

Origination Form

Specifications

| | | | |
|---------------|-------------------------------|------------------------------|---------------------|
| Name: | John Shoucair | Specification Number: | 285-2, 285-3, 285-4 |
| Email: | john.shoucair@dot.state.fl.us | Associated Specs: | 911 |
| Date: | 2024-06-20T19:23:04Z | Verified: | VERIFIED |

Summary:

The main change was the addition of "Calcarenite" rock as an approved base material.

Justification:

Discovery of new geologic formation in Florida.

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 | Mary Jane Hayden | Yes |
| Structures Manual | | No |
| Basis of Estimates Manual | | No |
| Approved Product List | | No |
| 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?

The change allows approval of a new mine source with new inventory of reserves. It will likely be approved as a new source for friction course.

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

There are several new Department projects immediately adjacent to the mine. The short haul distance will reduce aggregate costs.

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

The proximity to several new Department projects will shorten construction time.

How does this change improve efficiency or quality?

In addition to items 3 and 4, the Limerock Bearing Ratio of this materials ranges from 150 to 180 and represents high quality.

Which FDOT offices does the change impact?

Materials and Construction.

What is the impact to districts with this change?

Addition of a new mine for District 1 manpower inspection requirements.

Does the change shift risk and to who?

Risk is neutral.

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.

**OPTIONAL BASE COURSE
(REV 6-20-24)**

ARTICLE 685-2 is deleted and the following substituted:

285-2 Materials.

Meet the material requirements as specified in the Section covering the particular type of base to be constructed.

| | |
|--|--------------------|
| Graded Aggregate ¹ | Section 204 |
| Asphalt ¹ | Section 234 |
| Reclaimed Asphalt Pavement (RAP) ^{1,2*} | Section 283 |
| <u>Prime and Tack Coat¹.....</u> | <u>Section 300</u> |
| Limerock ¹ | Section 911 |
| Shell Base ¹ | Section 911 |
| Shell-Rock ¹ | Section 911 |
| Cemented Coquina ¹ | Section 911 |
| <u>Calcarenite¹.....</u> | <u>Section 911</u> |
| Recycled Concrete Aggregate (RCA) ^{**1,3} | Section 911 |
| <u>Bituminous Materials¹.....</u> | <u>Section 916</u> |

¹Use products and producers listed on the Department's APL.

^{2*}Only for use on non-limited access paved shoulders, shared use paths, or other non-traffic bearing applications.

^{3**}Do not use on interstate roadways.

ARTICLE 285-3 is deleted and the following substituted:

285-3 Selection of Base Option.

The Plans will include typical sections indicating the various types of base construction (material and thickness) allowable.

When base options are specified in the Plans, use only those options. When base options are not specified, select one base option as allowed for each typical section shown in the Plans. Only one base option is permitted for each typical section. See Tables 285-1 and 285-2 for optional base materials, thickness and additional restrictions.

Notify the Engineer in writing of the base option selected for each typical section at least 45 calendar days prior to beginning placement of base material.

| Table 285-1 Optional Base Groups 1 through 7 | | | | | | | |
|---|-------------------------------------|-------------------|-------------------|-------------------|------------|------------|---------------|
| Base Materials | Base Group (Base Group Pay Item) | | | | | | |
| | 1 (701) | 2 (702) | 3 (703) | 4 (704) | 5 (705) | 6 (706) | 7 (707) |
| Limerock, LBR 100 | 4" | 5" | 5-1/2" | 6" | 7" | 8" | 8-1/2" |
| Cemented Coquina, LBR 100 | 4" | 5" | 5-1/2" | 6" | 7" | 8" | 8-1/2" |
| Shell Rock, LBR 100 | 4" | 5" | 5-1/2" | 6" | 7" | 8" | 8-1/2" |
| Bank Run Shell, LBR 100 | 4" | 5" | 5-1/2" | 6" | 7" | 8" | 8-1/2" |
| <u>Calcarenite, LBR 100</u> | <u>4"</u> | <u>5"</u> | <u>5-1/2"</u> | <u>6"</u> | <u>7"</u> | <u>8"</u> | <u>8-1/2"</u> |
| Recycled Concrete Aggregate, LBR 150 ⁽¹⁾ | 4" | 5" | 5-1/2" | 6" | 7" | 8" | 8-1/2" |
| Graded Aggregate Base, LBR 100 | 4-1/2" | 5-1/2" | 6-1/2" | 7-1/2" | 8-1/2" | 9" | 10" |
| Type B-12.5 | 4" ⁽³⁾ | 4" ⁽³⁾ | 4" ⁽³⁾ | 4" ⁽³⁾ | 4-1/2" | 5" | 5-1/2" |
| B-12.5 and 4" Granular Subbase, LBR 100 ⁽²⁾ | - | - | - | - | - | - | - |
| RAP Base ⁽⁴⁾ | 5" ⁽⁴⁾ | - | - | - | - | - | - |

(1) Do not use on interstate roadways.
(2) The construction of both the subbase and Type B-12.5 will be bid and used as Optional Base. Granular subbases include limerock, cemented coquina, shell rock, bank run shell, recycled concrete aggregate and graded aggregate base. All subbase thicknesses are 4" minimum prior to adding the required prime coat.
(3) Based on minimum practical thickness.
(4) Only for use on non-limited access paved shoulders, shared use paths, or other non-traffic bearing applications.
(5) To be used for widening, three feet or less.

| Table 285-1(continued) Optional Base Groups 8 through 15 | | | | | | | | |
|---|-------------------------------------|------------|-------------|-------------|----------------|------------------------------|--------------------------|-------------|
| Base Materials | Base Group (Base Group Pay Item) | | | | | | | |
| | 8 (708) | 9 (709) | 10 (710) | 11 (711) | 12 (712) | 13 (713) | 14 (714) | 15 (715) |
| Limerock, LBR 100 | 9-1/2" | 10" | 11" | 12" | 12-1/2" | 13-1/2" ⁽⁵⁾ | 14" ⁽⁵⁾ | - |
| Cemented Coquina, LBR 100 | 9-1/2" | 10" | 11" | 12" | 12-1/2" | 13-1/2" ⁽⁵⁾ | 14" ⁽⁵⁾ | - |
| Shell Rock, LBR 100 | 9-1/2" | 10" | 11" | 12" | 12-1/2" | 13-1/2" ⁽⁵⁾ | 14" ⁽⁵⁾ | - |
| Bank Run Shell, LBR 100 | 9-1/2" | 10" | 11" | 12" | 12-1/2" | 13-1/2" ⁽⁵⁾ | 14" ⁽⁵⁾ | - |
| <u>Calcarenite</u> | <u>9-1/2"</u> | <u>10"</u> | <u>11"</u> | <u>12"</u> | <u>12-1/2"</u> | <u>13-1/2"⁽⁵⁾</u> | <u>14"⁽⁵⁾</u> | <u>-</u> |
| Recycled Concrete Aggregate, LBR 150 ⁽¹⁾ | 9-1/2" | 10" | 11" | 12" | 12-1/2" | 13-1/2" ⁽⁵⁾ | 14" ⁽⁵⁾ | - |
| Graded Aggregate Base, LBR 100 | 11" | 12" | 13" | 14" | - | - | - | - |
| Type B-12.5 | 5-1/2" | 6" | 6-1/2" | 7" | 7-1/2" | 8" | 8-1/2" | 9" |

| Table 285-1(continued) Optional Base Groups 8 through 15 | | | | | | | | |
|---|-------------------------------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Base Materials | Base Group (Base Group Pay Item) | | | | | | | |
| | 8 (708) | 9 (709) | 10 (710) | 11 (711) | 12 (712) | 13 (713) | 14 (714) | 15 (715) |
| B-12.5 and 4" Granular Subbase, LBR 100 ⁽²⁾ | - | 4" | 4-1/2" | 5" | 5-1/2" | 6" | 6-1/2" | 7" |
| RAP Base ⁽⁴⁾ | - | - | - | - | - | - | - | - |

(1) Do not use on interstate roadways.
(2) The construction of both the subbase and Type B-12.5 will be bid and used as Optional Base. Granular subbases include limerock, cemented coquina, shell rock, bank run shell, recycled concrete aggregate and graded aggregate base. All subbase thicknesses are 4" minimum prior to adding the required prime coat.
(3) Based on minimum practical thickness.
(4) Only for use on non-limited access paved shoulders, shared use paths, or other non-traffic bearing applications.
(5) To be used for widening, three feet or less.

| Table 285-2: Limited Use Optional Base Groups ⁽¹⁾ | | | | | | | | |
|--|-------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Base Materials | Base Group (Base Group Pay Item) | | | | | | | |
| | 101 (701) | 102 (702) | 103 (703) | 104 (704) | 105 (705) | 106 (706) | 107 (707) | 108 (708) |
| Limerock Stabilized, LBR 70 | 5" | 6-1/2" | 8" | 9" | 10" | 11" | 12-1/2" | - |
| Shell, LBR 70 | 5" | 6-1/2" | 8" | 9" | 10" | 11" | 12-1/2" | - |
| Shell Stabilized, LBR 70 | 7" | 8-1/2" | 9-1/2" | 10-1/2" | 12" | - | - | - |
| Sand-Clay, LBR 75 | 5" | 6-1/2" | 8" | 9" | 10" | 11" | 12-1/2" | - |
| Soil Cement (300 psi) (Plant Mixed) | 5" | 5-1/2" | 6-1/2" | 7-1/2" | 8-1/2" | 9" | 10" | 11" |
| Soil Cement (300 psi) (Road Mixed) | 5" | 5-1/2" | 6-1/2" | 7-1/2" | 8-1/2" | - | - | - |
| Soil Cement (500 psi) (Plant Mixed) | 4" ⁽²⁾ | 4" | 5" | 5-1/2" | 6" | 7" | 7-1/2" | 8-1/2" |

(1) Use only when specified in the Plans.
(2) Based on minimum practical thicknesses.

ARTICLE 285-4 is deleted and the following substituted:

285-4 Construction Requirements.

Construct the base in accordance with the Section covering the particular type of base to be constructed.

| | |
|---|-------------|
| Graded Aggregate | Section 204 |
| Asphalt | Section 234 |
| Reclaimed Asphalt Pavement (RAP)* | Section 283 |
| Limerock | Section 200 |
| Shell Base | Section 200 |

Shell Rock.....Section 200

Cemented Coquina.....Section 200

CalcareniteSection 200

Recycled Concrete Aggregate (RCA)**Section 200

*Only for use on non-limited access paved shoulders, shared use paths, or other

non-traffic

**Do not use on interstate roadways.