**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: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_