

Chapter 9

Landscape and Community Aesthetic Features

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Chapter 9

Landscape and Community Aesthetic Features

9.1 General

"Landscape" or "Landscaping" means any vegetation, mulches, irrigation systems, and site amenities, such as, street furniture, specialty paving, tree grates, walls, planters, fountains, fences, and lighting (excluding public utility street and area lighting), as defined in **Rule Chapter 14-40, Florida Administrative Code, Highway Beautification and Landscape Management**. Landscaping may be constructed as a stand-alone project or as a component of a roadway project or Community Aesthetic Feature.

Community Aesthetic Features (CAF) are enhancements installed in/on the Department's right-of-way, structures, or facilities for the sole purpose of representing, reflecting, or recognizing nearby community cultural and/or natural values and resources, or to enhance the sense of place through which a highway passes. These features are designed, maintained, and entirely paid for by the local governmental entity. The CAF may be constructed by the local governmental entity or included as part of a Department project.

9.1.1 References

Additional information regarding landscape plans may be found in:

1. ***Florida Accessibility Code for Building Construction***
2. ***Florida-friendly Best Management Practices for Protection of Water Resources***
3. ***Florida's Best Native Plants; 200 Readily Available species***, Gil Nelson, 2003, University Press of Florida
4. ***Florida Building Code***
5. ***Highway Beautification Policy # 000-650-011***
6. ***FDOT Design Standards***
7. ***FDOT Drainage Manual***
8. ***FDOT Utility Accommodation Manual***
9. ***FDOT Voluntary Code of Conduct regarding Invasive exotic plants***
10. ***FDOT-Florida Highway Landscape Guide.***
11. ***Florida Power and Light-Right Tree for Right Place:***
http://www.fpl.com/residential/trees/right_tree_right_place.shtml
12. ***Highway Landscape, Beautification, and Plan Review Procedure (Topic No. 650-050-001)***
13. ***Identification & Biology of Non-Native Plants in Florida's Natural Areas***, Langeland and Burks, 1998, University of Florida
14. ***Rule Chapter 14-40, Florida Administrative Code, Highway Beautification and Landscape Management***
15. ***Transit Cooperative Research Program Report 19 – Guidelines for the Location and Design of Bus Stops*** (for additional guidance in areas where transit is present)
16. ***Turf and Landscape Irrigation Best Management Practices, Irrigation Association, December 2010***
17. ***Rule Chapter 62-610, Florida Administrative Code, www.flrules.org***
18. ***Sections 125.568, 166.048, 255.259, 335.167, 369.251, 373.185, 373.227, and 581.091 Florida Statutes (F.S.), www.leg.state.fl.us/statutes***
19. ***Florida's Highway Beautification Programs, www.MyFloridaBeautiful.com***

9.2 Landscaping

9.2.1 Design Intent

Landscaping is designed to complement and enhance the natural and man-made environment. This may include irrigation systems and site amenities such as street furniture, specialty pavement, tree grates, walls, planters, fountains, fences, and lights. Include the following elements in the plans:

1. Large plants as defined in the ***Basis of Estimates Manual*** pay item 580 with combined value of 50% or more of the estimated value of all plants specified in the plans.
2. Plant selection and placement that:
 - a. Is consistent with the Department's Highway Beautification Policy, Topic Number 000-650-011
 - b. Preserves visibility of community aesthetic features, permitted outdoor advertising signs, and highway signing
 - c. Adheres to agreed maintenance requirements established by District Landscape Architect, District Maintenance Engineer, or maintenance agreement
 - d. Complements the performance and function of existing stormwater systems
 - e. Adheres to [Florida Friendly Landscaping](#), **Section 335.167, F.S.** The Department uses, and requires the use of, Florida-friendly landscaping practices, as defined in [Florida Statutes Chapter 373.185](#), in the construction and maintenance of all new state highways, wayside parks, access roads, welcome stations, and other state highway rights-of-way constructed upon or acquired after June 30, 2009
 - f. Minimizes soil erosion
 - g. Avoids conflicts with existing and proposed ITS devices, above and below ground utilities
3. When a part of the Contract Documents, Irrigation system design that:
 - a. Avoids overspray into the roadway, sidewalks, or any other paved surfaces, buildings, transit stops, etc.
 - b. Complies with state and local requirements (e.g., ***Florida Building Code***, ***Water Management Districts***, ***Florida Administrative Code***, etc.)

- c. Promotes water conservation (e.g., control system technologies including SMART irrigation technologies, reclaimed and reuse sources, etc.)
- d. Uses durable materials that are traffic rated and ultraviolet light resistant

9.2.2 Design Elements

Plans should consider the following elements:

1. Conservation of natural roadside growth (vegetation), scenic vistas and natural features.
2. Relocation of existing vegetation.
3. Selective clearing and thinning of existing vegetation.
4. Natural regeneration and succession of native plants.
5. Florida native plants with known provenance (original source of plants stock) to be as close to planting site as possible.
6. Plant selection and placement that minimizes impacts to natural areas.
7. Recycled and recyclable materials.
8. Texture and structure of existing soils or the need to remove and replace with soils appropriate for plants to grow in value.
9. Abilities, resources, and preferences of the maintaining entity.

The Landscape should be designed to permit sufficiently wide, clear, and safe pedestrian walkways, bicycle ways, and transit waiting areas. Requirements for sight distances and clearance to obstructions must be observed, especially at intersections.

Landscaping cannot screen from view a legally permitted outdoor advertising sign. The extent of the screening prohibition is provided in **Section 479.106(6), Florida Statutes (F.S.)**. Additional information is found in **Rule Chapter 14-10 and 14-40, Florida Administrative Code (F.A.C.)**. Irrigation systems must adhere to any additional requirements set forth by local governmental entity and water management districts.

When a legally erected and permitted outdoor advertising sign is within the project limits (adjacent to the right of way), and there is no permitted view zone, the landscape architect will notify the sign permittee that a highway landscape project is proposed. An example letter and other useful information are available at www.myfloridabeautiful.com. The sign permittee will have 30 days to establish a view zone by submitting an **Application to**

Permit Vegetation Management at Outdoor Advertising Sign (Form 650-050-06) that proposes a view zone (see **Rule 14-10.056, F.A.C.**). If an **Application to Permit Vegetation Management at Outdoor Advertising Sign** is submitted within 30 days, a view zone will be established in accordance with the provisions of **Rule Chapter 14-10, F.A.C.**, upon approval of the application by the Department. If the sign owner does not respond to the notice within the 30-day time frame provided, and the specific location of the view zone is not established by permit or agreement, the view zone will be within an area beginning at a point on the edge of pavement perpendicular to the edge of the sign facing nearest the highway and continuing in the direction of approaching traffic for a distance of 350 feet for posted speed limits of 35 miles per hour or less and 500 feet for posted speed limits over 35 miles per hour (see **Section 479.106(6), F.S.**). Contact information for any permitted sign may be obtained by contacting the State Outdoor Advertising Administrator, Florida Department of Transportation, 605 Suwannee Street, MS 22, Tallahassee, Florida 32399-0450.

Modification for Non-Conventional Projects:

Delete **PPM** 9.2.2 and see the RFP for requirements.

9.2.3 Maintenance Plan

A performance based maintenance plan for all proposed landscape improvements, including the irrigation system, must accompany the landscape plans. A performance based maintenance plan describes the desired or required end result necessary to achieve the design intent; not the day to day maintenance activities. This may be on separate plan sheets or written documents. This maintenance plan will not be part of the construction contract documents, and does not affect the contractor's responsibility during the plant establishment period. The maintenance plan is intended to make sure that the landscape architect and the maintaining entity responsible for maintenance understand what resources and practices will be necessary to maintain the irrigation system and its components to ensure safety, efficient water delivery, conservation of water resources, and to maintain the landscape in a safe and vigorous condition that meets the project objectives many years after construction is completed. The intent of design elements, such as to screen a view, maintain a clear sight distance, watering schedule, or assist with water retention, must be included in a description of the project, accompanied by a written or graphic guide describing the performance requirements of the maintaining entity. The maintenance plan defines the limits of the maintenance activities that will be performed. When necessary, the maintenance plan must include a temporary traffic

control plan. The maintenance plan must also include performance requirements necessary to maintain and manage the following, as applicable:

1. Sight distance
2. Lateral offset and vertical clearance
3. Accessibility
4. Plant health, form, height and spread
5. Turf (mowing)
6. Mulch thickness and cover
7. Edges
8. Weeds and litter
9. Irrigation system(s) (see irrigation performance requirements listed below)
10. Erosion control
11. Hardscape, lighting, benches, and site amenities
12. Invasive plant management
13. Other requirements necessary for the design intent to be fulfilled

Include the following performance requirements for the irrigation system in the maintenance plan:

1. The frequency of scheduled inspections
2. Reporting parameters for performance conditions
3. Detailed requirements associated with the system components inspection against the original design parameters
4. Adjustments necessitated over time as the landscape matures
5. A written or graphic guide describing the plant water needs across changing weather conditions at the station or zone level

The maintenance plan must also include performance requirements necessary to maintain and manage the following:

1. Performance of backflow prevention
2. Water supply and pressure requirements
3. Desired operating pressure for pressure regulators
4. Filters and filtration requirements

5. Operation of controller, including battery backup
6. Sensors
7. Valve flow and operation
8. Flow regulators
9. Head adjustment and spray pattern
10. Testing requirements
11. Manufacturer specifications and user manuals
12. Winterization requirements (if applicable)
13. Future audit requirements
14. Other requirements necessary for the performance intent to be fulfilled

A maintenance cost estimate based on performance expectations described in the maintenance plan must be provided independently from the plans. Consult with the District Landscape Architect and District Maintenance staff when developing the cost estimate. The estimate allows the maintenance entity to evaluate the landscape plan and determine if revisions are necessary. When the landscape and irrigation project is to be maintained by a local governmental entity, the maintenance plans will become an exhibit to the maintenance agreement. When maintained by the Department, maintenance plans are exhibits for landscape maintenance contracts. The designer should meet with the local governmental entity during development of the maintenance plan.

For Landscape Plan contents refer to **Chapter 26** of Volume 2.

9.2.4 Cost Estimate

A cost estimate for all proposed landscaping must accompany the landscape plans. The cost estimate must include a total unit cost for each individual plant type and size, as tabulated on **Exhibit LD-1, Chapter 26** in Volume 2. The breakout cost for large plants and small plants must include all incidental costs associated with the landscape plans, as defined in **Chapter 26** in Volume 2. This must be on separate plan sheets or written documents. This cost estimate will not be part of the construction contract documents. The cost estimate is intended solely for use by the Department. This estimate is to be provided to the Project Manager.

Modification for Non-Conventional Projects:

Delete **PPM 9.2.4**.

9.3 Community Aesthetic Features (CAF)

Communities may have an active interest in placing aesthetic features on the Department's right-of-way. Community Aesthetic Feature projects must meet the Department's requirements governing safety, access, and maintenance of the highway.

The **Community Aesthetic Feature Agreement** ([Form Number 625-010-10](#)) must be executed by the local governmental entity and the Department prior to any construction in/on the Department's right-of-way, structures, or facilities. This agreement provides for the removal and/or relocation of the Community Aesthetic Feature at the local governmental entity's expense should it not be maintained by the local governmental entity, or if the Department needs the right-of-way for transportation purposes. A Deposit, Performance Bond, or Letter of Credit is required as part of the Community Aesthetic Feature agreement. See F.S. 334.187 for requirements.

Final plans for placing a Community Aesthetic Feature within the Department's right-of-way must be accompanied by a resolution of the local governmental entity indicating their full financial responsibility for the feature's design, construction and maintenance during its lifespan. (See **Sections 9.3.1** and **9.3.2** for submittal and approval requirements.)

9.3.1 Categories and Criteria

Community Aesthetic Features, as defined in **Section 9.1**, consist of two categories:

- Public Art (Stand Alone or Affixed)
- Local ID Markers (Stand Alone or Affixed)

While there are some criteria unique to each category, all Community Aesthetic Features must meet the following criteria:

1. Except where parking is available, select a site and lay out the site plan to deter drivers from stopping within the roadway. If drivers are expected to stop or park, provide for parking in the plan. If public access is available, all Department Standards and Specifications must be met, including ADA requirements. Prohibit public access to the Community Aesthetic Feature when it is located within the interstate, interchange, or limited access right-of-way.
2. The feature must not contain any signs as defined in the **2009 Manual on Uniform Traffic Control Devices (MUTCD), Part 1, Chapter 1A.13**, traffic control features, auditory devices, reflective surfaces, flashing lights, moving parts or moving illumination.

3. The feature must not contain any advertising per the **MUTCD** and **23 C.F.R., 1.23** which prohibits advertising on, or commercial use of the right of way. Commercial advertising on state right of way is also prohibited by **Chapter 479, Florida Statutes**, including charitable, fraternal, religious, or political signs, symbols, logos, banners or any other such device.
4. Lighting of the feature must not be directed at motorists, bicyclists or pedestrians. For lighting criteria see **Section 7.3, Table 7.3.3** of this Volume. When located near an airport, the feature must not create a hazard as defined by **Section 333.01(3), F.S.**
5. In absence of feature lighting, any messages or text included on Local ID Markers must be retroreflective. Decorative or accent lighting must not include any strobe effects, flashing lights, moving parts, or moving illumination.
6. Local ID Markers (Stand-Alone or Affixed) are not allowed on limited access facilities unless they are part of an overall aesthetic treatment plan that can include landscaping and other aesthetic components.
7. Local ID Markers intended to represent the geographic boundary of the county, municipality, sovereign nation or unincorporated area should be located in close proximity to the actual geographic boundary of that area. Remove existing standard geographic boundary guide signs, and/or non-official signs or structures, at or near the location.
8. Do not install Local ID Markers in both the median and roadside at a given location.
9. CAF installations within limited access right-of-way, which are visible from the Interstate mainline, require FHWA approval.
10. CAFs are not allowed within the median of an interstate or limited access facility.
11. One Stand-Alone feature will be allowed per mainline interchange approach (for a maximum of two installations). The local governmental entity must select one site from amongst the ramp and the mainline, along the outside of a ramp, or the area inside a loop ramp.
12. The feature must meet all applicable building codes and design criteria for similar structures or landscaping placed adjacent to the highway's right of way, including wind loading commensurate with highway signs in the area.
13. The feature must not cause adverse impacts to property access, air quality, noise, water quality, wetlands, floodplain encroachments, endangered or threatened species or their critical habitat, historical resources, or create public controversy.

14. The feature, including amenities (landscape, fencing, etc.), must not obstruct any signs or interfere with any sight distance, sight triangle, or view zone (see **Section 9.2.2**).
15. The final design of all CAFs must be signed and sealed by a responsible professional licensed in Florida.
16. All CAF submittals must include a Submittal/Approval Letter (**Exhibit 23-A**) signed by the applicant and the DDE or Turnpike Design Engineer.

In addition, CAFs must meet the following criteria:

A. Public Art – Stand-Alone:

1. All roadways:
 - a. The location must be outside the appropriate clear zone and should be as close to the right-of-way line as practical.
 - b. The structure may not display messages with text, or contain any words or alpha-numeric characters.
 - c. The artist's insignia may be inscribed or etched on a small plaque affixed to the artwork, or placed on the artwork itself. The insignia must not be visible from the roadway so as to avoid distraction to drivers or bicyclists.
 - d. The object's highest point must not be greater in elevation than 25 feet above the nearest point of the roadway.
2. Urban roadways:
 - a. The feature may be placed in the median of urban roadways with curb or curb and gutter, where:
 - i. The Design Speed is less than or equal to 45 mph.
 - ii. Right-of-way is restricted.
 - iii. A minimum offset of four feet from the face of curb is provided.

B. Public Art – Affixed:

1. The feature may not display any messages with text, or contain any words or alpha-numeric characters.
2. The artist's insignia may be inscribed or etched on a small plaque affixed to the artwork, or placed on the artwork itself. The insignia must not be visible from the roadway so as to avoid distraction to drivers or bicyclists.
3. For bridges, the feature must not reduce the vertical clearance over the roadway.

4. For art wraps affixed to traffic control cabinets:
 - a. Do not obstruct cabinet vents with the art wrap.
 - b. The DDE should coordinate with the District Traffic Operations Office during the review process.
 - c. Art wrap themes can be approved for general use by a local government entity.
 - d. A CAF Agreement will be required for these features.
 - e. Any maintaining agency, other than a local government, must coordinate approvals and maintenance through the appropriate local government entity.

C. Local ID Marker – Stand-Alone:

1. All roadways:
 - a. The location must be outside the appropriate clear zone and should be as close to the right-of-way line as practical.
 - b. The structure may contain text such as the name of the municipality, county, or community area (as defined in [Chapter 14-51.041, F.A.C.](#)) with a short phrase or message. The words “Exiting” or “Leaving” are not permitted.
 - c. The object’s highest point must not be greater in elevation than 25 feet above the nearest point of the roadway.
2. Urban roadways:
 - a. The feature may be placed in the median of urban roadways with curb or curb and gutter, where:
 - i. The Design Speed is less than or equal to 45 mph.
 - ii. Right-of-way is restricted.
 - iii. A minimum offset of four feet from the face of curb is provided.
3. Interstates and Limited Access Facilities:
 - a. Placement on interstate and limited access routes should be well outside the minimum clear zone at 50 feet minimum (100 feet preferred) from the edge of the travel lane or ramp, whether guardrail is present or not. The 50 foot minimum/100 foot preferred lateral placement will help to minimize driver distraction, and reduce the likelihood that vertical structures will become storm debris blown across the roadway.
 - b. The maximum letter height allowed is four feet.
 - c. A short phrase or message is not allowed.

D. Local ID Marker – Affixed:

1. All roadways:
 - a. The feature may contain text such as the name of the municipality, county or community area (as defined in [Chapter 14-51.041\(2\)\(c\), F.A.C.](#)) with a short phrase. The words “Exiting” or “Leaving” are not allowed.
 - b. For bridges, the feature must not reduce the vertical clearance over the roadway.
2. Interstates and Limited Access Facilities:
 - a. The maximum letter height allowed is four feet.
 - b. A short phrase or message is not allowed.

9.3.2 CAF Approval Process

The application process is conducted in two phases, the Concept Phase and the Final Phase. The Concept Phase includes District coordination with the applicant to ensure that the proper Community Aesthetic Feature category is selected, the corresponding criteria is achievable and acceptable, and the conditions of the Agreement are acceptable.

The District Design Engineer (DDE) or Turnpike Design Engineer will then submit a concept drawing and documentation to the State Roadway Design Engineer (SRDE). This documentation must include a Submittal/Approval Letter (**Exhibit 23-A**) signed by a representative of the requesting entity and the DDE/Turnpike Design Engineer. Upon review by the Roadway Aesthetic Community of Practice (RA CoP) and the SRDE, conceptual approval may be granted. Should conceptual approval be granted, the signed Submittal/Approval Letter will be returned via e-mail to the DDE and is intended to indicate that the Central Office is in agreement with the concept, and that any proposed Design Variations are acceptable. Otherwise, conceptual approval will be denied with comments. For applications on interstate right-of-way, the District should coordinate with the FHWA District Transportation Engineer prior to submitting to the SRDE.

The Final Phase includes the preparation and review of all final documents. The DDE will forward the Submittal/Approval Letter and final documents with a recommendation for approval to the SRDE. The SRDE will review the application and provide approval to place the feature, or deny the submittal with comments. Features on the Interstate System will also require final approval by FHWA.

When any of the requirements in Section 9.3.1 are not met, a Design Variation must be approved by the SRDE.

9.3.2.1 Concept Phase

Informal coordination may take place at any time between the District and the entity desiring to place a feature on the Department's right-of-way. The District should work with the applicant to resolve issues related to feature category, compliance with criteria, optimum location for placement, and identification of possible Design Variations. Before submittal to the SRDE, the local governmental entity must submit a written request to the DDE to place the Community Aesthetic Feature in the Department's right-of-way. A request for Conceptual Phase Approval must include at a minimum:

1. The designation of the feature category.
2. A conceptual drawing/rendering showing the top, front, and side views of the feature with labeled dimensions, material designations including connections, proposed lighting configuration, and any alpha-numeric characters.
3. A draft site plan dimensioning the location of the feature in relation to the roadway and the right-of-way.
4. The design speed of all adjacent roadways.
5. A citation of the governing **Design Standards**, **Criteria** and **Building Codes** to which the feature will be designed.
6. If the feature is to be affixed to a bridge:
 - a. Designate the bridge owner.
 - b. Declare what the impact is to the bridge loading.
7. The Signature/Approval Letter (**Exhibit 23-A**) signed by the applicant and the DDE.

9.3.2.2 Final Phase

Upon conceptual approval by the SRDE, the local governmental entity may choose to begin the Final Phase. The conceptual approval is valid for one year, at which time the local governmental entity may request an extension from the DDE. The Final Phase submittal includes the following documents:

1. Site Plans, including a Traffic Control Plan if temporary maintenance of traffic will be required to place and/ or maintain the feature.

2. Structural Plans including a wind load analysis.
3. Local Governmental Entity Resolution.
4. Executed **Community Aesthetic Feature Agreement**.
5. Signature/Approval Letter (**Exhibit 23-A**) signed by the applicant and the DDE.

Upon final approval by the SRDE and, if applicable, FHWA, the District will notify the local governmental entity that it may proceed with the placement of the feature. The Final Phase approval is valid for one year, at which time the local governmental entity may request an extension from the DDE.

9.4 Place Name Signs

All signs within the Department's right-of-way are regulated by the **MUTCD, Part 2**. Signs for general information, services, tourist destinations, and recreational/cultural interest areas all have specific chapters in the **MUTCD** which specify sign color, size and lettering requirements. Destination signs are classified in the **MUTCD** as Guide Signs and are also regulated therein.

Place Name Signs within the Department's right-of-way are regulated by the Department. Requirements for Place Name Signs are located in [Rule Chapter 14-51, F.A.C., Part IV Place Name Signs](#). Place name signs located off the Department right of way must conform to **Section 479.16, F.S.**

<http://www.dot.state.fl.us/trafficoperations/>

Customized Place Name Signs, previously included in **Chapter 14-51.043, F.A.C.**, are now considered Local ID Markers, as indicated in **Section 9.3.1**.

9.5 Blue Star Memorial Markers and Flag Poles

Blue Star Memorial Markers and Flag Poles are not considered Community Aesthetic Features and are not covered by this chapter. These markers are managed through the Local FDOT Maintenance and Traffic Operations offices.

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