

Response To Comments Received From Industry Review

Butch Hines

File: 1620000 - Prepared Soil Layer
Username: Butch Hines
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Date: Tuesday, September 13, 2005
Time: 01:12:21 PM

Comments:

After review of the proposed Prepared Soil Layer Spec, I have notice under 162-5.1 that the testing for organic matter content, pH and primary macronutrients (N, P, K) and secondary macronutrients (S, Ca, Mg). Acquire the from the soil testing laboratory the fertilizer recommendations.

At this time we do not have a laboratory that is qualified under 6-9 that can provide what is being requested above. At this time our test procedures are written for corrosion test only. This type of testing would have to come from a laboratory that runs the agriculture test and could provide this type of test results.

Response: Revised to "laboratory as approved by the Engineer" instead of "laboratory qualified by 6-9".

Mark Minich

From: "Mark Minich" [Mminich@ajaxpaving.com]
Sent: 09/16/2005 11:45 AM
To: <duane.brautigam@dot.state.fl.us>
Cc: "Christie Alvaro" <Calvaro@ajaxpaving.com>
Subject: Proposed Spec Change 1620000.D01 Prepared Soil Layer and 9870000 Prepared soil layer material

Here we go again.

1620000 - The first paragraph 162-1.1 requires import material whether or not it is needed. Probably not a great cost to benefit ratio on that one. Many projects only require processing of existing material, mixing etc.

Response: Revised to "if necessary to achieve the required pH and OM levels required in 162-4".

Also, 162.5 Acceptance testing - The former frequency of 1 test per 2 shoulder miles is substantially increased on most projects by going to a frequency of 1000 SY/ test. Again, probably not a great cost to benefit ratio. Based on typical widths on resurfacing projects, this change would increase frequency testing 5 to 10 times what is used now. I am thinking a more reasonable approach may be every 5000 SY with no less than 3 tests per project with over 1000 SY of prepared soil layer. I think that is more reasonable and will provide an effective level of quality control without disregarding smaller projects.

Response: Test sampling changed from 1,000 sq. yds. to 2,500 sq. yds. and averaged at 10,000 sq. yds.

Section 987 - 2.5% organic is not just a small change from 1% organic. In most cases, this requirement will have a substantial cost that in our experience will not have a noticeable effect on the growth of sod, or the establishment of grass. I guess if the Department wants to find a way to get rid of some extra money, this works.

Response: See response to comments for 9870000.

Dave Reid

From: "Dave Reid" [dreid@ajaxpaving.com]

Sent: 09/16/2005 12:35 PM

To: Mark Minich" <Mminich@ajaxpaving.com>

Cc: Christie Alvaro" <Calvaro@ajaxpaving.com>

Subject: RE: Proposed Spec Change 1620000.D01 Prepared Soil Layer and 9870000 Prepared soil layer material

One of the things I heard at the recent FTBA roundtable seemed to make sense, although that question pertained to asphalt.

Why not just warranty the grass? Either the grass grows or it doesn't. Let the contractor be responsible and you'll have the most cost effective product. Nobody wants to come back and rework the grass. With this spec, even if we do all this, if the grass dies, we still replace it, right?

This spec change will probably mean that in most cases, in addition to spending a lot of money testing dirt underneath grass that will grow in almost any location or condition, we'll need to wait between finishing the dirt and grassing to see if our tests pass, and in order to assure that, we'll need to purchase 6" of topsoil, which means we'll need to be purchasing material that is priced at \$15-20 per CY delivered, or more if the site is remote. The direct cost of this work – the QC and the additional material alone, means that to put down bahia sod that grows anywhere you set it down and water it, which can be installed at about \$2.00 per SY, for a typical 1000 SY

area, we would have to add another \$5.50 a SY. In addition, somewhere else in our bid, we'd need to cover cost to overexcavate to make room for that 6" of select material, and we'll need to allow for reworking these areas anytime we're doing this during the summer, since there will be lots of occasions where our finished soil layer just washes away in summer rain, and anytime an inspection reveals topsoil that isn't perfect. Is the Department ready for Bahia that costs \$10.00/SY? Is the problem with getting grass to grow really that bad? When I drive around the state, I am struck by how good all of the finished projects look. I never would have guessed that in general, the grass isn't growing well on highway projects.

Mark is right. This is a great way for the department to get rid of extra money on something with little or no benefit to the state.

Response: The Department is moving in the direction of Performance Turf. You will see these changes in future specification changes.

Rusty Birchall

Comments on Proposed Changes to Specification 162 – Prepared Soil Layer

In section 162-1.1, the use of "imported" seems unnecessary. "Imported" connotes that the material is brought from offsite. Allowable sources of prepared soil layer are clearly defined in Section 987, Prepared Soil Layer Materials. It should be left at that.

Who is responsible for the testing required in 162-5, Acceptance Testing - the Engineer or the Contractor?

Rusty Birchall
Cone & Graham, Inc.
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Response: See response above.

District 2 Materials Office

File: 1620000 - Prepared Soil Layer
Username: DISTRICT 2 MATERIALS OFFICE
UserEmail: RT219CD
UserTel: SC 881-7719
Date: Thursday, September 29, 2005
Time: 04:32:13 PM

Comments:

For uniformity of format, consider defining prepared soil layer as section 162-1 and include last sentence as 162-1.1 for Finish soil layer below.

Response: Prepared soil layer is the entire Section 162, while finish soil layer is defined in 162-1.

Note the use of term MUCK BLANKET in 1.1 and BLANKET in 1.3 & 2.2

Response: Revised to “mixing in an organic material”.

162-3

Is 'outside of ROW' different from 'off-site'? Can Std index or other spec sections be referenced for disposal of excess material? 505/120?

Response: Revised to “in accordance with 120-5”.

162-5

Consider whether the testing requirements for this Spec (162) can be provided by Labs qualified under 6-9. Tests for primary & secondary nutrients are not those routinely provided by CMT labs. Further, the required recommendations regarding Fertilizer applications are not within the scope of CMT labs.

The spec provided guidance to pH & OM tests in 987. What guidance can be provided for the primary & secondary nutrient tests?

Response: See response above.

Dan Blaydes

Mr. Brautigam,

In section 162.5, the spec. says Acceptance Testing to be performed at a lab qualified under 6-9. My company's lab is qualified under 6-9 and we would be unable to perform the required testing for this specification. I am not sure whether other labs would be able to or not. This testing does not fall into the normal range of testing normally performed for FDOT materials at our facility.

I request that you reconsider the wording of this specification.

Thanks

Dan Blaydes, P.E.
FDOT Program Director
Senior Geotechnical/CMT Engineer

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Response: See response above.

Merritt Bird

File: 1620000 - Prepared Soil Layer

Username: Merritt Bird

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Date: Monday, October 10, 2005

Time: 03:16:23 PM

Comments:

Finish soil layer 162-1.1 revision is inconsistent with 987-2 (1).The second line of 162-1.1 refers to imported material. 987-2 (1) states you could use material excavated within the limits of construction.

Response: See response above.

Jennifer Taylor

Username: Jennifer Taylor

UserEmail: jennifer.taylor@dot.state.fl.us

UserTel: SC373-3471

Date: Tuesday, October 11, 2005

Time: 10:58:47 AM

Comments:

1. Section 162 Prepared Soil Layer (162-3)Some surplus material could end up on the project after final acceptance. Once accepted getting material removed and restoration of the site could prove problematic.

Response: Revised to "in accordance with 120-5".

2. Section 162 Prepared Soil Layer (162-5)

Testing occurs after completion of construction operations.

Response: The operation referred to here is the mixing, addition of additives as necessary, etc., associated with Prepared Soil Layer.

3. Section 162-1 Soil Layer

What is considered existing soil? The problems we have is limerock that is wasted in the median and shoulders. If you mix the existing soil (limerock) with organic material you still will not have what is considered desirable material for growing plants in landscaping.

It also says prepare finished soil layer in areas to be sodded, when called for in the plans. The problem we have is when the plans don't call for a finish soil layer and cities or counties want to do landscaping after we are done with the project. The median and shoulders are full of limerock and they complain because they have to remove what the Department considers acceptable material.

It would be very helpful for design to get with the cities and counties during design and see what their future plans are. It would also be helpful for design to document who with the cities or counties they spoke with. If the cities or counties are going to do landscaping then they need to be on board from the beginning so water and finish soil layer can be considered.

Response: Agree with much of your comment and thoughts, but these are beyond the scope of this spec modification. Would be a Plans Prep Manual issue.

4. 162-1.1 Finish Soil Layer:

Why limit to imported material- on site mat'l may work fine especially if muck is present?

Response: See response above.

5. 162-5 Acceptance Testing.

How will this work with LIMS - will it show missing samples and provide certification issues?

Response: Sampling results entries would be same as is currently done for sampling.
