objectives.

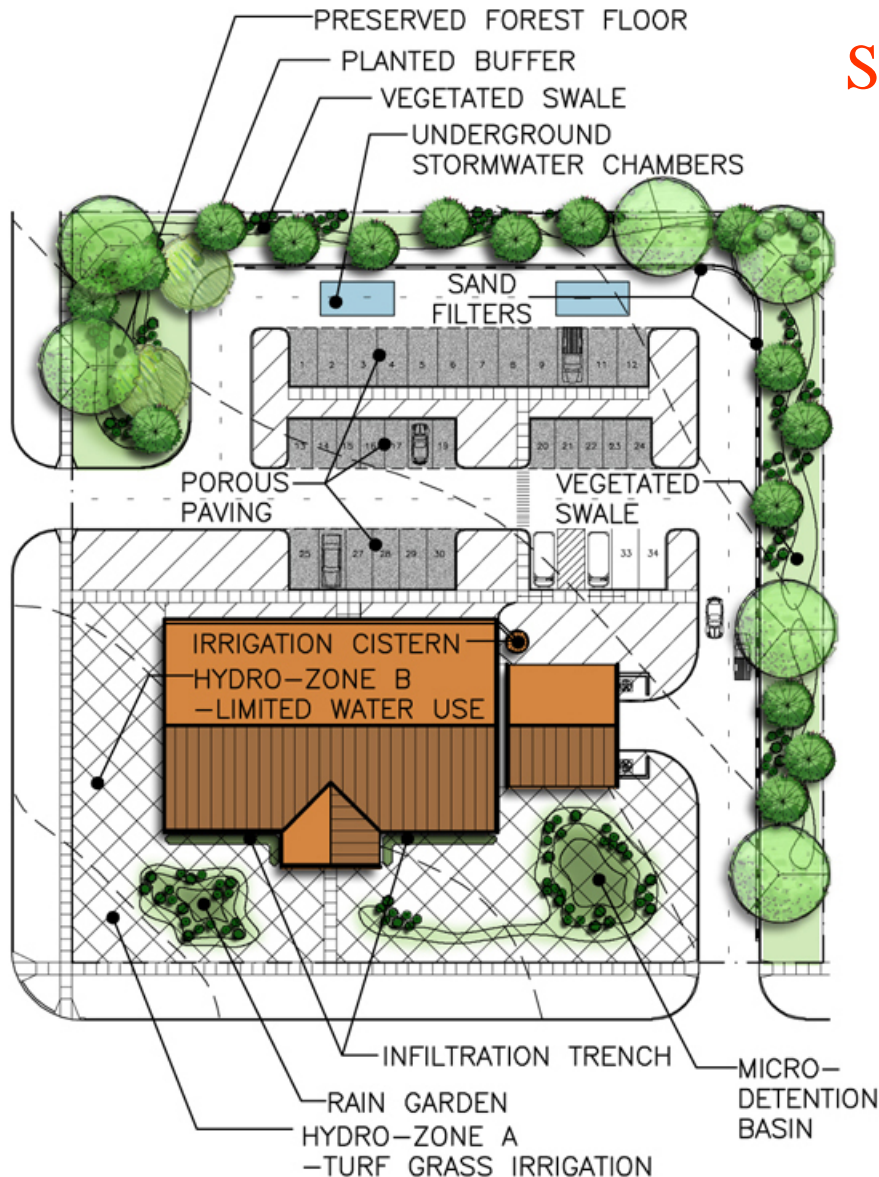


MICRO-DETENTION BASIN

The concepts of capturing, filtering, cleaning, percolation and reduction of the amount of run off.



Water Conservation & Stormwater Capture Zones



Each and every landscape design component can be designed as a functioning stormwater facility. With a permeability ratio of 48%, sufficient area to control storm water on site exists. However, storm water events in Louisiana prevent all stormwater to be controlled on site. Storm water goals prioritize containing the first inch and a half, which is the most toxic.



Preserved Wet Pond



Constructed Wetland



Constructed Detention Pond



Roadway Detention



Grassed Open Space Infiltration Area



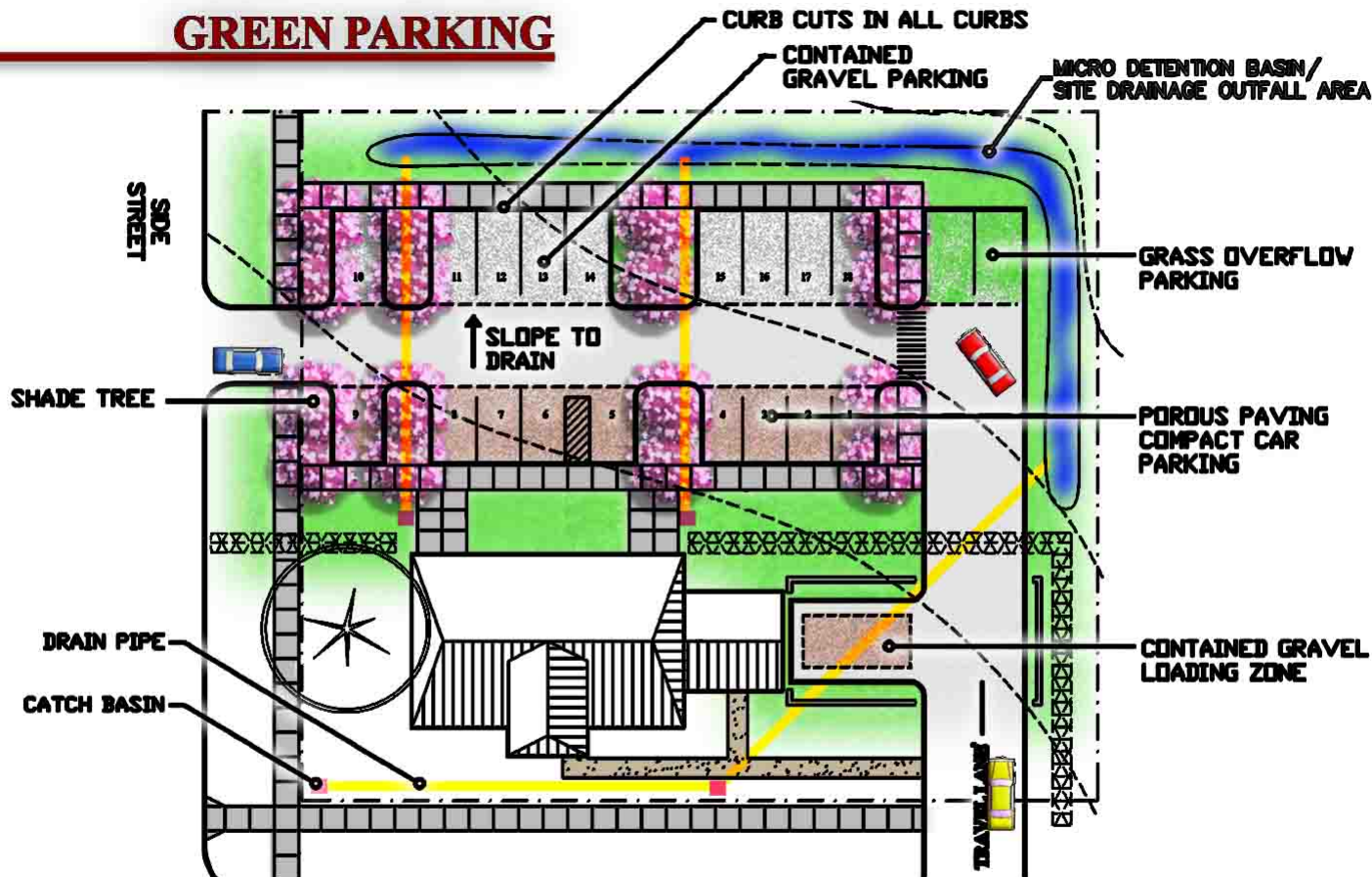
Grassed Swales



Parking Lot Detention

Design Standards-Green Parking

GREEN PARKING

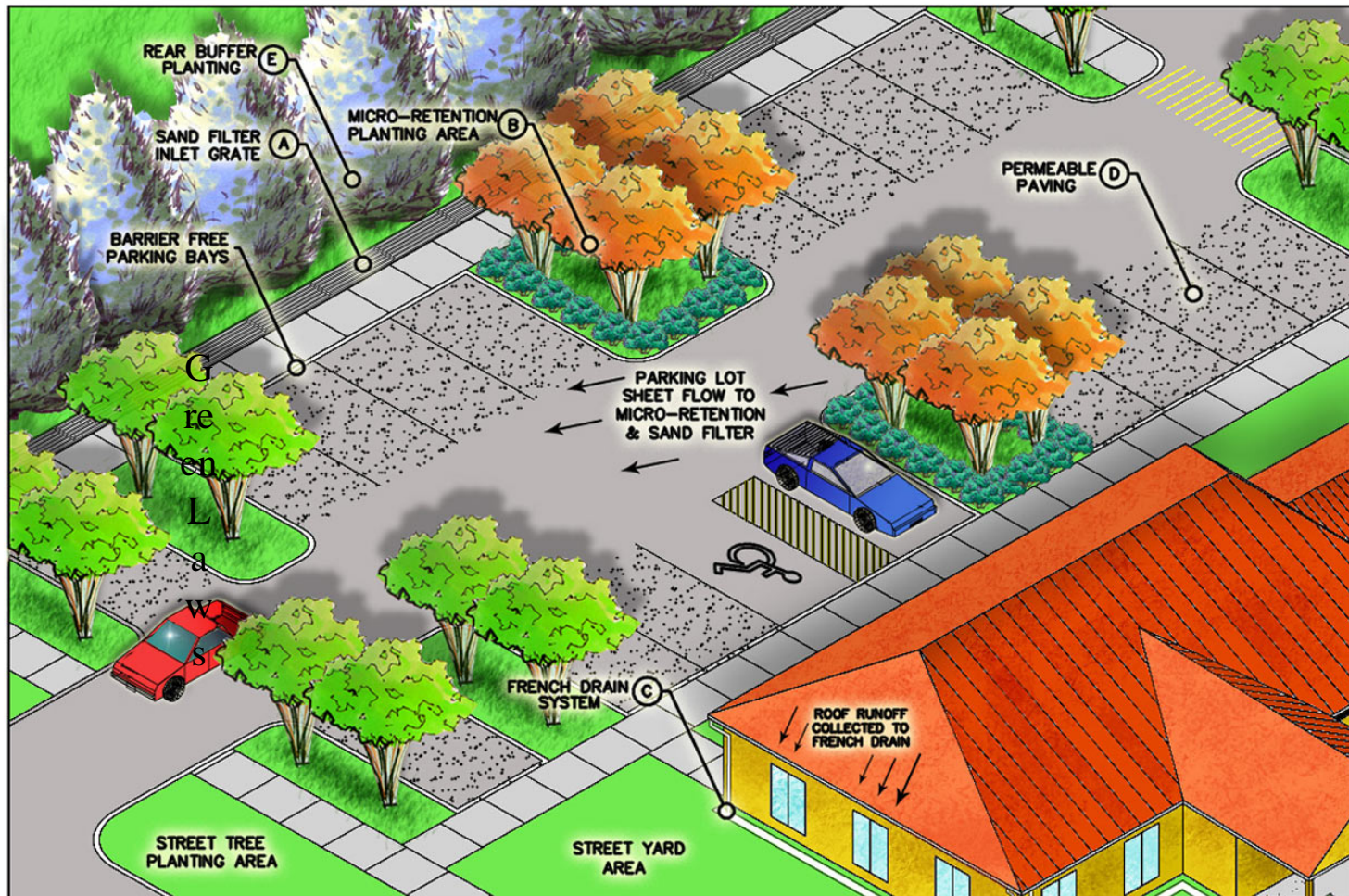


Green parking is based upon designing parking lots that do environmental work so as to be healthy, energy conserving, and low in Environmental impact and sustainable

Elements Of Green Parking

Car Sorting, Porous Paving, Stormwater Detention, Tree Plantings, Shade Production, Multi-use esp Active Recreation, Food Production
Energy Use Reduction-Solar Collection, Air Cleansing

VEHICULAR USE AREA

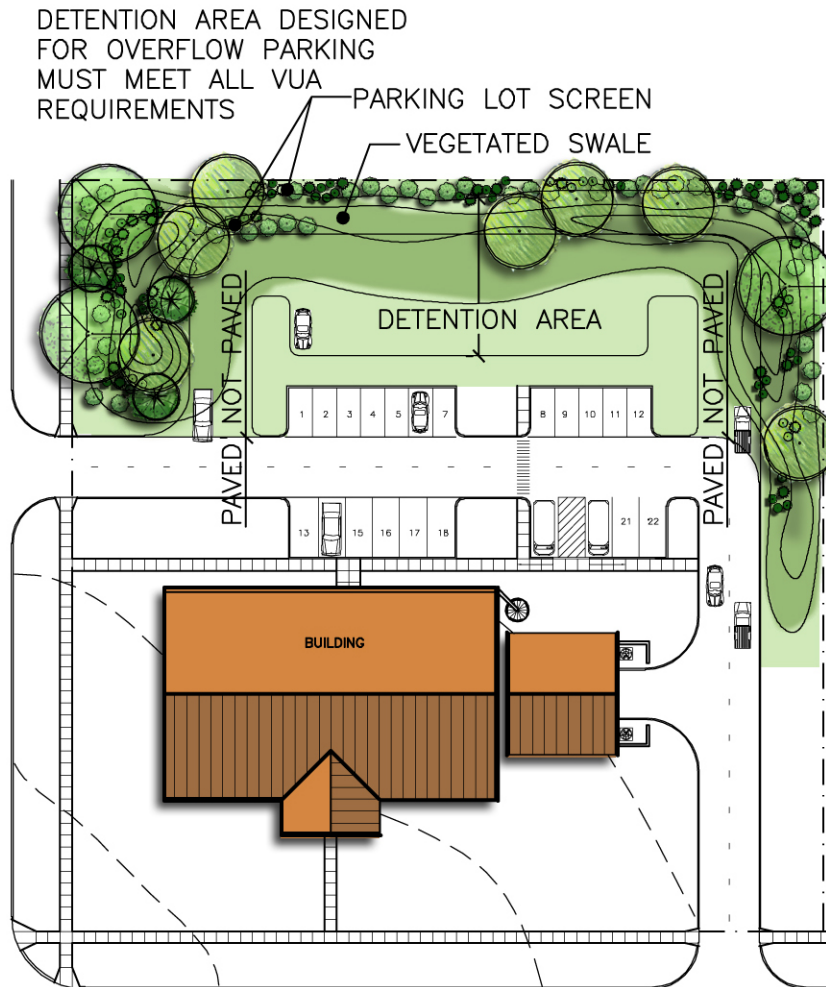


Geography of a development site
-DESIGN COMPONENTS

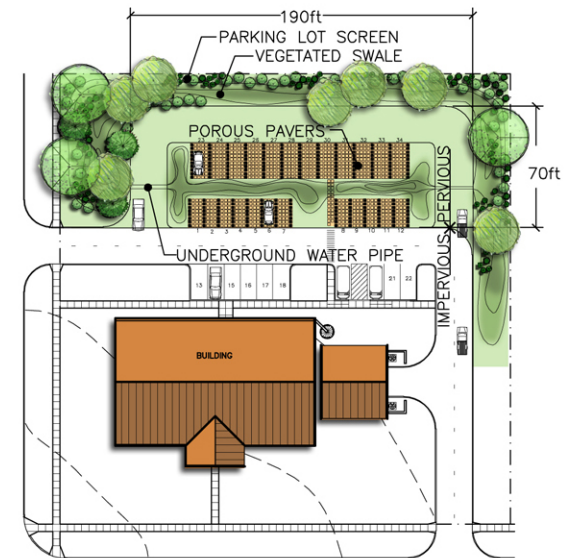
Green
Laws



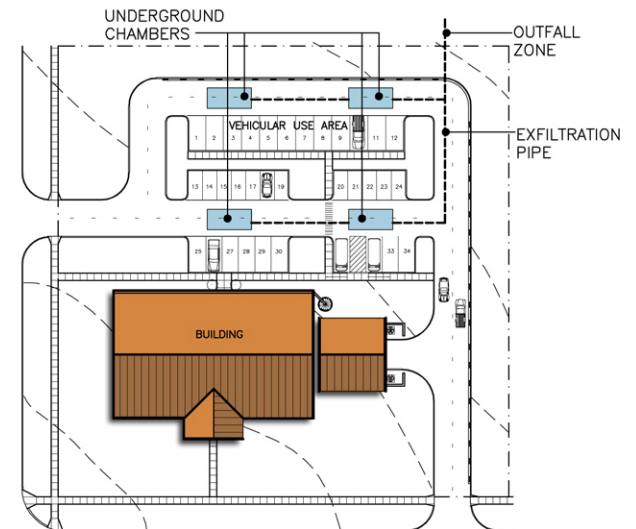
Non-Structural Detention



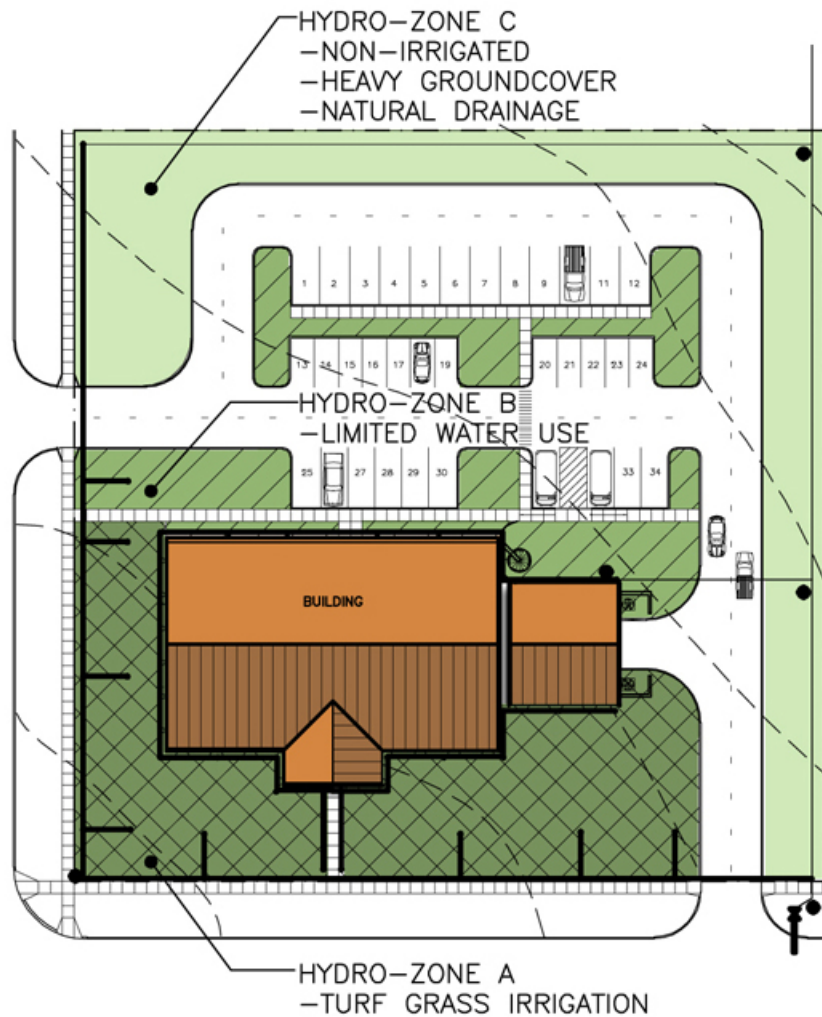
Structural Detention



Structural Capture



Vehicular Use Area Detentions



Total Landscaped Area: 29,850 sf

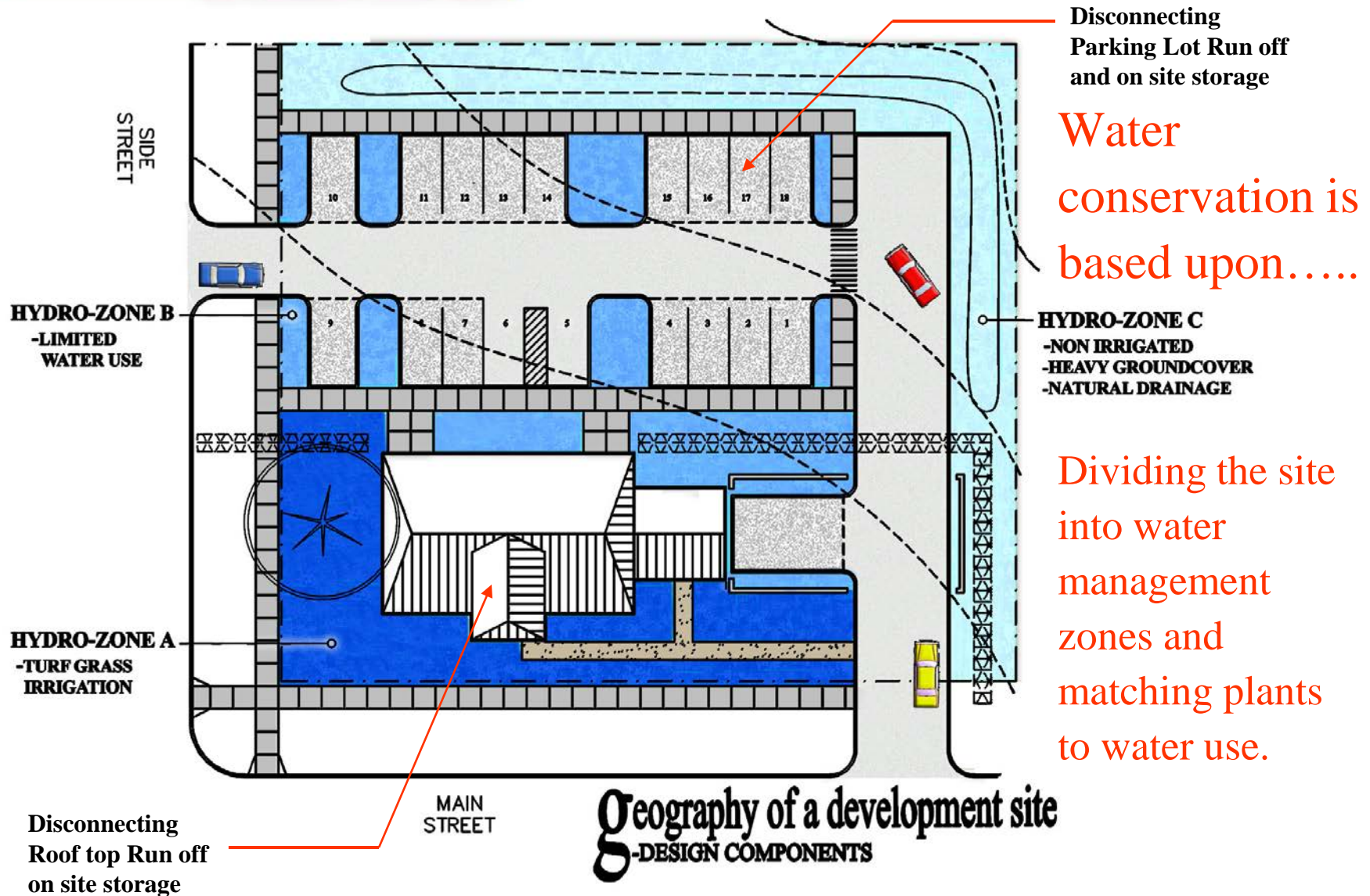
Municipalities across the United States have adopted irrigation standards to reduce or eliminate the volume of potable water utilized to water landscape areas. Designs that include plant zones, topography sloped toward landscape beds and conservation areas utilize natural storm water events as opposed to installed irrigation systems.

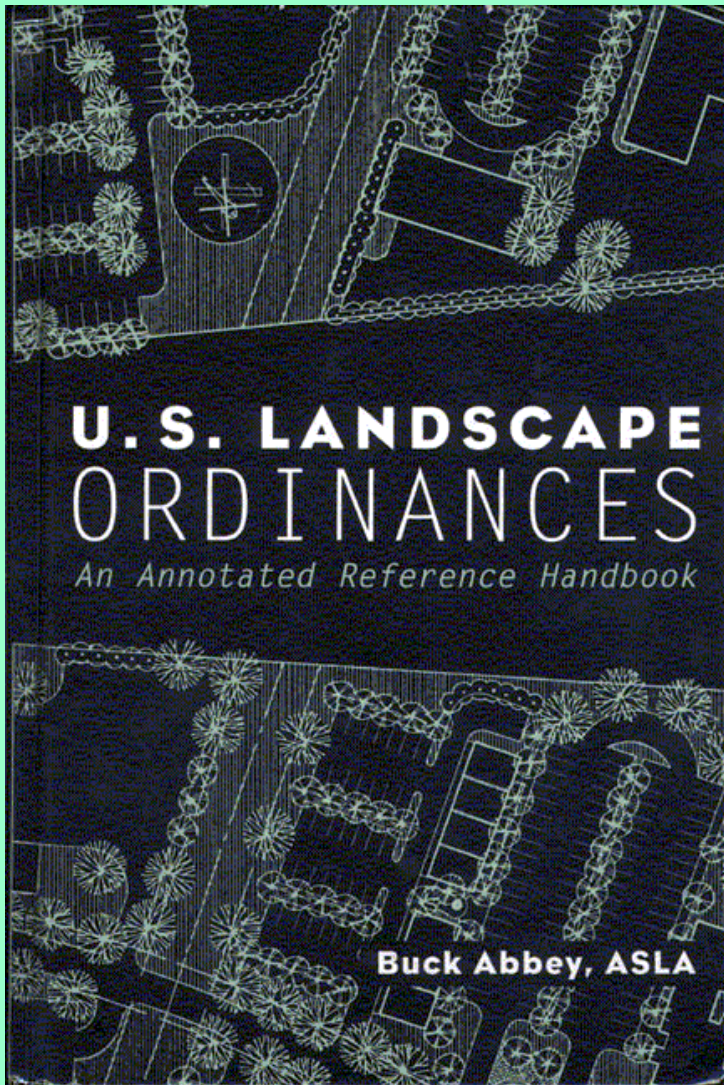
Irrigation Hydrozones



Design Standards-Xeriscape ^(TM)

HYDRO-ZONES





Appreciation is expressed
to John Wiley & Sons, Inc,
Publishers, New York,
for citing ideas and
concepts from their book
U.S. Landscape Ordinances

U.S. Landscape Ordinances

Credits



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For a free copy of this program contact

Louisiana Department of Agriculture & Forestry
P.O.Box 1628
Baton Rouge, LA 70821-1628
225.925.4500

**For additional information Contact the
research program at 225.578.1434 or
visit the web site at
www.greenlaws.lsu.edu**

Production Staff

PROJECT DIRECTOR-

Prof. D.G.Abbey, ASLA
Louisiana State University

CONSULTANT-

Prof. Sissi Foster
Michigan State University

PRODUCER-

Louisiana Department of
Agriculture And Forestry

DIGITAL PRODUCTION-

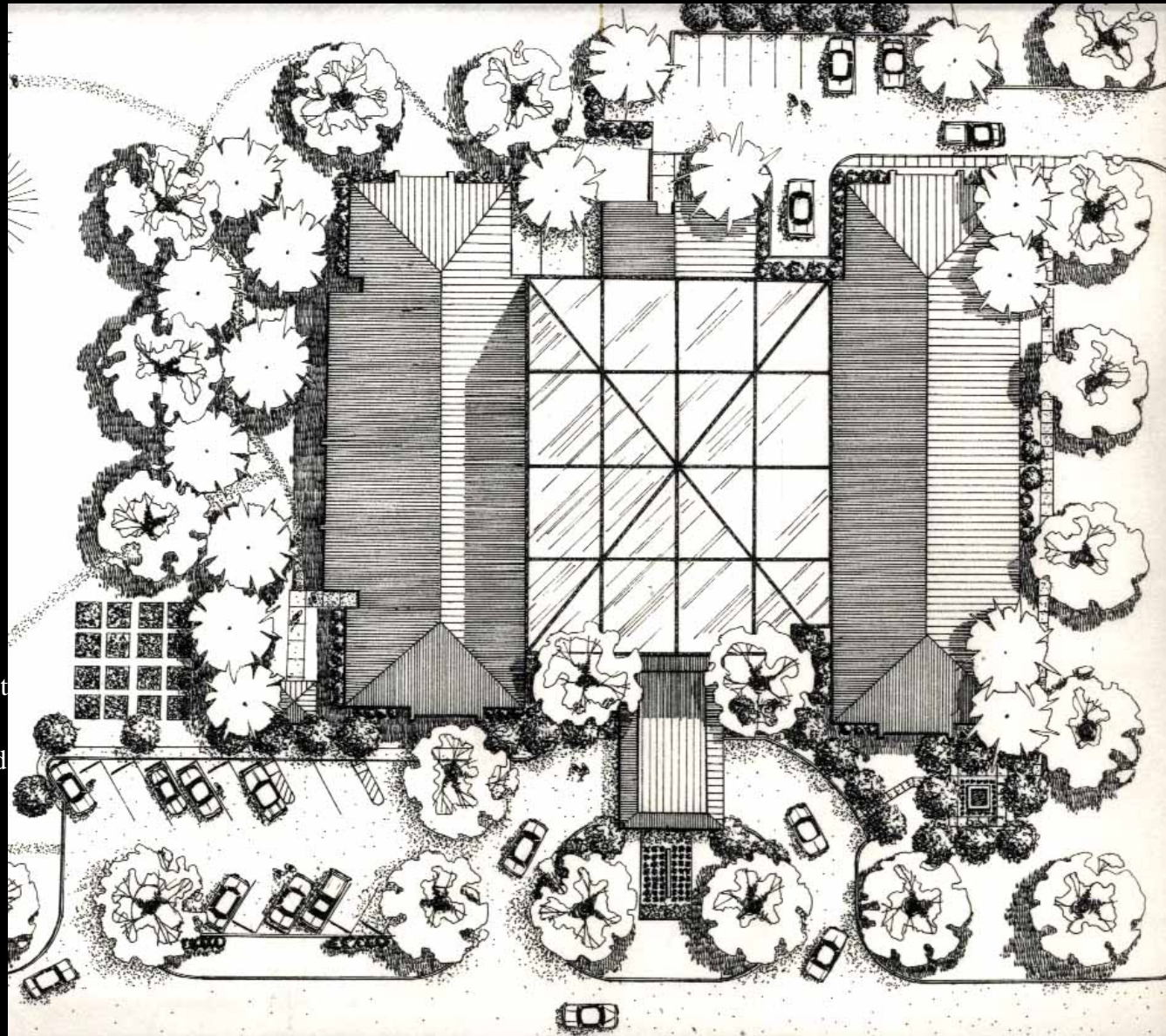
Dan Farrah
Joe Labbe'

GRAPHIC ASSISTANTS-

Matt Faust
Courtney Bush
Kay Orlando Ourso

SPECIAL ASSISTANCE-

Collier County Florida Planning Department
Abbey Associates Landscape Architects
Members of the LCodeLSU Advisory Board
City of Baton Rouge, Louisiana
Tree & Landscape Commission
Southlake Texas Planning Department
City of Mandeville, Louisiana



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Drawing By Kay Orlando Ourso Landscape Architect

Abbey Associates, Inc. Landscape Architects - The Architecture Group Baton Rouge, Louisiana



Beau Louisiana