Soil Protection Rule Proposal (2:76-25 and 2:76-25A)

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SUBCHAPTER 25. SOIL DISTURBANCE ON PRESERVED FARMLAND

§ 2:76-25.1 Applicability

This subchapter applies to premises subject to farmland preservation deed restrictions recorded pursuant to the Agriculture Retention and Development Act, P.L. 1983, c.32 (N.J.S.A. 4:1C-11 et seq.).

§ 2:76-25.2 Purpose

The purpose of this subchapter is to define what activities on the premises constitute soil disturbance and to establish a soil disturbance limitation. Exceeding the soil disturbance limitation established in this subchapter will constitute a violation of the deed of easement, which prohibits activities detrimental to soil conservation and detrimental to the continued agricultural use of the premises in accordance with N.J.A.C. 2:76-6.15(a)(7) and the intent of which seeks to ensure the premises is maintained as an agriculturally viable parcel capable of sustaining a variety of agricultural operations in the future.

§2:76-25.3 Definitions

“Actively cropped” means land on portions of the premises that is available for agricultural use and production where the following apply: crops or forages are grown directly in the soil profile for a minimum of 150 consecutive days in one (1) calendar year or for two (2) periods of not less than 90 consecutive days each in one (1) calendar year; annual crops and hay are harvested or perennial crops other than hay are maintained annually, and forages are consumed by direct

grazing; or cover crops grown as part of a production rotation that may or may not be harvested and are included in a farm conservation plan.

“Agricultural productivity” means the capacity of a soil to produce a specified plant or sequence of plants under a physically defined set of management practices as measured in terms of inputs of production factors in relation to outputs or yields.

“Agriculturally viable parcel” has the same meaning as that term is defined in N.J.A.C. 2:76-6.2.

“Bulk density” means an indicator of soil compaction, a major determinant of how well plant roots are able to extend into the soil, calculated as the dry weight of soil divided by its volume.

“Committee” means the State Agriculture Development Committee.

“Contiguous premises” means adjacent properties, even if they are separated by human-made barriers or structures or legal boundaries. Contiguous premises shall include, but are not limited to, land areas which directly abut or are separated by a general access roadway or other right-of way, including waterways.

“Cover crop” means an annual or perennial crop consisting of a specific plant or mix of plants that are planted and grown primarily to improve soil quality by reducing soil compaction, increasing soil organic matter content, trapping or producing nitrogen, and reducing soil erosion.

“Cranberry bog”, also known as a cranberry bed, means a naturally acidic bog that has been drained, cleared, leveled, and covered with sand and includes appurtenant canals and earthen

dikes for purposes of cultivating cranberry varieties developed from the native species *Vaccinium macrocarpon*.

"Deep tillage" means performing tillage operations below the normal tillage depth in a manner consistent with an approved farm conservation plan to modify adverse physical or chemical properties of a soil that inhibit plant growth such as, but not limited to, compacted layers formed by field operations, restrictive layers such as cemented hardpans in the root zone, overwash or deposits from wind and water erosion or flooding, or contaminants in the root zone. Deep tillage does not include elevation or topography change.

"Development Easement" means an interest in land, less than fee simple absolute title thereto, which enables the owner to develop the land for any nonagricultural purpose as determined by and acquired under the provisions of N.J.S.A. 4:1C-11 et seq., P.L. 1983, c.32, and any relevant rules or regulations promulgated pursuant thereto. A development easement is conveyed by a deed of easement.

"Existing agricultural water impoundment" means an excavated, unlined farm pond or dammed impoundment fed by surface water or groundwater for irrigating agricultural crops or watering livestock that is reflected in the baseline map established pursuant to N.J.A.C. 2:76-25.10. Agricultural water impoundments shall not include other types of water-related structures including, but not limited to, decorative or recreational ponds, wildlife ponds, stormwater management facilities, aquaculture ponds, pools, manure lagoons, tailwater recovery ponds, ponds constructed primarily for hydropower uses, or naturally occurring ponds and wetlands

but not including existing open ditches as that term is defined in this subchapter. Associated berms or dams are considered soil alteration or soil surfacing.

"Existing open ditch" means a vegetated, unlined canal, ditch, open drain, conveyance swale, or similar structure used to convey water that is reflected in the baseline map established pursuant to N.J.A.C. 2:76-25.10 and may be associated with an existing agricultural water impoundment or utilized to convey runoff from crop fields or underground drainage systems.

"Farm conservation plan" has the same meaning as that term is defined in N.J.A.C. 2:76-2A.7

"Field moisture capacity" means the amount of water retained in a soil after it has been saturated and has drained freely, expressed as a percentage of the oven dry weight of the soil.

"Field Office Technical Guide" or "FOTG" means United States Department of Agriculture Field Office Technical Guide, incorporated herein by reference, as amended and supplemented, and available at https://efotg.sc.egov.usda.gov/#/state/NJ/documents.

"Forest land" means a portion of the premises covered with a large and thick collection of growing trees of at least five (5) contiguous acres in size and not less than 120 feet wide. Forest land does not include land devoted to the production of Christmas trees, nursery stock, orchard, or similar areas where trees are primarily grown to harvest their fruits, nuts, stems, or flowers.

"Forest stewardship plan" has the same meaning as that term is defined in N.J.A.C. 7:3-1.3.

“Geotextile fabric” means a permeable, woven or non-woven, plastic fabric typically used for separation of soil layers, erosion control and weed management, but does not include biodegradable or paper fabrics.

“Geotextile field” means an area that has been covered with geotextile fabric for purposes of agricultural or horticultural production in which the fabric is placed over native soil that has not undergone soil alteration, soil surfacing, or soil compaction but may be top-dressed with organic mulch.

“Grantee” means the entity to which the development easement was conveyed.

“Grantor” means the owner who conveyed the development easement, their heirs, executors, administrators, personal or legal representatives, successors and assigns.

“Ground-level surface” means a surface placed in contact with the soil and includes, but is not limited to, flooring, paving, asphalt, asphalt millings, reinforced concrete, recycled concrete, porous asphalt, porous concrete, stone, rock, gravel, pavers, bricks, block, rubber, sand, cinders, construction mats, pond liners, and non-topsoil stockpiles.

“Hoophouse” means an individual temporary agricultural structure that is used exclusively for the production and storage of live plants by protecting them from sun, wind, excessive rainfall, or cold, or to extend the growing season. A hoop house is constructed of a metal, wood, or durable plastic frame covered with polyethylene, polycarbonate, plastic, or fabric material and does not have a permanent foundation, footings, ground-level surface, or anchoring system. The frame and exterior covering may or may not be removed during the growing season.

"Hoophouse" includes structures commonly known as "high tunnel", "low tunnel", "temporary greenhouse" or "polyhouse".

"Human-altered and human-transported soils 'HAHT,'" also known as anthropogenic soils, means soils that have profound and purposeful alteration or occur on landforms with purposeful construction or excavation and the alteration is of sufficient magnitude to result in the introduction of a new parent material ("human-transported material") or a profound change in the previously existing parent material ("human-altered material"). HAHT soils do not include soils with incidental or unintentional surficial changes due to exempt agricultural practices and are more fully described in the USDA-NRCS *Keys to Soil Taxonomy*, *Twelfth Edition, 2014, at* https://www.nrcs.usda.gov/wps/PA_NRCSConsumption/download?cid=stelprdb1252094&ext=pdf*)* and the USDA-NRCS *Soil Survey Manual*, *Issued March 2017 with Minor Amendments 2018* (https://www.nrcs.usda.gov/wps/PA_NRCSConsumption/download?cid=nrcseprd1333016&ext=pdf.)

"Innovation waiver" means a waiver that allows the Grantor to implement a new or innovative agricultural practice that is not otherwise considered exempt pursuant to N.J.A.C. 2:76-25.4 and which, if approved by the Committee in advance, shall not count toward the soil disturbance limit set forth in N.J.A.C. 2:76-25.5.

"Limit of disturbance" means a clearly delineated area around a proposed area of disturbance authorized pursuant to a waiver, inside which all construction-related activities occur, including

but not limited to site preparation, grading, equipment traffic, construction, and staging. Existing disturbed areas are not part of the limit of disturbance.

“Livestock confinement area” means feedlots, cow yards, dry lots, and exercise yards used exclusively for livestock .

“Livestock training area” means an uncovered, outdoor area of the premises used for riding, racing, training, showing, or rehabilitating livestock. Examples include but are not limited to arenas, tracks, and training rings.

“Low ground pressure equipment” means construction and/or agricultural equipment specifically designed to distribute the weight of the equipment over a larger area to reduce soil compaction, typically with tracks or other design features. Examples include a tracked excavator, tracked skid steer, or wide tracked tractor.

“Maximum dry bulk density” has the same meaning as that term is defined in N.J.A.C. 2:76-25A.3.

“Minimum rooting depth” means at least 40 inches or a lesser depth equal to the depth to a subsurface layer in the natural soil profile that inhibits or prevents root penetration.

“Minimum vegetative cover” means vegetative cover of at least 70% for at least 9 months per calendar year measured pursuant to the procedures set forth in N.J.A.C. 2.76-25A.6.

“NRCS” means the Natural Resources Conservation Service, an agency of the United States Department of Agriculture providing technical assistance for the conservation of agricultural and related natural resources.

“Nominal smoothing” means the movement of topsoil to reduce irregularities from the soil surface that does not alter the elevation of the existing ground surface more than three (3) inches from the original pre-existing natural landform.

“Nominal tent” means a tent that covers up to 2,000 square feet of the premises for any length of time. Nominal tents may be comprised of multiple tents or the first 2,000 square feet of a larger tent.

“Normal tillage” means generally accepted agricultural practices for seedbed preparation and cultivation of soil including moldboard plowing, disking, chisel plowing, hill and furrow plowing, bed shaping, and the use of similar site preparation practices as determined by the Committee where the practice does not meet the definition of human-altered and human-transported soils. Normal tillage is limited to the depth of the topsoil layer.

“On-farm utilities” means buried electric, sewer, water, gas or communication lines, or similar utilities that serve residential units, agricultural labor housing, farm buildings, or other permitted uses on the premises, and installed in compliance with the on-farm utilities construction standards established in N.J.A.C. 2:76-25A.4. On-farm utilities do not include utilities installed for the purpose of supplying resources for, or being interconnected with, off-farm utility demand or generation.

“Organic” means a material derived from living matter such as leaves, crop residues or compost.

"Organic mulch" means a material consisting exclusively of organic material used for weed control, moisture retention, landscaping, travel paths, livestock bedding, soil-compaction alleviation, or as a soil amendment, that is composed of tree bark, wood chips, straw, pine straw, grass clippings, leaves, compost, manure, coconut fibers, or similar materials, and applied at a depth capable of being incorporated into the soil profile without diminishing soil productivity. Organic mulch does not include rubber mulch or materials with synthetic fibers, oils, or other inorganic substances added.

"Parking area" means an area used for vehicular parking that does not meet the definition of a travel lane or storage area. A parking area encompasses parking spaces and the aisles used to connect to travel lanes. Parking areas are delineated by roads, travel lanes, fences, or otherwise delineated by land use and vegetative cover.

"Parking structure" means any fence, barrier, bollard, parking aid, traffic control device, lighting fixture, or similar structure that is installed to manage vehicular traffic and limits or prohibits normal harvesting or tillage activities. Temporary traffic control devices such as wooden stakes, fiberglass reflective rods, rope, and traffic cones which are installed only during a farm event and removed at the events' completion are not considered parking structures. Agricultural fencing whose primary purpose is to contain livestock or exclude wildlife and generally follows the field perimeter is not considered a parking structure.

"Permeable" means a material or surface treatment that allows the passage of water into the soil at a rate equal to or greater than the surrounding surface soils, or that allows the passage

of water into the soil at a rate equal to or greater than the saturated hydraulic conductivity for the soil type identified in the soil survey.

"Planning criteria" means the United States Department of Agriculture National Resource Concern List and Planning Criteria, incorporated herein by reference, as amended and supplemented, at https://directives.sc.egov.usda.gov/OpenNonWebContent.aspx?content=45689.wba.

"Premises" means the property under easement which is defined by the legal metes and bounds description contained in the deed of easement.

"Production waiver" means a waiver that allows the Grantor to exceed the soil disturbance limits established by N.J.A.C. 2:76-25.5, up to a maximum of 15% of the premises or six (6) acres, whichever is greater.

"Riparian zone" has the same meaning as the term that is defined in N.J.A.C. 7:13-1.2.

"Saturated hydraulic conductivity" means a quantitative measure of a saturated soil's ability to transmit water when subjected to a hydraulic gradient.

"Soil" means the natural and native mineral and organic enriched material that occurs at the earth's surface due to the combined long-term interactions of soil forming factors such as geologic parent material, climate, vegetation, and topography. Natural soils are characterized by distinct layers, or horizons, that have resulted from these factors over time.

“Soil alteration” means human-altered and human-transported soils and includes soil movement, grading, leveling, importation, exportation, cut, and fill, but does not include normal tillage or deep tillage.

“Soil compaction” means any activity other than normal tillage that results in an increase in soil dry bulk density above the root limiting levels, or in the consolidation of or a reduction in a soil’s capacity to infiltrate and percolate water. The causes of soil compaction include, but are not limited to: static force, tamping, vibration, kneading, and/or rolling techniques. Examples of preparing or using land that result in soil compaction include, but are not limited to: footings, foundations, earth-retaining structures, parking areas, storage areas, travel lanes or the placement of engineered structures, unless approved by the Committee as an exempt agricultural practice.

“Soil disturbance” means soil alteration, soil surfacing, or soil compaction.

“Soil horizon” means a layer within a soil profile differing from layers of soil above and below it in one or more of the soil morphological characteristics including color, texture, coarse fragment content, structure, consistency and presence of redoximorphic features.

“Soil profile” means a vertical cross-section of soil showing the characteristic horizontal layers or horizons of the soil, which have formed as a result of the combined effects of parent material, topography, climate, biological activity and time.

“Soil surfacing” means a human-made or human-placed covering over the soil including both suspended surfaces and ground-level surfaces unless identified by the Committee as an exempt agricultural practice.

“Solar energy facilities” has the same meaning as that term is defined in N.J.A.C. 2:76-24.3.

“Solar panels” means ground-mounted photovoltaic panels associated with a solar energy facility meeting the standards set forth in N.J.A.C. 2:76-25A.4.

“Stewardship conservation plan” means a farm conservation plan that meets or exceeds the planning criteria for all soil and water resources identified on the premises.

“Stockpile” means a pile of any material located on the Premises for more than 120 cumulative days in a 12-month period. Stockpiles include, but are not limited to, subsoil, sand, manure, leaves, wood chips, compost, building materials, gravel, road surfacing materials, timber, and metal.

“Storage area” means an area of land not in crop production used for the storage of equipment or other farm-related items but not otherwise meeting the definition of a parking area or travel lane.

“Subsoil” means the layer of soil immediately beneath the topsoil where there is visibly less organic matter and root development than the topsoil layer, typically noticed by a change in soil color.

“Substitute soil material” means soil that has been created from a blend of basic components to have equivalent physical, chemical, and biological properties as the native soil.

“Suspended surface” means a surface placed above the soil and includes, but is not limited to, trailers, greenhouses, run-in sheds, pavilions, open-floored arenas, decks, and roofs of buildings.

“Technical Service Provider” means a private individual or entity certified by the NRCS as capable of providing technical service activities according to NRCS standards and specifications for specific conservation activities.

“Temporary geomembrane” means an impermeable plastic film used for a variety of agricultural uses including, but not limited to, plastic mulch and silage wraps, which are typically removed annually.

“Temporary ground protection mats” means construction mats consisting of wood (not including plywood), plastic, or metal that are specifically designed to distribute heavy loads to reduce soil compaction and that are in place for less than 120 cumulative days per calendar year.

“Temporary movable structure” means a structure that is removed from the premises without demolition, and which does not have a permanent foundation, floor, or anchoring system and is in place for no more than 120 cumulative days in a 12-month period. Temporary movable structures include, but are not limited to, office trailers, portable trailer-mounted-bathrooms, portable toilets, horse trailers, food carts, campers, and similar structures.

“Temporary parking area” means an actively cropped area used seasonally or periodically for public parking of vehicles related to the operation of the farm and which maintains minimum vegetative cover. Temporary parking areas do not contain parking structures.

“Temporary storage area” means an area utilized for the storage of infrequently used farm equipment or privately owned equipment associated with permissible farm activities and which maintains minimum vegetative cover.

“Temporary tent” means a tent in place on the premises for less than 120 cumulative days in a calendar year.

“Tent” means a temporary structure with an impermeable covering to provide shelter. It is also known as a tensioned membrane structure or canopy. A tent does not have a permanent foundation, footing, floor, or anchoring systems. A hoop house is not a tent.

“Topsoil” means the uppermost layer in a natural or cultivated soil profile where cultivation, root growth, biological activity, and organic matter are concentrated. Topsoil is composed of mineral particles (sand, silt, and clay) and organic material, and allows for air exchange and water retention. Topsoil is also known as the “plow layer”, “surface soil”, “Ap layer”, “Ap horizon”, or the “surface layer”. Topsoil depth is site-specific, but typically varies between 6 and 12 inches.

“Topsoil stockpile” means a stockpile of topsoil constructed in accordance with N.J.A.C. 2:76-25A.5.

“Travel lane” means a generally linear feature on a farm primarily used for the conveyance of vehicles, pedestrians, livestock, and/or equipment.

“Underground drainage system”, also known as “drain tile”, means a subsurface drainage system made of conduit such as corrugated plastic tubing, tile, or pipe, installed beneath the ground surface to collect and/or convey drainage water to improve farming conditions.

“Unimproved travel lane”, also known as a “farm lane”, means a travel lane that is not more than 10 feet wide for one-way traffic or 16 feet wide for two-way traffic, measured from the outside of the tire tracks, plus an additional 2-foot allowance per side for a shoulder, that has not been surfaced, and is not constructed closer than 300 feet to another unimproved travel lane or travel lane.

“USDA” means the United States Department of Agriculture.

“Vegetative cover” means living plant cover or intact residues but does not include weeds.

“Unimproved livestock area” means a livestock training or livestock confinement area that has not been surfaced or subjected to soil alteration.

“Weed” means a plant that is not grown deliberately or is otherwise prohibited, invasive, or noxious. Examples of weeds include, but are not limited to, plantain, thistle, burdock, garlic mustard, and ground ivy.

§ 2:76-25.4 Exemptions

(a) The following agricultural practices shall not constitute soil disturbance for purposes of determining compliance with the soil disturbance limitation set forth in N.J.A.C. 2:76-25.5, and shall be considered exempt agricultural practices:

1. Cranberry bogs/beds;
2. Deep tillage;
3. Existing open ditches;
4. Existing agricultural water impoundments;
5. Geotextile fields;
6. Normal tillage;
7. Nominal smoothing;
8. Nominal tents;
9. On-farm utilities;
10. Organic mulch;
11. Rehabilitated soils;
12. Solar panels;
13. Temporary geomembranes;
14. Temporary ground protection mats;
15. Temporary movable structures;
16. Temporary parking areas;
17. Temporary storage areas;

18. Temporary tents;

19. Topsoil stockpiles;

20. Underground drainage systems;

21. Unimproved travel lanes;

22. Unimproved livestock areas.

(b) Hoophouses, as defined in N.J.A.C. 2:76-25.3, including those placed on geotextile fields, without soil alteration, soil surfacing, or soil compaction.

(c) Conservation practices meeting the criteria below shall not constitute soil disturbance for the purpose of determining compliance with the soil disturbance limitation set forth in N.J.A.C. 2:76-25.5 when the conservation practice:

1. Is required to address runoff or erosion resulting from normal tillage, and
2. Is planned and installed in accordance with the planning criteria and conservation practice standards developed by the NRCS, and
3. Has a positive conservation effect under section 5 of the FOTG for one or more of the following resource concerns:
   i. Sheet and rill erosion,
   ii. Wind erosion,
   iii. Ephemeral gully erosion,
   iv. Classic gully erosion,
   v. Bank erosion from streams, shorelines, or water conveyance channels, and
   vi. Compaction
4. Is designed to minimize excavation, cuts, and fills; and

5. Ensures that all topsoil shall be stripped and reapplied in accordance with the topsoil stockpiling standard at N.J.A.C. 2:76-25A.5; and

6. Does not utilize suspended surfaces or ground-level surfaces and maintains minimum vegetative cover; and
7. Is included in a farm conservation plan approved by the local soil conservation district and NRCS prior to installation; and
8. Is installed under the supervision of a licensed professional engineer, the Committee, a Technical Service Provider, or NRCS; and
9. Is subject to the submission of an as-built design certifying the conservation practice, as implemented, which meets or exceeds NRCS standards, and which is provided to the Committee and the Grantee.

(d) A conservation practice may also be considered exempt if the Committee finds that the water and erosion control measure meets the criteria in (c) 2, 3, 4, 5, 7, 8 and 9 above, and is necessitated by factors beyond the control of the Grantor including, but not limited to, natural weather conditions or drainage coming from off the farm, such as stormwater from public roads and/or adjacent properties.

(e) Conservation practices, including stormwater management facilities, required to address runoff or erosion resulting from soil disturbance activities or from exempt agricultural practices set forth in N.J.A.C. 2.76-25.4, excluding normal tillage, shall not be considered exempt from soil disturbance limitations in N.J.A.C. 2.76-25.5.

(f) The Committee may designate additional exempt agricultural practices by amendment to (a) above .

1. In considering the adoption of additional exempt agricultural practices, the Committee may consult with the following agencies, organizations, or persons:

   i. The New Jersey Department of Agriculture;

   ii. The New Jersey Agricultural Experiment Station, including appropriate county agents;

   iii. County Agriculture Development Boards;

   iii. County Agriculture Development Boards;

   iv. The State Soil Conservation Committee;

   v. Any other states' Departments of Agriculture, land grant institutions or Agricultural Experiment Stations;

   vi. The United States Department of Agriculture, or any other Federal governmental entity; or

   vii. Any other organization or person which may provide expertise concerning the particular practice.

2. A Grantee or Grantor may request the Committee designate additional exempt agricultural practices.

(g) Exempt agricultural practices shall not violate any other provision of the deed of easement.

(h) Soil disturbance created solely as a result of other property interests in the premises superior in title to the farmland preservation easement, such as utility easements and road

rights-of-way, shall not constitute soil disturbance for the purposes of determining compliance with the soil disturbance limitations set forth in N.J.A.C. 2:76-25.5.

§ 2:76-25.5 Limitation

(a) Soil disturbance may occupy up to 12% of the premises or four (4) acres, whichever is greater.

(b) Alternatively, Grantor may seek permission from the Committee to increase the extent of soil disturbance on the premises over and above the total soil disturbance existing on the premises as of the date this subchapter is published as a rule proposal in the New Jersey Register, in an amount totaling an additional 2% of the premises, or one (1) acre, whichever is greater.

1. The Grantor is eligible for an allocation of an additional 2% or one (1) acre of disturbance if the Grantee and Committee determine that:

    i. The premises complies with the farmland preservation deed of easement; and

    ii. The disturbance proposed on the premises exceeds the soil disturbance limitation pursuant to N.J.A.C. 2:76-25.5(a).

2. The Committee shall utilize the soil disturbance base map issued to the Grantor pursuant to N.J.A.C. 2:76-25.10 or, if applicable, the amended base map established pursuant to N.J.A.C. 25.10(e), as the basis upon which the additional 2 percent or one (1) acre, whichever is greater, shall be calculated.

3. The Committee shall issue a final decision on the Grantor's request to increase the extent of soil disturbance on the premises over and above the total soil disturbance existing on the premises as of the date this subchapter is published as a rule proposal in the New Jersey Register, totaling an additional 2% of the premises, or one (1) acre, whichever is greater.

(c) In calculating the permissible soil disturbance limit, acreage shall be rounded to three decimal places (0.000).

(d) Once an area of the premises has been disturbed, it will continue to be considered soil disturbance unless and until the Committee determines that the area has been successfully rehabilitated in accordance with N.J.A.C. 2:76-25.9 and N.J.A.C. 2:76-25A.9.

(e) Activities occurring within the footprint of areas already considered disturbed will not be counted as additional soil disturbance.

(f) Soil disturbance located outside the boundaries of the premises, including but not limited to severable and non-severable exception areas, residential exclusion areas, and any other area(s) of a farm not subject to the terms and conditions of the deed of easement, shall not count towards the limitation set forth in (a) above.

(g) Removal of topsoil from the Premises is expressly prohibited, except as directly related and incidental to the harvesting of agricultural and horticultural products, such as in soil that is removed with roots when sod is harvested.

2:76-25.6 Waivers

(a) The Committee and Grantee may grant a waiver or waivers of the soil disturbance limitation pursuant to N.J.A.C. 2:76-25.5. The Grantor may apply for one or both types of waivers:

1. A production waiver shall allow additional soil disturbance to a maximum limit of 15% of the premises or six (6) acres, whichever is greater, provided the Grantor meets all the eligibility criteria and conditions listed at (b), (c), and (d) below.

2. An innovation waiver shall allow additional soil disturbance beyond the limits established pursuant to N.J.A.C. 2:76-25.5 and the production waiver limit at N.J.A.C. 2:76-25.6(a)1., provided the Grantor meets all the eligibility criteria and conditions in (b), (c), and (e) below.

(b) Grantor shall be eligible to apply for a waiver under this section if the Grantee and Committee determine that:

1. The premises complies with the farmland preservation deed of easement; and

2. The disturbance proposed on the premises exceeds the soil disturbance limitation pursuant to N.J.A.C. 2:76-25.5.

(c) If a Grantor is determined to be eligible for the waiver pursuant to (b) above, then the proposed project shall meet the following conditions, as determined by the Grantee and Committee:

1. There is no apparent feasible alternative to a proposed project resulting in soil disturbance on the preserved farm beyond the limitation pursuant to N.J.A.C. 2:76-25.5, which would avoid or substantially reduce the proposed soil disturbance; and

2. It is not feasible to utilize areas of existing soil disturbance which would provide sufficient land area for the proposed use, nor is it feasible to implement a certified rehabilitation project on the premises pursuant to N.J.A.C. 2:76-25.9 which, once completed, would render the need for a waiver unnecessary; and

3. The proposed project:

    i. Has an exclusively agricultural or horticultural production purpose; and

    ii. Has a positive impact on agricultural productivity on the premises; and

    iii. Is compliant with relevant federal and state laws and regulations; and

    iv. Does not cause a measurable, negative impact on or off the premises to any of the following:

        (1) Drainage; or

        (2) Flood control, including stormwater runoff quantity; or

        (3) Water conservation, including groundwater recharge; or

        (4) Erosion control, including runoff quality; or

        (5) The continued agricultural use of the premises for a variety of agricultural operations.

v. Does not cause soil contamination.

4. The Grantor has obtained, and the Committee has approved, a stewardship conservation plan for the premises.

   i. The stewardship conservation plan shall maintain the functional integrity of vegetation in the riparian zone.

   ii. For the purposes of meeting the planning criteria for sheet and rill erosion, the following shall apply:

      (1) Soil attached to crops at harvest shall be excluded from the soil loss calculation; and

      (2) Soil loss shall be averaged over a crop rotation period not to exceed five (5) years.

5. The Grantor has obtained a forest stewardship plan for all forest land on the premises.

6. The Grantor provides a long-term maintenance plan for conservation measures associated with the proposed disturbance.

(d) Grantor shall be eligible for a production waiver if the Grantee and Committee, in addition to (b) and (c) above, determine all the following conditions are met:

1. All site preparation, grading, equipment traffic, construction, and staging is confined to a specified limit of disturbance area or area of existing disturbance; and

2. The project design adheres to one or more the following sets of standards and criteria, as determined by the Committee:

    i. Construction standards for expedited production waivers pursuant to N.J.A.C. 2:76-25A.7; or

    ii. The low impact disturbance design criteria pursuant to N.J.A.C. 2:76-25A.8

(e) Grantor shall be eligible for an innovation waiver if the Grantee and Committee, in addition to (b) and (c) above, determine all the following conditions are met:

1. The project:

    i. Maintains minimum vegetative cover; and

    ii. Does not cause the maximum dry bulk density of the soil to increase beyond the limit identified pursuant to N.J.A.C. 2:76-25A.9(c)6ii.(1); and

    iii. Does not cause any soil resource concerns, including soil alteration; and

2. Any soil surfacing proposed can be deployed and readily removed without causing negative impacts to all soil resources, including topsoil.

(f) An application for a waiver shall be filed with the Committee, and the Committee shall provide the Grantee, if applicable, a copy of the application.

1. The Committee shall, within 30 days of receipt of the application, provide written notice to Grantor and Grantee, if applicable, whether the application is complete or incomplete. If incomplete, the notice shall specify the missing information.

2. If the application is incomplete, Grantor shall have 120 days from receipt of the notice of incompleteness to provide the Committee with any missing information.

3. The Grantee shall take no action on the request for a waiver until the Grantee receives copies of the complete application and all supporting materials from the Committee.

(g) Within thirty (30) days of receipt of written notice from the Committee that the application is complete, the Grantor shall provide written notice of the application, at Grantor's sole expense, via certified mail, return receipt requested, and/or by personal service, to:

1. The clerk and land use board secretary of the municipality in which the premises is located. If the premises is located within 200 feet of an adjoining municipality, then written notice of the application shall also be given to the clerk and land use board secretary of the adjoining municipality;

2. The owners of all real property, on the current tax duplicates, within 200 feet in all directions of the premises. The Grantor shall be solely responsible to pay for and obtain a certified list of property owners in accordance with N.J.S.A. 40:55D-12c.;

3. The county planning board, if the premises is located adjacent to a county road.

(h) The notice provided by the Grantor in (g) above shall include the following: the type of waiver sought in the application, a complete description of the project, the conservation measures set forth in the proposed stewardship conservation plan, the conservation measures set forth in the forest stewardship plan, if applicable, the reason(s) necessitating the application, that comments on the application may be provided to, and that copies of the application materials

can be obtained from, the Committee at: State Agriculture Development Committee, P.O. Box 330, Trenton, NJ 08625-0330, and sadc@ag.nj.gov.

(i) The application shall include, but not be limited to, the following information, as applicable:

1. A detailed narrative that includes all the following:

   i. The agricultural purpose of the project; and

   ii. A description of the physical attributes of the proposed project, including location, type and characteristics of proposed disturbance, and the materials to be utilized or placed on the land; and

   iii. The economic impact of the project to the farm operation; and

   iv. An alternatives analysis demonstrating alternate designs, locations, and/or rehabilitation of other areas for the project are infeasible; and

   v. A description of any potential physical impacts of the proposed project upon the premises and any contiguous properties; and

   vi. A description of the existing land use(s) on the premises adjacent to the proposed disturbance area and any potential impacts of the proposed project on those land uses; and

   vii. A description of the conservation measures set forth in the proposed stewardship conservation plan and forest stewardship plan.

2. If the waiver request relates to the construction of agricultural structures, all necessary information relevant to support the request including, but not limited to, zoning, building

and development plans, site plans, relevant permits, and if applicable, stormwater management plans and calculations; and

3. A site map, or copy of the most recent soil disturbance map established pursuant to N.J.A.C. 2:76-25.10 for the premises, clearly depicting the extent and type of both existing disturbance and the proposed new disturbance with a tabulation of total combined disturbances; and

4. A copy of the stewardship conservation plan; and

5. A maintenance plan for all resource management practices necessary to comply with the waiver, if applicable; and

6. A copy of the forest stewardship plan, if applicable; and

7. Any additional information that the Grantee or Committee determines is reasonable and necessary to evaluate whether the waiver request meets the requirements of this section.

(j) Application Review and Approval

1. In determining whether to grant an application for a waiver satisfying the requirements of (b), (c), and (d) or (e) above, consideration shall be given to the extent to which the Grantor's actions or inaction caused or contributed to the need to submit a request for a waiver.

2. In calculating the permissible waiver limit, acreage shall be rounded to three decimal places (0.000); and

3. If a county or a qualified tax-exempt nonprofit organization is the Grantee of the development easement, the decision on the request for a waiver shall be made by both the Grantee and the Committee pursuant to this section.

4. The Grantee and Committee shall prepare resolutions approving, conditionally approving, or denying the waiver request. The resolution shall include, but not be limited to:

    i. A description of the proposed waiver activity; and

    ii. A description of conservation measures set forth in the proposed stewardship conservation plan; and

    iii. A map locating all existing soil disturbance, proposed disturbance areas subject to the waiver request, proposed conservation measures set forth in the proposed stewardship conservation plan, and exempt activities on the premises, including the limit of disturbance area; and

    iv. Area calculations of all existing soil disturbance, proposed disturbance areas subject to the waiver request, proposed conservation measures and exempt activities proposed on the premises; and

    v. Any conditions specific to the waiver activity; and

    vi. The reasons for approval, conditional approval, or denial of the waiver.

5. The Committee resolution shall be recorded with the Office of the County Clerk, and a copy of the recorded document shall be provided to the Grantor, and if applicable, to the Grantee.

(k) No disturbance associated with an approved waiver may occur until:

1. The Grantor has implemented all required engineering practices as defined in the FOTG that are planned for year one (1) of the stewardship conservation plan; and

2. Grantor is on or ahead of schedule with implementation of all other practices prescribed in the stewardship conservation plan; and

3. The forest stewardship plan has been approved by the NJ Forest Service and the Grantor is on schedule with all prescribed management activities; and

4. Grantor obtains and complies with all required permits and approvals.

(l) Waiver(s) granted under this section may be revoked at any time by the Committee if the Grantor fails to maintain compliance with all conditions of waiver approval, the deed of easement, or this subchapter. If a waiver is revoked, the limit of disturbance area shall be rehabilitated in accordance with N.J.A.C. 2:76-25.9 and N.J.A.C. 2:76-25A.9.

§ 2:76-25.7 Aggregation and consolidation

(a) The soil disturbance allocation allowed pursuant to N.J.A.C. 2:76-25.5 may, upon joint approval, if applicable, of the Grantee and the Committee, be aggregated on contiguous premises owned by the same Grantor provided the total disturbance acreage does not exceed the combined individual allocations for each premises comprising the contiguous premises.

1. The decision set forth in (a), above shall be memorialized by resolution of the Grantee, if applicable, and Committee setting forth detailed findings of fact and conclusions of law.

2. The Grantee shall provide the Grantor and Committee with a copy of its decision to approve, approve with conditions, or deny the application.
    i. The Grantee shall provide the Committee with a copy of the Grantee's decision within 10 days of the issuance of the decision.
3. The Committee shall approve, approve with conditions, or deny the request for aggregation within 60 days of receipt of the Grantee's approval.
    i. Such time period may be extended by the Committee for good cause or with the consent of the Grantor.
    ii. The Committee shall provide the Grantor and Grantee with a copy of its decision to approve, approve with conditions, or deny the application.
4. Decisions by the Committee and by the Grantee, as applicable, shall be memorialized by resolution and decisions by the Committee shall be considered final administrative agency action subject to the right of appeal to the Appellate Division of the Superior Court.

(b) No aggregation between contiguous premises shall be permitted unless those premises are restricted such that each premises is permanently associated with, and shall not be conveyed separate and apart from, each other, except as provided in (d), below. The further division of aggregated parcels is prohibited.

(c) In the event the Committee approves an aggregation and consolidation in compliance with this section, the Committee shall prepare a document reflecting the reallocation of the permitted disturbance and prohibiting further division of the respective premises in the

future. The document shall be recorded with the County Clerk, and a copy of the recorded document shall be provided to the Grantor and, if applicable, to the Grantee.

(d) The Committee may, upon a showing of reasonable cause, approve the disaggregation of parcels as permitted in this section.

1. The approval shall require that the soil disturbance limitation for each disaggregated premises not exceed that set forth in N.J.A.C. 2:76-25.5.

2. The Committee may require such other reasonable terms and conditions in granting approval.

§ 2:76-25.8 Division of the premises

(a) Each parcel resulting from a division of the premises approved by the Committee pursuant to N.J.A.C. 2:76-6.15(a)(15) must comply with the soil disturbance limitation prescribed in N.J.A.C. 2:76-25.5 at the time of division.

(b) The soil disturbance limitation prescribed in N.J.A.C. 2:76-25.5 and disturbance associated with production waiver eligibility prescribed in N.J.A.C. 2:76-25.6(a)1 shall be allocated proportionally to each of the parcels resulting from a division of premises pursuant to N.J.A.C. 2:76-6.15(a)(15).

(c) In the event the Committee approves a division of the premises, the Committee shall prepare a document reflecting the division and the allocation of the allowable soil disturbance on the respective premises. The document shall be recorded with the County Clerk, and a copy of the recorded document shall be provided to the Grantor and, if applicable, to the Grantee.

(d) In no event shall an increase in the total soil disturbance limitation prescribed in N.J.A.C. 2:76-25.5 result from a division of the premises.

§ 2:76-25.9 Soil rehabilitation application and certification procedures

(a) A Grantor may complete a certified soil rehabilitation project pursuant to this section and N.J.A.C. 2:76-25A.9 for purposes of rehabilitating disturbed soils so that they no longer count towards the soil disturbance limit established pursuant to N.J.A.C. 2:76-25.5.

(b) The Committee shall have the discretion to reduce, and/or determine, the non-applicability of rehabilitation plan components set forth in N.J.A.C. 2:76-25A.9.

1. Reduction of the components in N.J.A.C. 2:76-25A.9 shall be based on relevant, site-specific conditions of the premises including, but not limited to, soil type and the nature and duration of the disturbance.
2. The Committee may develop templates for rehabilitation of common soil disturbances which may be followed in lieu of the requirements of N.J.A.C. 2:76-25A.9.

(c) Prior to commencing any proposed rehabilitation activities, the Grantor shall submit to the Committee a rehabilitation application and plan ("application package") on a form prepared by the Committee consistent with this subchapter and with the soil rehabilitation standards set forth in N.J.A.C. 2:76-25A.9.

(d) The Committee shall, within 60 days of receipt of the application package, notify the Grantor whether the application package is administratively complete.

1. If the application package is determined administratively incomplete, Grantor shall be notified in writing with a summary of deficiencies.

2. If the application package is determined administratively complete, the Committee shall commence a technical review of the rehabilitation plan.
3. The Committee shall provide written notice to the Grantee, if applicable, when the Committee has deemed an application for rehabilitation complete and provide an opportunity for the Grantee to provide comments on the proposed rehabilitation plan.

(e) The rehabilitation plan technical review period shall be 90 days.

1. If the Committee determines portions of the rehabilitation plan are missing technical information necessary to complete a technical review:
    i. The Grantor shall be notified in writing; and
    ii. The review period shall be paused pending submission of any requested information; and
    iii. The Grantor shall have 30 days to supply the requested information; and
    iv. Acceptance of the submitted information shall restart the review period; and
    v. Failure to submit the documentation within the timeframe shall be considered a withdrawal of the application package.
2. If the Committee determines that the rehabilitation plan does not meet the soil rehabilitation standards set forth in N.J.A.C. 2:76-25A.9, the Committee shall provide a written denial letter to the Grantor stating the reason(s) for the denial. The Grantor may request a hearing before the Committee for any such denial.
3. If the Committee determines the rehabilitation plan meets the soil rehabilitation standards set forth in N.J.A.C. 2:76-25A.9, the Committee shall provide written notice advising the Grantor and Grantee that the Grantor may commence the rehabilitation

process. Notice shall be by certified mail, return receipt requested. The Grantor shall commence the rehabilitation project within 12 months of receipt of the notice to commence.

(f) The Committee may extend the application review timeframes listed above with appropriate justification. Notice of all such extensions shall be in writing to the Grantor. Failure by the Committee to act upon an application package within the review period(s) shall constitute approval of the rehabilitation plan.

(g) If the rehabilitation plan is approved, the Grantor shall complete rehabilitation in accordance with the approved rehabilitation sequence.

1. The Grantor shall notify the Committee of intent to commence the rehabilitation plan, and each step in the rehabilitation sequence, at least five (5) business days prior to start of physical work.
2. The Committee shall inspect each step in the rehabilitation sequence within five (5) business days of notice thereto. The Grantor shall obtain interim certification of the previous step from the Committee prior to commencing the subsequent step.
    i. If interim certification is not obtained, the Grantor shall have not more than one (1) year to meet the standards of that step or the rehabilitation plan shall be considered unsuccessful.
        (1) Not more than one (1) extension of not more than one (1) year shall be approved per step.
        (2) Not more than two (2) extensions shall be approved per rehabilitation plan.

ii. If interim certification is obtained, the Grantor shall retain the documentation for final certification and shall proceed with the rehabilitation sequence.

3. The Committee, in its discretion, may require an inspection of the premises before, during, or after rehabilitation to determine compliance with rehabilitation criteria.
4. The Committee may conduct an inspection of the site and may collect soil samples or other relevant site information to determine if rehabilitation was conducted according to the rehabilitation criteria.
5. The Committee reserves the right to issue a stop-work order upon evidence of work being undertaken that violates the approved rehabilitation plan.
6. Upon completion of all rehabilitation activities, the Grantor shall submit a final certification report in accordance with N.J.A.C. 2:76-25A.9(d).
    i. The Committee shall complete an administrative review within 60 days of receipt of the final report.
    ii. The Committee shall schedule a site visit and review all submitted materials for technical completeness.
    iii. If the Committee determines rehabilitation was not completed according to the approved rehabilitation plan, the Committee shall notify the Grantor, in writing, of deficiencies and recommend corrective measures to bring the rehabilitation area into compliance with the standards within the timelines described in N.J.A.C. 2:76-25A.9.
    iv. If the Committee determines that the rehabilitation work is still deficient after all stated timelines have passed, a resolution shall be issued denying the certification

of rehabilitation, and the land area subject to the deficient rehabilitation work will continue to be counted towards the soil disturbance limitations set forth in N.J.A.C. 2:76-25.5.

v. If the Committee determines that rehabilitation has been completed according to the approved rehabilitation plan, the Committee shall issue a final certification that all soil rehabilitation standards in N.J.A.C. 2:76-25A.9 have been satisfied. A resolution memorializing the certification shall be issued and the rehabilitated land area will no longer be counted towards the soil disturbance limitations set forth in N.J.A.C. 2:76-25.5.

§ 2:76-25.10 Soil protection mapping and monitoring requirements

(a) A baseline soil disturbance map of each premises shall be established by the Committee as of the date this subchapter is published as a rule proposal in the New Jersey Register.

(b) Written notice of the baseline soil disturbance map shall be provided by the Committee to the Grantor by certified mail, return receipt requested, at the recipient's last known address. The Committee shall provide a copy of the baseline soil disturbance map to the Grantee, if applicable.

1. If the notice is returned as unclaimed or undeliverable, then the Committee shall make good faith efforts to provide an alternate manner of notice.

2. The written notice shall include the baseline map and a link to the Committee's website connecting to an online version of the baseline map depicting the extent and classification of identified soil disturbance features on the premises.

3. The written notice shall include a statement that the Grantor and/or Grantee may request reconsideration of the calculated extent or assigned classification of baseline soil disturbance map features in writing to the Committee.

4. The written notice shall include a statement specifying that any Grantor seeking to qualify for an additional 2% or one (1) acre of soil disturbance on the premises pursuant to N.J.A.C. 2:76-25.5(b) , and who wishes to appeal the baseline soil disturbance map issued by the Committee pursuant to this section, shall submit in writing an appeal of the calculated extent or assigned classification of soil disturbance features contained in the baseline map within 60 days of publication of the adoption of this subchapter in the New Jersey Register.

(c) A Grantor seeking to qualify for approval of an additional 2% or one (1) acre of soil disturbance on the premises pursuant to N.J.A.C. 2:76-25.5(b) , and who wishes to dispute the baseline soil disturbance map issued by the Committee pursuant to this section, shall submit a written request for mapping reconsideration of the calculated extent or assigned classification of soil disturbance features contained in the baseline map within 60 days of publication of the adoption of this subchapter in the New Jersey Register. Failure to submit a request for mapping reconsideration within the 60-day period will constitute Grantor's consent to the soil disturbance baseline mapping for the premises.

(d) All other Grantors and Grantees may submit to the Committee a written request for mapping reconsideration of the calculated extent or assigned classification of soil disturbance reflected on the then-current soil disturbance map features at any time.

(e) Upon receipt of a written request for reconsideration Committee staff shall conduct a site visit, as necessary, in order to ascertain the accuracy of the current soil disturbance map for the premises.

1. Within 60 days of the site visit, Committee staff shall solicit comments and information from the Grantor and the Grantee that may inform the evaluation of the soil disturbance mapping.
2. Within 120 days of receipt of the request for reconsideration, the Executive Director shall issue a final, updated soil disturbance map for the premises to the Grantor and the Grantee.
3. If the Grantor and/or Grantee disagree(s) with the revised soil disturbance calculation issued by the Executive Director, then the request for mapping reconsideration will be heard directly by the Committee and the Committee will issue a final decision.

(f) Review of soil disturbance mapping shall occur regularly as part of the monitoring of each premises required in accordance with applicable Committee regulations, or upon request of the Grantee.

1. The current version of soil disturbance mapping shall be available to the Grantor and/or Grantee at any time upon written request.

2. Any increase in identified, or proposed, soil disturbance of two (2) acres or more shall be identified in the annual monitoring report submitted to the Committee by the Grantee.

3. For farms within 75% of the soil disturbance limit established pursuant to N.J.A.C. 2:76-25.5, all newly identified actual or proposed soil disturbances must be reported to the Committee by the Grantee within 60 days of identification.

(g) For farms within 50% of the soil disturbance limit established at N.J.A.C. 2:76-25.5, the Grantee shall include the following documentation as part of its annual monitoring report submission to the Committee:

1. Description of newly identified or amended disturbances characterized by type, location and size (in sq./ft.) as follows:

   i. Soil disturbance types as defined in N.J.A.C. 2.76-25.3:

      (1) Altered soil; and/or

      (2) Surfaced soil; and/or

      (3) Compacted soil.

   ii. Property location identified by tax block and lot number and general description (for example, Northeast corner of Block A, Lot X) and with georeferencing, using latitude and longitude, being preferred.

   iii. Size measured coarsely using basic field tools, including but not limited to tape measures, pacing, or hand-held Global Positioning System (GPS) units, with GPS

measurements being preferred. Vegetative cover shall be measured in accordance with N.J.A.C. 2:76-25A.6.

iv. For areas where classification of soil disturbance is unclear, such as with soil alteration (cut/fill), minimum vegetative cover, or exemptions, the monitor shall err on the side of including the potential disturbance, and additional follow-up may be required to more accurately quantify disturbance areas with more precise tools.

2. Photos of each new disturbance shall be taken and provided to the Committee in digital format.

3. Any additional information that the Committee determines is reasonable and necessary.

(c) The Committee reserves the right to inspect all farms which received Committee approval of an additional soil disturbance allocation pursuant to N.J.A.C. 2:76-25.5(b) and or of a waiver request pursuant to N.J.A.C. 2:76-25.6 as needed to determine ongoing compliance with such approvals.

§ 2:76-25.11 Enforcement

(a) The Grantee and/or the Committee, upon a finding that the owner of the premises has violated this subchapter, may pursue remedies available in N.J.S.A. 4:1C-33 and the deed of easement pursuant to N.J.A.C. 2:76-6.15.

§2:76-25.12 Open public meetings; Committee delegation to the Executive Director

(a) All meetings by the Committee and a Grantee that is a county in connection with applicable provisions in N.J.A.C. 2:76-24.5 through 25.11 shall be held in accordance with the Senator Byron M. Baer Open Public Meetings Act, N.J.S.A. 10:4-6 et seq.

(b) The Committee may delegate to its Executive Director, by resolution, any action of the Committee required pursuant to this subchapter.

(c) Any applicant aggrieved by the decision of the Executive Director may appeal the decision to the Committee.

(d) Nothing in this section shall preclude the Executive Director from bringing any application or request of any kind before the Committee for review and approval, when such action is deemed appropriate by the Executive Director.

§ 2:76-25.13 Severability

Should any section, subsection, sentence, clause, phrase or term of this subchapter be declared void, invalid, illegal or unenforceable, for any reason, by the adjudication of any court or other tribunal having jurisdiction, such a declaration shall not affect the validity of the remaining provisions, which are hereby declared to be severable and which shall continue to remain in full force and effect.

SUBCHAPTER 25A. SUPPLEMENTAL SOIL DISTURBANCE STANDARDS

§ 2:76-25A.1 Applicability

This subchapter applies to premises subject to farmland preservation deed restrictions recorded pursuant to the Agriculture Retention and Development Act, P.L.1983, c. 32 (N.J.S.A. 4:1C-11 et seq.).

§ 2:76-25A.2 Purpose

The purpose of this subchapter is to promulgate technical standards for certain agricultural practices for which a singular definition, as otherwise set forth in N.J.A.C. 2:76-25.3, is infeasible. Where those agricultural practices are undertaken in a manner noncompliant with the supplemental standards established in the subchapter, the acreage where those activities have occurred will count towards the soil disturbance limitation set forth in N.J.A.C. 2:76-25.5.

§ 2:76-25A.3 Definitions

“Avoid-control-trap system” means a system for preventing pollution from sediment, nutrients, bacteria, and pesticides (pollutants) that prioritizes avoiding the introduction of pollutants into the environment, controlling the risks from the unavoidable introduction of pollutants and utilizing best management practices to trap pollutants close to their source to avoid their spread.

"Basal cover” means the portion of the soil surface covered by the base of plants. It does not include foliar cover (the vertical projection of exposed leaf area), or canopy cover (the vertical projection of the outermost perimeter of natural spread of foliage).

“Bulk density” has the same meaning as that term is defined in N.J.A.C. 2:76-25.3.

“Coarse mulch” means wood chip mulch consisting of shredded leaves, bark, and wood particles ranging from 1 to 4 inches in length, with at least 50% of the mulch having a length of 2 inches or greater.

“Dense vegetative cover” means more than 90% live vegetative cover over a topsoil stockpile year-round.

“Farm conservation plan” has the same meaning as that term is defined in N.J.A.C. 2:76-2A.7.

“Farm management unit” has the same meaning as that term is defined in N.J.A.C. 2:76-2.1.

“Forest land” has the same meaning as that term is defined in N.J.A.C. 2:76-25.3.

“Highly erodible land” means land that can erode at excessive rates as determined by the NRCS.

“Innovation waiver” has the same meaning as that term is defined in N.J.A.C. 2:76-25.3.

“Limit of disturbance” has the same meaning as that term is defined in N.J.A.C. 2:76-25.3.

“Low ground pressure equipment” has the same meaning as that term is defined in N.J.A.C. 2:76-25.3.

“Low intensity topsoil stockpile” means an option for stockpiling topsoil designed in accordance with N.J.A.C. 2:76-25A.5.

“Maximum dry bulk density” means the maximum bulk density measured in grams per cubic centimeter as set forth in N.J.A.C. 2:76-25A.5.

“Minimum rooting depth” has the same meaning as that term is defined in N.J.A.C. 2:76-25.3.

“Minimum vegetative cover” has the same meaning as that term is defined in N.J.A.C. 2:76-25.3.

“Moderate intensity topsoil stockpile” means an option for stockpiling topsoil from which hay may be harvested pursuant to N.J.A.C.2.76-25A.5.

“On-farm utilities” has the same meaning as that term is defined in N.J.A.C. 2:76-25.3.

"Premises" has the same meaning as that term is defined in N.J.A.C. 2:76-25.3.

“Production waiver” has the same meaning as that term is defined in N.J.A.C. 2:76-25.3.

"Soil" has the same meaning as that term is defined in N.J.A.C. 2:76-25.3.

“Soil compaction” has the same meaning as that term is defined in N.J.A.C. 2:76-25.3.

“Soil disturbance” has the same meaning as that term is defined in N.J.A.C. 2:76-25.3.

“Soil horizon” has the same meaning as that term is defined in N.J.A.C. 2:76-25.3.

“Soil loss tolerance rate”, or “T”, means the maximum rate of annual soil loss that will permit crop productivity to be sustained economically and indefinitely on a given soil as defined in the USDA-NRCS Soil Survey Manual, Issued March 2017 with Minor Amendments 2018 at: https://www.nrcs.usda.gov/wps/PA_NRCSConsumption/download?cid=nrcseprd1333016&ext=pdf.

“Soil profile” has the same meaning as that term is defined in N.J.A.C. 2:76-25.3.

“Soil structure” means the arrangement of soil particles into aggregates which form cohesive and distinct structural units.

"Solar energy" has the same meaning as that term is defined in N.J.A.C. 2:76-24.3.

"Solar energy facilities" has the same meaning as that term is defined in N.J.A.C. 2:76-24.3.

"Solar panels" has the same meaning as that term is defined in N.J.A.C. 2:76-25.3.

"Solar-related disturbance area" means the total contiguous or noncontiguous area(s) supporting the solar energy facilities and related infrastructure. The total area calculation shall include all areas of land that are devoted to or support the solar energy facilities; any areas of land no longer available for agricultural or horticultural production due to the presence of the solar energy facilities; any areas of the farm used for underground piping or wiring to transmit solar energy or heat where the piping or wiring is less than three feet from the surface. Solar-related disturbance area does not include building-mounted solar energy facilities.

"Soil survey report" means a report generated from the NRCS Web Soil Survey (https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm) that includes maps showing the distribution of soil mapping units throughout a particular geographic area, together with narrative descriptions of the soil series shown and other information relating to the uses and properties of the various soil series.

"Steep slopes" means any slope equal to or greater than five (5) percent as measured over a minimum run of 10 feet.

"Step-point method" means the quantitative means of determining minimum vegetative cover pursuant to N.J.A.C. 2:76-25A.6.

"Stockpile" has the same meaning as that term is defined in N.J.A.C. 2:76-25.3.

“Subsoil” has the same meaning as that term is defined in N.J.A.C. 2:76-25.3.

“Topsoil” has the same meaning as that term is defined in N.J.A.C. 2:76-25.3.

“Topsoil stockpile” has the same meaning as that term is defined in N.J.A.C. 2:76-25.3.

"USDA" has the same meaning as that term is defined in N.J.A.C. 2:76-25.3.

“Vegetated filter strip” means a grassed filter area that meets or exceeds the requirements in the conservation practice standard for filter strips at (https://efotg.sc.egov.usda.gov/api/CPSFile/13129/393_NJ_CPS_Filter_Strip_2017) to reduce excess sediment in surface waters and dissolved contaminants, suspended solids, and associated contaminants in runoff.

§ 2:76-25A.4 On-farm utilities construction

(a) On-farm utilities general construction criteria are as follows:

1. Construction activities shall be completed while soil moisture is significantly below field moisture capacity.
2. Low ground pressure equipment and/or ground protection mats shall be used during construction to reduce soil compaction. Gravel construction roads and unprotected construction roads are counted towards the soil disturbance limitation set forth in N.J.A.C. 2:76-25.5, and shall adhere to the requirements of N.J.A.C. 2.76-25.9 and N.J.A.C. 2:76-25A.9 after construction is complete.
3. No mechanical or structural soil compaction (e.g., with a sheep-foot compactor or vibratory compactor) shall occur prior to or during installation.

4. Topography shall not be altered as part of utility construction.
5. After construction is complete, bare soil over, under, and around the utility shall be seeded to a permanent vegetative cover that is compliant with the *Standards for Soil Erosion and Sediment Control in New Jersey* set forth at: https://www.nj.gov/agriculture/divisions/anr/pdf/2017%20Standards%20Complete%20with%20Soil%20Restoration.pdf or compliant with a farm conservation plan approved by the soil conservation district.
6. Soil loss from the utility area shall be maintained at or below the soil loss tolerance rate "T".

(b) Buried utility construction criteria are as follows:

1. All underground utilities (electric, sewer, water, gas, communication lines, or similar) shall be buried below the minimum rooting depth, or compliant with the depths required by building code or other relevant regulations, if greater.

    i. To the maximum extent practicable, underground utilities shall be buried using a trenching machine.

    ii. If use of a trenching machine is not feasible, an open (excavated) ditch may be used and should be the minimum width necessary to install the utility. The following conditions apply when underground utilities are installed using an open ditch:

        (1) Topsoil and subsoil shall be staged separately from each other and stored in accordance with N.J.A.C. 2:76-25A.5 et seq.

(2) Topsoil shall not be used as bedding beneath buried utility pipe.

(3) After installation, topsoil shall be replaced to an equivalent depth as existed before installation. Excess subsoil may be removed from the premises or reused on site in compliance with an approved farm conservation plan.

(4) Horizontal directional drilling may be utilized as appropriate below the minimum rooting depth. Any soil disturbance resulting from horizontal directional drilling shall comply with N.J.A.C. 2.76-25.9 and N.J.A.C. 2:76-25A.9.

(c) Solar energy facility construction criteria are as follows:

1. The solar energy facility must be approved pursuant to N.J.A.C. 2:76-24.1 et seq. prior to construction.
2. Solar energy facilities shall be designed in a manner to minimize the solar-related disturbance area.
3. The land within the solar energy facility may be utilized for crop production, pasture/grazing, or other soil-based agriculture when part of an approved farm conservation plan.
4. Only the land underneath solar panels, buried utilities, and solar arrays installed according to this standard shall be exempt from the soil disturbance limitation set forth in N.J.A.C. 2:76-25.5. The footprint for all other infrastructure required for the solar

energy facility shall count towards the soil disturbance limitation set forth in N.J.A.C. 2:76-25.5.

5. Travel lanes used solely to access the solar energy facility do not qualify for the unimproved travel lane exemption pursuant to N.J.A.C. 2.76-25.4.
6. Nothing in these rules shall be interpreted to abrogate, supersede, or replace solar energy generation laws and regulations applicable to preserved farmland.
7. Mounting requirements for solar energy facility are as follows:
   i. For a solar energy facility mounted to the ground by a screw, piling, or similar system that does not require a footing, concrete, or other permanent mounting there are no additional installation requirements.
   ii. For a solar energy facility mounted using ballast such as, but not limited to, gravel contained within structures, concrete block, or similar materials:
      (1) Ballast structures shall be designed to minimize the overall footprint of the ballast area;
      (2) All topsoil shall be stripped from the footprint of the ballast structure, concrete block, or similar material and stockpiled according to N.J.A.C. 2.76-25A.5;
      (3) No structural compaction of topsoil or subsoil shall occur within the ballast area; and

(4) The area of the ballast structure is not exempt from the soil disturbance limitation set forth in N.J.A.C 2:76-25.5.

iii. For a solar energy facility mounted using permanent mounting techniques (i.e., concrete footings), and where written justification from a licensed professional engineer has been approved by the Committee:

(1) Footings shall be minimized to the maximum extent practicable;

(2) The area around the footings shall be protected from soil compaction; and

(3) The area of the footings is not exempt from the soil disturbance limitation set forth in N.J.A.C 2:76-25.5.

8. Maintenance

i. Minimum vegetative cover shall be maintained over the entire solar-related disturbance area to minimize runoff and soil erosion.

ii. The solar energy facility shall be kept in good working order.

iii. Land beneath non-functioning panels does not qualify for soil disturbance exemptions in N.J.A.C. 2.76-25.4.

9. Removal:

i. At the end of the solar energy facilities' useful life, all associated infrastructure shall be removed from the soil and properly disposed of. All permanent footings, concrete structures, conduits, and underground utilities shall be removed to a minimum depth of 36 inches. Infrastructure buried deeper than 36 inches may be left in place.

ii. The entire solar-related disturbance area shall comply with the rehabilitation standards pursuant to N.J.A.C. 2.76-25.9 and N.J.A.C. 2:76-25A.9 once the infrastructure has been removed.

§ 2:76-25A.5 Topsoil stockpiling

(a) General performance criteria are as follows:

1. Topsoil stockpiles shall not be located in regulated areas such as wetlands, waters of the state, floodplains, or wetland transition areas.
2. Topsoil stockpiles shall be oriented to allow drainage around the stockpile, to keep the topsoil well drained and aerobic, and to avoid ponding water around the soil.
3. Topsoil movement shall only take place when soils on the site are significantly below field moisture capacity to minimize soil compaction.
4. Topsoil shall be removed and placed using low ground pressure equipment unless work is done from ground protection mats or existing travel lanes.
5. The area to be stripped of topsoil:
   i. Shall have existing vegetation removed by harvesting, mowing, or treating with herbicide according to the manufacturer's label; and
   ii. Shall not be tilled before excavating topsoil to maintain the soil structure.
6. Bulky vegetation (e.g., mulch, corn stover, excessive grass) shall not be incorporated into topsoil stockpiles but shall be harvested or otherwise removed.

7. When moving, handling, and grading topsoil, care shall be taken to avoid overhandling and compaction.

    i. Topsoil shall not be moved using any equipment that substantially reduces soil aggregate structure, increases soil compaction, or leads to excessive soil smearing.

    ii. When possible, the topsoil shall be placed directly onto the final stockpile location or shall be placed directly into a vehicle to be transported to the stockpile location.

8. Topsoil stockpile placement shall avoid overlying prime farmland soils when feasible.

9. Topsoil shall be managed in a way to maintain its soil structure to the maximum extent practicable (e.g., avoid deliberately pulverizing soil clods).

10. Care shall be taken to avoid soil smearing; if the soil is smeared during construction, soil shall be scarified to allow for water and air infiltration and exchange.

11. Topsoil stockpiles shall be maintained to be free of woody vegetation unless specifically permitted herein.

12. Topsoil stockpiles shall be created as either low intensity topsoil stockpiles or moderate intensity topsoil stockpiles, depending on the goals of the farming operation, as described below.

13. If equipment travel over the topsoil stockpile is necessary for construction or maintenance of the stockpile, travel shall be limited to the minimum number of passes required. Travel shall not increase soil dry bulk density above the values listed

in the following table as set forth in the Standards for Soil Erosion and Sediment Control in New Jersey (https://www.nj.gov/agriculture/divisions/anr/pdf/2017%20Standards%20Complete%20with%20Soil%20Restoration.pdf):

Maximum dry bulk densities (grams/cubic centimeter) by soil type /texture

Soil Type/Texture	Bulk Density (g/cc)
Coarse, Medium and Fine Sands and Loamy Sands	1.80
Very Fine Sand and Loamy Very Fine Sand	1.77
Sandy Loam	1.75
Loam, Sandy Clay Loam	1.70
Clay Loam	1.65
Sandy Clay	1.60
Silt, Silt Loam	1.55
Silty Clay Loam	1.50
Silty Clay	1.45
Clay	1.40

(b) Performance criteria for low intensity and moderate intensity topsoil stockpiles are as follows:

1. Low intensity topsoil stockpile areas cover a smaller area than moderate intensity topsoil piles but do not grow a harvestable crop. For low intensity topsoil stockpile areas:
   i. Existing vegetation shall be removed before placement of topsoil fill.
   ii. The existing topsoil shall be tilled or ripped to eliminate any transition zone between the existing topsoil and the topsoil stockpile to be placed on the area.

iii. Topsoil shall be stockpiled to a maximum height of three (3) feet above original grade.

iv. The side-slopes of the topsoil stockpile shall be no greater than 4 horizontal:1 vertical (25%) to reduce erosion potential and allow for routine mowing.

v. When topsoil is planned to be stockpiled for more than 30 days it shall be seeded and mulched according to the standards for soil erosion and sediment control in New Jersey at: https://www.nj.gov/agriculture/divisions/anr/pdf/2017%20Standards%20Complete%20with%20Soil%20Restoration.pdf.

2. Moderate intensity topsoil stockpile areas are lower in height than low intensity stockpiles, and cover more land area, but may be cropped with hay. For moderate intensity topsoil stockpile areas:

i. All vegetation shall be removed prior to placement of topsoil fill;

ii. The existing topsoil shall be tilled or ripped to eliminate any transition zone between the existing topsoil and the topsoil stockpile to be placed on the area;

iii. Topsoil shall be placed at a depth of not less than 12 inches and not more than 18 inches;

iv. Side slopes shall be no greater than 6 horizontal: 1 vertical (17%);

v. Seeding shall be an appropriate long-term, deep rooting perennial hay crop within 30 days;

vi. During establishment, no harvesting shall occur until the crop has reached a sufficient height to ensure vigorous, deep root establishment.

(c) Maintenance of topsoil stockpiles shall be as follows:

1. Agronomic nutrient testing of the surface of the topsoil stockpile shall be completed as soon as the stockpile is constructed. Appropriate amendments shall be added to the soil to establish and maintain dense vegetative cover as recommended by the soil test results.
2. Dense vegetative cover shall be established and maintained on the topsoil stockpiles within 30 days of final soil placement and grading. Topsoil stockpiles shall be reseeded as necessary to maintain dense vegetative cover. There shall be no tillage of topsoil stockpiles after initial establishment except as expressly provided herein.
3. Permanent vegetation on low intensity soil stockpiles shall be mowed no lower than six (6) inches and shall be maintained free of woody vegetation unless otherwise specified herein. Equipment travel over the stockpiles shall be minimized and shall only occur when the stockpile is significantly below field moisture capacity.
4. Permanent vegetation on moderate intensity soil stockpiles shall be mowed or harvested not less than four (4) inches and shall be allowed to regrow at least 12 inches prior to subsequent harvests. Care shall be taken to avoid excessive equipment traffic over the topsoil stockpile. Hay bales shall not be stockpiled on the soil stockpile and shall not be removed from the field unless the ground is significantly below field moisture capacity or the ground is frozen.

5. Tillage may occur on moderate intensity topsoil stockpiles to establish a hay crop not more than once every five (5) years. Seeding or overseeding of hay crops may occur at any frequency necessary to maintain the hay.
6. Trees, shrubs, and woody vegetation shall not be planted or be allowed to establish on topsoil stockpiles unless specifically approved by resolution of the Committee. Nursery stock shall not be established on topsoil stockpiles.
7. Signage shall be maintained on each topsoil stockpile preventing improper use. Topsoil stockpiles shall not be used for picnic areas, parking, travel, pasture or other livestock use, growing crops, filling depressions or containers, or any other use unless specifically provided for herein.
8. All erosion rills that form on the stockpile shall be addressed promptly by stabilization with seed and mulch or biodegradable erosion control matting, if necessary, for vegetation to establish.

§ 2:76-25A.6 Vegetative Cover

(a) Temporary parking areas and temporary storage areas are exempt agricultural practices pursuant to N.J.A.C. 2:76-25.4 when minimum vegetative cover as defined in N.J.A.C. 2:76-25.3 is maintained.

(b) The Committee recognizes that there may be circumstances beyond the reasonable control of the Grantor affecting the Grantor's ability to maintain minimum vegetative cover including, but not limited to, the type of soil present or extended weather conditions. The

Committee and Grantee, as appropriate, shall consider the following factors affecting the quality of vegetation and the ability of a field to maintain minimum vegetative cover in determining whether these areas shall be considered exempt agricultural practices:

i. The weight of the equipment or vehicles; and

ii. The frequency of use of the area each day or season; and

iii. The yield potential of the pasture; and

iv. Pasture management (i.e. mowing, irrigating, fertilizing, seeding, and pasture rotation); and

v. Plant species present; and

vi. Drainage; and

vii. Soil type; and

viii. Weather conditions and season.

(c) The following method shall be used to measure vegetative cover:

1. Delineate land use area by physical breaks (e.g. fences, roads, hedge rows) and/or by visible evidence of soil degradation captured from a drone, aerial imagery, other remote sensing device, or in-person observation.

i. Measurement areas within a land use area to be sampled shall be grouped by soil type and topography.

(1) Each measurement area shall have uniform vegetative cover to avoid undercounting degraded areas.

(2) Each measurement area shall be contiguous (a single polygon, instead of multiple parts).

(3) Measurement areas shall not exceed 1-acre;

(4) The minimum measurement of vegetative cover shall be 0.1-acre.

ii. Sampling results shall be reported separately for each measurement area.

2. Measurement areas shall be sampled at a frequency of 100 points per acre using the following methodology:

i. Establish five (5) equally spaced transects of 20 equally spaced points;

ii. For smaller areas, proportionally reduce the number of points, not the spacing;

iii. To the maximum extent practicable, utilize a pre-determined transect design with points spaced 10 feet apart and rows spaced 40 feet apart (see figure below);

iv. Pace or measure to each sampling location and look at the land cover touching the middle of the boot tip. Alternatively, a measuring tape or pre-measured rope with knots may be used;

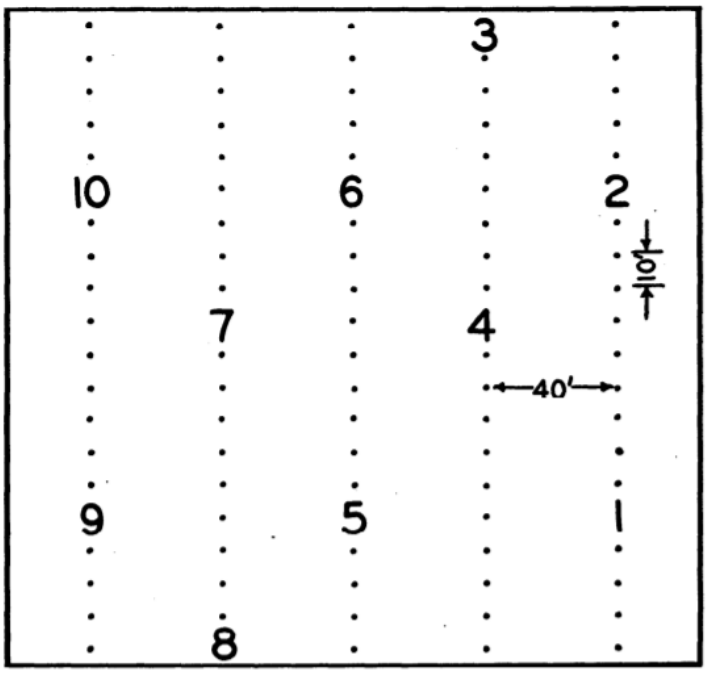
v. Record land cover at each sampling location on a chart or spreadsheet as "vegetation," "weed," "crop residue," "bare ground," or "other" (rocks, wood);

vi. A leaf hanging over bare soil shall be marked as bare soil;

3. The step-point method is used to estimate basal cover of grass and is not a method to estimate vegetative cover beneath trees.

4. Tally points in each land cover category and divide by the total points collected in that measurement area; measurement areas with more than 70 points per acre (70%) of

"vegetation" and/or "crop residue" are not considered degraded soil.



• Step-point
3 Frame-point and step-point

§ 2:76-25A.7 Construction standards for expedited production waivers

(a) Construction standards for expedited production waivers may be utilized when a Grantor demonstrates a proposed project meets all the criteria contained in (b) through (g) below, as applicable.

(b) The following criteria shall apply to all projects seeking to utilize expedited waiver construction standards:

1. No soil disturbance shall be planned:

   i. Within wetlands or other regulated areas; or

ii. In areas with karst topography, shallow depth to bedrock, organic soils, Highly Erodible Land designation, or acid producing soils, pursuant to a soil survey report or identified by NRCS; or

iii. On any steep slopes; and

iv. In forest land; and

2. Disturbed areas shall be minimized while meeting the agronomic needs; and

3. No deliberate mechanical soil compaction (e.g. with a sheep-foot compactor or vibratory compactor, or similar) shall occur on the disturbed area; and

4. Low ground pressure equipment and/or ground protection mats shall be used during construction on exposed soil; and

5. No disturbance shall occur within the dripline of any wooded area, tree, or perennial crop outside the limit of disturbance; and

6. At no time shall the topsoil be removed from the premises or mixed with the underlying subsoil; and

7. All subsoil shall remain on the premises; and

8. Preparation of proposed soil disturbance areas shall only occur when soil moisture within the limit of disturbance is at or below field capacity to avoid excessive rutting, mixing of topsoil and subsoil, and to minimize compaction; and

9. Soil disturbance activities shall not commence unless and until a waiver has been approved by the Grantee and the Committee.

(c) The following maintenance requirements shall apply to all projects seeking to utilize construction standards for expedited production waivers :

1. Erosion occurring within or downslope of the disturbed area shall be stabilized promptly. If erosion occurs repeatedly within or adjacent to a disturbed area, additional conservation measures shall be adopted and implemented that meet the planning criteria; and
2. Topsoil stockpiles shall be maintained according to the N.J.A.C. 2:76-25A.5; and
3. Contamination of the soil beneath the surfacing with high concentrations of fuel, agricultural chemicals, or other toxic substances that might affect future agricultural use of the soil shall be avoided. If soil contamination occurs, the contaminated soil shall be remediated in consultation with Committee; and

(d) When a proposed project will cause soil compaction as defined in N.J.A.C. 2:76-25.3, all the following criteria shall apply:

1. Compacted areas shall not have soil alteration or soil surfacing; and
2. No topsoil or subsoil shall be removed or moved for the construction or use of the compacted area; and
3. Coarse organic mulch and/or ground protection mats shall be utilized when practical; and
    i. The Grantor shall plant and maintain a vegetated filter strip downstream of the compacted area; and
    ii. Be maintained until the compacted area is rehabilitated; and
4. Additional vegetated filter strips shall be planned at an interval within the compacted area necessary to prevent concentrated flow erosion.

(e) When a proposed project will utilize ground-level surfaces, as defined in N.J.A.C. 2:76-25.3, all the following criteria shall apply:

1. Prior to installation, topsoil shall be removed, stockpiled, and stabilized pursuant to N.J.A.C. 2:76-25A.5; and
2. Surfaced areas which require additional grading are considered soil alteration and shall also follow the criteria for altered soils in (g) below; and
3. Surfaced areas shall be underlain with a suitable permeable woven or non-woven geotextile fabric to prevent base or surface material from becoming embedded into native soil while allowing water infiltration; and
    i. Fabric shall extend sufficiently beyond the ground-level surface to ensure native soil/surface material separation; and
    ii. The fabric shall be installed according to manufacturer's guidelines; and
    iii. Additional layers of pressure-distributing material may be added; and
4. At least six (6) inches of appropriate permeable subbase shall be installed to properly distribute loads into the subsoil; and
5. Additional surfacing above the subbase:
    i. May be added as necessary for the agricultural operation; and
    ii. Shall have an infiltration rate greater than or equal to the porosity of the underlying native soil; and
    iii. May include gravel, crushed concrete, cinders, shells, sand, soil, pavers, bricks, or blocks; and

iv. Appropriate edging shall be installed around the perimeter of the facility to limit movement of material off the facility into the neighboring soil; and

v. On-site topsoil shall not be used as a surface; and

vi. Shall not include poured concrete, asphalt, asphalt millings, porous asphalt, or porous concrete. If those surfaces are necessary, the design shall follow the low impact disturbance design criteria pursuant to N.J.A.C. 2:76 25A.8.

(f) When a proposed project will utilize suspended surfaces, as defined in N.J.A.C. 2:76-25.3, all the following criteria shall apply:

1. Rooftop runoff shall be managed using gutters or other management system to capture water for future use, infiltrate water to groundwater, and/or delay the timing of runoff to reduce the impact of the runoff; and
2. A stormwater management plan and design shall be obtained for any required stormwater management facilities; and
3. For the land beneath the suspended surface:
   i. The criteria for ground-level surfaces in (e) above shall be followed; or
   ii. The soil shall be protected with ground protection mats; or
   iii. The soil shall be protected with coarse mulch of at least three (3) inches.

(g) Where soil alteration, as defined in N.J.A.C. 2:76-25.3, is proposed, all the following criteria shall apply:

1. Prior to construction, topsoil shall be removed, stockpiled, and stabilized pursuant to N.J.A.C. 2:76-25A.5; and

2. Grading shall only occur within the B soil horizon (the first soil horizon below the topsoil); and
3. No grading shall go into lower soil horizons or bedrock; and
4. All subsoil shall stay on site, either stockpiled or as part of fill for the project; and
    i. Subsoil stockpiles shall be stabilized with temporary control measures to prevent soil loss due to wind and water erosion; and
5. Exposed soil shall be permanently vegetated or otherwise stabilized within the first growing season; and
6. For fill piles, including organic material, soil amendments, construction materials, or long-term subsoil piles:
    i. The volume of material to be piled onsite shall be commensurate with the volume of material needed for an agricultural purpose on the farm management unit, using a nutrient management plan or other applicable NRCS conservation practices; and
    ii. All imported material shall be free of asphalt, concrete, stone, other rubble, or other undesirable characteristics as determined by the Committee; and
7. For organic fill piles, including mulch, compost, wood chips, manure, livestock bedding, and leaves, a vegetated filter shall be planted and maintained around the fill area. The vegetated filter strip shall be maintained until the fill area is rehabilitated; and

(h) If a deviation from this standard is necessary, the Grantor shall follow the low impact disturbance design criteria pursuant to N.J.A.C. 2:76-25A.8.

§ 2:76-25A.8 Low impact disturbance design criteria

(a) For a project to be eligible for the production waiver, the Grantor shall describe how the proposed project addresses all the low impact disturbance design criteria described below:

1. Topsoil shall be stockpiled pursuant to N.J.A.C.2:76-25A.5; and
2. The following criteria for soil shall, to the maximum extent practicable, be adhered to:
    i. Protect the existing soil profile, by minimizing including cuts, fills, and excavations; and
    ii. Maintain soil physical properties such as soil texture, consistency, and structure; and
    iii. Maintain soil chemical properties; and
    iv. Maintain the natural contour of the land; and
    v. Retain the existing subsoil depth and thickness; and
    vi. Keep the soil profile free of gravel, foreign material, and debris; and
    vii. Keep the bulk density within appropriate levels for plant growth; and
    viii. Support practices that maintain organic matter content; and
3. The following criteria for water shall, to the maximum extent practicable, be adhered to:
    i. Design to maintain existing topography; and
    ii. Prioritize nutrient management in an avoid-control-trap system; and
    iii. Prioritize long-term maintenance of water management systems; and
    iv. Avoid concentrating flows; and
    v. Avoid creating or disturbing steep slopes; and

vi. Employ practices that maintain or increase the infiltration rate of water; and

vii. Protect flow through natural drainage areas; and

viii. Minimize impermeable surfaces; and

4. The following criteria for forest land shall, to the maximum extent practicable, be adhered to:

   i. Maintain healthy forest land.

5. The project design and accompanying narrative for the waiver application shall be completed and certified by a Technical Service Provider, Professional Engineer (PE), NRCS Certified Conservation Planner, or other Committee-approved conservation professional.

2:76-25A.9 Soil rehabilitation plan requirements

(a) The purpose of this section is to establish the minimum application, plan, and certification requirements for a rehabilitation plan to be certified by the Committee as a soil rehabilitation project pursuant to N.J.A.C. 2:76-25.9.

(b) A rehabilitation application and plan shall be prepared in accordance with application documents developed by the Committee.

(c) The rehabilitation plan shall meet or exceed the criteria identified below:

1. General criteria applicable to all rehabilitation plans:

   i. All rehabilitation activities shall be completed while the soil moisture is sufficiently below field moisture capacity to avoid rutting of and damage to soil structure.

ii. Soil rehabilitation activities shall be timed for completion at the onset of the optimal seeding period to minimize the duration and area of exposure of bare soil to erosion.

iii. Vegetative cover shall be established in accordance with the specified cover crop mixture or crop rotation immediately after rehabilitation activities.

iv. Low ground-pressure equipment and/or ground protection mats shall be used during rehabilitation activities.

v. The following soil physical properties shall approximate or be more favorable for plant growth than pre-disturbance conditions:

(1) Surface infiltration rate;

(2) Hydraulic conductivity;

(3) Texture;

(4) Structure

(5) Porosity (e.g. bulk density);

(6) Consistency;

(7) Penetration resistance; and

(8) The reaction (pH) and other chemical properties of the major horizons of the rehabilitated soil must be within the ranges of the pre-disturbed soil or be similar to, or as favorable for, plant growth.

vi. The depth and quality of the rooting zone of the rehabilitated soil shall be equal to or greater than the pre-disturbance soil rooting zone or the rooting zone of a reference site if pre-disturbance rooting zone depth is unknown.

2. Additional criteria applicable to the removal of surfaces or structures are as follows:
    i. All structures, surfaces, and associated foreign materials and debris, including buried infrastructure, shall be removed in their entirety within the soil profile. Buried infrastructure below parent material may remain in place.
    ii. Demolished structures and surfaces shall be removed from the premises for disposal, reuse, or recycling, or may be retained on the premises for beneficial reuse if approved in the rehabilitation plan.
    iii. Removal of gravel or other surfacing shall be completed in a manner that minimizes gravel mixing with soil and compaction of the soil. The removal equipment shall remain on the gravel or ground protection mats during the rehabilitation process.
    iv. After removal of surfaces or structures, human made or processed artifacts (e.g., concrete, glass, brick, gravel) in each horizon shall be less than 5% by volume of the soil profile.
3. Additional criteria applicable to modified topography and soil profile reconstruction are as follows:
    i. Rehabilitated areas shall be consistent with the pre-disturbance contour of the land, and any rehabilitated slope shall be within 1% of the pre-disturbance slope.
    ii. Final grading of the reconstructed soil shall provide for adequate surface drainage.
    iii. The minimum depth of soil and/or substitute soil material to be reconstructed shall be 48 inches; or another depth if deemed necessary or appropriate by the Committee to restore the pre-disturbance soil productivity.
4. Additional criteria applicable to subsoil replacement and/or grading:

i. Subsoil shall be replaced at the same depth and thickness of the undisturbed soil or a similar reference site if the original depth and thickness are unknown.

ii. If importation of subsoil is necessary for rehabilitation, certified clean subsoil shall be utilized and records retained for submission with the final certification report, as described in (d) 1 through (d)7 below.

iii. Replacement subsoil shall have similar physical characteristics to the native subsoil unless the Grantor can demonstrate using soil with similar physical characteristics will prohibit rehabilitation (e.g. excessive clay content).

iv. Subsoil shall be tested for bulk density according to the additional criteria for soil bulk density and decompaction testing set forth in paragraph (c)6 below.

v. Subsoil shall be placed in lifts of not more than six (6) inches and excessive voids shall be removed prior to placement of additional subsoil.

vi. Subsoil shall be scarified before placing additional subsoil or topsoil layers, and any reconstructed soil horizons shall be deep-tilled with appropriate implements to ensure root penetration and that restrictive layers do not limit downward water percolation.

5. Additional criteria related to topsoil replacement and/or grading are as follows:

i. Replacement topsoil shall be applied to the remediation area to a depth not less than that of the pre-disturbed soil, accounting for soil settling.

ii. Topsoil shall not be removed from undisturbed portions of the farm to be utilized for rehabilitation.

iii. Replacement topsoil utilized shall be sourced, in order of preference, from:

(1) An on-site topsoil stockpile, if topsoil was stockpiled prior to disturbance;

(2) An off-premises topsoil source;

(3) Vendor supplying substitute soil material, provided the applicant submits a written justification that is approved by the Committee,

iv. Replacement topsoil shall have similar soil properties as the pre-existing soil as identified in the application package.

(1) Replacement topsoil shall be friable, loamy, with similar coarse fragment content to the original topsoil, free of debris, objectionable weeds and stones, and contain no toxic substance or adverse chemical or physical condition that may be harmful to plant growth. In all cases, topsoil shall have not more than 15% coarse rock fragments greater than one (1) inch in size.

(2) Replacement topsoil shall have an organic matter content greater than or equal to that of the pre-existing topsoil.

(A) Organic matter content may be increased by additives not explicitly prohibited by the deed of easement. Paper-mill byproducts, sludge, biosolids, and other waste products shall not be permitted as soil amendments without the Committee's written approval and as part of a farm conservation plan.

(B) Manure may be incorporated into the soil as part of a manure management plan or farm conservation plan.

v. Prior to applying replacement topsoil:

(1) Complete the additional criteria for bulk density testing and decompaction within the subsoil as set forth in paragraph (c)6 below.

(2) Scarify the subsoil surface to ensure root penetration and that restrictive layers do not limit downward water percolation.

vi. When placing replacement topsoil:

(1) Soil handling shall be limited to the minimum necessary for replacement to maintain soil structure.

(2) Place additional topsoil to allow for settling so the final depth of replacement topsoil is equivalent to or greater than pre-disturbance conditions.

vii. After final topsoil replacement, complete the:

(1) Additional criteria for bulk density testing and decompaction, set forth in paragraph (c)6, and

(2) Additional criteria for soil testing and amendments, set forth in paragraph (c)7, and

(3) Additional criteria for crop yield comparisons, set forth in paragraph (c)8.

6. Additional criteria for bulk density testing and decompaction are as follows:

i. Test the soil in at least five (5) locations per acre at the minimum rooting depth and at the surface for excessive compaction using the soil test methods described below.

ii. Rehabilitated soils shall have bulk density values less than or equal to bulk density values in an undisturbed reference location and not more than those listed in Table 19-1 of the Standards for Soil Erosion and Sediment Control in New Jersey

(https://www.nj.gov/agriculture/divisions/anr/pdf/2014NJSoilErosionControlStandardsComplete.pdf)):

(1) Maximum dry bulk densities (grams/cubic centimeter) by soil type /texture

Soil Type/Texture	Bulk Density (g/cc)
Coarse, Medium and Fine Sands and Loamy Sands	1.80
Very Fine Sand and Loamy Very Fine Sand	1.77
Sandy Loam	1.75
Loam, Sandy Clay Loam	1.70
Clay Loam	1.65
Sandy Clay	1.60
Silt, Silt Loam	1.55
Silty Clay Loam	1.50
Silty Clay	1.45
Clay	1.40

iii. Soil test methods shall be selected from the handheld soil penetrometer test method, tube bulk density test method, or nuclear density test method described in the Standard for Land Grading in the Standards for Soil Erosion and Sediment Control in New Jersey at https://www.nj.gov/agriculture/divisions/anr/pdf/2014NJSoilErosionControlStandardsComplete.pdf.

iv. If soil is determined to be above the maximum bulk density after testing, the soil shall be tilled or scarified to the depth of compaction or the minimum rooting depth, whichever is less, using a chisel plow, subsoiler, or other similar equipment. Vegetative measures designed to loosen the soil (forage radish, cover crops) may be utilized alone or in conjunction with other mechanized methods.

v. After decompaction, the soil density shall be retested at least at the minimum rooting depth, the subsoil surface, and the topsoil surface until compaction has been rehabilitated. The Committee may require additional bulk density sampling within the soil profile for especially compacted soils.

7. Additional criteria for soil testing and soil amendments are as follows:

i. Collect topsoil samples after all grading, soil replacement, and decompaction has been completed. Collect five (5) to ten (10) representative topsoil samples across each rehabilitation area to create a composite mixture for testing at a rate of at least one (1) soil test per disturbance within the rehabilitation area, but not less than one (1) sample per three (3) acres.

ii. Soil sample collection shall follow laboratory standards.

(1) For rehabilitation projects where no topsoil was imported, the soil shall be tested utilizing the New Jersey Agriculture Experiment Station's Full Farm Test (https://njaes.rutgers.edu/soil-testing-lab/services-fees.php) or equivalent, including, nutrients, pH, estimated cation exchange capacity (CEC) and cation saturation, plant-available (inorganic) nitrogen, and organic matter content.

(2) For rehabilitation projects where topsoil was imported from offsite or substitute soil material was created, the Topsoil Specification Test, Ecological Research Test, and/or Compost/Technical Test (https://njaes.rutgers.edu/soil-testing-lab/services-fees.php) may be required based on site-specific conditions.

(3) The Committee reserves the right to require any additional soil tests as is necessary to prove the quality of imported topsoil or substitute soil material.

iii. Amendments shall be applied according to soil test results and recommendations from a Rutgers Cooperative Extension agent or similarly qualified agronomist or soil scientist.

iv. Soil organic matter within the rehabilitation area shall be amended until organic matter content within the rehabilitation area is equal to pre-existing conditions or that of the surrounding farm fields if pre-existing levels are unknown.

v. Topsoil shall be tilled to incorporate all necessary fertilizers and amendments using a large offset disk, roto-tiller, chisel plow or similar equipment, then seeded with a fast-growing cover crop until the next crop is planted.

vi. Once soil amendment is completed, follow additional criteria for crop yield comparisons, set forth in (c)8 below.

8. Additional criteria for crop yield comparisons are as follows:

i. Establish a baseline for comparison using one or more of the following methods:

(1) Pre-recorded crop yields from not more than five (5) years prior to the date of rehabilitation, with farming practices enumerated.

(2) Parallel crop yields from another field farm with the same soil type and under equivalent management practices (irrigation, fertilizer application, seed type, tillage).

(3) If pre-recorded or parallel crop yields are not feasible, county yield values from the soil survey report as defined in N.J.A.C. 2:76-25.3 may be permitted at the discretion of the Committee.

ii. Determine post-rehabilitation crop yield:

(1) Develop and implement a planned cropping rotation for measuring crop yield. Acceptable crops for yield comparison testing may include row crops such as corn or soybeans or small grains but shall not include vegetables, tree fruit, or hay unless approved in writing by the Committee.

(2) Crop yield shall be measured at harvest utilizing a standardized protocol developed by the Grantor in the application package and approved in writing by the Committee.

(3) Crop production shall be measured for at least five (5) years after all other rehabilitation standards have been met and certified.

(4) For sites where parallel crop yield comparison is not possible, adjustment for weather-induced variability in the annual crop production may be permitted by the Committee for not more than two (2) of the five (5) crop yield measurements.

iii. Crop yield testing shall be considered successful when the five (5)-year averaged yield is not less than 90% of the pre-recorded crop yields or county values, or when the parallel crop yields are not less than 90% of the yields in the control fields for three (3) of the five (5) testing years.

iv. Crop yields that fail to meet the minimum rehabilitation thresholds after ten (10) years will be considered unsuccessful and the land will continue to be counted towards the soil disturbance limitations set forth in N.J.A.C. 2:76-25.5.

(d) After rehabilitation activities and testing have been completed, the Grantor shall submit to the Committee and the Grantee a final certification report which, at a minimum, shall include:

1. Records of interim certifications for each step in the approved rehabilitation sequence;
2. A comparison of the pre-existing and rehabilitated soil properties;
3. Documentation of acceptable bulk density tests with a map depicting the approximate location of the tests, and date(s) of testing;
4. Certification of clean fill, including source of soil, if applicable;
5. Results of soil tests, including quantity and type of amendments applied;
6. Crop yield comparisons, farming practices, and sampling pattern and locations; and an as-built survey showing slopes if grading occurred.

§ 2:76-25A.10 Severability

Should any section, subsection, sentence, clause, phrase or term of this subchapter be declared void, invalid, illegal or unenforceable, for any reason, by the adjudication of any court or other tribunal having jurisdiction, such a declaration shall not affect the validity of the remaining provisions, which are hereby declared to be severable and which shall continue to remain in full force and effect.