Florida Department of Transportation

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SECRETARY

ENGINEERING AND OPERATIONS MEMORANDUM 13-03

DATE: October 9, 2013

FROM: Brian Blanchard, P.E., Assistant Secretary for Engineering and Operations

TO: District Secretaries, District Directors

COPIES: Brian Peters, Rich Biter, Tom Byron, Duane Brautigam, David Sadler, Tim Lattner, Lisa Saliba, Bob Crim, Marjorie Bixby, Bob Romig

SUBJECT: Perimeter Wall Guidelines and Implementation

BACKGROUND

Perimeter walls have been constructed as part of several projects in recent years due to the negative impact on residents living near the road improvement when noise barriers were not justified in an effort to preserve the quality of life for those affected. To assure that the use and costs of perimeter walls is consistent across the state, guidelines have been developed containing the process and design methodologies to be used when considering the use of perimeter walls. The decision to include perimeter walls within a project is not automatic and requires input from a local municipality or land owner(s).

REQUIREMENTS and IMPLEMENTATION

The Perimeter Wall Guidelines are attached and may be used on any project currently in the pre-design phase and all future projects.

In-depth processes and design controls will be released in a bulletin before January 31, 2014 which will include the detailed incorporation of these guidelines into the various Department manuals as well as introduce new design standards.

If you have questions, do not hesitate to contact Mariano Berrios by phone at (850) 414-5250, or by email at mariano.berrios@dot.state.fl.us.

RECOMMENDATIONS FOR STATEWIDE PERIMETER WALL CONSIDERATION

The purpose of a perimeter wall is to provide a separation between a highway and adjacent land users to maintain the quality of life that existed prior to the construction of a highway project and are not assumed to provide any measurable noise reduction benefits. Benefits of perimeter walls may include, but not limited to, minimizing visual impacts, providing a visual screen when existing vegetation is removed, providing separation to adjacent land owners, maintaining access control restrictions, and others. These recommendations are not intended to mandate the use of these walls in any instance and are to be considered only as a guide to aid in engineering decisions made on the project. Perimeter walls are not to be considered for retrofitting existing conditions where highway improvements are not proposed or for buildings that received a building permit after approval of the Categorical Exclusion, the Finding of No Significant Impact (FONSI), the Record of Decision, State Environmental Impact Report (SEIR) or Non-major State Action (date of public knowledge) for a project, unless an exception is granted by the Assistant Secretary of Engineering and Operations, on a case by case basis. Perimeter walls may be considered around FDOT facilities such as rest areas, weigh stations, etc., to provide a positive separator between the facilities and with the adjacent land uses.

The initial assessment for the use of a Perimeter Wall would typically be performed during the Project Development and Environment (PD&E) process and only when such a wall is requested by a local municipality or a substantial group of affected residents. The final decision for the use of a perimeter wall would be made during the Design phase when the final conditions and cost are available for consideration.

The results of the perimeter wall analysis shall be documented in a Perimeter Wall Justification Report. This is a standalone report and is not part of any environmental document. Final decisions made during the Design Phase will be added to the report by addendum.

The following steps provide a general overview of the process to consider requests for Perimeter Walls:

1. Considerations for a Perimeter Wall Assessment

Perimeter walls will be considered in areas requested by a local municipality or group of directly affected residents and where a perimeter wall is deemed to offer benefit to the adjacent land use. Perimeter walls shall only be considered on the

project types listed below and shall not be considered for resurfacing, operational, highway safety, maintenance, emergency, or enhancement projects. The following are projects where perimeter walls may be considered and only when the distance from the edge of the travel lane to the closest portion of the structure is equal to or less than 150':

- the capacity of an existing highway is expanded by adding lanes to the outside;
- horizontal and/or vertical alignment of an existing highway is significantly altered as defined in the PD&E manual;
- a highway on new location;
- existing extensive vegetation or other visual barriers are removed;

2. Factors Considered for a Perimeter Wall Recommendation:

If any of the above criteria are met, the Department will evaluate the following factors to determine if a perimeter wall would be considered for the project:

- Functional Classification (Access Controlled Urban Arterials, freeways)
- Adjacent land uses (highly residential, schools, recreation areas)
- View of traffic from the adjacent land use. If the traffic on a road is not visible from the adjacent land use, a perimeter wall will not be considered

The following feasibility factors should be considered: constructability, safety, cost, access, drainage and utility conflicts. Perimeter walls shall not be considered if additional Right of Way must be acquired to incorporate the wall into a project. Perimeter walls may also be considered when FDOT is granted an easement to facilitate the construction of the wall. Perimeter walls will not be recommended across the frontage of properties with closely spaced driveways that will require multiple openings on the wall.

The cost of providing the perimeter wall shall not exceed $25,000 for each adjacent land owner. Only lands immediately adjacent to the ROW will be considered for perimeter walls.

To assure consistent application of these guidelines, partial or complete funding from non-FDOT sources will not be accepted and no custom designs are allowed.

3. Local Municipality Concurrence

If a perimeter wall is proposed, the Department will approach the local government during the design phase of the project to seek concurrence on the incorporation of the perimeter wall into the project. The local government will be responsible for obtaining support from the majority (simple majority) of the adjacent property owners prior to construction of a perimeter wall. FDOT will work closely with the local municipality to determine final wall locations, wall height, color, texture, etc. For walls located on non-FDOT owned lands, the local government or land owner assumes the responsibility for all maintenance, including structural repairs. The local government will provide formal concurrence with the recommendation (resolution or letter) and a Maintenance Agreement for the perimeter wall, if applicable.

4. Design Parameters

Allowable wall heights will be limited to 8'.

Standards will show two options available to the contractor: hand laid block, precast concrete panels

Textures will be limited to those that are available in standard block. No custom designs allowed. Smooth blocks will not be allowed.

Full wind loads will be used to design the walls

Minimum 75 year design life.

Assume a square foot cost equal to 2/3 of the cost per square foot of a noise barrier when estimating the cost of the perimeter wall.