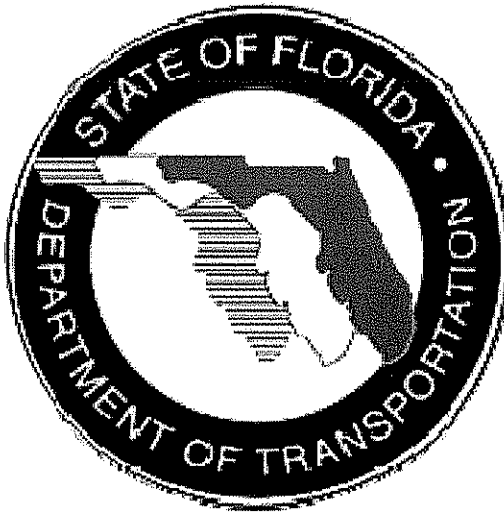


Feasibility Study US 1 Bunnell Weigh Station Relocation



**Executive Summary to the Executive Board
Resource Allocation Workshop
Motor Carrier Compliance Office
Craig Wilson**

July 15, 2008

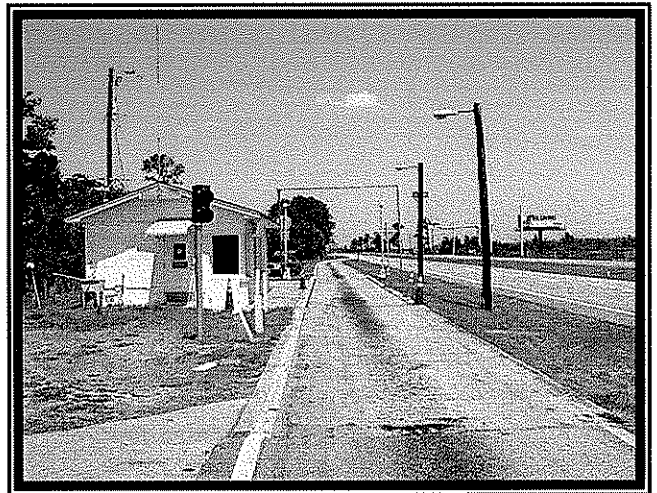
Project Location: The Bunnell Weigh Station is located on the west side of US 1 at mile marker 17.2 in Flagler County, approximately 1/2 mile north of the Palm Coast Parkway.

Existing Operations: Northbound commercial vehicles are required to maneuver a u-turn in order to enter the station on the west side of the road. OMCC has recently closed this northbound movement as a precaution. Station is not ADA compliant. Insufficient truck parking.

Station as a System: The I-95 WIM Station and the Bunnell Station operate in tandem to monitor northbound and southbound commercial vehicles travelling through the northeast Florida corridor. The Palm Coast Parkway, connecting US-1 to I-95, creates a natural bypass where commercial vehicles can travel on high speed, low congestion roads and easily avoid both the I-95 WIM and Bunnell Weigh Station.

Problem Statement: The Bunnell Weigh Station does not provide a strategic enforcement advantage in it's current location, which results in additional inspector and officer staff hours, substandard operating conditions and additional stress to the state highway pavement system.

Need for Study: Based on the above, it was decided to conduct a feasibility study to evaluate potential sites along the US-1 corridor which would provide a strategic enforcement advantage and improve operations.



Corridor Studied: It was decided that the Bunnell Weigh Station and the I-95 WIM must be in parallel in order to eliminate the natural bypass routes. Therefore a segment of US-1 from SR-100 just North of the City of Bunnell to the Palm Coast Parkway was determined as the optimum study corridor.

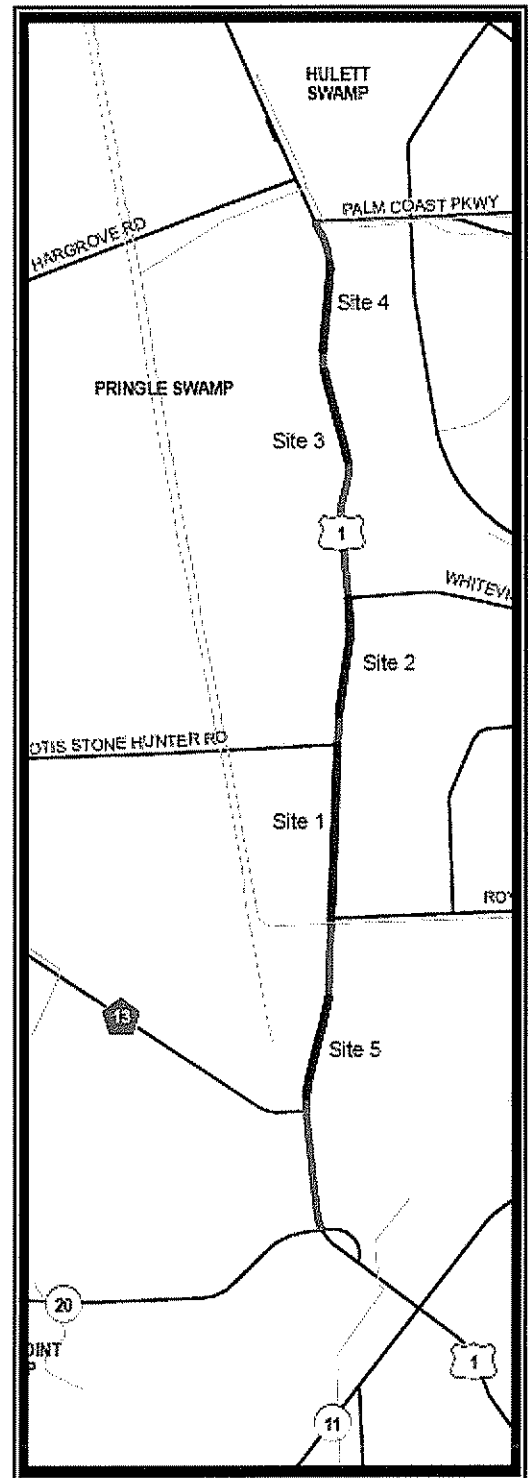
Station Type: It was decided that the most desirable station is a Typical Class 3: Median Enforcement Station. This station type provides the greatest flexibility by providing all operations in one consolidated area. If it became infeasible for a median station, other options could be considered.

Relocation Alternatives: Five sites were initially selected based on the geometrics and physical attributes. The desirable locations were on tangent sections of the road absent of major development.

Initial Environmental Screen: A GIS Screen was conducted for the relocation study corridor. Sites were evaluated based on the findings of this initial screen. Elements evaluated were, FEMA Floodplain, Development of Regional Impacts, Landuse, Public Lands, USGS, Wetlands, and Threatened and Endangered Species.

Right of Way: The alternative sites were evaluated based on the Right of Way maps. The existing R/W varies throughout the corridor from 300' to 150'.

Initial Evaluation Results: Table 1 shows the results of the initial evaluation. The preferred location is Site 1 beginning at Royal Palms Parkway to Otis Stone Hunter Road. This site provides the least impacts.



| Bunnell Relocation Site Evaluation Matrix¹ | | | | | |
|---|--|--|---|---|--|
| | Site 1: Royal Palms Parkway to Otis Hunter Road | Site 2²: North of Otis Hunter Road | Site 3²: 1 Mile South of Palm Coast Parkway | Site 4²: ½ Mile South of Palm Coast Parkway | Site 5: 1 Mile South of Royal Palms Parkway |
| Residential Impacts | None | Significant³ | Significant³ | Significant³ | Moderate |
| Wetlands | None | Moderate | Minor | Minor | Moderate |
| Threatened and Endangered Species⁴ | None | None | Minor | Minor | None |
| Right of Way | 300'⁵ | 300'⁵ | 300'⁵ | 300'⁵ | 150'⁶ |
| Geometrics /Length | Superior /5000' | Substandard /2000' | Substandard /3000' | Substandard /2800' | Substandard /2900' |
| <p>Notes:</p> <ol style="list-style-type: none"> 1. Matrix contains those items that differentiate sites. 2. Initially these sites were selected for widening of the median by moving the southbound roadway to the west. However, the existing right of way is offset to the east. Therefore, expansion to the west would require the purchase of additional right of way. Additionally, a power transmission line is located to the west of the existing right of way resulting in significant cost to this option. Moving both roadways to get the necessary median width would allow the station to be built within the existing right of way, resulting in no impacts to the transmission line, but would significantly increase construction costs. Therefore, moving the northbound lanes to accommodate the median was selected as the most viable option and is evaluated above. 3. Relocation of the northbound roadway, while constructed within existing right of way, would result in the final alignment being close to property lines. May require noise study and public opposition. 4. A site evaluation for Gopher Tortoise habitat to occur six months prior to construction. 5. The centerline of the southbound roadway is the centerline of right of way. From the centerline the right of way is, 100' to the west and 200' to the east resulting in expansion to the east the most desirable. 6. 150 feet of right of way does not provide enough to accommodate the median station resulting in the purchase of right of way significantly increasing the cost of this option. | | | | | |

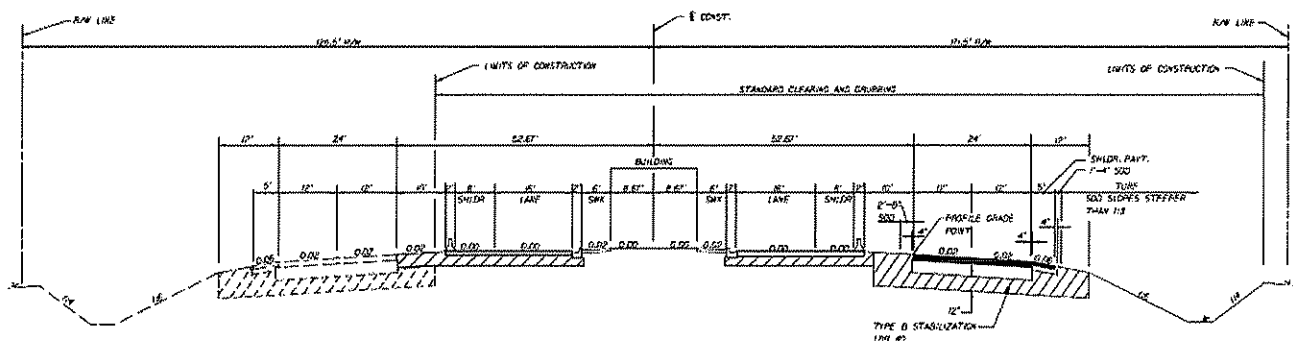
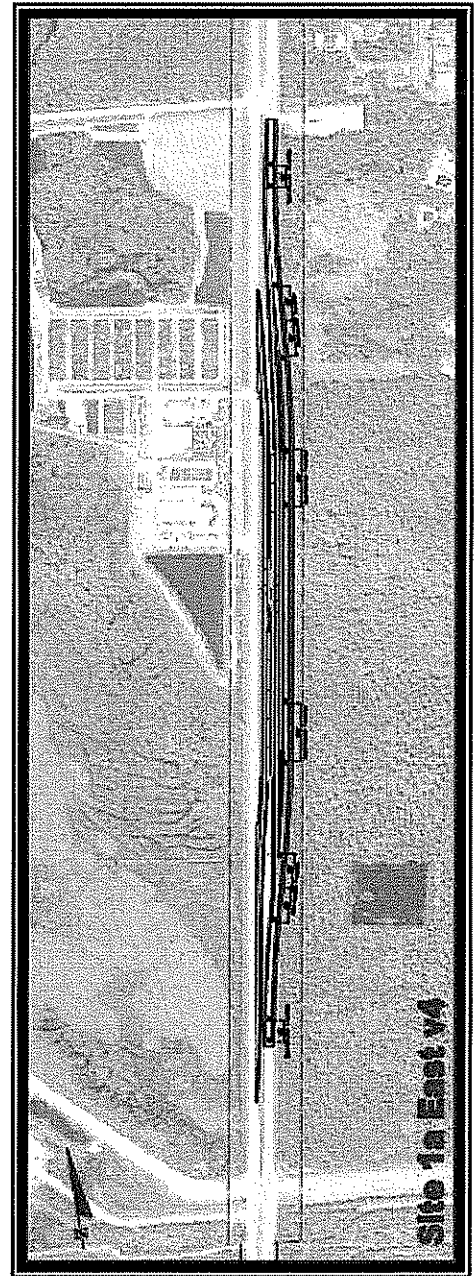
Based on the above evaluation, Site 1 is the preferred location for the Bunnell Weigh Station. A detailed environmental assessment is being conducted by District 5 EMO. Since no federal funds will be used on this project, and the initial screen indicates no significant impacts, it is believed the Department is able to use the 'Non Major State Action' process involving evaluation documentation using a checklist. This process is currently underway and is expected to be complete within the next few months. If approved the project may progress to final design as the next phase of project development.

Preferred Site Selected: Site 1, begins at Royal Palms Parkway and continues 5000' north to Otis Stone Hunter Road. The northbound roadway would require realignment, within the existing right of way, to the east to accommodate a median weigh station. Utilities are available at the site for power, telephone, water and sewer.

Operations: Excellent. Station provides for full acceleration and deceleration within the proposed station. Static scales for each direction. Six vehicle parking stalls. Eight Truck parking, four in each direction. ADA Compliant. Site allows for mainline WIM option for increased efficiency.

Environmental Impacts: Insignificant. The swales to be relocated are maintained (mowed). There is existence of wetland vegetation in the bottom of the swales that is defined as 'other surface waters.

Socio-Economic Impacts: The closest residential area will be greater than 800' from the relocated northbound lanes. The four vacant properties adjacent to the eastern right of way limits could be permitted for right in/right out access. The agricultural property on the west side has full access through Otis Stone Hunter Road and can maintain a right in/right out US-1 access.

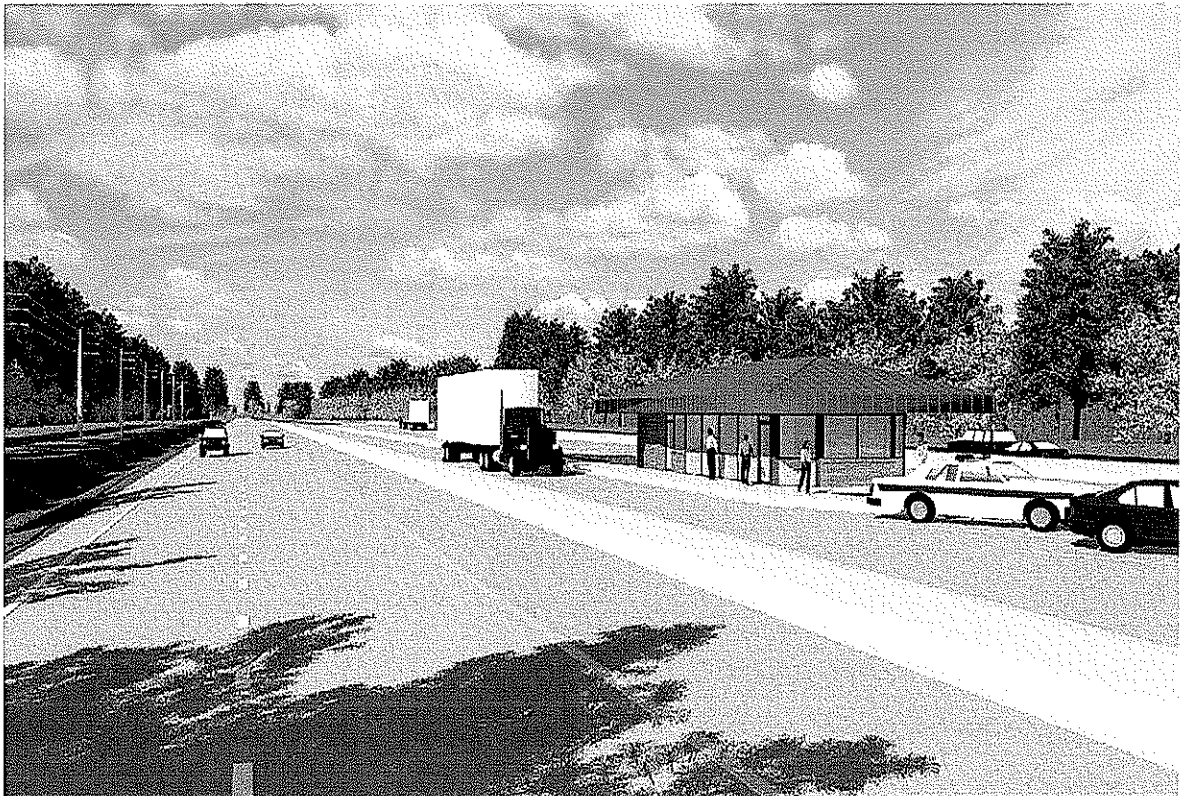


Cost: \$ 10,610,000 Construction Estimate (2008 costs)

Note: this estimate is based on a conceptual design of the roadway and building. The estimate includes the cost of fixed scales. It does not include the costs of a mainline WIM option. Design decisions, community input, existing soil conditions and other issues encountered during the design phase will impact the final estimate.

Justification: Since the closure of the northbound traffic at the Bunnell Weigh Station, weighings have dropped. Easy bypass of the Bunnell and I-95 Flagler WIM stations along with the substandard operations and current location of the Bunnell Weigh Station results in accelerated deterioration of the transportation system throughout the Northeast Florida corridor. The anticipated pavement deterioration along with the improved efficiency and operations provides ample justification for the relocation of the station.

Recommendation: Fund the design and construction of the Bunnell Weigh Station within the 5 year work program.



EXTERIOR RENDERING

Feasibility Study for US 1
Bunnell Weigh Station Relocation



www.ferrenarchitects.com

