

274 Selective Clearing and Grubbing

274.1 General

This chapter provides the criteria and requirements for Selective Clearing and Grubbing (C&G) designs. See **FDM 924** for development of Selective C&G Plan sheets

Selective C&G is an alternative to Standard C&G in areas outside the limits of construction (i.e., area that must be cleared for the purpose of constructing the roadway). While Standard C&G requires complete removal of all trees, stumps, roots and other such protruding vegetation, Selective C&G provides instruction for areas where existing trees and vegetation are retained.

Coordinate the determination of desired Select C&G areas with the District Landscape Architect early in the design phase. Verify that the inclusion of Select C&G activities aligns with future landscape projects or available Landscape Opportunity Plan. Also, review Project Commitments made during the PD&E phase to identify possible landscaped areas that would benefit from Select C&G activities.

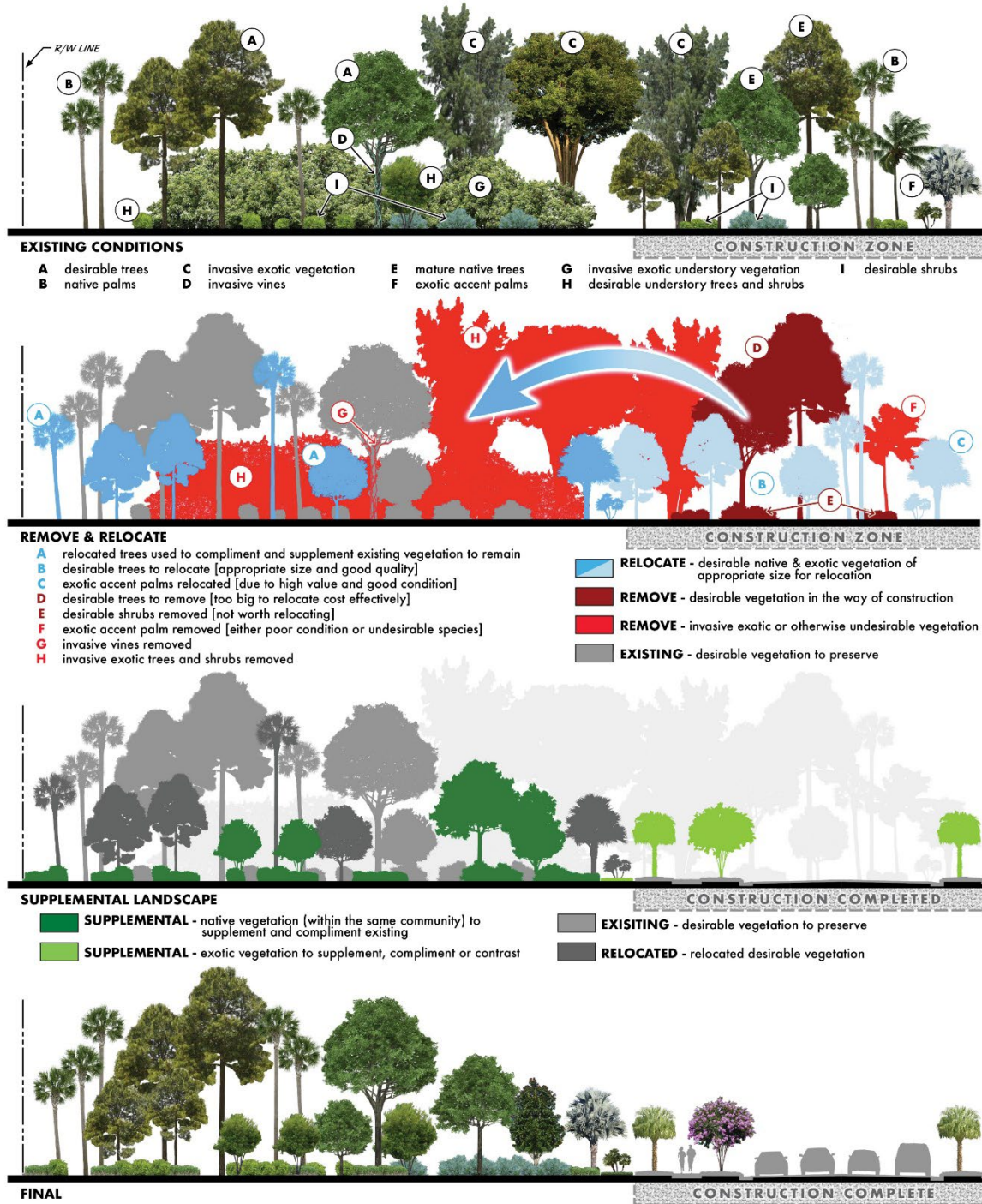
Selective C&G areas may include one or more of the following activities:

- Preservation and protection of desirable trees and vegetation
- Removal of undesirable trees and vegetation
- Installation of tree protection fencing
- Branch and root pruning
- Tree or palm relocation

Preserve and protect healthy and structurally sound trees, palms, and vegetation along transportation corridors. Removal or relocation of trees and palms should be considered only when preservation is impractical. See **FDM 275** for tree and palm relocation requirements.

Refer to **Figure 274.1.1** for an illustration of the Selective C&G process, including vegetation removal, preservation, relocation, and supplementing with new landscape material.

Figure 274.1.1 Illustration of Selective C&G Process



274.1.1 Preservation of Trees and Vegetation

Preserve natural landscapes by identifying Plant Preservation Areas within the Select C&G Plan sheets. Plant Preservation Areas are areas in which no construction activities are to occur, including the staging of materials or equipment.

Trees, palms, shrubs, grasses, wildflowers, and existing soils within Plant Preservation Areas are to be protected from construction activities. Surrounding these areas by silt fence (or other visible delineation) during the construction phase is an effective way of avoiding unintended encroachment.

Verify with the District Landscape Architect that preservation areas align with future highway landscape plans.

274.1.2 Removal of Undesirable Trees and Vegetation

Trees and vegetation that are in poor health, diseased, or listed as invasive are undesirable and should be removed. Within a designated Selective C&G area, undesirable vegetation can be removed while preserving existing desirable vegetation.

Mechanical thinning (removal) of undergrowth to improve the health and appearance of desirable trees and vegetation should also be considered. Avoid thinning dense trees and shrubbery along the R/W when this vegetation is providing a desired buffer between the roadway and adjacent residents.

When removing undesirable trees, determine if stump removal is necessary or may be left in place.

Chemical weed control, or physical removal of invasive trees and vegetation will also improve the health and appearance of remaining landscaped area. When attempting to remove invasive grass, weeds, and vines, consider the effectiveness of this treatment when adjacent properties are overrun as well, or if follow-up treatments will be necessary for complete eradication.

Category 1 plants listed by the [Florida Exotic Pest Plant Council](#) are undesirable and removed when feasible.

274.1.3 Tree Protection Fencing

Tree protection fencing is to protect the tree in its entirety, including the root system, trunk, branches, and surrounding soil from damage, compaction, and contamination. Utilize tree protection fencing for trees “selected” to remain when:

- (1) Individual or groups of trees require preservation, or
- (2) Individual or groups of trees have been relocated within project limits.

Place fencing around the root zone, or at minimum the dripline of trees. See [FDOT Standard Plans](#), Index 110-100 for fencing installation requirements.

274.1.4 Branch and Root Pruning

Branch pruning is the selective removal of unwanted tree branches and provides one or more of the following benefits:

- Reduce risk of damage to people or property
- Manage tree health and direction of growth
- Provide horizontal and vertical clearance for pedestrians, cyclists, or vehicles
- Improve tree structure, restore shape, or improve aesthetics

Root pruning is the process of cutting roots prior to mechanical excavation near a tree. Root pruning is necessary to minimize damage to the tree's critical root system during construction, or in preparation for tree relocation. The roots are typically sliced at the drip line of an established tree.

274.2 Selective C&G Field Assessment

A field assessment should be conducted prior to final determination on extent of Select C&G activities. The field assessment should identify the following:

- (1) Opportunities for preservation, protection and enhancement of existing vegetation, and tree relocation options. Also note:
 - (a) Presence of endangered plant species ([Florida Department of Agriculture Endangered Plant Species](#)), or invasive trees and vegetation.
 - (b) Health and condition of trees and vegetation
 - (c) Historically significant, or large trees or palms

- (d) Completed beautification or landscape projects
- (e) Vegetation buffers between project and adjacent landowners
- (2) Opportunities for vegetation removal to create vistas or allow views into desirable areas such as ponds, forested areas, or other attractive transportation features.
- (3) Anticipated limits of construction and the impacts on surrounding vegetation.
- (4) Location of outdoor advertising signs, community aesthetic features, or other similar structures.
- (5) Corridors traversing through designated Florida Scenic Highways, or conservation lands.
- (6) Possible utility conflicts effecting proposed tree removal or installations.

274.2.1 Tree and Vegetation Survey

The result of the field assessment determines the course of action for Selective C&G and the extent of the Tree and Vegetation Survey.

Prepare a site inventory of all existing trees and vegetation, including species, size, and location. Coordinate with the surveyor to have trees tagged and surveyed.

A site inventory provides a record of what existed prior to construction if mitigation or replacement is warranted due to damage caused by contractor.

274.3 Selective C&G Maintenance Report

A Select C&G Maintenance Report is required when Select C&G sheets are included in the Roadway Plans.

This Select C&G Maintenance Report details the care and maintenance of preservation and Selective C&G areas. This document describes the intent of the Selective S&G activities, and arboricultural best practices.

Deliver the Select C&G Maintenance Report to the District Project Manager.