



**AN ORDINANCE AMENDING THE CODE OF ORDINANCES
OF THE TOWN OF NAGS HEAD, NORTH CAROLINA**

WHEREAS, A text amendment was initiated by the Planning Board to address a confusing and irregular aspect of lot coverage calculations when it comes to the use of permeable surfaces; and

WHEREAS, The Town Board desires to keep local ordinances up to date and applicable with current conditions and to be consistent in enforcement and has just adopted an update to the Town's Ordinances regulating the use of fill and requirements for stormwater management; and

WHEREAS, The Planning Board finds that appropriate use of permeable surfaces can reduce stormwater run-off and promote a healthy, natural environment and a built environment that reflects the heritage of "Old Nags Head" as mentioned in the Town's Vision Statement in the 2010 Land Use Plan; and

WHEREAS, the Town finds that these text amendments are consistent with the goals, objectives and policies of the Town's adopted Land Use Plan, and that this action is reasonable and in the public interest;

NOW THEREFORE BE IT ORDAINED by the Board of Commissioners of the Town of Nags Head, North Carolina, that Chapter 48, Zoning, of the Code of Ordinances shall be amended as follows:

PART I. That Section 48-402 R-1 Low-Density Residential District, subsection (d) (2), Section 48-403 R-2 Medium-Density Residential District subsection (d) (2), Section 48-404 R-3 High-Density Residential District subsection (d) (2) be amended as follows (changes in red italics):

(d) *Dimensional requirements.* Unless otherwise specified in subsection (c) of this section, the following dimensional requirements in the R-1 district shall apply:

- (1) A minimum lot area of 20,000 square feet is required for single-family dwellings.
- (2) Lot Coverage:

a) The lot coverage shall not exceed 30 percent plus 300 square feet or 33 percent, whichever is greater. When performing lot coverage calculations, the residential lot coverage calculation sheet included with the site development application, as amended, shall be completed and submitted for review and approval.

b) Permeable Pavement:

- i. The use of permeable paving systems shall be credited with a 33% reduction in the calculated lot coverage for the area of square footage of permeable pavement used. The total calculated lot coverage whenever permeable paving systems are used shall not exceed 40%.*
- ii. Permeable pavement materials include porous concrete, permeable interlocking concrete pavers, concrete grid pavers, Turfstone™, and other proven technologies available as covered in the NC Best Management Practices Manual and as approved by the Town Engineer for appropriateness to the site and existing conditions. Porous concrete shall be designed and installed in accordance with ACI specifications, or equivalent standard, with hydrological, operation and maintenance considerations. Installation shall be conducted by a contractor certified in the installation of the type of pavement system chosen.
- iii. Edge restraints shall be provided on all concrete grid pavers, permeable interlocking concrete pavers, and similar type installations to confine the pavement installation. The pavement surface course structural properties*

shall be designed to withstand the applied vehicular loading pursuant to the specified application.

- iv. No porous concrete shall be used east of NC 1243 (South Old Oregon Inlet Road) or NC12 (South Virginia Dare Trail). Compacted gravel shall not be considered permeable pavement.
- c) In the case of an oceanfront lot, only that area landward of the first line of stable natural vegetation (as defined by CAMA) shall be used for calculating lot coverage. Where an oceanfront lot has little or no stable natural vegetation, the line of such vegetation shall be a line extending between the nearest such vegetation existing north and south of the lot. In the case of lots abutting estuarine waters (as defined by division of marine fisheries and used by CAMA), lot coverage shall be in accordance with the standards listed above, except that in the area waterward of the U.S. Army Corps of Engineers 404 fill line, lot coverage shall not exceed 30 percent. If the Corps of Engineers 404 fill line is not evident or located within the estuarine AEC, as defined by CAMA, lot coverage within the estuarine, AEC shall not exceed 30 percent. Lot coverage allowances shall not be transferred from one portion of the lot to another.
- d) The area necessary for shared accessways in accordance with subsection 48-90(a) shall be excluded from the total lot coverage allowance for an individual lot.
- e) For residential uses, the total lot coverage may be increased from 40% to 45% when onsite stormwater management facilities are designed, constructed, verified and maintained to retain and infiltrate the run-off from a 3.5 inch, two-hour rainfall event, assuming a standard infiltration rate of ten inches per hour. The stormwater management design standard may be reduced to a 3.0 inch, two-hour rainfall event when more than 15 percent of the lot area is preserved in existing vegetation in accordance with subsection 48-485(b)(1)(3).

~~*The lot coverage shall not exceed 30 percent plus 300 square feet or 33 percent, whichever is greater. Coverage may be increased to a maximum of 40 percent if open-face paving block, Turfstone™, or porous concrete as approved by the town engineer is used in place of surfaces such as concrete or asphalt. The porous concrete shall be designed and installed in accordance with ACI specifications, or equivalent standard, with hydrological, operation and maintenance considerations in accordance with those described in Chapter 18, Permeable Pavement, NCDENR—Division of Water Quality—Stormwater Best Management Practices Manual, latest edition. Installation shall be conducted by a contractor certified in the installation of this type of pavement system. One square foot of concrete or asphalt can be replaced by 1½ square feet of open-faced paving block. Open-face paving block shall be installed in accordance with article V of this chapter. In the case of an oceanfront lot, only that area landward of the first line of stable natural vegetation (as defined by CAMA) shall be used for calculating lot coverage. Where an oceanfront lot has little or no stable natural vegetation, the line of such vegetation shall be a line extending between the nearest such vegetation existing north and south of the lot. In the case of lots abutting estuarine waters (as defined by division of marine fisheries and used by CAMA), lot coverage shall be in accordance with the standards listed above, except that in the area waterward of the U.S. Army Corps of Engineers 404 fill line, lot coverage shall not exceed 30 percent. If the Corps of Engineers 404 fill line is not evident or located within the estuarine AEC, as defined by CAMA, lot coverage within the estuarine, AEC shall not exceed 30 percent. Lot coverage allowances shall not be transferred from one portion of the lot to another. The area necessary for shared accessways in accordance with subsection 48-90(a) shall be excluded from the total lot coverage allowance for an individual lot. For residential uses, lot coverage as regulated by this subsection may be increased to a maximum of 40 percent, and further increased to a maximum of 45 percent if open-face paving block, Turfstone, or porous concrete as approved by the town engineer is used, when onsite stormwater management facilities are designed, constructed, verified and maintained to retain and infiltrate the run-off from a 3.5 inch, two-hour rainfall event, assuming a standard infiltration rate of ten inches per hour. The stormwater management design standard may be reduced to a 3.0 inch, two-hour rainfall event when more than 15 percent of the lot area is preserved in existing vegetation in accordance with subsection 48-485(b)(1)(3).*~~

PART II. Section 48-405 CR Commercial Residential District subsection (d) (2) and (3)
be amended as follows

- 2) Lot coverage for single-family and two-family uses shall be in accordance with subsection 48-404(d)(2).
- 3) Lot Coverage for all uses other than single-family and two-family uses:
 - a) The lot coverage shall not exceed 40 percent. *When performing lot coverage calculations, the residential lot coverage calculation sheet included with the site development application, as amended, shall be completed and submitted for review and approval.*
 - b) Permeable Pavement:
 - i. *The use of permeable paving systems shall be credited with a 33% reduction in the calculated lot coverage for the area of square footage of permeable pavement used. The total calculated lot coverage whenever permeable paving systems are used shall not exceed 50%.*
 - ii. Permeable pavement materials include porous concrete, permeable interlocking concrete pavers, concrete grid pavers, Turfstone™, and other proven technologies available as covered in the NC Best Management Practices Manual and as approved by the Town Engineer for appropriateness to the site and existing conditions. Porous concrete shall be designed and installed in accordance with ACI specifications, or equivalent standard, with hydrological, operation and maintenance considerations. Installation shall be conducted by a contractor certified in the installation of the type of pavement system chosen.
 - iii. *Edge restraints shall be provided on all concrete grid pavers, permeable interlocking concrete pavers, and similar type installations to confine the pavement installation. The pavement surface course structural properties shall be designed to withstand the applied vehicular loading pursuant to the specified application.*
 - iv. No porous concrete shall be used east of NC 1243 (South Old Oregon Inlet Road) or NC12 (South Virginia Dare Trail). Compacted gravel shall not be considered permeable pavement.
 - c) In the case of an oceanfront lot, only that area landward of the first line of stable natural vegetation (as defined by CAMA) shall be used for calculating lot coverage. Where an oceanfront lot has little or no stable natural vegetation, the line of such vegetation shall be a line extending between the nearest such vegetation existing north and south of the lot. In the case of lots abutting estuarine waters (as defined by division of marine fisheries and used by CAMA), lot coverage shall be in accordance with the standards listed above, except that in the area waterward of the U.S. Army Corps of Engineers 404 fill line, lot coverage shall not exceed 30 percent. If the Corps of Engineers 404 fill line is not evident or located within the estuarine AEC, as defined by CAMA, lot coverage within the estuarine, AEC shall not exceed 30 percent. Lot coverage allowances shall not be transferred from one portion of the lot to another.
 - d) The area necessary for shared accessways in accordance with subsection 48-90(a) shall be excluded from the total lot coverage allowance for an individual lot.
 - e) For residential uses, the total lot coverage may be increased from 40% to 45% when onsite stormwater management facilities are designed, constructed, verified and maintained to retain and infiltrate the run-off from a 3.5 inch, two-hour rainfall event, assuming a standard infiltration rate of ten inches per hour. The stormwater management design standard may be reduced to a 3.0 inch, two-hour rainfall event when more than 15 percent of the lot area is preserved in existing vegetation in accordance with subsection 48-485(b)(1)(3).

~~The lot coverage shall not exceed 30 percent plus 300 square feet or 33 percent, whichever is greater. Coverage may be increased to a maximum of 40 percent if open-face paving block, Turfstone™, or porous concrete as approved by the town engineer is used in place of surfaces such as concrete or asphalt. The porous concrete shall be designed and installed in accordance with ACI specifications, or equivalent standard, with hydrological, operation and maintenance considerations in accordance with those described in Chapter 18, Permeable~~

~~*Pavement, NCDENR—Division of Water Quality—Stormwater Best Management Practices Manual, latest edition. Installation shall be conducted by a contractor certified in the installation of this type of pavement system. One square foot of concrete or asphalt can be replaced by 1½ square feet of open faced paving block. Open face paving block shall be installed in accordance with article V of this chapter. In the case of an oceanfront lot, only that area landward of the first line of stable natural vegetation (as defined by CAMA) shall be used for calculating lot coverage. Where an oceanfront lot has little or no stable natural vegetation, the line of such vegetation shall be a line extending between the nearest such vegetation existing north and south of the lot. In the case of lots abutting estuarine waters (as defined by division of marine fisheries and used by CAMA), lot coverage shall be in accordance with the standards listed above, except that in the area waterward of the U.S. Army Corps of Engineers 404 fill line, lot coverage shall not exceed 30 percent. If the Corps of Engineers 404 fill line is not evident or located within the estuarine AEC, as defined by CAMA, lot coverage within the estuarine, AEC shall not exceed 30 percent. Lot coverage allowances shall not be transferred from one portion of the lot to another. The area necessary for shared accessways in accordance with subsection 48-90(a) shall be excluded from the total lot coverage allowance for an individual lot. For residential uses, lot coverage as regulated by this subsection may be increased to a maximum of 40 percent, and further increased to a maximum of 45 percent if open face paving block, Turfstone, or porous concrete as approved by the town engineer is used, when onsite stormwater management facilities are designed, constructed, verified and maintained to retain and infiltrate the run-off from a 3.5 inch, two-hour rainfall event, assuming a standard infiltration rate of ten inches per hour. The stormwater management design standard may be reduced to a 3.0 inch, two-hour rainfall event when more than 15 percent of the lot area is preserved in existing vegetation in accordance with subsection 48-485(b)(1)(3).*~~

PART III. Section 48-407 C-2 General Commercial District subsection (d) (2) and (3)
be amended as follows

- (2) Dimensional requirements and lot coverage for single-family and two-family uses shall be in accordance with subsection 48-404(d)(2).
- (3) Lot Coverage:
 - a) The lot coverage shall not exceed 55 percent. *When performing lot coverage calculations, the residential lot coverage calculation sheet included with the site development application, as amended, shall be completed and submitted for review and approval.*
 - b) Permeable Pavement:
 - i. *The use of permeable paving systems shall be credited with a 33% reduction in the calculated lot coverage for the area of square footage of permeable pavement used. The total calculated lot coverage whenever permeable paving systems are used shall not exceed 65%.*
 - ii. Permeable pavement materials include porous concrete, permeable interlocking concrete pavers, concrete grid pavers, Turfstone™, and other proven technologies available as covered in the NC Best Management Practices Manual and as approved by the Town Engineer for appropriateness to the site and existing conditions. Porous concrete shall be designed and installed in accordance with ACI specifications, or equivalent standard, with hydrological, operation and maintenance considerations. Installation shall be conducted by a contractor certified in the installation of the type of pavement system chosen.
 - iii. *Edge restraints shall be provided on all concrete grid pavers, permeable interlocking concrete pavers, and similar type installations to confine the pavement installation. The pavement surface course structural properties shall be designed to withstand the applied vehicular loading pursuant to the specified application.*
 - iv. No porous concrete shall be used east of NC 1243 (South Old Oregon Inlet Road) or NC12 (South Virginia Dare Trail). Compacted gravel shall not be considered permeable pavement.
 - c) In the case of an oceanfront lot, only that area landward of the first line of stable natural vegetation (as defined by CAMA) shall be used for calculating lot coverage. Where an oceanfront lot has little or no stable natural vegetation, the line of such

vegetation shall be a line extending between the nearest such vegetation existing north and south of the lot. In the case of lots abutting estuarine waters (as defined by division of marine fisheries and used by CAMA), lot coverage shall be in accordance with the standards listed above, except that in the area waterward of the U.S. Army Corps of Engineers 404 fill line, lot coverage shall not exceed 30 percent. If the Corps of Engineers 404 fill line is not evident or located within the estuarine AEC, as defined by CAMA, lot coverage within the estuarine, AEC shall not exceed 30 percent. Lot coverage allowances shall not be transferred from one portion of the lot to another.

- d) The area necessary for shared accessways in accordance with subsection 48-90(a) shall be excluded from the total lot coverage allowance for an individual lot.
- e) For residential uses, the total lot coverage may be increased from 40% to 45% when onsite stormwater management facilities are designed, constructed, verified and maintained to retain and infiltrate the run-off from a 3.5 inch, two-hour rainfall event, assuming a standard infiltration rate of ten inches per hour. The stormwater management design standard may be reduced to a 3.0 inch, two-hour rainfall event when more than 15 percent of the lot area is preserved in existing vegetation in accordance with subsection 48-485(b)(1)(3).

~~The lot coverage shall not exceed 30 percent plus 300 square feet or 33 percent, whichever is greater. Coverage may be increased to a maximum of 40 percent if open face paving block, Turfstone™, or porous concrete as approved by the town engineer is used in place of surfaces such as concrete or asphalt. The porous concrete shall be designed and installed in accordance with ACI specifications, or equivalent standard, with hydrological, operation and maintenance considerations in accordance with those described in Chapter 18, Permeable Pavement, NC DENR—Division of Water Quality—Stormwater Best Management Practices Manual, latest edition. Installation shall be conducted by a contractor certified in the installation of this type of pavement system. One square foot of concrete or asphalt can be replaced by 1½ square feet of open faced paving block. Open face paving block shall be installed in accordance with article V of this chapter. In the case of an oceanfront lot, only that area landward of the first line of stable natural vegetation (as defined by CAMA) shall be used for calculating lot coverage. Where an oceanfront lot has little or no stable natural vegetation, the line of such vegetation shall be a line extending between the nearest such vegetation existing north and south of the lot. In the case of lots abutting estuarine waters (as defined by division of marine fisheries and used by CAMA), lot coverage shall be in accordance with the standards listed above, except that in the area waterward of the U.S. Army Corps of Engineers 404 fill line, lot coverage shall not exceed 30 percent. If the Corps of Engineers 404 fill line is not evident or located within the estuarine AEC, as defined by CAMA, lot coverage within the estuarine, AEC shall not exceed 30 percent. Lot coverage allowances shall not be transferred from one portion of the lot to another. The area necessary for shared accessways in accordance with subsection 48-90(a) shall be excluded from the total lot coverage allowance for an individual lot. For residential uses, lot coverage as regulated by this subsection may be increased to a maximum of 40 percent, and further increased to a maximum of 45 percent if open face paving block, Turfstone, or porous concrete as approved by the town engineer is used, when onsite stormwater management facilities are designed, constructed, verified and maintained to retain and infiltrate the run-off from a 3.5 inch, two-hour rainfall event, assuming a standard infiltration rate of ten inches per hour. The stormwater management design standard may be reduced to a 3.0 inch, two-hour rainfall event when more than 15 percent of the lot area is preserved in existing vegetation in accordance with subsection 48-485(b)(1)(3).~~

PART IV. Section 48-408 C-3 Commercial Services District subsection (d) (6)
be amended as follows:

- (d) *Dimensional requirements.* Dimensional requirements in the C-3 district are as follows:
 - (1) Individual lots within a C-3 district shall have a minimum lot area of 25,000 square feet.
 - (2) The minimum lot width shall be 100 feet.
 - (3) The minimum depth of the front yard shall be 30 feet.
 - (4) The minimum width of the side yard shall be 20 feet.
 - (5) The minimum depth of the rear yard shall be 25 feet.

(6) Lot coverage shall be in accordance with the following table:

<i>Distance from Fresh Pond</i>	<i>Maximum Permeable Pavement</i>	<i>Maximum Impermeable Surface</i>	<i>Minimum Open Space</i>
<i>0—500 feet</i>	<i>25 percent</i>	<i>30 percent</i>	<i>45 percent</i>
<i>Over 500 feet</i>	<i>25 percent</i>	<i>45 percent</i>	<i>30 percent</i>

Permeable pavement materials include porous concrete, permeable interlocking concrete pavers, concrete grid pavers, Turfstone™, and other proven technologies available as covered in the NC Best Management Practices Manual and as approved by the Town Engineer for appropriateness to the site and existing conditions. However, no porous concrete shall be used east of NC 1243 (South Old Oregon Inlet Road) or NC12 (South Virginia Dare Trail). Compacted gravel shall not be considered permeable pavement. Porous concrete shall be designed and installed in accordance with ACI specifications, or equivalent standard, with hydrological, operation and maintenance considerations. Installation shall be conducted by a contractor certified in the installation of the type of pavement system chosen.

PART IV. Section 48-409. C-4 Village Commercial District subsection (d) (3) be amended as follows:

(d) *Dimensional requirements.* Unless otherwise specified in subsection (c) of this section, the following dimensional requirements shall apply in the C-4 district:

(1) A minimum lot area of 15,000 square feet is required for commercial development and single-family dwellings or a combination thereof. A minimum lot area of 22,500 square feet is required for duplexes or duplexes in combination with commercial uses. Please note [section 48-122](#) regarding the uses permitted for nonconforming lots of record which are at least 5,000 square feet but less than 15,000 square feet in area. Lots using individual wells and septic tanks shall be at least 20,000 square feet in area.

(2) Lot coverage for single-family and two-family uses shall be in accordance with subsection [48-404\(d\)\(2\)](#).

(3) *Lot Coverage:*

a) *The lot coverage shall not exceed 40 percent. When performing lot coverage calculations, the residential lot coverage calculation sheet included with the site development application, as amended, shall be completed and submitted for review and approval.*

b) *Permeable Pavement:*

i. *The use of permeable paving systems shall be credited with a 33% reduction in the calculated lot coverage for the area of square footage of permeable pavement used. The total calculated lot coverage whenever permeable paving systems are used shall not exceed 50%.*

ii. *Permeable pavement materials include porous concrete, permeable interlocking concrete pavers, concrete grid pavers, Turfstone™, and other proven technologies available as covered in the NC Best Management Practices Manual and as approved by the Town Engineer for appropriateness to the site and existing conditions. Porous concrete shall be designed and installed in accordance with ACI specifications, or equivalent standard, with hydrological, operation and maintenance considerations. Installation shall be conducted by a contractor certified in the installation of the type of pavement system chosen.*

iii. *Edge restraints shall be provided on all concrete grid pavers, permeable interlocking concrete pavers, and similar type installations to confine the pavement installation. The pavement surface course structural properties*

shall be designed to withstand the applied vehicular loading pursuant to the specified application

iv. No porous concrete shall be used east of NC 1243 (South Old Oregon Inlet Road) or NC12 (South Virginia Dare Trail). Compacted gravel shall not be considered permeable pavement.

c) In the case of an oceanfront lot, only that area landward of the first line of stable natural vegetation (as defined by CAMA) shall be used for calculating lot coverage. Where an oceanfront lot has little or no stable natural vegetation, the line of such vegetation shall be a line extending between the nearest such vegetation existing north and south of the lot. In the case of lots abutting estuarine waters (as defined by division of marine fisheries and used by CAMA), lot coverage shall be in accordance with the standards listed above, except that in the area waterward of the U.S. Army Corps of Engineers 404 fill line, lot coverage shall not exceed 30 percent. If the Corps of Engineers 404 fill line is not evident or located within the estuarine AEC, as defined by CAMA, lot coverage within the estuarine, AEC shall not exceed 30 percent. Lot coverage allowances shall not be transferred from one portion of the lot to another.

~~(z) The lot coverage for all other uses shall not exceed 40 percent. Coverage may be increased to a maximum of 50 percent if open face paving block, Turfstone™, or porous concrete as approved by the town engineer is used in place of surfaces such as concrete or asphalt. The porous concrete shall be designed and installed in accordance with ACI specifications; or equivalent standard, with hydrological, operation and maintenance considerations in accordance with those described in Chapter 18, Permeable Pavement, NCDENR—Division of Water Quality—Stormwater Best Management Practices Manual, latest edition. Installation shall be conducted by a contractor certified in the installation of this type of pavement system. One square foot of concrete or asphalt can be replaced by 1½ square feet of open face paving block. Open face paving block shall be installed in accordance with article V of this chapter. In the case of an oceanfront lot, only that area landward of the first line of stable natural vegetation (as defined by CAMA) shall be used for calculating lot coverage. Where an oceanfront lot has little or no stable natural vegetation, the line of such vegetation shall be a line extending between the nearest such vegetation existing north and south of the lot. In the case of lots abutting estuarine waters (as defined by Division of Marine Fisheries and used by CAMA), lot coverage shall be in accordance with the standards listed above, except that in the area waterward of the U.S. Army Corps of Engineers 404 fill line, lot coverage shall not exceed 30 percent. If the Corps of Engineers 404 fill line is not evident or located within the estuarine AEC, as defined by CAMA, lot coverage within the estuarine AEC shall not exceed 30 percent. Lot coverage allowances shall not be transferred from one portion of the lot to another.~~

PART VI. All ordinances or parts of ordinances in conflict with this ordinance are hereby repealed. This ordinance shall be in full force and effect from and after the 18th day of June 2014.

Robert C. Edwards
Robert C. Edwards, Mayor
Town of Nags Head

ATTEST:

Carolyn F. Morris
Carolyn F. Morris, Town Clerk



APPROVED AS TO FORM:

John Leidy
John Leidy, Town Attorney

Date adopted: June 18, 2014 (Second Reading)

Motion to adopt by Commissioner _____
Motion seconded by Commissioner _____
Vote: _____ AYES _____ NAYS