

# Origination Form

## Specifications

<b>Name:</b>	Melissa Hollis	<b>Specification Number:</b>	521-2, 521-3, 521-7
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<b>Date:</b>	2024-05-30T13:42:58Z	<b>Verified:</b>	VERIFIED

### Summary:

521-2: Updated materials article to include APL/BABA formatting and additional product types. 521-3: Removed repeat reference to approved producer; requirement in 521-2. 521-7: Changed "plant" to "producer". Reworded last sentence to be consistent with the previous paragraph.

### Justification:

APL/BABA formatting changes are to help with compliance with Federal BABA rules.

### Do the changes affect other types of specifications?

Neither

### List Specifications Affected:

Other Affected Documents/Offices	Contacted	Yes/No
Other Standard Plans		No
Florida Design Manual		No
Structures Manual		No
Basis of Estimates Manual		No
Approved Product List	Karen Byram	Yes
Construction Office		No
Maintenance Office		No
Materials Manual		No
Traffic Engineering Manual		No

**Are changes in line with promoting and making progress on improving safety, enhancing mobility, inspiring innovation, and fostering talent; explain how?**

Helps to ensure compliance with Federal BABA rules.

**What financial impact does the change have; project costs, pay item structure, or consultant fees?**

None

**What impact does the change have on production or construction schedules?**

None

**How does this change improve efficiency or quality?**

Helps to ensure compliance with Federal BABA rules.

**Which FDOT offices does the change impact?**

Product Evaluation- product types added to the APL

**What is the impact to districts with this change?**

None

**Does the change shift risk and to who?**

None

**Provide summary and resolution of any outstanding comments from the districts or industry.**

Comments and Responses are available on the Track the Status of Revisions hyperlink located on the Specifications landing page: <https://www.fdot.gov/programmanagement/Specs.shtm>

**What is the communication plan?**

Through the established specification revision process (e.g., Internal and Industry Review)

**What is the schedule for implementation?**

The Standard Specifications eBook and Workbook are effective July 1st every year.

**CONCRETE BARRIERS, TRAFFIC RAILINGS, AND PARAPETS.  
(REV 5-30-24)**

ARTICLE 521-1 is deleted and the following substituted:

**521-1 Description.**

Construct precast or cast in place concrete barriers, traffic railings, opaque visual barriers, and parapets, herein referred to as rigid barrier, in accordance with the Standard Plans and the details shown in the Plans. Use stationary removable forms or sliding forms to construct the rigid barrier. Do not use permanent precast concrete rigid barrier on bridge or box culvert structures.

~~Submit written certification from the manufacturer of the precast rigid barrier that the barrier meets the requirements of this Section. Rigid barrier is produced using certification acceptance; therefore, assume responsibility for performance of quality control testing and inspections required by Sections 346 and 400. Perform all Quality Control Testing and inspections using CTQP qualified testing personnel. Perform compressive strength testing in a laboratory inspected by CCRL or CMEC.~~

~~Ensure that each shipment of products to the job site includes a list of products shipped and the required written certification statement for each product. Submit this list and certifications to the Engineer.~~

ARTICLE 521-2 is deleted and the following substituted:

**521-2 Materials.**

Meet the following requirements:

Flowable Fill*	.....	Section 121
Concrete*	.....	Sections 346 and 347
Reinforcing Steel*	.....	Section 415
<u>Doweled Joints</u>	.....	<u>Section 416</u>
<u>Precast Components*</u>	.....	<u>521-3</u>
Joint Materials*	.....	932-1.1
<u>Joint Materials*</u>	.....	<u>932-1.2 and 932-1.3</u>
Barrier Delineators *	.....	Sections 705
<u>Curing Materials*</u>	.....	<u>Section 925</u>
<u>Concrete Repair*</u>	.....	<u>Section 930</u>

~~\*Use products and producers listed on the Department's Approved Product List (APL). Producers seeking inclusion on the list must meet the requirements of Section 105.~~

ARTICLE 521-3 is deleted and the following substituted:

**521-3 Requirements.**

**521-3.1 Precast Temporary Concrete Barrier:** Meet the requirements of 102-9.5.

**521-3.2 Precast Noise Wall Barrier Requirements:** ~~Obtain precast concrete components from a plant that is currently on the Department's Production Facility Listing. Producers seeking inclusion on the list must meet the requirements of Section 105.~~

——Do not accept products that are not permanently and clearly stamped on the tongue and groove portion of the panel and posted with the type, date cast, project number, and the manufacturer's name or symbol by the Producer.

**521-3.2.1 Casting Tolerances:** Maintain the following casting tolerances:

1. Overall Height and Width: +/- 1/4"
2. Thickness: +/- 1/4"
3. Out of Square: 1/8" per 6 ft., but not more than 3/8" total along any side
4. Warping: 1/16" per foot distance to nearest corner
5. Bowing: 1/240 segment dimension
6. Surface Smoothness: +/- 1/16"
7. Tongue and groove joint dimensions: +/- 1/4"

**521-3.2.2 Shop Drawing Submittal:** Submit shop drawings for precast elements, when required, in accordance with Section 5, showing a plan and elevation with the following project specific information:

1. Begin and end wall stations with offsets
2. Horizontal and vertical alignments of the wall
3. Segment locations and lengths
4. Segment locations for:
  - a. Graphic details for architectural inlays as required
  - b. Special detailing for drainage requirements
5. Elevations of top of segments
6. Existing ground and finished grade elevations
7. Top panel to precast base grouted and dowelled joint dowel and sleeve locations
8. Non-standard precast component details
9. Lifting devices

ARTICLE 521-1 is deleted and the following substituted:

**521-7 Repairs and Rejection.**

For permanent precast concrete rigid barrier that has not been installed, evaluate cracks, spalls and other deficiencies in accordance with 450-12. Repair deficiencies in accordance with 450-13 or the ~~plant's~~ producer's approved repair methods that are included as part of their Quality Control (QC) Plan. Ensure that the original performance and durability of the repaired rigid barrier is maintained. Use materials for concrete repair that will meet or exceed the strength requirement for the class of concrete used. Materials meeting the requirements of Section 930 may be substituted for non-shrink grout when required by 450-13. Concrete rigid barrier is subject to rejection if it fails to conform to any of the Specification requirements after repair.

For all rigid barriers after installation, The ~~the~~ disposition of concrete cracks ~~in rigid barrier after installation~~ shall be in accordance with 400-21.