



Florida Department of Transportation

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ROADWAY DESIGN BULLETIN 21-04

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DATE: April 27, 2021

TO: District Directors of Transportation Operations, District Directors of Transportation Development, District Design Engineers, District Construction Engineers, District Structures Design Engineers, District Maintenance Engineers, District Consultant Project Management Engineers, District Roadway Design Engineers, District Traffic Operations Engineers, Program Management Engineers, District Materials Engineers, District Specifications Engineers, District Estimates Engineers

FROM: Michael Shepard, P.E., State Roadway Design Engineer

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SUBJECT: ***Developmental Standard Plans, Index D521-005***
(Concrete Barrier at Toll Sites)

This Bulletin introduces the new ***Developmental Standard Plans, Index D521-005 (Concrete Barrier at Toll Sites)***. This Index provides barrier layout options and construction details to accommodate the specific needs of tolling facilities along the Florida's Turnpike System.

COMMENTARY

Index D521-005 was developed in coordination with the Florida Turnpike Enterprise (FTE).

This Index provides standard barrier configurations that accommodate embedded pull boxes and integral gantry supports for electronic tolling equipment. Additionally, these barrier designs include Glass Fiber Reinforced Polymer (GFRP) reinforcement to help prevent signal interference in vehicle detection and classification equipment.

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IMPLEMENTATION

Index D521-005 is now available for use on applicable current or future projects. **Developmental Standard Plans** can be found on the Department's website at the following link:

<https://www.fdot.gov/design/standardplans/dev.shtm>

Index D521-005 utilizes the existing **Standard Specifications for Road and Bridge Construction, Section 521 (Concrete Barriers, Traffic railings, and Parapets)** and **Section 932 (Nonmetallic Accessory Materials for Concrete Pavement and Concrete Structures)**.

Follow the **Developmental Standard Plans Usage Process** as outlined in **FDM 115** and insert **Index D521-005** in the Plans as described in **FDM 302**. Central Office Monitor approval is required, and Project-Specific Pay Items will be provided upon approval. See the **Basis of Estimates Manual (BOE)**, Pay Item 521-1-AA for Median Concrete Barrier.

Use of this Index typically requires project-specific designs and details for integral items such as pull boxes, conduits, general toll site electronics, and gantry support foundations. For more information, see the details of **Index D521-005** along with the FTE's General Tolling Requirements (GTR).

CONTACT

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