

LANDSCAPE & REFORESTATION

A. Front & Rear Yard Tree Requirements

1. A minimum of three 3" caliper native trees (existing, new or a combination) are required for the front yard of all lots.
2. A minimum of three 2-1/2" caliper native trees (existing, new or a combination) are required in rear yards on lots that back to public venues (i.e., lakes, parks, etc.)
3. A minimum of two 2-1/2" caliper native trees (existing, new or a combination) are required in rear yards on corner, interior and entry lots.

B. Refer to Exhibit "D" ("Reforestation Criteria for Residential Home Sites") for reforestation guidelines and requirements.

C. Substantial stands of natural vegetation may exist on some lots. This vegetation (understory, mid growth and canopy) is to be protected during construction and is to be integrated into the final landscape treatment to the maximum extent practical. At least 40% of the front yard (and side yard of corner lots) must be preserved/restored in a natural wooded setting, including mulched/barked beds. See attached Exhibit "D" ("Reforestation Criteria for Residential Home Sites") and Exhibit "C" ("Side Screening Planter Bed on Corner Lots").

D. Substantial stands of natural vegetation are non-existent or have been removed from most lots. This vegetation (understory, mid growth and canopy) must be installed by the Buyer and is to be integrated into the final landscape treatment. At least 40% of the front yard (and side yard of corner lots) must be preserved/restored in a natural wooded setting, including mulched/barked beds. See attached Exhibit "D" ("Reforestation Criteria for Residential Home Sites") and Exhibit "C" ("Side Screening Planter Bed on Corner Lots").

E. Front Yard Planter Bed Population – Minimum Requirements:

1. Refer to attached Exhibit "D" ("Reforestation Criteria for Residential Home Sites").
2. For every 25 square feet of planter bed, Buyer must install at least one 5-gallon shrub or three 1-gallon shrubs. Ground cover such as Asian Jasmine, Foxtail Fern, Variegated Flax Lily, Society Garlic, Lantana, etc. can be used, but will not be calculated as part of this requirement.
3. When installed, 5-gallon shrubs must be no shorter than 24 inches.
4. When installed, 1-gallon shrubs must be no shorter than 12 inches.
5. To create a natural appearance, vegetation cannot be planted in rows.
6. No area of any planter bed can have more than 16 square feet of bare area.
7. Trees that are required in the front yard do not supplement the required number of shrubs and should not be counted as part of the required number of shrubs.
8. Vegetation cannot be split/torn into multiple pieces. If a shrub and/or other vegetation item are split/torn into pieces to plant in multiple areas, those plants will not be counted

towards meeting the landscape requirements and their replacement may be requested at Final Inspection.

9. All shrubs must be full, fast growing, hardy and drought resistant.

F. Side Screening Planter Bed on Corner Lots – Minimum Requirements:

1. Refer to attached Exhibit “C” (“Side Screening Planter Bed on Corner Lots”).
2. Buyer must install a natural-appearing, continuous mulched planter bed the entire length of the side fence.
3. The planter bed must be installed beginning at the side fence line out five feet towards the street and should be populated with a continuous variety of shrubs of different sizes, heights and types.
4. The continuous side screening bed may only be separated in cases when its presence would create a lot drainage issue. In this case, a small break in the continuous bed may be made to install a small drainage swale. Bull rock may be used in this swale, but it may not pass beyond the edge of the mulch bed.
5. Shrubs must be at least 5 gallons each and, when installed, be no shorter than 24 inches or 1/3 the height of the side fence to be screened, whichever is greater. Ground cover such as Asian Jasmine, Foxtail Fern, Variegated Flax Lily, Society Garlic, Lantana, etc. can be used, but will not be calculated as part of this requirement.
6. Tree installation is optional, but recommended, and does not replace the need for continuous shrubs.
7. All shrubs installed in the side screening bed must be staggered to further give a natural appearance and may be spaced no greater than 4 feet from center to center.
8. Vegetation cannot be split/torn into multiple pieces. If a shrub and/or other vegetation item are split/torn into pieces to plant in multiple areas, those plants will not be counted towards meeting the landscape requirements and their replacement may be requested at Final Inspection.
9. The Buyer must also install irrigation for all side screening.
10. All shrubs must be full, fast growing, hardy and drought resistant.

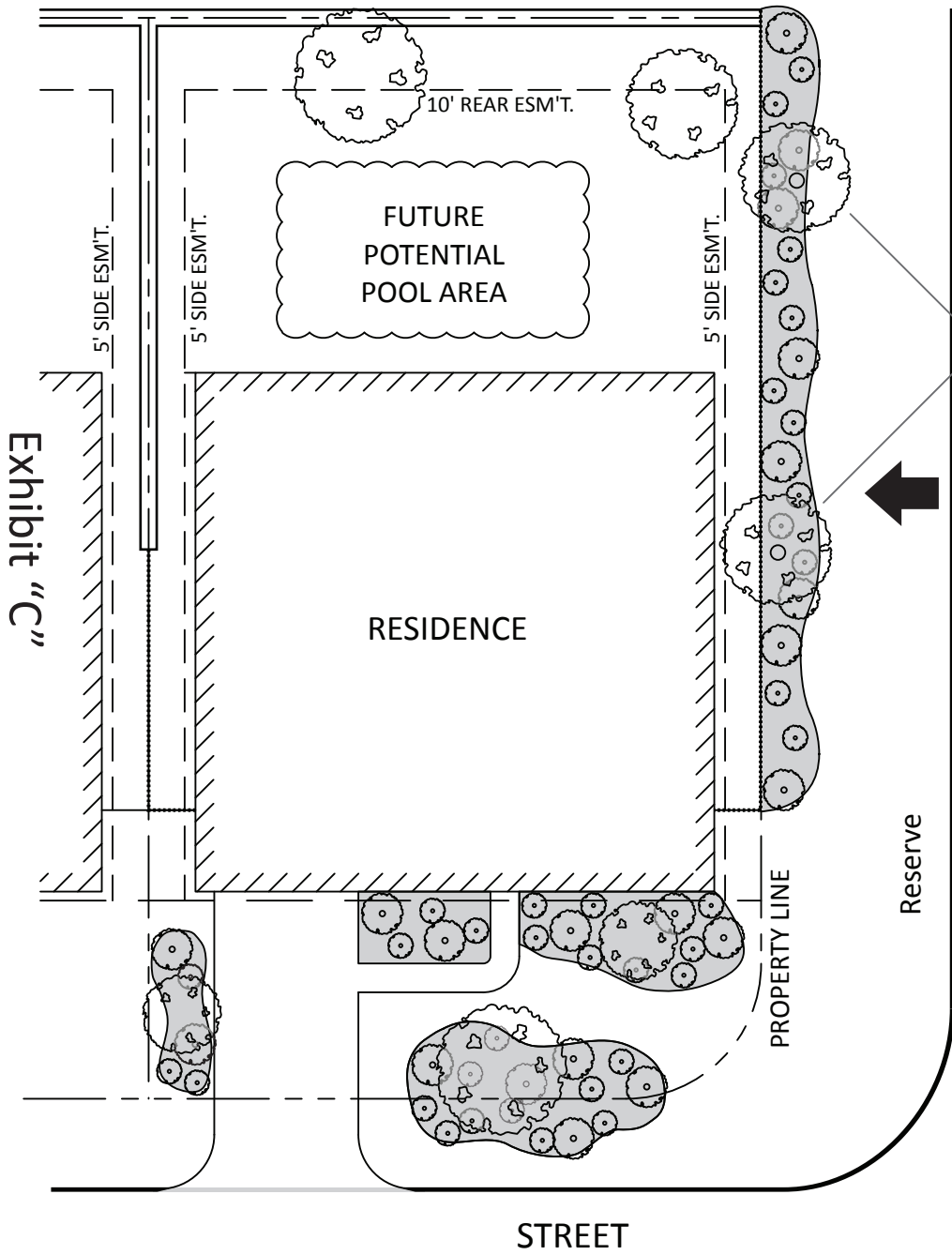
G. Any clearing five feet beyond the building pad or three feet beyond the driveway requires the written approval of the Committee. Temporary fencing is to be furnished and installed by the Buyer immediately after clearing but prior to beginning form work for the slab, in order to protect easily damaged vegetation.

H. The natural vegetation must be restored with appropriate landscaping so as to present a completed appearance which should include sodding, seeding, pine bark or planting to cover bare or erosion prone areas.

I. In keeping with The Woodlands concept of preservation of the natural forest environment, native plant material should be utilized for all landscape efforts. Suggested plant lists are found on Page 3 of “Exhibit “D” (“Reforestation Criteria for Residential Home Sites”).

- J. All A/C and pool equipment must be screened with vegetation so as not to be visible from the street.
1. INTERIOR LOTS: Buyer must install at least one (1) native shrub at the front of the A/C Unit and/or Pool Equipment. The shrub must be at least half the height of the tallest unit it is screening and must be full, fast growing, hardy and drought resistant. Vegetation cannot be split/torn into multiple pieces. If a shrub and/or other vegetation item are split/torn into pieces to plant in multiple areas, those plants will not be counted towards meeting the landscape requirements and their replacement may be requested at Final Inspection.
 2. CORNER LOTS: Buyer must install at least one (1) native shrub at the front of the A/C Unit and/or Pool Equipment. One additional shrub must be installed on the street-facing side of each A/C Unit. Pool Equipment, depending on the size of the cluster, may require the installation of additional shrubs to create adequate side screening. All shrubs must be at least half the height of the tallest unit it is screening and must be full, fast growing, hardy and drought resistant.
- K. Buyer is required to complete the front, rear and side lot final landscape treatment prior to the Committee final inspection and home occupancy. The installation of a landscape irrigation system for all newly landscaped areas is required, including front, side and rear property. No area of any lot (front, side or rear) shall be left unlandscaped or bare.
- L. The Restricted Open Space Reserves (ROSR) are to remain intact and no construction, clearing, or other access through such areas is permitted.
- M. Erosion silt fencing is required on all construction sites prior to beginning form work for slab, and shall be maintained throughout the period of home construction.

SIDE SCREENING PLANTER BED ON CORNER LOTS CORNER LOT (WITH SIDE RESERVE)



Elevation A
Side Screening at Fence

Trees are required in side screening planter bed.

See Elevation A (above).

The Woodlands Land Development Company	
Date: 4/29/13	

Landscape in this exhibit may not be to scale and is intended for example use only.

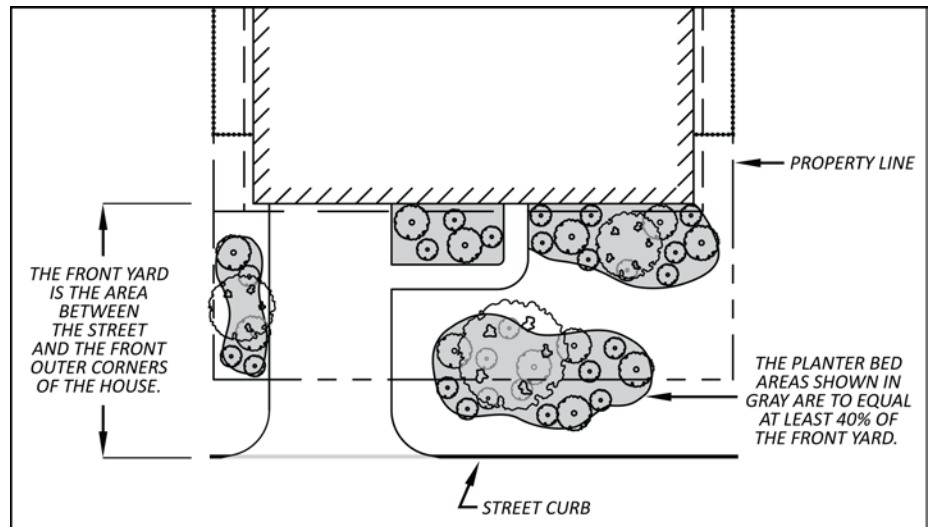
REFORESTATION CRITERIA FOR RESIDENTIAL HOME SITES

REFORESTATION ZONES

It is a requirement that all builders include a reforestation zone on each lot. This is a native forest area containing existing trees, shrubs, understory plants, and seedlings or it may be a forest "rebuilt" with at least a minimum density of native plants. Typical reforestation zones will include both conditions and must be located in the front yard (the area of the lot between the front façade of the house and the street). On a corner lot, the area between the side street and the side building setback line or fence is evaluated separately and must also meet these reforestation criteria.

PRESERVING & REPLANTING

Substantial stands of natural vegetation exist on most lots. In the front yard area, this vegetation including the undisturbed forest floor, understory plants, and canopy trees must be protected during construction and is to be integrated into the landscape treatment to the maximum extent practical. At least **40%** of the front yard must be preserved or replanted in a natural wooded setting.



LAWN GRASS

This natural vegetation must be supplemented with appropriate landscaping so as to present a completed appearance which should include sodding, pine bark or pine straw to cover bare or erosion prone areas. The total area covered by lawn grass and hard surface paving must not be more than **60%** of the front yard area. Preferred types of lawn grasses are St. Augustine, Zoysia and Bermuda. No metal, plastic or wood edging around planter beds or borders between yards are allowed.

NATIVE PLANTS

Native plants in this context are plants that are indigenous to the Piney Woods of the southeastern United States.

In keeping with The Woodlands concept of preservation of the natural forest environment, native plants should be utilized for the majority of all landscape efforts. A list of approved **Native Canopy Trees** and a list of **Native Shrubs and Ornamental Plants** are provided. No less than **50%** of the species of trees and shrubs planted in the front yard, foundation plantings included in the aggregate, must be selected from these lists.

Groundcover in this context is a grouping of plants that are less than 18" high with spacing not greater than 18" center to center. There are no restrictions on the species selection or location of plants used as groundcover. Neither native shrubs nor exotic, non-native shrubs used in this way as groundcover are included in the final evaluation to determine if the "50% native" requirement has been met.

CANOPY TREE PLANTING DENSITY

Some areas of the reforestation zone may be treeless or contain only trees that are six feet or less in height. In these areas, an average density of at least one 45 gallon-size or larger canopy tree, 3" caliper (measured at 2' above natural grade), machine planted, selected from the **Native Canopy Trees** list. These trees must be planted per 150 square feet. Plants on the **Native Shrubs and Ornamental Plants** list may not be substituted for required canopy trees.

UNDERSTORY PLANTING DENSITY

Some areas of a reforestation zone may have no understory. In these areas, an average density of at least three 5 gallon-size or one 15 gallon-size shrub or ornamental plant selected from the **Native Shrubs and Ornamental Plants** list must be planted per 150 square feet. Smaller Native Canopy Trees may be substituted for required understory.

SPECIES SELECTION

Pines, Yaupon and Waxmyrtle, native evergreen trees and shrubs commonly found in the forest, must be included as part of a diverse reforestation planting. Evergreen reforestation planting should be included in areas where visual screening is required (e.g., where views of the driveway or garage dominate the landscape).

No less than **50%** of the aggregate of all trees and shrubs planted in the front yard (foundation plantings included) must be selected from the lists of **Native Canopy Trees** and **Native Shrubs & Ornamental Plants** on the following page. When evaluated for compliance with these criteria, the sizes of native plants selected must be equal to or greater than the sizes of any non-native species planted. For example, if six 48" high non-native shrubs such as Azaleas are planted anywhere in the front yard, then at least six 4' high or larger Yaupon, Waxmyrtle or other native understory shrubs must also be planted in the front yard. On certain lots, a builder may be required to plant a minimum number of trees that are 30 gallon-size or larger.

*Please see the lists of **Native Canopy Trees** and **Native Shrubs & Ornamental Plants** on the following page.*

WATER CONSERVATION & LOT DRAINAGE

Minimizing the size of lawn areas and the use of adapted native plants and mulches will reduce the water requirements of a landscape. A *water-wise* irrigation system for all newly planted areas is encouraged.

Providing acceptable lot drainage in a natural forested environment can be a challenge. The feeder roots of a tree often extend well beyond the overhead canopy of that tree. When adding soil over tree roots, more than a two-inch depth of fill may cause stress or even death to established trees. Using sharp sand in these situations rather than soils high in clay content will have less impact on the ability of feeder roots to absorb air and water.

All lots should have drainage to the street and/or to the rear property line as dictated by the topography of the lot. Each builder must provide a clearly defined drainage-way or swale, preferably along a side property line and directed to the front and/or to the back of the property. Lot re-grading, rain gutters, drainage swales, drainage pipes and other drainage modifications must not direct drainage onto any adjoining side lot.

APPROVED PLANT LIST

Listed by:

Common Name Scientific Name

NATIVE CANOPY TREES

(approved tree list; will count in determining "50% native" requirement)

Cypress, Bald.....	Taxodium distichum
Elm, Winged.....	Ulmus alata
Elm, Cedar.....	Ulmus crassifolia
Gum, Black.....	Nyssa sylvatica
Gum, Sweet.....	Liquidambar
Holly, American.....	Ilex opaca
Maple, Drummond Red.....	Acer rubrum
Maple, Southern Sugar.....	Acer barbatum
Magnolia, Southern.....	Magnolia grandiflora
Oak, Bur.....	Quercus macrocarpa
Oak, Live.....	Quercus virginiana
Oak, Nuttall.....	Quercus nuttallii
Oak, Shumard.....	Quercus shumardii
Oak, Water.....	Quercus nigra
Oak, White.....	Quercus alba
Pine, Slash.....	Pinus elliotii
Pine, Loblolly.....	Pinus taeda

SUGGESTED GROUNDCOVER

(will not count in determining "50% native" requirement)

Asian Jasmine.....	Trachelospermum asiaticum
Bulbine Lily.....	Bulbine bulbosa
Creeping Daisy.....	Sphagneticola trilobata
Dianella (Variegated Flax Lily).....	Dianella tasmanica 'Variegata'
Daylily, Evergreen.....	Hemerocallis spp.
Foxtail Fern.....	Asparagus densiflorus 'Myersii'
Lantana.....	Lantana montevidensis
Sandy-Leaf Fig Ivy.....	Ficus sp.
Society Garlic.....	Tulbaghia violacea
Ruellia, Katie Dwarf.....	Ruellia brittoniana 'Katie'
Verbena.....	Verbena spp.
Violet, Australian.....	Viola hederacea
Violet, Garden.....	Viola odorata

SUGGESTED ORNAMENTAL GRASSES

(will not count in determining "50% native" requirement)

Cassian Fountain Grass.....	Pennisetum alopecuroides 'Cassian'
Dwarf Maiden Grass.....	Miscanthus sinensis 'Yaku Jima'
Fountain Grass.....	Pennisetum alopecuroides
Maiden Grass.....	Miscanthus sinensis
Miscanthus, Adagio.....	Miscanthus sinensis 'Adagio'
Miscanthus, Morning Light.....	Miscanthus sinensis 'Morning Light'
Miscanthus, Sarabande.....	Miscanthus sinensis 'Sarabande'
Miscanthus, Silver Feather.....	Miscanthus sinensis 'Silberfeder'
Mondo Grass.....	Ophiopogon japonicus
Muhly, Gulf Coast.....	Muhlenbergia capillaris
Muhly, Lindheimer.....	Muhlenbergia lindheimeri
Porcupine Grass.....	Miscanthus sinensis var. strictus

NATIVE SHRUBS & ORNAMENTAL PLANTS

(will count in determining "50% native" requirement)

American Beautyberry.....	Callicarpa americana
Birch, River.....	Betula nigra
Buckeye, Red.....	Aesculus pavia
Buckthorn, Carolina.....	Rhamnus caroliniana
Buttonbush.....	Cephalanthus
Cherry-laurel, Carolina.....	Prunus caroliniana
Coralberry.....	Symphoricarpos
Crape Myrtle *.....	Lagerstroemia indica
Dogwood, Flowering.....	Cornus florida
Esperanza, Gold Star.....	Tecoma stans
Eve's Necklace.....	Sophora affinis
Fringe Tree.....	Chionanthus
Holly, Tall Ink-berry.....	Ilex coriacea
Holly, Possumhaw.....	Ilex decidua
Holly, Yaupon.....	Ilex vomitoria
Leatherwood (Titi).....	Cyrilla racemiflora
Loblolly-bay.....	Gordonia lasianthus
Magnolia, Sweetbay.....	Magnolia virginiana
Maple, Chalk.....	Acer leucoderme
Parsley Hawthorn.....	Crataegus marshallii
Pine, Slash.....	Pinus elliotii
Pine, Loblolly.....	Pinus taeda
Plum, Mexican.....	Prunus mexicana
Redbud.....	Cercis canadensis
Sassafras.....	Sassafras albidum
Silverbell, Two-winged.....	Halesia diptera
Snowbell, Bigleaf.....	Styrax grandifolius
Sumac.....	Rhus
Summer Sweet Clethra.....	Clethra alnifolia
Sweetspire, Virginia.....	Itea virginica
Texas Mountain Laurel.....	Sophora secundiflora
Viburnum, Arrow-wood.....	Viburnum dentatum
Viburnum, Rusty Blackhaw.....	Viburnum rufidulum
Wax Myrtle, Southern.....	Myrica cerifera
Witch Hazel.....	Hamamelis virginia

** non-native, but well-adapted to this area*

SUGGESTED NON-NATIVE SHRUBS & ORNAMENTAL PLANTS

(will not count in determining "50% native" requirement)

Abelia.....	Abelia spp.
Almond Verbena.....	Aloysia virgata
Azalea sp.....	Azalea
Bottlebrush.....	Callistemon spp.
Boxwood, Japanese.....	Buxus microphylla
Chinese Fringe Flower.....	Loropetalum chinensis
Holly Fern.....	Cyrtomium falcatum
Holly, Burford.....	Ilex cornuta 'Burfordii'
Holly, Carrisa.....	Ilex cornuta 'Carrisa'
Indian Hawthorn, Clara.....	Raphiolepis indica 'Clara'
Japanese Blueberry.....	Elaeocarpus decipiens
Japanese Cleyera.....	Ternstroemia gymnanthera
Juniper, Green Mound.....	Juniperus procumbens
Juniper, Prostrate.....	Juniperus prostrata
Ligustrum, Waxleaf.....	Ligustrum japonicum
Lilac Chaste-Tree.....	Vitex agnus-castus
Loropetalum, Plum Delight.....	Loropetalum 'Plum Delight'
Loquat, Coppertone.....	Eriobotrya japonica 'Coppertone'
Nandina.....	Nandina domestica spp.
Oleander, Common.....	Nerium oleander
Oleander, Dwarf.....	Nerium oleander 'Petite Salmon'
Plumbago, Blue.....	Plumbago auriculata
Purple Skyflower.....	Duranta repens
Rose Hybrids.....	Rosa spp.
Spirea.....	Spiraea spp.