ORIGINATION FORM Proposed Revisions to the Specifications (Please provide all information - incomplete forms will be returned)

Date:	Office:
Originator:	Specification Section:
Telephone:	Article/Subarticle:
email:	Associated Section(s) Revisions:

Will the proposed revision require changes to the following Publications:

Publication	Yes	No	Office Staff Contacted	Date
Standard Plans Index				
Traffic Engineering Manual				
FDOT Design Manual				
Construction Project Administration Manual				
Basis of Estimate/Pay Items				
Structures Design Guidelines				
Approved Product List				
Materials Manual				
Maintenance Specs				

Will this revision necessitate any of the following:

Design Bulletin Construction (DCE Memo)

Estimates Bulletin

Materials Bulletin

Have all references to internal and external publications in this Section been verified for accuracy?

Synopsis: Summarize the changes:

Justification: Why does the existing language need to be changed?

Do the changes affect either of the following types of specifications (Hover over type to go to site.):

Special Provisions Developmental Specifications

List Specifications Affected: (ex. SP3270301, Dev330TL, Dev334TL etc.)

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

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

3. What impacts does the change have on production or construction schedules?

4. How does this change improve efficiency or quality?

5. Which FDOT offices does the change impact?

6. What is the impact to districts with this change?

7. Does the change shift risk and to who?

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

9. What is the communication plan?

10. What is the schedule for implementation?

<u>GEOSYNTHETIC</u> FOR <u>DRAINAGE</u> APPLICATIONS <u>FILTER FABRIC</u> (GEOTEXTILE)

(REV 6-1-23)

SECTION 514 is deleted and the following substituted:

514-1 Description.

<u>This Section specifies the construction requirements for geosynthetics used in drainage,</u> <u>slope protection, and material separation applications. Install a filter fabric.</u>

514-2 Material.

Meet the filter fabric requirements as specified in Use geosynthetic materials meeting the requirements of Section 985 and listed on the Approved Product List (APL). Ensure the geosynthetic materials received at the job site are in unopened shipping packages and the packages are clearly labeled with the manufacturer's name, product name, style number, roll dimension and LOT number, otherwise, the Engineer will reject the material. Store geosynthetic materials in accordance with the manufacturer's instructions ensuring to protect the geosynthetic material from physical damage, debris, and temperatures greater than 140° F. Prevent mud, fluid concrete, asphalt, or other deleterious materials from coming in contact with the geosynthetic materials that could impact the performance of the geosynthetic material. Replace geosynthetic materials with defects, tears, punctures, flaws, deterioration, or other damage at no additional cost to the Department.

514-3 Construction Methods.

514-3.1 <u>Geosynthetic Materials for Drainage Applications General:</u> <u>Select a</u> geosynthetic material meeting the appropriate application as specified in 985-3. Place and install the geosynthetic material at the proper elevation, location and orientation filter fabric (fabric) in the manner and locations as shown in the <u>Contract Documents Plans, and</u> in accordance with the manufacturer's <u>instructions directions</u>, and as specified in these Specifications. Place the geosynthetic material fabric on areas with a uniform slope that are reasonably smooth, free from mounds, windrows, and any debris or projections which might damage the geosynthetic <u>material fabric</u>.

Loosely lay the material. Do not stretch the material. Replace or repair any fabric damaged or displaced before or during placement of overlying layers to the satisfaction of the Engineer and at no expense to the Department.

_____When overlapping is necessary, the Contractor may sew the seams to reduce overlaps as specified in 985-2.63.

<u>After placement of the geosynthetic material</u>, <u>Schedule work so that covering the</u> fabric with the specified material does not exceed the manufacturer's recommendations for exposure to ultraviolet light or five days, whichever is less. If <u>the exposure time is the Engineer</u> determines the exposure time was exceeded, the <u>Contractor shall-remove and</u> replace the geosynthetic materialfabric at no expense to the Department.

514-3.2 Subsurface Drainage <u>Applications</u>: When indicated in the Plans, place the <u>geosynthetic materialfabrie</u> with the long dimension parallel to the trench. Place <u>and install</u> the <u>geosynthetic materialfabrie</u> to provide a minimum 12-inch overlap for each joint<u>or in</u>

<u>accordance with the manufacturer's recommendation, whichever is greater</u>. Do not drop the <u>coarse aggregate filter</u> materials from heights greater than 3 feet.

514-3.3 Stabilization and Reinforcement: Overlap adjacent strips of fabric a minimum of 36 inches.

514-3.34 Riprap Revetment System Applications Filter: Overlap adjacent strips of geosynthetic material fabrie at a minimum of 24 inches and in accordance with the manufacturer's recommendations, whichever is greater. A, and anchor the geosynthetic them materials with securing pins (as recommended by the manufacturer) inserted through both strips of geosynthetic material fabrie along a line through the midpoint of the overlap and to the extent necessary to prevent movement displacement of the geosynthetic material.fabrie.

Place the <u>geosynthetic material</u><u>fabrie</u> so that the upstream (upper) strip of <u>geosynthetic material</u><u>fabrie</u> overlaps the downstream (lower) strip.

Stagger vertical laps a minimum of 5 feet. Use full rolls of <u>geosynthetic material</u> <u>fabric</u> whenever possible <u>in order</u> to reduce the number of vertical laps.

514-3.4 Repairs: Replace geosynthetic material damaged during or after installation at no cost to the Department. Repair geosynthetics damaged during or after installation only after the manufacturer establishes that the intended use and stability is not affected and after obtaining the Engineer's approval. Make such repairs as follows:

Remove materials placed within the damaged geosynthetic area plus an additional 4 feet in all directions beyond the limits of the damage. Place a patch consisting of the same material as the geosynthetic material over the damaged area in accordance with the manufacturer's recommendation. Overlap the undamaged geosynthetic material with the patch at a minimum of 3 feet in all directions. Place backfill material on the geosynthetic material in accordance with the Contract Documents after repairs have been completed.

For repairs of Geosynthetic material placed on slopes adjacent to water, place geosynthetic material so that the upstream (upper) strip of geosynthetic material overlaps the downstream (lower) strip.

514-4 Basis of Payment. Acceptance Criteria.

No separate payment will be made for the work specified in this Section. The cost of furnishing, placing, and sewing or overlapping the fabric will be included in the Contract price for the items to which it is incidental.

Submit to the Engineer the product label with the manufacturer's name, product name, style number, roll dimension and LOT number at least fourteen days prior to placement. In addition, provide two 8-inch by 10-inch samples of geosynthetic materials for product identification to the Engineer. The acceptance of the geosynthetic material is subject to the approval of the State Materials Office (SMO).

<u>514-5</u> Basis of Payment.

No separate payment will be made for the work specified in this Section. The cost of furnishing, placing, and sewing or overlapping the fabric will be included in the Contract price for the items to which it is incidental.