## STATE OF RHODE ISLAND

#### IN GENERAL ASSEMBLY

#### **JANUARY SESSION, A.D. 2012**

# AN ACT

#### RELATING TO TOWNS AND CITIES - SOIL EROSION AND SEDIMENT CONTROL

Introduced By: Representatives Handy, Edwards, Slater, Naughton, and Ferri

<u>Date Introduced:</u> February 28, 2012

Referred To: House Environment and Natural Resources

It is enacted by the General Assembly as follows:

1 SECTION 1. Section 45-46-5 of the General Laws in Chapter 45-46 entitled "Soil 2 Erosion and Sediment Control" is hereby amended to read as follows: 45-46-5. Model ordinance -- Soil erosion and sediment control. -3 4 ARTICLE I 5 Section 1. Purpose. (a) The (city or town) council finds that excessive quantities of soil are eroding from 6 7 certain areas that are undergoing development for non agricultural uses such as housing developments, industrial areas, recreational facilities, and roads. This erosion makes necessary 8 9 costly repairs to gullies, washed out fills, roads, and embankments. The resulting sediment clogs 10 the storm sewers and road ditches, muddies streams, leaves deposits of silt in ponds and 11 reservoirs, and is considered a major water pollutant. 12 (b) The purpose of this ordinance is to prevent soil erosion and sedimentation from 13 occurring as a result of non agricultural development within the city or town by requiring proper 14 provisions for water disposal, and the protection of soil surfaces during and after construction, in 15 order to promote the safety, public health, and general welfare of the city or town.

16 ARTICLE II

17 Section 1. Applicability.

This ordinance is applicable to any situation involving any disturbance to the terrain, topsoil or vegetative ground cover upon any property within the city or town of \_\_\_\_\_\_ after

- 1 determination of applicability by the building official or his or her designee based upon criteria
- 2 outlined in article III. Compliance with the requirements as described in this ordinance shall not
- 3 be construed to relieve the owner/applicant of any obligations to obtain necessary state or federal
- 4 permits.

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#### ARTICLE III

Section 1. Determination of applicability.

- (a) (1) It is unlawful for any person to disturb any existing vegetation, grades, and contours of land in a manner which may increase the potential for soil erosion, without first applying for a determination of applicability from the building official or his or her designee. Upon determination of applicability, the owner/applicant shall submit a soil erosion and sediment control plan for approval by the building official or his or her designee, as provided in article IV. The application for determination of applicability shall describe the location, nature, character, and time schedule of the proposed land disturbing activity in sufficient detail to allow the building official or his or her designee to determine the potential for soil erosion and sedimentation resulting from the proposed project. In determining the applicability of the soil erosion and sediment control ordinance to a particular land disturbing activity, the building official or his or her designee shall consider site topography, drainage patterns, soils, proximity to watercourses, and other information deemed appropriate by the building official or his or her designee. A particular land disturbing activity shall not be subject to the requirements of this ordinance if the building official or his or her designee finds that erosion resulting from the land disturbing activity is insignificant and represents no threat to adjacent properties or to the quality of any coastal feature or watercourse, as defined in Article IX. The current "Rhode Island Soil Erosion and Sediment Control Handbook," U.S. department of agriculture soil conservation service, R.I. department of environmental management, and R.I. state conservation committee shall be consulted in making this determination.
- (2) This ordinance shall not apply to existing quarrying operations actively engaged in excavating rock but shall apply to sand and gravel extraction operations.
  - (b) No determination of applicability is required for the following:
- (1) Construction, alteration, or use of any additions to existing single family or duplex homes or related structures; provided, that the grounds coverage of addition is less than one thousand (1,000) square feet, and construction, alteration and use does not occur within one hundred (100') feet of any watercourse or coastal feature, and the slopes at the site of land disturbance do not exceed ten percent (10%).
  - (2) Use of a home garden in association with onsite residential use.

1	(3) Accepted agricultural management practices such as seasonal tilling and harvest
2	activities associated with property utilized for private and/or commercial agricultural or
3	silvacultural purposes.
4	(4) Excavations for improvements other than those described in subsection (b)(1) of this
5	section which exhibit all of the following characteristics:
6	(i) Does not result in a total displacement of more than fifty (50) cubic yards of material;
7	(ii) Has no slopes steeper than ten feet (10') vertical in one hundred feet (100') horizontal
8	or approximately ten percent (10%); and
9	(iii) Has all disturbed surface areas promptly and effectively protected to prevent soil
10	erosion and sedimentation.
11	(5) Grading, as a maintenance measure, or for landscaping purposes on existing
12	developed land parcels or lots; provided, that all bare surface is immediately seeded, sodded or
13	otherwise protected from erosive actions, and all of the following conditions are met:
14	(i) The aggregate area of activity does not exceed two thousand (2,000) square feet; and
15	(ii) The change of elevation does not exceed two feet (2') at any point; and
16	(iii) The grading does not involve a quantity of fill greater than eighteen (18) cubic
17	yards; except where fill is excavated from another portion of the same parcel and the quantity
18	does not exceed fifty (50) cubic yards.
19	(6) Grading, filling, removal, or excavation activities and operations undertaken by the
20	city or town under the direction and supervision of the director of public works for work on
21	streets, roads, or rights-of-ways dedicated to public use; provided, that adequate and acceptable
22	erosion and sediment controls are incorporated, in engineering plans and specifications, and
23	employed. Appropriate controls apply during construction as well as after the completion of these
24	activities. All work shall be undertaken in accordance with the performance principles provided
25	for in Article V, Section 1(c) and the standards and definitions that may be adopted to implement
26	the performance principles.
27	ARTICLE IV
28	Section 1. Provisions of plan Procedures.
29	(a) Plan.
30	(1) To obtain approval for a land disturbing activity as found applicable by the building
31	official or his or her designee under article III, an applicant shall first file an erosion and sediment
32	control plan signed by the owner of the property, or authorized agent, on which the work subject
33	to approval is to be performed. The plan or drawings, as described in article V, shall include
34	proposed erosion and sediment control measures to be employed by the applicant or the

applicant's agent.

(2) R.I. Freshwater Wetlands Permit: Where any portion of a proposed development requires approval under any provision of the general laws approved by the general assembly or where the approval contains provisions for soil erosion and sediment controls, that approved plan shall be a component of the overall soil erosion and sediment control plan required under this ordinance for the development.

(b) Fees.

The city or town adopting this ordinance may collect fair and reasonable fees from each applicant requesting approval of a soil erosion and sediment control plan for the purposes of administering this ordinance.

- (c) Plan review.
- (1) Within five (5) working days of the receipt of a completed plan, the building official or his or her designee shall send a copy of the plan to the review authorities which may include the public works department, the planning board or planning department, and conservation commission for the purpose of review and comment. The building official or his or her designee may also, within five (5) working days, submit copies of the plan to other local departments or agencies, including the conservation district that services their county, in order to better achieve the purposes of this chapter. Failure of these review authorities to respond within twenty-one (21) days of their receipt of the plan shall be deemed as no objection to the plan as submitted.
- (2) The time allowed for plan review shall be commensurate with the proposed development project, and shall be done simultaneously with other reviews.
  - (d) Plan approval.
  - (1) The building official or his or her designee shall take action in writing, either approving or disapproving the plan, with reasons stated within ten (10) days after the building official has received the written opinion of the review authorities.
  - (2) In approving a plan, the building official or his or her designee may attach conditions deemed reasonably necessary by the review authorities to further the purposes of this ordinance. The conditions pertaining to erosion and sediment control measures and/or devices, may include, but are not limited to, the erection of walls, drains, dams, and structures, planting vegetation, trees and shrubs, furnishings, necessary easements, and specifying a method of performing various kinds of work, and the sequence or timing of the work. The applicant/owner shall notify the building inspector, or his or her designee, in advance of his or her intent to begin clearing and construction work described in the erosion and sediment control plan. The applicant shall have the erosion and sediment control plan on the site during grading and construction.

1	(e) Appeals

- (1) Administrative procedures: (A) If the ruling made by the building official or his or her designee is unsatisfactory to the applicant/owner, the applicant/owner may file a written appeal. The appeal of plans for soil erosion and sediment control shall be to the zoning board of review or other appropriate board of review, as determined by the city or town council.
- (B) Appeal procedures shall follow current requirements for appeal to the abovementioned boards.
  - (C) During the period in which the request for appeal is filed, and until the time that a final decision is rendered on the appeal, the decision of the building official or his or her designee remains in effect.
  - (2) Expert opinion: The official, or his or her designee, the zoning board of review, or other board of review, may seek technical assistance on any soil erosion and sediment control plan. The expert opinion must be made available in the office of the building official, or his or her designee, as a public record prior to the appeals hearing.

#### 15 ARTICLE V.

- Section 1. Soil Erosion and Sediment Control Plan.
- 17 (a) Plan preparation.

The erosion and sediment control plan shall be prepared by a registered engineer, or landscape architect or a soil and water conservation society certified erosion and sediment control specialist, and copies of the plan shall be submitted to the building official or his or her designee.

(b) Plan contents.

The erosion and sediment control plan shall include sufficient information about the proposed activities and land parcels to form a clear basis for discussion and review and to assure compliance with all applicable requirements of this chapter. The plan shall be consistent with the data collection, data analysis, and plan preparation guidelines in the current "Rhode Island Soil Erosion and Sediment Control Handbook," prepared by the U.S. department of agriculture, soil conservation service, R.I. department of environmental management, R.I. state conservation committee, and at a minimum, shall contain:

- (1) A narrative describing the proposed land disturbing activity and the soil erosion and sediment control measures and stormwater management measures to be installed to control erosion that could result from the proposed activity. Supporting documentation, such as a drainage area, existing site, and soil maps shall be provided as required by the building official or his or her designee.
- 34 (2) Construction drawings illustrating in detail existing and proposed contours, drainage

1	features, and vegetation; limits of clearing and grading, the location of soil erosion and sediment
2	control and stormwater management measures, detail drawings of measures; stock piles and
3	borrow areas; sequence and staging of land disturbing activities; and other information needed for
4	construction.
5	(3) Other information or construction plans and details as deemed necessary by the
6	building official or his or her designee for a thorough review of the plan prior to action being
7	taken as prescribed in this chapter. Withholding or delay of information may be reasons for the
8	building official or his or her designee to judge the application as incomplete and providing
9	grounds for disapproval of the application.
10	(c) Performance principles.
11	The contents of the erosion and sediment control plan shall clearly demonstrate how the
12	principles, outlined in this subsection, have been met in the design and are to be accomplished by
13	the proposed development project.
14	(1) The site selected shall show due regard for natural drainage characteristics and
15	topography.
16	(2) To the extent possible, steep slopes shall be avoided.
17	(3) The grade of created slopes shall be minimized.
18	(4) Post development runoff rates should not exceed pre development rates, consistent
19	with other stormwater requirements which may be in effect. Any increase in storm runoff shall be
20	retained and recharged as close as feasible to its place of origin by means of detention ponds or
21	basins, seepage areas, subsurface drains, porous paving, or similar technique.
22	(5) Original boundaries, alignment, and slope of watercourses within the project locus
23	shall be preserved to the greatest extent feasible.
24	(6) In general, drainage shall be directed away from structures intended for human
25	occupancy, municipal or utility use, or similar structures.
26	(7) All drainage provisions shall be of a design and capacity so as to adequately handle
27	stormwater runoff, including runoff from tributary upstream areas which may be outside the locus
28	of the project.
29	(8) Drainage facilities shall be installed as early as feasible during construction, prior to
30	site clearance, if possible.
31	(9) Fill located adjacent to watercourses shall be suitably protected from erosion by
32	means of riprap, gabions, retaining walls, vegetative stabilization, or similar measures.
33	(10) Temporary vegetation and/or mulching shall be used to protect bare areas and
34	stockpiles from erosion during construction; the smallest areas feasible shall be exposed at any

1	one time; disturbed areas shall be protected during the non growing months, November through
2	March.
3	(11) Permanent vegetation shall be placed immediately following fine grading.
4	(12) Trees and other existing vegetation shall be retained whenever feasible; the area
5	within the dripline shall be fenced or roped off to protect trees from construction equipment.
6	(13) All areas damaged during construction shall be resodded, reseeded, or otherwise
7	restored. Monitoring and maintenance schedules, where required, shall be predetermined.
8	(d) Existing uses and facilities.
9	(1) The building official and/or his or her designee shall accept plans for existing uses
10	and facilities which by their nature may cause erosion and sedimentation, such as excavation and
11	quarrying operations; provided, that this section shall not apply to article III, section 1(a)(1).
12	Plans or satisfactory evidence to demonstrate that the existing operations accomplish the
13	objectives of the section shall be submitted to the building official and/or his/her designee within
14	one hundred twenty (120) days from the date of the determination of applicability.
15	Implementation of the plan shall be initiated upon approval of the plan.
16	(2) When the preexisting use is a gravel extraction operation, the property owner shall
17	conduct the operation in a manner so as not to devalue abutting properties; to protect abutting
18	property from wind erosion and soil erosion due to increased runoff, sedimentation of reservoirs,
19	and drainage systems; and to limit the depth of extraction so as not to interfere with the existing
20	nearby water table.
21	(e) Alternative Paving Materials. An alternative paving material is one of the following:
22	porous asphalt; porous concrete; permeable interlocking concrete pavers; permeable pavers; hard
23	surface elastomeric paving; decomposed granite; crushed rock; gravel; restrained systems (a
24	plastic or concrete grid system confined on all sides to restrict lateral movement, and filled with
25	gravel or grass in the voids); Hollywood Driveways (two strips of concrete or pavers over dirt or
26	vegetation); or recycled rubber. Alternative paving material are permitted for use in every parking
27	area, automobile storage area, automobile, manufactured home or trailer sales area, and
28	driveways, subject to the following:
29	(1) Any product installed within areas designated by the fire department as a fire lane
30	must be approved by the fire department.
31	(2) Permeable interlocking concrete pavers and permeable pavers shall have a minimum
32	thickness of 80mm (3.14 inches).
33	(3) If plantings are an element of the alternative paving material, the irrigation system
34	shall not utilize potable water except for plant establishment.

1	(4) Products and underlying drainage material shall be installed per manufacturers
2	specifications. Sub-grade soils shall be compacted as required per the product installation
3	specifications.
4	(5) Decomposed granite, crushed rock and gravel shall only be allowed for driveways and
5	parking areas serving only one or two residential units.
6	(6) All projects shall be compliant with all other provisions of the municipal code and
7	any applicable standards or guidelines.
8	(7) The requirements of this section shall not apply to the use of alternative paving
9	materials on residential property.
10	ARTICLE VI. Enforcement.
11	Section 1. Performance bond.
12	(a) Performance bond.
13	(1) Before approving an erosion sediment control plan, the building official or his or her
14	designee may require the applicant/owner to file a surety company performance bond, deposit of
15	money, negotiable securities, or other method of surety, as specified by the building official or his
16	or her designee. When any land disturbing activity is to take place within one hundred feet (100')
17	of any watercourse or coastal feature or within an identified flood hazard district, or on slopes in
18	excess of ten percent (10%), the filing of a performance bond shall be required. The amount of
19	the bond, as determined by the public works department, or in its absence, the building official or
20	his or her designee, shall be sufficient to cover the cost of implementing all erosion and sediment
21	control measures as shown on the plan.
22	(2) The bond or negotiable security filed by the applicant shall be subject to approval of
23	the form, content, amount, and manner of execution by the public works director and the city or
24	town solicitor.
25	(3) A performance bond for an erosion sediment control plan for a subdivision may be
26	included in the performance bond of the subdivision. The posting of the bond as part of the
27	subdivision performance bond does not, however, relieve the owner of any requirements of this
28	ordinance.
29	(b) Notice of default on performance secured by bond.
30	(1) Whenever the building official or his or her designee finds that a default has occurred
31	in the performance of any terms or conditions of the bond or in the implementation of measures
32	secured by the bond, written notice shall be made to the applicant and to the surety of the bond by
33	the municipal solicitor. The notice shall state the nature of default, work to be done, the estimated
34	cost, and the period of time deemed by the building official or his or her designee to be

1	reasonably necessary for the completion of the work.
2	(2) Failure of the applicant to acknowledge and comply with the provisions and
3	deadlines outlined in the notice of default means the institution, by the city or town solicitor,
4	without further notice of proceedings whatsoever, of appropriate measures to utilize the
5	performance bond, to cause the required work to be completed by the city or town, by contract or
6	by other appropriate means as determined by the city or town solicitor.
7	(c) Notice of default on performance secured by cash or negotiable securities deposit.
8	If a cash or negotiable securities deposit has been posted by the applicant, notice and
9	procedure are the same as provided for in subsection (b) of this section.
10	(d) Release from performance bond conditions.
11	The performance bonding requirement shall remain in full force and effect for twelve
12	(12) months following completion of the project, or longer if deemed necessary by the building
13	official or his or her designee.
14	Section 2. Approval Expiration Renewal.
15	(a) Every approval granted in this ordinance shall expire at the end of the time period
16	established in the conditions. The developer shall fully perform and complete all of the work
17	required within the specified time period.
18	(b) If the developer is unable to complete the work within the designated time period, he
19	or she shall, at least thirty (30) days prior to the expiration date, submit a written request for an
20	extension of time to the building official or his or her designee, stating the underlying reasons for
21	the requested time extension. If the extension is warranted, the building official or his or her
22	designee may grant an extension of time up to a maximum of one year from the date of the
23	original deadline. Subsequent extensions under the same conditions may be granted at the
24	discretion of the building official.
25	Section 3. Maintenance of measures.
26	Maintenance of all erosion sediment control devices under this ordinance shall be the
27	responsibility of the owner. The erosion sediment control devices shall be maintained in good
28	condition and working order on a continuing basis. Watercourses originating and located
29	completely on private property shall be the responsibility of the owner to their point of open
30	discharge at the property line or at a communal watercourse within the property.
31	Section 4. Liability of applicant.

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condition of this chapter shall relieve the owner/applicant from any responsibility for damage to

persons or property, nor impose any liability upon the city or town for damages to persons or

Neither approval of an erosion and sediment control plan nor compliance with any

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- 2 ARTICLE VII.
- 3 Section 1. Inspections.
- 4 (a) Periodic inspections.

The provisions of this ordinance shall be administered and enforced by the building official or his or her designee. All work shall be subject to periodic inspections by the building official, or his or her designee. All work shall be performed in accordance with an inspection and construction control schedule approved by the building official or his or her designee, who shall maintain a permanent file on all of his or her inspections. Upon completion of the work, the developer or owner shall notify the building official or his or her designee that all grading, drainage, erosion and sediment control measures and devices, and vegetation and ground cover planting has been completed in conformance with the approval, all attached plans, specifications, conditions, and other applicable provisions of this ordinance.

- (b) Final inspection.
- (1) Upon notification of the completion by the owner, the building official or his or her designee shall make a final inspection of the site in question, and shall prepare a final summary inspection report of its findings which shall be retained in the department of inspections, and in the department of public works' permanent inspections file.
- (2) The applicant/owner may request the release of his or her performance bond from the building official or his or her designee twelve (12) months after the final site inspection has been completed and approved. In the instance where the performance bond has been posted with the recording of a final subdivision, the bond shall be released after the building official or his or her designee has been notified by the city or town planning director of successful completion of all plat improvements by the applicant/owner.
- ARTICLE VIII. Notification.
- 26 Section 1. Noncompliance.

If, at any stage, the work in progress and/or completed under the terms of an approved erosion and sediment control plan does not conform to the plan, a written notice from the building official or his or her designee to comply shall be transmitted by certified mail to the owner. The notice shall state the nature of the temporary and permanent corrections required, and the time limit within which corrections shall be completed as established in section 2(b) of this article. Failure to comply with the required corrections within the specified time limit is considered a violation of this ordinance, in which case the performance bond or cash or negotiable securities deposit is subject to notice of default, in accordance with sections 1(b) and 1(c) of article VI.

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	Section	۷.	Penalties.

- 2 (a) Revocation or suspension of approval.
- The approval of an erosion and sediment control plan under this chapter may be revoked or suspended by the building official and all work on the project halted for an indefinite time period by the building official after written notification is transmitted by the building official to the developer for one or more of the following reasons:
  - (1) Violation of any condition of the approved plan, or specifications pertaining to it;
- 8 (2) Violation of any provision of this ordinance or any other applicable law, ordinance, 9 rule, or regulation related to the work or site of work; and
  - (3) The existence of any condition or the performance of any act constituting or creating a nuisance, hazard, or endangerment to human life or the property of others, or contrary to the spirit or intent of this ordinance.
    - (b) Other penalties.

In addition, whenever there is a failure to comply with the provisions of this ordinance, the city or town has the right to notify the applicant/owner that he or she has five (5) days from the receipt of notice to temporarily correct the violations and thirty (30) days from receipt of notice to permanently correct the violations. Should the applicant owner fail to take the temporary corrective measures within the five (5) day period and the permanent corrective measures within the thirty (30) day period, the city or town then has the right to take whatever actions it deems necessary to correct the violations and to assert a lien on the subject property in an amount equal to the costs of remedial actions. The lien shall be enforced in the manner provided or authorized by law for the enforcement of common law liens on personal property. The lien shall be recorded with the records of land evidence of the municipality, and the lien does incur legal interest from the date of recording. The imposition of any penalty shall not exempt the offender from compliance with the provisions of this ordinance, including revocation of the performance bond or assessment of a lien on the property by the city or town.

(c) In addition to any other penalties provided in this section, a city or town is authorized and empowered to provide by local ordinance for penalties and/or fines of not more than two hundred fifty dollars (\$250) for failure to submit plans on or before the date on which the plan must be submitted, as stated in the determination of applicability. Each day that the plan is not submitted constitutes a separate offense.

#### 32 ARTICLE IX.

- 33 Section 1. Definition of selected terms.
- 34 (a) Applicant: Any persons, corporation, or public or private organization proposing a

development which would involve disturbance to the natural terrain as defined in this ordinance.

- (b) Coastal feature: Coastal beaches and dunes, barrier beaches, coastal wetlands,
   coastal cliffs, bluffs, and banks, rocky shores, and manmade shorelines as defined in "The State
   of Rhode Island Coastal Resources Management Program" as amended June 28, 1983.
  - (c) Cut: An excavation. The difference between a point on the original ground and a designated point of lower elevation on the final grade. Also, the material removed in excavation.
- 7 (d) Development project: Any construction, reconstruction, demolition, or removal of 8 structures, roadways, parking, or other paved areas, utilities, or other similar facilities, including 9 any action requiring a building permit by the city or town.
  - (e) Erosion: The removal of mineral and/or organic matter by the action of wind, water, and/or gravity.
  - (f) Excavate: Any act by which earth, sand, gravel, or any other similar material is dug into, cut, removed, displaced, relocated, or bulldozed, and includes the resulting conditions.
  - (g) Fill: Any act by which earth, sand, or other material is placed or moved to a new location above ground. The fill is also the difference in elevation between a point of existing undisturbed ground and a designated point of higher elevation of the final grade.
    - (h) Land disturbing activity: Any physical land development activity which includes such actions as clearance of vegetation, moving or filling of land, removal or excavation of soil or mineral resources, or similar activities.
  - (i) Runoff: The surface water discharge or rate of discharge of a given watershed after a fall of rain or snow, and including seepage flows that do not enter the soil but run off the surface of the land. Also, that portion of water that is not absorbed by the soil, but runs off the land surface.
  - (j) Sediment: Solid material, both mineral and/or organic, that is in suspension, is being transported, or has been moved from its site or origin by wind, water, and/or gravity as a product of erosion.
  - (k) Soil erosion and sediment control plan: The approved document required before any person may cause a disturbance to the natural terrain within the city or town as regulated by this ordinance. Also, referred to as erosion and sediment control plan, approved plan.
  - (l) Watercourse: The term watercourse means any tidewater or coastal wetland at its mean high water level, and any freshwater wetland at its seasonal high water level, including, but not limited to, any river, stream, brook, pond, lake, swamp, marsh bog, fen, wet meadow, or any other standing or flowing body of water. The edge of the watercourse shall be used for delineation purposes.

1	SECTION 2. This act shall take effect upon passage.
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## EXPLANATION

### BY THE LEGISLATIVE COUNCIL

OF

## AN ACT

## RELATING TO TOWNS AND CITIES - SOIL EROSION AND SEDIMENT CONTROL

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This act would establish guidelines for the use of alternative paving materials for nonresidential driveways and parking lots under the soil erosion and sediment control model
ordinance.

This act would take effect upon passage.