**Soil Quality Restoration (SQR) for New Lawns-No Impervious Surface Runoff Managed**

**Method 5, March 2017**

**The goal of Method 5 is to create an 8 inch thick healthy profile through a combination of tillage and respread of topsoil. Method 5 combines 4-7 inches of topsoil and tillage to achieve an 8 inch soil profile depth. Method 5 requires a minimum of 4 inches of topsoil being respread. Tillage depth varies between 1-4 inches depending on depth of topsoil spread.**

Applicant\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Submitted by\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Location\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Attach copy of Soil Quality Management Plan including site and soil maps.
2. How many square feet will be treated by SQR \_\_\_\_\_\_\_\_\_\_\_ SF?
3. Please attach documentation of existing soil conditions including description of topsoil to be used.

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10,000 square feet: Take 1 core per 1,000 square feet

10,000-20,000 square feet: Take 1 core per 2,500 square feet

20,000-43,560 square feet: Take 1 core per 5,000 square feet

Provide a lab analysis or follow these guidelines:

* 1. What is the depth of dark brown to black topsoil to be respread? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	2. After a ribbon test, does the ribbon break off at 1” of length? \_\_\_yes \_\_\_no

(If yes, 25% clay content or less is met.)

* 1. Does the soil break up into granules resembling cake crumbs or small curd cottage cheese? \_\_\_yes \_\_\_no

(If yes, granular soil structure exists and the bulk density criteria is met.)

* 1. Is the B Horizon (layer below topsoil) light brown to yellowish? yes\_\_\_ no\_\_\_

(If yes, non-hydric soils and separation from high water table exist.)

**Table:** Recommended tillage and topsoil depths for soil quality restoration to achieve an 8 inch deep healthy soil profile.

|  |  |  |
| --- | --- | --- |
| **Method** | **Initial Tillage****Depth of Subsoil****(inches)** | **Topsoil Depth** |
| 5 | 1 | 7 |
| 5 | 2 | 6 |
| 5 | 3 | 5 |
| 5 | 4 | 4 |
| 5 | 4 | 3” with 1” attached to sod |

1. Identify depth of tillage and type of tillage tool(s) to be used. Attach photos of tillage equipment to be used. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Provide the calculations and quantities of materials applied as amendments

**Topsoil:**

\_\_\_\_Depth of topsoil (in feet) [For example: 4” of topsoil = 4”/12” = 0.33 ft of topsoil]

\_\_\_\_Depth of topsoil (in feet) x \_\_ SF of treated area = \_\_\_\_\_CF of topsoil

\_\_\_\_CF of topsoil / 27 cf/cy = \_\_\_\_ cy of topsoil needed

 \_\_\_\_CF of topsoil x 90 lbs/cf = \_\_\_\_lbs of topsoil/2,000 lbs/ton = \_\_\_tons of topsoil needed

1. Provide a copy of the planting plan with quantities of seed or plants used and a listing of species and rates applied.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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1. Describe the erosion and sediment control measures used to protect the soil quality management area until vegetation is established on disturbed sites that shed towards the soil quality management area. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

***FOR REVIEWERS USE ONLY***

[ ]  Design appears to comply with applicable design standards, and local, state, and federal requirements.

[ ]  Design does not appear to comply with applicable design standards, and local, state, and federal requirements.

Comments:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name of Reviewer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_