

**RULES AND REGULATIONS  
GOVERNING THE SUBDIVISION OF LAND**

**NANTUCKET ISLAND, MASSACHUSETTS**



**PREPARED BY THE NANTUCKET PLANNING BOARD  
AMENDED THROUGH DECEMBER 20, 1999**



## **NANTUCKET PLANNING BOARD**

### **RULES AND REGULATIONS GOVERNING THE SUBDIVISION OF LAND**

**Nantucket, Massachusetts**

Prepared by the Nantucket Planning Board.

Under the authority vested in the Planning Board of the Town of Nantucket by Section 81-Q of Chapter 41 of the General Laws of Massachusetts, the Planning Board called a public hearing in the Town of Nantucket, Massachusetts, on Monday, December 20, 1999, for the purpose of soliciting public comment concerning amendments to its *Rules and Regulations Governing the Subdivision of Land*. This document was originally adopted on February 16, 1955.

These rules and regulations have been based on the *Model Subdivision Regulations* of the Commonwealth of Massachusetts, but have been considerably revised by the Nantucket Planning Board to suit local conditions. On December 20, 1999, the Planning Board voted affirmatively to approve the contents of this edition of the *Rules and Regulations Governing the Subdivision of Land*.

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**SECTION I**  
**GENERAL PROVISIONS**

**1.01 ADOPTION AND EFFECTIVE DATE**

The Subdivision Control Law of Massachusetts (Sections 81K through 81GG inclusive, of Chapter 41 of the General Laws of the Commonwealth) is in effect in the Town of Nantucket, having been adopted on February 16, 1955. Under authority vested in the Nantucket Planning Board by Section 81Q of Chapter 41, the Board hereby adopts these rules and regulations governing the subdivision of land, which shall be effective on and after the 20th day of December, 1999, until modified or amended by the Board.

**1.02 APPLICABILITY**

No person shall make a subdivision of any land within the Town, or proceed with the improvement or sale of lots in a subdivision, or the construction of ways, or the installation of municipal services therein, unless and until a definitive plan of such subdivision has been submitted to and approved by the Board, as hereinafter provided.

**1.03 PURPOSE**

These regulations have been adopted for the purpose of protecting the safety, convenience and welfare of the inhabitants of Nantucket by regulating the laying out and construction of ways in subdivisions providing access to the several lots therein, but which have not become public ways, and ensuring sanitary conditions in subdivisions and, in proper cases, parks and open space.

In achieving these purposes, the powers of the Board shall be exercised:

1.03a With due regard for the provision of adequate access to all of the lots in a subdivision by ways that will be safe and convenient for travel;

1.03b For lessening congestion in such ways and in the adjacent public ways;

1.03c For reducing danger to life and limb in the operation of motor vehicles;

1.03d For securing safety in the case of fire, flood, panic and other emergency;

1.03e For ensuring compliance with the *Nantucket Zoning Bylaw*;

1.03f For securing adequate provision of water, sewerage, drainage, underground utility service, fire, police and other municipal equipment, street lighting, and other requirements, where necessary, in a subdivision; and

1.03g For coordinating the ways in a subdivision with each other and with the public ways in the Town and with the ways in neighboring subdivisions.

1.03h To advance the community master plan known as the Town's *Goals and Objectives for Balanced Growth*, as amended from time to time by the Town Meeting, such plan to be construed as conforming to the Massachusetts General Laws (M.G.L.), Chapter 41, Section 81-D

#### 1.04 DEFINITIONS

As used in this document, words in singular include the plural and those in the plural include the singular. The word "may" is permissive; the words "shall" or "will" are mandatory.

For the purpose of these *Rules and Regulations*, the following words used herein are hereby defined as follows:

1.04a **Applicant:** The person who applies for the approval of a plan, or for approval not required endorsement, or his administrators, executors, heirs, devisees, successors and assigns.

1.04b **Board:** The Planning Board of the Town of Nantucket.

1.04c **Lot:** An area of land in one ownership, with definite boundaries, used or available for use, as the site of one or more buildings, and intended for transfer of ownership.

1.04d **Subdivision:** As defined in the Massachusetts General Laws Chapter 41, Section 81-L, as amended.

#### 1.05 WAIVER OF COMPLIANCE

Strict compliance with the requirements of these *Rules and Regulations* may be waived when, in the judgement of the Board, such action is in the public interest, and not inconsistent with the Subdivision Control Law. The application for approval of a definitive plan must be accompanied by a written request for waiver of strict compliance with these rules, the regulation sought to be waived, the nature and location of the waiver sought, and a statement by the applicant's surveyor or engineer that such waiver is consistent with each of the purposes set forth in Section 1.03 of these *Rules and Regulations*.

#### 1.06 AMENDMENTS

These regulations or any portion thereof may be amended, supplemented or repealed from time to time by the Board after a public hearing on its own motion or by petition.

## **SECTION II**

### **SUBMISSION AND APPROVAL OF PLANS**

#### **2.01 GENERAL**

Only those plans which constitute "subdivisions", as that term is defined in Section 1.04d, require the approval of the Board. However, all plans, whether "subdivisions" within the meaning of the law or not, must be reviewed by the Board before any approval is given, or before an endorsement is made that the plan does not constitute a subdivision and therefore does not require approval. The Register of Deeds of Nantucket shall not record any plan showing a division of a tract of land into two or more lots, and ways, whether existing or proposed, providing access thereto, unless (1) such plan bears an endorsement of the Planning Board that such plan has been approved by the Planning Board, and a certificate by the Town Clerk is endorsed on the plan, or is separately recorded and referred to on said plan, that no notice of appeal was received during the twenty days next after receipt and recording of notice from the Planning Board of the approval of the plan, or, if an appeal was taken, that a final decree has been entered by the court sustaining the approval of the plan, or (2) such plan bears an endorsement of the Planning Board that approval of such plan is not required, or (3) the plan is accompanied by a certificate of the Town Clerk that it is a plan which has been approved by reason of the failure of the Planning Board to act thereon within the time prescribed, or that it is a plan submitted pursuant to Section 81P and that it has been determined by failure of the Planning Board to act thereon within the prescribed time that approval is not required. In order to obtain a permit for the erection of a building on a lot, a way giving access to such lot must appear on a plan recorded at the Nantucket Registry of Deeds or entitled to be recorded under Massachusetts General Laws, Chapter 41, Section 81X.

#### **2.02 SUBMISSION COMPLETENESS**

No plan for review, whether for approval or for endorsement of approval not required, shall be accepted as a submittal unless and until all information necessary for such review, as described herein under the applicable provisions of submission requirements, are fully provided, unless waived in writing by the Board. At the time of submission, a determination shall be made by the Planning Board, or its designee, using a checklist, that the submission materials are either complete or incomplete. If the submission has been determined to be incomplete, the plan shall be returned to the applicant either in person or by certified mail with a letter indicating that insufficient information has been provided making it impossible for the Board to adequately review the plan, to approve the plan or endorse the plan "Approval Not Required." Incomplete plans shall not be considered submittals and shall not be considered the start of any time limits within which the Board is required to act under various provisions of the State law.

#### **2.03 PLANS BELIEVED NOT TO REQUIRE APPROVAL (ANR)**

The following provisions apply to all plans for which "Approval Not Required" endorsement is desired.

2.03a "Approval Not Required" Plan Submission Requirements.

Any person may submit a plan seeking endorsement that the plan does not require approval



under the Subdivision Control Law by providing the Board with the following:

1. An original plan on linen or reproducible mylar and two paper prints of the plan showing:

(a) The area, frontage and dimensions of the lot or lots requiring endorsement and any contiguous lots in common beneficial ownership whose dimensions are altered by the plan having area or frontage less than twice the prevailing required area and/or frontage for the zoning district in which the land is located.

In the case where said contiguous lots have less than twice the required frontage but more than twice the area, only the frontage shall be shown on the plan.

(b) The date of the plan, scale, north point;

(c) The names of the record owner and the applicant, and the name, seal and signature of the registered surveyor.

(d) Abutting properties with the names of owners from the most recent tax list and showing all relevant abutting lot lines;

(e) Zoning classification data, wetlands and floodplains;

(f) The Assessor's map and parcel number as it is recorded on the official tax maps of Nantucket and recently recorded plans for the parcel;

(g) The name(s) of the way(s) on which the lots front;

(h) The physical condition of the way(s) shown on the plan including actual width, surface condition and available drainage;

(i) An area set aside for the signatures of Board members, file number and date of endorsement preceded by the words "Approval Under the Subdivision Control Law Not Required, Nantucket Planning Board";

(j) A locus plan at a scale of at least 1"=2000', containing sufficient information so that the land can be readily located, including streets bounding on or near the property;

(k) Each plan shall contain a note or notes as to the compliance of each lot shown thereon with the Lot Area requirements as provided in the *Nantucket Zoning Bylaw*, Chapter 139 ss 2A and 16A. The Mylar plan shall show the entire area of such lot as computed pursuant to the minimum technical standards for surveys as set forth under 250 CMR 6.01, including such areas subject to protection under the State Wetlands Protection Act.

The notes to be set forth on each such plan, as applicable in each individual instance, shall be substantially to the following effect:

The Planning Board determines that:

(a) Lot(s) \_\_\_\_\_ is/are subject in part to protection under the Massachusetts Wetlands Protection Act, but contain sufficient Lot Area, as defined in the *Nantucket Zoning Bylaw*, to comply with the applicable zoning requirements. A Notice of Intent may be required to be filed with the Nantucket Conservation Commission with regard to proposed construction on such lot(s).

(b) Lot(s) \_\_\_\_\_ do not contain areas subject to protection under the Massachusetts Wetlands Protection Act which are required to be excluded from Lot Area under the *Nantucket Zoning Bylaw*, but still may be subject to protection under State and Local Wetland bylaws. Determination of applicability may be obtained through application to the Conservation Commission.

(c) Lot(s) \_\_\_\_\_ contain inadequate Lot Area, as defined in the *Nantucket Zoning Bylaw*, to comply with minimum area requirements applicable under such Bylaw.

To enable the Board to make such findings, a third separate paper print shall serve as a worksheet to determine Lot Area compliance with zoning. This print shall show the full area of the lot, and shall also show the full area computed in accordance with the *Nantucket Zoning Bylaw*. The boundary of each such area subject to protection under the State Wetlands Protection Act which is excluded from Lot Area under the *Nantucket Zoning Bylaw* shall be clearly shown and labeled upon each such plan. A note shall be included on this plan which shall be substantially to the following effect:

Wetlands lines are approximate and for purposes of determining zoning compliance only.

Any necessary supporting documentation shall be submitted along with the worksheet plan as part of the submission and will be kept on file with signed plans at the Planning Board office.

2. A properly executed Form A application as shown in Appendix B.

3. Necessary evidence to show that the plan does not require approval, which shall include the precise legal ownership of the way(s) and proper positive documentation that every lot within the divided tract has frontage either on a public way or a way which the Town Clerk certifies is maintained and used as a public way or a way shown on a plan theretofore approved and endorsed in accordance with the Subdivision Control Law; or a way in existence on February 16, 1955, having, in the opinion of the Planning Board, sufficient width, suitable grades and adequate construction to provide for the needs of vehicular traffic in relation to the proposed use of the land abutting thereon or served thereby, and for the installation of municipal services to serve such land and the buildings erected or to be erected thereon. All plans seeking Approval Not Required endorsement shall be accompanied by adequate evidence that there is practical interior access to the proposed house sites.

Plans and profiles of access roads previously approved by the Planning Board which do not provide frontage for any lot shown on a subject plan shall not be construed as a way shown on a plan theretofore approved and endorsed in accordance with the Subdivision Control Law.

2.03b "Approval Not Required" Plan Filing Procedures.

Persons seeking endorsement of plans "Approval Not Required" shall submit such plans, either by mail or in person, to the Nantucket Planning Board, the Town & County Building, 16 Broad Street, Nantucket, Massachusetts 02554. In order to be included in the agenda for consideration at a Planning Board meeting the plan must be submitted to the Planning Board office before noon of the Wednesday before the meeting. Any plans received after the Wednesday noon deadline will automatically be carried over to the agenda for the following meeting, unless the chair, with staff's recommendation, determines there are special circumstances that warrant a late submittal.

A fee shall accompany the application in the amount of fifty dollars (\$50) per lot and twenty dollars (\$20) per lot for plan updates.

The applicant shall file, by delivery or registered mail, a notice with the Town Clerk stating the date of submission for such determination.

2.03c "Approval Not Required" Plan Action

A determination of wetland boundaries from the Nantucket Conservation Commission may be required in order to verify that the area of one or more lots complies with zoning requirements. For plans which are submitted without such determination, and for which a question as to the accuracy of the delineation of wetland boundaries arises, the applicant shall obtain a determination from the Conservation Commission. Failure to do so within the 21-day statutory decision period shall cause the Planning Board to add a notation to the plan stating that the lot in question has not been determined to have sufficient area to comply with zoning requirements and to notify the Building Department that a Building Permit shall not be issued until the Planning Board has been provided satisfactory information to determine that the lot in question has sufficient area to meet Lot Area requirements.

If the Board determines that the plan does not require approval, it shall forthwith, without public hearing, endorse the plan accordingly. The plan shall be returned to the applicant so endorsed within fourteen (14) days of submission of said plan.

If the Board determines that the plan does require approval, it shall, without a public hearing and within twenty-one (21) days of submission, notify the applicant and the Town Clerk of the determination.

If the Board fails to take action within twenty-one (21) days of submission, the plan is automatically deemed not a subdivision plan and the Board shall forthwith make such endorsement. On its failure to do so forthwith, the Town Clerk shall issue a certificate to

the same effect.

#### 2.03d Ways in Existence

Existing ways will normally be determined by the Board to provide adequate access to qualify a plan as not constituting a subdivision only when the layout, design and construction meet the standards of these *Rules and Regulations*.

#### 2.04 PRE-SUBMISSION REVIEW (SKETCH PLAN)

Prior to investing in extensive professional design efforts for subdivision plans, it will often prove useful to review the proposed development of a parcel of land with the Board in an informal manner, in order that general approaches, possible use of cluster development, and potential problems can be freely explored. Pencil sketches and other illustrations, which need not be professionally prepared, will assist the discussion, and might show some, but not all, of the information shown on a Preliminary Plan. In some cases, pre-submission review may eliminate the advisability of submitting a Preliminary Plan. However, the pre-submission review provision is strictly a voluntary procedure left to the discretion of the applicant. The pre-submission review has no legal status whatsoever, insofar as zoning exemptions are concerned.

#### 2.05 PRELIMINARY PLAN

A Preliminary Plan of a Residential Subdivision may, and a Preliminary Plan of a Nonresidential Subdivision shall, be submitted by the subdivider for discussion and approval, modification or disapproval by the Planning Board and the Board of Health. The submission of such a Preliminary Plan will enable the subdivider, the Planning Board, and other municipal agencies to discuss and clarify the problems of such a subdivision before extensive engineering costs are incurred in the preparation of the Definitive Plan.

2.05a Submission Requirements for Preliminary Plans shall be drawn on tracing paper, or a print thereof, and shall show:

- (1) the subdivision name, boundaries, north point, date, scale, legend and title "Preliminary Plan;"
- (2) the names of the record owner and the applicant and the names of the designer, engineer and surveyor;
- (3) the names of all abutters, as determined from the most recent tax list;
- (4) the existing and proposed line of streets, ways, easements, any public or common areas and lots shown in a general manner;
- (5) a schematic representation of the proposed system of drainage, including adjacent existing natural waterways;
- (6) the approximate boundary lines of proposed lots, with approximate areas and dimensions;

- (7) the names, approximate location and widths of adjacent streets;
- (8) the topography of the land in a general manner, including areas of the tract suspected to be flood prone and/or wetlands;
- (9) a vicinity map to appear in the upper right corner of the plan showing the location of the parcel as it relates to areas of the community within at least one-half mile of the tract boundaries (suggested scale: 1"=2,000');
- (10) the zoning classification of the land to be subdivided;
- (11) proposed sewage, water and utility systems, shown in a general manner; and
- (12) in the case of a subdivision covering less than all of the land owned by the subdivider in the area of the subdivision, a plan showing, in a general manner, the proposed overall development of all of said land.

#### 2.05b Filing Procedures for Preliminary Plans

An application for consideration of the Preliminary Plan shall be accompanied by twelve (12) contact prints of the plan and a filing fee of \$50.00. The applicant shall also file one (1) contact print with the Board of Health.

The applicant shall give written notice to the Town Clerk of Nantucket by delivery or by registered mail, postage prepaid, that he has submitted such a plan.

#### 2.05c Plan Action for Preliminary Plans

Within forty-five (45) days after submission of a Preliminary Plan, the Board shall either approve the plan with or without modifications, or the Board shall disapprove the plan. In the case of disapproval, the Board shall state its reasons therefor. The Board shall notify the Town Clerk of its action in writing. The action of the Board shall be on two copies of the Preliminary Plan, referenced and attached to any conditions. One copy shall be returned to the applicant and the other retained by the Board. Approval of the Preliminary Plan does not constitute approval of the subdivision for recording but does facilitate the procedure in securing approval of the Definitive Plan. The *Rules and Regulations Governing the Subdivision of Land* in effect at the time of its submission shall govern the Definitive Plan evolved from such Preliminary Plan, provided that the Definitive Plan is duly submitted within seven months from the date of submission of the Preliminary Plan and said Definitive Plan is ultimately approved. Such exemptions shall endure for eight (8) years from the date of Definitive Plan approval.

### 2.06 DEFINITIVE PLAN OF A SUBDIVISION (AR)

The Definitive Plan of a subdivision shall conform substantially to the Preliminary Plan as approved but may constitute only that portion which is proposed to be recorded and developed at the time. The subdivision *Rules and Regulations* and zoning in effect at the time of the submission of the Preliminary Plan shall govern the Definitive Plan if it is duly submitted within seven months.

Applicants are strongly urged to schedule a pre-submission conference and tour with the Planning Board and its staff to identify as early as possible any items requiring special attention.

#### 2.06a Submission Requirements

An applicant seeking approval of a Definitive Plan of a subdivision shall file with the Board the following:

- (1) The original drawings of the Definitive Plan and twelve (12) prints thereof which shall be distributed for review to the following agencies: Conservation Commission, Department of Public Works, Fire Department and Water Company.
- (2) A street network plan shall be submitted on 8.5" X 11" paper showing, at a minimum, proposed, existing, and adjacent streets, names and locations of abutters, north arrow, and any adjacent natural features.
- (3) A properly executed application in the form shown as Form B in Appendix B, which form may be changed from time to time by the Planning Board.
- (4) A list of the names and addresses of all abutters, certified as complete by the Tax Assessor, plus a set of gummed mailing labels bearing these names and addresses plus a set of certified mailing materials, i.e., both (1) Receipts for Certified Mail and (2) Domestic Return Receipts, all appropriately and completely prepared for mailing. "Abutters" shall be defined as those landowners immediately bordering the proposed subdivision, those landowners abutting the immediate abutters, and those landowners located directly across all segments of streets and ways bordering the proposed subdivision.
- (5) A master plan showing a possible or prospective street and lot layout for any adjacent unsubdivided land owned or controlled by the owner or subdivider of the subdivision shall be submitted, unless such a plan has already been filed with the Board.
- (6) A filing fee shall accompany the application in the amount of fifty dollars (\$50.00) plus fifty cents (\$0.50) per linear feet of proposed or reconstructed ways located within and outside the subdivision.
- (7) In addition to the filing fee, applications shall be accompanied by a check in the amount of two (2) dollars per linear foot of new or reconstructed interior or perimeter roadway in accordance with Section 2.06(k) located herein, to be deposited into a Road Inspection Escrow Account within the Town Treasury, to be kept separate from other funds, the proceeds of which shall be drawn upon from time to time by the Board to pay for costs associated with the inspection of the applicants required public improvements.
- (8) A proposed covenant or bond in accordance with Section 2.06f - Performance Guarantee.
- (9) Notice to Town Clerk: The applicant shall give written notice to the Town Clerk by

delivery or by registered mail, postage prepaid, that he has submitted such a Definitive Plan, accompanied by a copy of the application, within forty-eight (48) hours of submission. If the notice is given by delivery, the Town Clerk shall, if requested, give a written receipt therefore to the person who delivered such notice. Such notice shall describe the land to which the plan relates sufficiently for identification, and shall state the date when such plan was submitted and the name and address of the owner of such land; and the facts stated in such notice shall be taken by the Town Clerk as true, unless contrary is made to appear. If sent by registered mail, the date of the mailing shall be the date of submission of the Definitive Plan. The Definitive Plan shall be considered submitted only when all plan requirements specified in Section 2.06(a) and 2.06(b) of these *Rules & Regulations* are included, unless waived in writing by the Board, as provided in Section 1.05.

(10) The Planning Board shall require the submission of storm drainage runoff flow calculations in order to evaluate the drainage plan.

(11) Site Analysis Report and Map:

An applicant seeking approval of a Definitive Plan shall submit, at the time of filing, three (3) copies of a Site Analysis Report and three (3) copies of a Site Analysis Map. Any submission of a Definitive Plan lacking these documents will be considered incomplete (Section 2.02).

The Site Analysis Map shall be one sheet of drawing paper no larger than 42 inches by 60 inches and shall show the entire subdivision at a suitable scale. If the Definitive Plan includes less than the Preliminary Plan from which it was derived, the Site Analysis Map shall include all the land shown on the Preliminary Plan. Applicants are encouraged to use tissue, acetate or mylar overlays in conjunction with a paper base map. The base for the Site Analysis Map shall show tract boundaries, proposed lots, ways, easements, open spaces, landmarks and existing structures and roads within one hundred (100) feet of the tract boundaries. Overlays using color or black and white patterns shall show the following information:

- **Wetlands**, including ponds, marshes, bogs, streams and all areas of the site subject to the Massachusetts Coastal Wetlands Act, as amended;
- **Areas of Special Flood Hazard**, as designated by the U.S. Department of Housing and Urban Development as part of the Flood Insurance Program for Nantucket;
- **Areas with Severe Limitations for On-Site Sewage Systems**, as mapped by the U.S.D.A. Soil Conservation Service's Soil Survey of the Island of Nantucket;
- **Areas with Severe Limitations Due to Seasonal High Water Table**, as mapped by the U.S.D.A. Soil Conservation Service's Soil Survey for the Island of Nantucket;

- **Areas where Special Drainage, Erosion and Sedimentation Measures** will be undertaken. Arrows shall show the predominant drainage patterns. The location of catchment basins and points of discharge shall be shown. Two foot contour lines also appear on this map;
- **Predominant Vegetative Cover Type**, including areas of the site the applicant feels are important to protect and all areas containing stands of trees with three (3) inch caliper or more; and
- **Protected Areas**, including all areas of the tract permanently kept from being developed by virtue of their being scenic, access, drainage or slope easements, or through other interest of fee simple grants of land to a conservation group or homeowners association.

The Site Analysis Report shall be a typed copy on 8.5 x 11 inch paper with a cover sheet indicating the name of the subdivision, the owner of the land, the applicant, the engineer/surveyor/land planner and the date of submission. The report shall consist of a narrative statement and appropriate data, documenting the likely impact of the subdivision on the following subject areas with references to the Site Analysis Map:

- **Surface Water Resources.** How will the proposed subdivision, when fully developed, effect the quality and quantity of ponds, marshes, bogs, streams and other surface water resources both on and off the site? What measures have been taken to assure full compliance with the State Coastal Wetlands Act? Will drainage easements be used to identify and protect portions of individual lots subject to the State Coastal Wetlands Act in order that prospective purchasers of lots in the subdivision will be adequately aware of the status of their property? What erosion and sediment control measures will be taken to prevent undue loss of topsoil and sedimentation of surface waters during construction? Has public access been provided to significant surface water resources?
- **Ground Water Resources.** How will the proposed subdivision when fully developed, effect the quality and quantity of ground water resources in the area? Has every effort been made to tie in with the community-wide sewage system? Have percolation tests been done on every lot to be used for residential or commercial purposes in the subdivision?
- **Flood Hazard.** Has the layout of streets and lots fully reflected the need to protect life and property by properly locating building lots out of areas of Special Flood Hazard as delineated by the Federal Government? Will floodway easements be used to protect these areas from encroachment and advise lot purchasers of the nature of their prospective property? Has the proposed system of drainage taken severe storm damage into account?
- **Vegetative Cover.** Are there any groves of trees with three (3) inch caliper or more; what measures have been taken to protect them? Has the applicant considered cooperating with the Nantucket Conservation District in reforesting portions of the tract at minimal cost? Have scenic or access



easements or fee simple grants of land been employed to protect valuable areas of the site?

○ **Traffic Safety and Convenience.** Does the subdivision provide for adequate internal circulation for both pedestrian and vehicular/bicycle traffic? Is the site served adequately by existing roads in the area when other subdivisions (both built-up and unbuilt) are considered? Has the applicant considered tying in with Nantucket's Island-wide bicycle path system? Has there been sufficient consideration for tying into anticipated future subdivisions on adjacent tracts of land now vacant? Will emergency vehicles be able to properly service this new neighborhood? What form of performance guarantee will be used for all public improvements? What is the physical condition of adjacent roads and access roads (width, surface and drainage)? What is the precise legal ownership of adjacent roads and access roads? Will the subdivision substantially effect traffic flow and safety in the area surrounding the subdivision, and if so, what mitigating measures are being undertaken to decrease any detrimental effects?

○ **Development Phasing.** When will all the required public improvements be completed? If this is the first of several Definitive Plans based on a larger Preliminary Plan, when does the applicant expect to submit other Definitive Plans? What will be the maximum number of dwelling units on this Definitive Plan (including seasonal cottages)?

○ **Common Open Spaces.** If the applicant includes in the plan common open spaces and other neighborhood facilities and services, how will such areas be owned and maintained (homeowners association, trust, condominium association, etc.)? Are these areas permanently preserved?

If any questions arise during the public hearing concerning the aforementioned subject areas, the Planning Board may require complete and detailed substantiation of any claim by the applicant, which could include an investigation by an outside consultant.

(12) If, in the opinion of the Planning Board, the size, scale or location of the subdivision may result in a significant impact on the surrounding road system, the Board may require the applicant to submit a traffic study. The study shall be prepared by a professional engineer specializing in traffic analysis, and identify, at a minimum, the following:

- (a) Internal vehicular circulation patterns
- (b) Estimated daily and peak hour vehicle trips
- (c) The measured daily and peak hour traffic flows, both weekday and weekend (non-holiday), measured during the period between June 15 and September 15, or other times as the Board may deem appropriate, on public and private roads and key intersections expected to be impacted by the project
- (d) Proposed composite daily and peak hour traffic on public and private roads and key intersections: a documentation of impacts on level of service
- (e) Suggested remedial measures to mitigate the expected impacts of the proposed subdivision.

Applicants are urged to meet with the Planning Board or planning staff prior to preparation of

the study to identify the study area and the appropriate elements of the traffic study.

#### 2.06b Contents of the Definitive Plan

A Definitive Plan of a subdivision shall be drawn on linen or reproducible mylar by a registered land surveyor at a scale of one inch equals forty (40) feet, or such other scale as the Board may accept to show details clearly and adequately, but no smaller than one inch equals one hundred feet. Sheet sizes shall not exceed 24" x 36". If multiple sheets are used, they shall be accompanied by an index sheet showing the entire subdivision. The Definitive Plan shall show the following:

- (1) Subdivision name, if any; boundaries, north point, date, scale, legend and title "Definitive Plan;"
- (2) The names of the record owner(s) and the applicant(s) and the applicant's engineer and surveyor, and the seal and signature of said engineer or surveyor;
- (3) The names of all abutters, as determined from the most recent local tax list;
- (4) Current zoning information, i.e., district, minimum lot size, front/side/rear yard setbacks, frontage, and ground coverage ratio. This information shall appear on every sheet in the plan;
- (5) The existing and proposed lines of streets, ways and easements and their widths; sidewalks, footpaths, bridle and bicycle paths and their widths; and any public or common areas within the subdivision. The proposed names of ways shall be shown in pencil until they have been approved by the Board.
- (6) Sufficient data to determine readily the location, bearing, and length of every street and way line, lot line, boundary line and to reproduce same on the ground. At least one bound on each proposed lot of a subdivision shall show the x and y coordinates relating to the Massachusetts Coordinate System, Island Zone;
- (7) The location of all permanent monuments properly identified as to whether existing or proposed;
- (8) Boundary lines of lots, lot areas and lot numbers;
- (9) Names, location and widths of adjacent streets and streets approaching the subdivision;
- (10) The topography of the land at two-foot contour intervals; location of areas of the tract suspected to be flood prone and/or wetlands, and existing and proposed watercourses and ponds. Elevations must refer to a known benchmark using the half-tide datum plan established by the U.S. Geological Survey or the National Geodetic Survey;

(11) A vicinity map to appear in upper right corner of the plan showing the location of the parcel as it relates to areas of the community within at least one-half mile of the tract boundaries (suggested scale: 1"=2000'). The vicinity map shall reference the number of the map and parcel as it is recorded on the official tax maps of Nantucket;

(12) The zoning classification of the land to be subdivided;

(13) All existing and proposed municipal services and their appurtenances shall be shown in such detail as necessary to coordinate all such services. An approved utility plan (or plans) accurately showing all electric street lighting, water, fire alarm, hydrants, sewer, storm drains, telephone, electric and cable television lines shall be submitted with the definitive plan. The Board shall review and approve, modify or disapprove the plans for municipal services and utilities as part of its approval;

(14) A landscape plan showing (a) location, size, and species of all proposed landscape plantings and (b) location and size of existing trees to be preserved;

(15) A signature block to record the action of the Board shall be located above the title block in the same lower right area of each sheet;

(16) Location of curbs and gutters;

(17) A typical cross section of road(s) within and outside the subdivision proposed to be constructed or improved;

(18) Location of on-site disposal areas for brush and trees to be removed due to the construction of public improvements, if determined by the Planning Board to be appropriate (see Section 5.04);

(19) Proposed system of storm drainage, including natural waterways, manmade systems, drainage easements, both within and adjacent to the limits of the subdivision;

(20) Profiles of Proposed Streets and Utilities may be made on a separate sheet and shall be drawn at the scale of forty feet to the inch vertical; existing center line shall be shown as fine black solid line, existing right side line as fine black line with long dashes and existing left side line as fine black line with short dashes; proposed center line shall be shown in red with a line and with elevations every fifty feet, except that in vertical curves elevations shall be shown at every twenty-five foot interval and at PVC and PVY; all existing intersecting walks and driveways, if any, shall be shown on both sides as well as the location of existing and proposed drainage lines and their appurtenances; sizes of all pipes shall be shown as well as inverts of all pipes at each man-hole or catch basin, together with invert elevation and rim elevation of each man-hole or catch basin; all centerlines, street lines and curb lines with elevations every twenty-five (25) feet of streets for two hundred (200) feet either side of each intersection on a connecting street shall be shown. Plans, profiles and cross-

sections of access roads to be improved shall be prepared at the same scale and in the same format as those drawn for proposed streets.

(21) Erosion and airborne dust control plans (Section 5.05);

(22) Reference to any covenant that may be required shall appear on the plan;

(23) Each Plan shall contain a note or notes as to the compliance of each lot shown thereon with the Lot Area requirements as provided in the *Nantucket Zoning Bylaw*, Chapter 139 ss 2A and 16A. The Mylar plan shall show the entire area of such lot as computed pursuant to the minimum technical standards for surveys as set forth under the State Wetlands Protection Act.

The notes to be set forth on each such plan, as applicable in each individual instance, shall be substantially to the following effect:

The Planning Board determines that:

(a) Lot(s) \_\_\_\_\_ is/are subject in part to protection under the Massachusetts Wetlands Protection Act, but contain sufficient Lot Area, as defined in the *Nantucket Zoning Bylaw*, to comply with applicable zoning requirements. A Notice of Intent may be required to be filed with the Nantucket Conservation Commission with regard to proposed construction of such lot(s).

(b) Lot(s) \_\_\_\_\_ do not contain areas subject to protection under the Massachusetts Wetlands Protection Act which are required to be excluded from Lot Area under the *Nantucket Zoning Bylaw* but still may be subject to protection under State and Local Wetland Bylaw. Determination of applicability may be obtained through application to the Conservation Commission.

(c) Lot(s) \_\_\_\_\_ contain inadequate Lot Area, as defined in the *Nantucket Zoning Bylaw*, to comply with minimum area requirements applicable under such bylaw.

To enable the Board to make such findings, a third, separate paper print shall serve as worksheet to determine Lot Area compliance with zoning. This print shall show the full area of the lot, and shall also show the area of lot as computed in accordance with the *Zoning Bylaw*. The boundary of each such area subject to protection under the State Wetlands Protection Act which is excluded from Lot Area under the *Nantucket Zoning Bylaw* shall be clearly shown and labeled upon each such plan. A note shall be included on this plan which shall be substantially to the following effect:

Wetlands lines are approximate and for purposes of determining zoning compliance only.

Any necessary supporting documentation shall be submitted along with the worksheet

plan as part of the submission and will be kept on file with signed plans at the Planning Board office.

#### 2.06c Review By Board of Health

At the time of filing of the Definitive Plan, the subdivider shall also file with the Board of Health two (2) prints of the Definitive Plan and comply with other Board of Health requirements, including percolation tests and test excavations.

The Board of Health shall, within 45 days after filing of the plan, report to the Planning Board in writing, with their recommendation of approval or disapproval of said plan. If the Board of Health disapproves said plan, it shall make specific findings as to which, if any, of the lots shown on such plan cannot be used for building sites without injury to the public's health.

Every building lot so located that it cannot be served by a connection to the municipal sewer system shall be provided with a sewage disposal system approved by the Board of Health.

#### 2.06d Review By Other Officials

Before the Definitive Plan is submitted, the Planning Board urges that the applicant consult with and obtain written statements that the proposed improvements shown on a separate Utility Plan or Road Plan and Profiles are laid out to the satisfaction of the following authorities and for the facilities listed below:

- (a) The Chief of the Fire Department as to the location of hydrants, adequacy of water flow at the hydrant, the layout of a fire alarm system, including location of boxes and location and installation of emergency water supply systems for fire fighting.
- (b) The Department of Public Works as to the requirements for provision for connections to and compatibility with the sewer system and, if required, the layout and design of the necessary connecting mains, laterals, manholes, and stubs for such system. In such cases, review by the DPW Superintendent will include the profiles of the streets.
- (c) The Manager of the Wannacomet Water Company and Siasconset Water Department as to the location and size of water mains, including service to the fire hydrants.
- (d) The Nantucket Electric Company as to the requirements for electricity.
- (e) The Telephone Company as to the location of the telephone lines.
- (f) The Conservation Commission as to the requirements under the Wetlands Protection Act (M.G.L. Chapter 131, Section 40 and 40A).

## 2.06e Staking of Subdivision

In order to facilitate on-site review by the various reviewing agencies, the applicant shall, at the time of filing of the Definitive Plan, stake and brush cut to a minimum of five (5) feet the centerline of all proposed ways in the subdivision and shall stake all points where lot lines intersect rights-of-way.

## 2.06f Performance Guarantee

Before endorsement of its approval of a Definitive Plan, the Planning Board shall require that the construction of ways and the installation of municipal services be secured by one of the four methods listed below, or a combination of methods which, from time to time, may be varied by the applicant upon approval of the Board:

(1) By a proper bond, sufficient in the opinion of the Planning Board to secure performance of the construction of ways and the installation of municipal services required for lots in the subdivision shown on the plan, and the Planning Board may require that the applicant specify the time within which such construction shall be completed.

(2) By a deposit of money or negotiable securities sufficient in the opinion of the Planning Board to secure performance of the construction of ways and the installation of municipal services required for lots in the subdivision shown on the plan, and the Planning Board may require that the applicant specify the time within which such construction shall be completed.

(3) By a covenant, executed and duly recorded by the owner of record, running with the land, whereby such ways and services shall be provided to serve any lot before such lot may be built upon or conveyed, other than by mortgage deed; provided, that a mortgagee who acquired title to the mortgaged premises by foreclosure or otherwise and any succeeding owner of such premises or part thereof may sell any such lot, subject to that portion of the covenant which provided that no lot shall be built upon until such ways and services have been provided to serve each lot; and provided, further, that nothing herein shall be deemed to prohibit a conveyance by a single deed, subject to such covenant, of either the entire parcel of land shown on the subdivision plan or of all lots not previously released by the Planning Board. A deed of any part of the subdivision in violation hereof shall be voidable by the grantee prior to the release of the covenant but not later than three years from the date of such deed. A suggested, but not required, form of the covenant is given by Form I in Appendix B; which form may be changed from time to time by the Planning Board.

Any covenant given under the preceding paragraph and any condition required by the Board of Health shall be either inscribed on the plan or contained in a separate document, referred to on the plan.

(4) By delivery to the Planning Board of an agreement executed after the recording of a first mortgage covering the premises shown on the plan or a

portion thereof given as security for advances to be made to the applicant by the lender, which agreement shall be executed by the applicant and the lender and shall provide for the retention by the lender of funds sufficient in the opinion of the Planning Board and otherwise due the applicant to secure the construction of ways and the installation of municipal services. Said agreement shall also provide for a schedule of disbursements which may be made to the applicant upon completion of various stages of the work, and shall further provide that in the event the work is not completed within the time set forth by the applicant, any funds remaining undisbursed shall be available for completion.

The penal sum of any such performance guarantee described under clause (a), (b) or (d) shall bear a direct and reasonable relationship to the expected cost, including the effects of inflation, necessary to complete the subject work. Such amount or amounts shall from time to time be reduced so that the amount bonded, deposited or retained continues to reflect the actual expected cost of work remaining to be completed.

The form of the performance guarantee may be as given by Form G, or Form I in Appendix B, or as otherwise required by the Board and shall be contingent upon the completion of said improvements within two (2) years of the date of the Agreement. At the discretion of the Board, a time extension may be granted for a period not to exceed one (1) year; provided such an extension may be conditioned upon an increase in the amount of such bond or security as determined by the Board.

The failure of the applicant to complete the required construction of ways and installation of municipal services within two (2) years from the date of the Agreement shall be grounds for the rescission of the approval of the plan.

#### 2.06g Public Hearing

Before approval, modification and approval or disapproval of the Definitive Plan, a public hearing shall be held by the Board after proper advertisements and notification of abutters as provided by Section 81T of the Subdivision Control Law.

#### 2.06h Plan Action

After the public hearing, the Board shall approve, or, if such plan does not comply with the Subdivision Control Law, these *Rules and Regulations* or recommendations of the Board of Health, shall modify and approve, or disapprove the Definitive Plan. In the event of disapproval, the Board shall state in detail wherein the plan does not conform to the *Rules and Regulations* and recommendations of the Board of Health and shall revoke its disapproval and approve a plan which, as amended, conforms to such *Rules and Regulations* or recommendations.

In the case of a nonresidential subdivision where a preliminary plan has been duly submitted and acted upon or where forty-five (45) days have elapsed since submission of the said preliminary plan, and then a definitive plan is submitted, and failure of the Planning Board either to take final action or to file with the Town Clerk a certificate of

such action regarding the definitive plan submitted by an applicant within ninety (90) days after such submission, or such further time may be agreed upon at the written request of the applicant, shall be deemed to be an approval thereof. Notice of such extension of time shall be filed forthwith by the Planning Board with the Town Clerk.

In the case of a subdivision showing lots in a residential zone, where a preliminary plan has been acted upon by the Planning Board or where at least forty-five (45) days has elapsed since submission of the preliminary plan, and a definitive plan is submitted, the failure of the Planning Board to take final action or to file with the Town Clerk a certificate of such action on the definitive plan within ninety (90) days after such submission, or such further time as may be agreed upon at the written request of the applicant, shall be deemed to be an approval thereof. Notice of such extension shall be filed forthwith by the Planning Board with the Town Clerk.

In the case of a subdivision showing lots in a residential zone, where no preliminary plan has been submitted and acted upon or where forty-five (45) days has not elapsed since submission of such preliminary plan, and a definitive plan is submitted, the failure of the Planning Board either to take final action or to file with the Town Clerk a certificate of such action regarding the definitive plan submitted by an applicant within one hundred and thirty-five (135) days after such submission, or such further time as may be agreed upon at the written request of the applicant, shall be deemed to be an approval thereof. Notice of such extension of time shall be filed forthwith by the Planning Board with the Town Clerk.

In addition to filing a certificate of its action with the Town Clerk, a copy of which shall be recorded by the Town Clerk, in a book kept for this purpose, the Board shall also send notice of such action by registered mail, postage prepaid, to the applicant at the address stated on the application.

In the case of approval of a plan by action of the Board, after the expiration of twenty (20) days without notice of appeal to the Superior Court, or if appeal has been taken after the entry of a final decree of the court sustaining the approval of such plan, the Board shall cause to be made upon the plan a written endorsement of its approval. The applicant shall have submitted to the Board a set of plans appropriately prepared for said endorsement and shall have included with these plans a road layout plan reduced to fit 8.5" x 11" paper. In case of the approval of such plan by reason of the failure of the Board to act within the time prescribed, the Town Clerk shall, after the expiration of twenty (20) days without notice of appeal to the Supreme Court, or, if appeal has been taken, after receipt of certified records of the Supreme Court indicating that such approval has become final, issue a certificate stating the date of the submission of the plan for approval, the fact that the Board failed to take action and that the approval resulting from such failure has become final. The plan bearing such endorsement or the plan and such certificate, as the case may be, shall be delivered by the Board, or, in the case of the certificate, by the Town Clerk, to the person who submitted such plan.

#### 2.06i Modification, Amendment, or Rescission of Approved Plans

The Board, on its own motion or on the petition of any interested person, has the power to modify, amend, or rescind its approval of a plan, or to require a change in a plan as a



condition of its retaining the status of an approved plan. All of the provisions of the Subdivision Control Law and these *Rules and Regulations* relating to the submission and approval of a plan shall, so far as apt, be applicable to the approval of the modification, amendment or rescission of such approval and to a plan that has been changed under this section.

No modification, amendment or rescission of the approval of a plan or change in such plan shall affect the lots in such subdivision which have been sold or mortgaged in good faith and for a valuable consideration subsequent to the approval of the plan, or any rights appurtenant thereto, without the consent of the owner of such lots, and of the holder of the mortgage or mortgages, if any, thereon.

So far as unregistered land is affected, no modification, amendment or rescission of the approval of a plan nor change in a plan under this section shall take effect until:

- (1) the plan as originally approved, or copy thereof and a certificate copy of the vote of the Board making such modification, amendment, rescission or change, and any additional plan referred to in such vote, have been recorded;
- (2) an endorsement has been made on the plan originally approved as recorded referring to such vote and where it is recorded; and
- (3) such vote is indexed in the grantor index under the names of the owners of record of the land affected.

So far as registered land is affected, no modification, amendment or rescission of the approval of a plan nor change in a plan under this section shall take effect, until such modification, amendment or change has been verified by the Land Court pursuant to Chapter 185, and in case of rescission, or modification, amendment or change not so verified, until ordered by the court pursuant to Section 114 of Chapter 185.

#### 2.06j Appeal by Any Person

Any person, whether or not a party to the proceedings, aggrieved by a decision of the Board of Appeals or by the Planning Board concerning a plan of a subdivision, or by failure of such a plan within the required time, or any municipal officer or board, may appeal to the Superior Court sitting in equity for Nantucket County, provided, that such appeal is entered within twenty (20) days after such decision has been recorded in the office of the Town Clerk or within twenty (20) days after the required time aforesaid, as the case may be, and notice of such appeal is given to the Town Clerk so as to be received within twenty (20) days.

#### 2.06k Inspection of Improvements

##### (a) General Procedure and Inspection Escrow Funds

Prior to the endorsement of a plan as approved, and prior to the return of such plan to the Applicant, the Applicant shall be required to deposit with the Treasurer of the Town an amount equal to two dollars (\$2.00) times the number of linear feet of proposed or

reconstructed ways located within and outside of the boundaries of the subdivision. The Planning Board shall direct the Treasurer to expend such funds to pay for all reasonable design review, construction inspection services and subdivision modification design reviews by its engineer or other professional persons required to assist the Planning Board in its determination as to the adequacy of the Definitive Plan with regard to the Subdivision Control Law and these *Rules and Regulations* and as to the adequacy of the subdivision construction and any design modifications to the plan and changes made in the field.

However, no such payment shall be directed until 14 days after a photocopy of the bill purporting to represent charges for such services and review has been sent, by certified mail, to the Applicant. The balance of this account shall at no time be less than one-half the initial deposit, and the Applicant shall deposit with the Treasurer such additional funds as are required to restore the account to the amount of the initial deposit upon notice from the Board, by first class mail, that the amount on deposit has been decreased by the expenditures described herein to an amount at or near one-half the initial deposit. The account shall be closed and the remaining funds returned to the Applicant when, in the opinion of the Board, all work required by the approved plan, any conditions placed upon such approval, and any subsequently approved modifications and these rules, and all inspections required by these rules, have been completed.

The failure of the Applicant to make the initial deposit, and to maintain the account in accordance with this section, shall be grounds for rescission the approval of the plan and for disapproval.

The full cost of any special non-scheduled inspections deemed necessary by the failure of construction to proceed entirely in accordance with the approved plan, or as a result of any question concerning the accuracy of any data provided by the applicant at any time, shall be borne by the applicant.

In the event the Planning Board denies approval of a plan, the account shall be closed and the unexpended funds returned to the applicant within 21 days from the date the subdivision plan was denied an approval.

The Planning Board in its discretion may waive or refund the inspection fee in whole or in part to the extent the Board determines that professional or other services were not required in consideration of the Definitive Plan.

#### 2.061 "As Built" Plans, Profiles and Cross-Sections

Prior to release from the performance guarantee of the last twenty (20) percent of the lots in a subdivision, the applicant shall submit "as built" plans and profiles, and cross-sections showing the actual constructed interior and access road(s), including any curbing, shoulders, sidewalks/bicycle paths, drainage facilities, invert and top of frame elevations for drainage structures, utility service connections (including sewer, water, electric, etc.), utilities (including sizes, materials, and locations), "as built" contours for detention and retention basins with contour intervals matching those depicted on the

subdivision plan, landscaping installed as per the definitive plan approval, and other appurtenances as may have been required to be constructed. "As built" plans, profiles and cross-sections shall be prepared at the same scale and in the same format as those which accompanied the Definitive Plan. Plans and profiles shall be prepared using data points no less frequently than every fifty (50) feet, except within fifty (50) feet on either side of any catch basins, in which case data points shall be every twenty-five (25) feet. Plans and profiles shall also show the locations of structures, such as drainage facilities, water lines, sewer lines, electrical, telephone and cable TV lines and their appurtenances.

Cross-section of the right-of-way showing paving surface, curbing, shoulders and sidewalks/bicycle paths shall be submitted for section every two hundred (200) feet as measured from the centerline of adjoining streets. Nine (9) elevation points shall be shown across the right-of-way, including centerline of road, five (5) feet off centerline in both directions, both edges of surface, edge of right-of-way, top of slope or toe of slope and edge of shoulders. Two (2) inch or greater core samples shall be taken and reported along with each cross-section to determine thickness of paving material, said samples to be determined by the Planning Board.

"As Built" plans, profiles and cross-sections shall be prepared by, bear the stamp of, and be signed by a Registered Land Surveyor or Registered Engineer, and shall include the statement "I hereby certify that the plans, profiles and cross sections included herein were prepared as the result of survey work performed on the ground and represent conditions in the field as they existed on \_\_\_\_\_(date)."

#### 2.06m Acceptance of Water and Sewer Lines

All water lines shown on the subdivision plan shall be offered for acceptance to the local municipal water company prior to the final release of security for the subdivision.

All sewer lines shown on the subdivision plan shall be offered for acceptance to the Town or County of Nantucket prior to the final release of security for the subdivision.

#### 2.06n Roadway Maintenance & Open Space Management

The Planning Board shall require the formation of a Home Owners' Association for subdivisions containing common open areas and/or ways which will remain private, the purpose of which is to maintain said private ways and open spaces for the protection of the lot owners in the subdivision.

In cases where a home owners' association is required, there shall be written into each deed out for every building lot in the subdivision, a set of covenants and restrictions, the form and content of which shall be subject to the review and approval of the Planning Board, which shall provide for the following:

(1) Establishment of a maintenance trust fund to be drawn upon from time to time by the association to perform needed maintenance to and reconstruction of private roads, as well as maintenance of common open spaces in the subdivision. Said fund shall

consist of two parts. (a) A maintenance endowment shall be established by the developer in the amount of two-hundred (\$200) dollars per lot, prior to the release of any lot in the subdivision. The principal amount of the endowment shall not be drawn upon by the association for at least 25 years from the date of its establishment, at which time it may be drawn upon for maintenance or reconstruction of roads. (b) Annual maintenance deposits shall consist of interest generated by the endowment and annual assessments made to association members, the amount of such annual assessment to be established by majority vote of the Association.

## SECTION III

### SUBDIVISION LAYOUT DESIGN STANDARDS

#### 3.01 ZONING

All lots shown on the plan shall comply with area, frontage and other requirements of the *Nantucket Zoning Bylaw*.

#### 3.02 PUBLIC OPEN SPACES

Before approval of a plan by the Planning Board, the Board shall also in proper cases require the plan to show a park or parks suitably located for playground or recreation purposes, or for providing light and air and not unreasonable in area in relation to the area of the land being subdivided and the prospective uses of such land, and if so determined said board shall by appropriate endorsement on the plan require that no building may be erected on such park or parks for a period of not more than 3 years without its approval.

#### 3.03 PROTECTION OF WETLANDS

All subdivisions shall comply with Local Town Bylaw (Chapter 136) on Wetland Protection and the Massachusetts Wetlands Protection Act (Chapter 131 of the General Laws, Section 40, as amended) and the rules and regulations promulgated under the provision of said act by the Massachusetts Department of Environmental Protection.

In addition to compliance of all proposed public improvements with the Wetlands Protection Act and the Town Wetlands Bylaw, the layout of all lots and open spaces shall comply with the intent of said Act and local bylaw and the rules and regulations promulgated under them by protecting wetlands through the use of one, or a combination of several, of the following methods:

3.03a Making lots large enough and of such shape and location so that anticipated future structures and access to those structures may be accompanied with full compliance to the Wetlands Protection Act and local Wetlands Bylaw and their rules and regulations; or

3.03b Designating wetland areas as common open space to be deeded, fee simple, to the Nantucket Conservation Commission, a home owners association or suitable conservation organization. (Nothing herein shall obligate the Town of Nantucket to accept such common open space.); or

3.03c The inclusion of conservation easements in the plan to accommodate Wetlands areas.

#### 3.04 FLOOD PRONE AREAS

All subdivisions shall be designed with due regard to the prevention of loss of life and property due to flooding. Areas shall be considered flood prone which appear on the U.S. Department of Housing and Urban Development Federal Insurance Administration's Flood Hazard Boundary Maps, as amended effective September 13, 1974. Applicants not in agreement with this delineation may appeal the delineation by providing the Board with sufficient positive

documentation prepared by a registered engineer including, but not limited to, maps, profiles and written historical accounts showing that the particular area being appealed is not, in fact, subject to periodic flood hazard. If deemed valid, these materials will be used to petition HUD to amend the official Flood Hazard Boundary Map for Nantucket. The arrangement, shape, and size of lots on the plan shall protect future development of the site by any one, or a combination of several, of the following methods:

3.04a Making lots large enough and of such shape and location that anticipated new structures will be able to be safely sited within areas of each lot so that the lowest floor (including basement) is elevated to above the level of the 100-year flood may be developed unless the anticipated construction:

(1) is located landward of the reach of the mean high tide;

(2) is elevated on adequately anchored piles or columns to a lowest floor level at or above the 100-year flood level and securely anchored to such piles or columns; and

(3) has no basement and has the space below the lowest floor free of obstructions so that the impact of abnormally high tides or wind-driven water is minimized.

3.04b Designating flood hazard areas as common open space to be deeded fee simple to the Nantucket Conservation Commission, a homeowners association or suitable conservation organization. (Nothing herein shall obligate the Town of Nantucket to accept such common open space.)

3.04c The inclusion of conservation easements in the plan to accommodate flood hazard areas.

All public utilities and facilities, such as sewer, gas, electrical and water systems shall be located, elevated and constructed to minimize or eliminate flood damage. Special drainage measures shall be taken to reduce exposure of areas, both on and off-site, to flood damage.

### **3.05 PROTECTION OF NATURAL FEATURES**

Due regard shall be shown for all natural features, such as large trees, water courses, scenic points, historic locations and similar community assets which, if preserved, will add attractiveness and value to the neighborhood.

### **3.06 ONE DWELLING PER LOT**

Not more than one building designed or available for use as a dwelling shall be erected or placed or converted to such use on any lot in a subdivision or elsewhere in the Town, without the consent of the Board and that such consent may be conditional upon the providing of adequate ways furnishing access to each site for lots within a subdivision. A fee shall accompany a request for a second dwelling in the amount of fifty dollars (\$50.00). See also §139-7A(2) of the Nantucket Zoning Bylaw.

### **3.07 FURTHER SUBDIVISION**

In case a tract is subdivided into larger parcels than ordinary building lots, such parcels shall be arranged so as to allow the logical and economic extension of streets, utility easements, drainage ways and public areas into such parcels.

### **3.08 HAZARDS**

Land subject to hazard to life, health or property shall not be subdivided for residential purposes until such hazards have been eliminated or unless adequate safeguards against such hazards are provided by the subdivision.

### **3.09 REVERSE LOT FRONTAGE**

The Board may require that proposed lots not front on existing major thoroughfares.

### **3.10 STREET SYSTEM**

The street system shall comply with the following requirements for locations and alignments:

3.10a The street system shall conform to the Master Plan, if any, of proposed streets as adopted in whole or in part by the Board;

3.10b Streets shall be continuous and in alignment with existing streets as far as practicable;

3.10c Provisions shall be made for the proper projection of streets if adjoining property is not subdivided.

3.10d Streets shall be designed to provide the most direct and convenient access to the site for normal traffic and emergency vehicles, while still respecting the natural contours of the land as far as possible.

## **SECTION IV**

### **DESIGN STANDARDS AND REQUIRED IMPROVEMENTS**

#### **4.01 GENERAL**

4.01a Subdivision plans shall comply with the following minimum design standards. Applicants are encouraged to exceed these minimum standards whenever possible.

It is difficult to create design standards appropriate to all types and sizes of subdivisions. While the standards included here are applicable to the vast majority of cases, there may be limited instances where different standards may apply particularly for commercial and large-scale development. For this reason, applicants are urged to discuss their proposals with the Planning Board staff and Board members early in the concept stage of planning, before money is spent on the final design, in order to determine if any different or additional standards would apply due to the unique character of the proposal. The Planning Board reserves the right to require design standards above the minimum standards described herein when a finding is made by the Board that the purposes of the Subdivision Control Act would be better served by doing so.

#### **4.02 ROADWAY LAYOUT AND PARCEL PERIMETER MONUMENTS**

4.02a Monuments shall be installed on both sides of the street (a) at all intersections, (b) at all points in change of direction or curvature, and (c) no less frequently than one monument every five hundred (500) feet for straight sections.

4.02b Monuments shall be installed at each lot corner along the street.

4.02c All monuments shall be of reinforced concrete, five (5) inches by five (5) inches by thirty (30) inches. Monuments to be set shall be shown on "As Built" plans as a solid box.

#### **4.03 STREETS**

4.03a Street width shall depend on the street's functional classification, as follows:

(1) A minor subdivision street which, in the opinion of the Board, provides access to abutting lots, and is not intended for use by through traffic, shall be paved to a width of not less than twenty (20) feet and shall be designed and constructed in conformance with Section 5, Specifications for Construction of the Required Improvements and as shown on Plate No. 5 in Appendix A.

(2) A secondary subdivision street which, in the opinion of the Board, carries traffic from minor streets to major streets or community facilities, shall be paved to a width of not less than twenty-two (22) feet and shall be designed and constructed in conformance with Section 5, Specifications for Construction of the Required Improvements and as shown on Plate No. 5 in Appendix A.

4.03b Street intersections shall be laid out as nearly as possible at right angles. No street shall intersect any other street at less than sixty (60) degrees.



4.03c Changes in grading exceeding (0.5) of one percent shall be connected by vertical curves of sufficient length.

4.03d Sight distances for subdivision roads intersecting major Island roads shall not be less than 300 feet.

4.03e The following design standards for streets shall apply:

Minimum Design Standards for Streets

Type of Street	Width of Layout	Width of Roadway	Minimum Centerline Radius	Maximum Centerline Radius	Minimum Centerline Grade	Minimum* Curb Radius at Street Intersection
Secondary	40'	22'	300'	6%	0.5%	25'
Minor	40'	20'	200	10%	0.5%	15'

\*Right-of-way shall be symmetrical with curbline radii of the street.

These design specifications represent minimum standards. More stringent design criteria may be required by the Board.

**4.04 DEAD-END STREETS**

4.04a Dead-end streets shall not be longer than one thousand (1,000) feet unless, in the opinion of the Board, a greater length is necessitated by topography or other local conditions.

4.04b Dead-end streets shall be provided at the closed end with a turnaround having an exterior layout radius of at least sixty (60) feet. The roadway shall have an exterior radius of at least fifty (50) feet. An island suitably landscaped with grass, ground cover, trees, natural rock and/or elements blending with the surroundings, shall be provided in the center of the turnaround with a radius of at least thirty (30) feet. The island shall be enclosed with vertical granite curbing with six (6) inch reveal from the roadway pavement. (See Appendix A, Plate Nos. 1 and 2 for turnaround and island plan.) An island shall not be required in a temporary turnaround; however, the turnaround shall be paved. When the dead-end street is extended, the turnaround easement shall terminate and the applicant shall be required to remove, re-grade and restore the turnaround area to the satisfaction of the Planning Board. Alternate turnarounds are contained in Appendix A, Plate Nos. 3 and 4. The temporary turnaround shall conform to Appendix A, Plates 1, 2, 3 and 4.

**4.05 STREET CONSTRUCTION**

All subdivision streets shall be constructed of an approved Roadway Pavement as specified within Section 5 - Specifications for Construction of the Required Improvements.

**4.05a Rural Road Alternative**

In certain cases, where approval is sought for a subdivision on land of a rural or sensitive nature, the Board may, at its discretion, waive strict compliance with the requirements of Section 4.03 in order to allow roads more in keeping with the character

of the rural landscape. In such cases, the Board will consider the following factors before granting a waiver of the standard road requirements:

- zoning and density of land use
- number of lots and probable traffic volume in the proposed subdivision
- applicable covenants restricting future density increase (e.g., one dwelling per lot)
- projected future development likely to use road
- other public uses of the road (e.g., beach access)
- road length
- design of the road and of the development with respect to preservation of open space, scenic amenity, and other conservation measures.

The following standards shall apply to rural roads:

- (1) Rural roads shall be designed with consideration for the natural contours of the landscape, and should provide adequate natural drainage at all points, while minimizing erosion both on and beside the road. Depressions should be filled to a grade above that of the adjacent roadside and, where possible, natural drainage measures (i.e., swales and retention ponds) shall be employed rather than storm sewers and catch basins. Where natural drainage is used, drainage easements shall be provided to permit maintenance and to countenance possible water accumulation. Appropriate measures should be taken to reduce siltation and to preserve and restore roadside vegetation.
- (2) Rural roads shall provide adequate access for emergency vehicles and normal traffic through the provision of turnouts at appropriately spaced intervals.
- (3) Design and construction of rural roads shall conform to the specifications of Type 8 Pavement (Stabilized Gravel Base) described in Section 5.08 and Appendix A. Reductions in the width of the traveled way may be permitted but in no case shall this way be less than 12' in width. A standard 40'-wide layout shall be maintained throughout.
- (4) When the rural road alternative is approved, the applicant shall be required to establish a Road Maintenance Endowment fund, of a sum to be specified by the Board, to ensure the proper long-term maintenance of the road(s). This fund shall be administered by a Homeowner's Association, with the Planning Board named as a third party enforcing agent, and shall be used for road reconstruction and its supporting engineering review and inspection. The Planning Board shall devise a maintenance schedule prior to approval, and this schedule shall be incorporated into the documents creating the fund.

The Board reserves the right to require applicants to use this Rural Road Alternative where it deems appropriate, notwithstanding the submission of an application expressly requesting use of any of the other roadway specifications

outlined in Section 5.08.

#### **4.06 STORM DRAINAGE**

##### **4.06a Subsurface Drains or Subdrains**

In areas where the finished grade of the roadway is less than four (4) feet above the water table or in areas where less than four (4) feet of fill is placed above water in swampy places or any standing water, or in other areas, where on the opinion of the Board, the subgrade must be drained, a system of subdrains shall be designed for such areas. The subdrain shall consist of at least one longitudinal drain for each side of the paved roadway. In addition, laterals may be required as directed by the Board in areas in which an undue amount of water could accumulate in the subgrade. The system of subdrains shall be discharged into the storm drain system or otherwise disposed of in a manner satisfactory to the Board.

##### **4.06b Storm Drains**

A complete storm drain system shall be designed for each street of the subdivision to the satisfaction of the Board and shall be so laid out and of sufficient size to permit unimpeded flow of all natural waterways, to provide adequate drainage of all portions of the street system so that water does not accumulate thereon, to intercept storm water runoff from the adjacent lots of the subdivision, and to eliminate undesirable or unnatural accumulation of water on any portion of the subdivision or surrounding property, and to be completely compatible with the existing town municipal services and waterways. Those conditions which result from a twenty-five (25) year storm shall be assumed as a basis for design of the street drains. The storm drain system shall include gutters, catch basins, manholes, culverts, drain lines, concrete headwalls and such other items as may be required to complete the system to the satisfaction of the Board.

(1) Catch basins shall be located in pairs, one on each side of the roadway, at all low points or sag curves in the roadway, at intervals of not more than three hundred (300) feet on continuous grades of the roadway, at or near the corners of the roadway at intersecting streets, and at the end of turnarounds. Invert and frame elevations shall be shown.

(2) Manholes shall be located at all changes in direction, either horizontally or vertically, of a drain line or at the intersection of two (2) or more drain lines, or so located that no drain line greater than five hundred (500) feet in length would exist without either a catch basin or manhole. Invert and frame elevations shall be shown.

(3) At least one leaching basin shall be annexed to each pair of catch basins proposed. Leaching basins shall be placed in accordance with the above Sections 4.06a and 4.06b and shall conform to the specifications contained within Section 5.06. (See Appendix A, Plate No. 12)

(4) All roadway drain pipes shall be a minimum of ten (10) inches in diameter and be laid on a slope of not less than one-half of one (0.5) percent. The

designed maximum velocity shall not exceed twelve (12) feet per second. All outfalls shall extend to, and be compatible with, either a natural waterway or an existing drainage system. The ground elevation of all outfall pipes, swales, channels or drainage ditches discharging to a stream, brook, pond, marsh or other wetland, should be 0.5 to 1 foot above mean water elevation, or at higher elevations if required by the Planning Board because of special local situations based on consultation with the Conservation Commission. Provision shall be made for the disposal of surface water intercepted or collected by the system in such a manner that no flow is conducted over Town ways above grade, or over the land of others unless a drainage easement is obtained. Where adjacent property is not subdivided, provision shall be made for extensions of the system by continuing appropriate drains to the boundary of the subdivision at such size and grade as will allow their proper projection.

(5) Gas and oil separators shall be installed as required by the Planning Board. (See Appendix A, Plate 13)

(6) Drainage systems within the Public Wellhead Recharge District (as designated in §139-12B of the Nantucket Zoning Bylaw) shall be designed in conformance with the publication entitled *Artificial Recharge: Evaluation and Guidance to Municipalities: A Guide to Stormwater Infiltration Practices in Public Water Supply Areas of Massachusetts*, prepared by the Pioneer Valley Planning Commission.

#### 4.06c Open Drainage Systems

Open drainage systems of swales, ridges, and slopes shall be designed to fit the natural contour of the land as much as possible. Disturbed land shall be landscaped to conform to the surrounding area and planted to eliminate the possibility of erosion and siltation. In no case shall side slopes in disturbed areas be greater than twenty-five (25) percent. Swales and drainage channels shall have a minimum grade of one half of one (0.5) percent and a maximum grade of five (5) percent, although for small areas draining not more than one-half (0.5) acre, grades of up to ten (10) percent are permissible. The ground shall be sloped so that there is no stagnant water or artificial pools on the site attributable to the open drainage system. Drainage channels and swales shall be provided with easements which shall also permit access by the Town of Nantucket for maintenance purposes. Easements shall conform to Section 4.07 of these *Rules and Regulations*. Drainage channels and swales shall be shown on all plans.

Where the Planning Board determines that the public interest and best interest of the Town and the subdivision will be served by extension of the drainage system outside the boundaries of the subdivision, the Planning Board may require the Applicant, at his own expense, to continue the layout and construction of the drainage system to a point outside the boundaries of the subdivision where the drainage system may be connected to, and be compatible with, either a natural waterway or an existing public drainage system.

### 4.07 EASEMENTS

Easements for utilities, bicycle paths and pedestrian paths outside of street rights-of way shall be provided and recorded as required and shall be at least twenty (20) feet wide for water mains, sanitary sewers and storm drains, ten (10) feet wide for underground electrical, telephone and cable TV lines, and fifteen (15) feet wide for bicycle and pedestrian paths. Slope easements and site and/or scenic easements may be required where deemed necessary. Where a subdivision is transversed by a water course, drainage way, channel, other stream or wetland, the Board may require the provision of an easement of adequate width to conform substantially to the line of such water course, drainage way, channel, stream or wetland and to provide for the possibility of flood, protection of banks, future maintenance or construction and other necessary purposes.

#### **4.08 ADEQUATE ACCESS TO THE SITE**

No subdivision shall be approved which does not have adequate access to the site. The applicant shall show to the satisfaction of the Board:

- (a) Adequate vehicular access to the subdivision has been provided by a way, or ways, having sufficient width, suitable grades and adequate construction to provide for vehicular traffic and to ensure direct ingress and a rapid response time for emergency vehicles. The Board may require that secondary access be provided for reasons of public safety and convenience. Said vehicular access shall meet the Town's Specifications for paved roads described in Section 5. Access roads may, at a minimum, meet the Town's specification for Stabilized Gravel Roads (see Appendix A) provided that the maximum number of lots permitted under current zoning density requirements does not exceed six lots.
- (b) Adequate utility access from existing utility lines to the subdivision designed to deliver underground electrical and telephone service to serve the land and buildings erected or to be erected thereon.
- (c) The legal right to pass and repass over such access way or ways and the legal right to install underground utilities in the proposed location.

#### **4.09 SHOULDERS**

Pitched shoulders shall extend 4 feet immediately outside the treated surface, and the slopes joining sideline of right-of-way to natural grade shall not be steeper than two (2) horizontal to one (1) vertical.

The four (4) foot shoulder shall be spread with four (4) inches of loam, and seeded with grass seed. The remaining area disturbed during the construction program shall be cleared of rocks, stones, or other debris and also spread with four (4) inches of loam, and seeded with grass seed. The plane of the loam on the strip between the sideline of right-of-way and the shoulder shall be two (2) inches above the plane of the loam and the seeded shoulder. (See Appendix A, Plate No. 5 for typical cross-section)

#### **4.10 GUARD RAILS AND POSTS**

Guard rails or posts shall be installed where necessary.

#### **4.11 STREET SIGNS**

Street signs conforming in design to the pattern in use by the Town and bearing the names of the intersecting streets as indicated on the Definitive Plan shall be installed at all intersections of streets in the subdivision. Street sign design shall be subject to the approval of the Historic District Commission. Street names shall appear on both sides of the sign if placed on a post.

#### **4.12 WATER PIPES AND RELATED EQUIPMENT**

Water pipes and related equipment such as hydrants, main shut-offs and laterals, including shut-offs, to serve each lot in the subdivision shall be constructed in accordance with the regulations and requirements of the Massachusetts Department of Public Health, the Nantucket Fire Department, and, where applicable, the local municipal or private water company. All water lines shall be offered for acceptance to the local municipal water company. A central water supply for more than six (6) units must be approved by the State Department of Public Health and Public Utilities.

#### **4.13 DRY SEWER LINES**

Dry sewer lines shall be installed to service all lots in the subdivision with laterals running to the low points of the property line. Sewer lines and related equipment shall be constructed in accordance with the following specifications.

4.13a Minimum velocity - 2 feet per second;

4.13b Design flow - 750 gallons per day per lot;

4.13c Tight joint pipe;

4.13d Lift stations and treatment plant to be approved by the Massachusetts Department of Public Health and the Nantucket Department of Public Works.

#### **4.14 POWER LINES**

Power lines shall be placed underground in accordance with the rules and regulations of the Nantucket Electric Company, provided that they are no less stringent than the Massachusetts Department of Public Utilities regulations. A letter from the Nantucket Electric Company shall be submitted stating that a person qualified to do so and acting on behalf of the Nantucket Electric Company has reviewed the proposed power line installation and that said installation meets with their approval.

All lines shall be placed in conduits in all locations where these lines pass under roadway surfaces. A flag shall be erected to mark each conduit location.

#### **4.15 TELEPHONE POLES**

All telephone lines shall be placed underground in accordance with the rules and regulations of the New England Telephone Company. A letter from the Telephone Company addressed to the Nantucket Planning Board shall be submitted stating that a person qualified to do so and acting on behalf of the New England Telephone Company has reviewed the proposed telephone installation and that said installation meets with their approval.

All lines shall be placed in conduits in all locations where these lines pass under roadway surfaces. A flag shall be erected to mark each conduit location.

**4.16 LANDSCAPING**

A landscape plan shall be presented as part of each subdivision plan. This plan shall clearly show:

- the location and size of all proposed trees and other plantings; and
- the location and size of all existing trees and other vegetation on the site which is to be preserved.

The following standards shall apply:

(1) Existing vegetation shall be preserved wherever possible on every site. All existing trees over three (3) inch caliper, as well as any tree which has been flagged by the Planning Board or its designee, shall be shown on the landscape plan.

(2) New trees shall be planted on subdivision lots in order to provide shade, visual-and wind-screening, habitat for birds and other wildlife, and visual amenity for future residents. Planting requirements for new trees and other vegetation shall be determined according to zoning and the density of the proposed subdivision. In general, the following guidelines shall apply:

ZONE	PLANTING REQUIREMENT
ROH, R1, R-2, R-10 RC, RC-2, LC	One tree of 4" caliper per each proposed lot, planted in the layout or in the front or side setbacks.
LUG-1 LUG-2 LUG-3 MMD	Any combination of planting of new species and preservation of existing vegetation which will demonstrate to the satisfaction of the Board that (1) future dwellings will be suitably screened from roads and from each other and (2) the entire subdivision, including lot and road siting and landscape plantings, has been planned with attention to the topography of the site so that the natural character of the landscape has been preserved and enhanced.

(3) New tree plantings shall be of a type which are resistant to breakage and are long-lived, clean, and appropriate to the local landscape and growing conditions. Guidelines

for species suitable to different local conditions are found below.

(4) All new trees shall have a diameter of 4" or greater, and shall be planted in a good loam and peat moss mixture, and guyed, wrapped, irrigated and otherwise maintained as necessary to ensure their survival.

(5) The subdivider shall be responsible to ensure the survival of all new trees and plantings for a period of one year from the date of their installation. A security, in an amount deemed sufficient by the Board, shall be held by the Board and released upon its certification that the landscaping requirements, including survival of all new plantings, have been met.

### **Recommended tree species for new plantings**

d = deciduous

e = evergreen

#### **Open Areas**

- d Plane tree (*Platanus occidentalis*)
- d Gingko (*Gingko biloba*)
- d Sycamore maple (*Acer pseudoplatanus*)
- d Thornless honey locust (*Gleditsia triacanthus*)
- d Japanese Pagoda tree (*Sophora japonica*)
- d Seedless Ash (*Fraxinus pennsylvatica lanceolata*)
- e Red cedar (*Juniperus virginiana*)
- e Japanese black pine (*Pinus thunbergii*)
- e Pitch pine (*Pinus rigida*)
- e Spruce varieties (*Picea* sp.)
- e White fir (*Abies consolor*)
- e Arbor vitae (*Thuja orientalis*)
- e Holly (*Ilex opaca*)
- e Cryptomeria (*Cryptomeria japonica*)
- e Sawara false cypress (*Chamecyparis*)

#### **Sheltered Areas**

Any of the above species, and, in addition:

- d Black tupelo (*Nyssa sylvatica*)
- d Elms (*Ulmus carpinifolia*, *U chinensis*, *U americana*)
- d Sweet Gum (*Liquidambar styraciflua*)
- d Flowering ash (*Fraxinus ornus*)
- d Linden (*Tilia americana*)
- d Gray birch (*Betula populifolia*)
- d Washington thorn (*Crataegus phaenopyrum*)
- e Holly (*Ilex opaca*)
- d Crabapple (*Malus* sp.)
- d White poplar (*Populus alba*)
- d Niobe weeping willow (*Salix niobe hort.*)
- d Oaks (*Quercus rubra*, *Q. alba*, *Q. stellata*)
- d Black locust (*Robinia pseudoacacia*)
- d Honeylocust (*Gleditsia triacanthos*)



#### **4.17 FIRE ALARM SYSTEMS AND EMERGENCY WATER SUPPLY SYSTEMS FOR FIRE FIGHTING**

Fire alarm systems shall be required where applicable; installation and design shall be approved by the Chief, or the Superintendent of Fire Alarms of the Nantucket Fire Department.

All lines shall be placed in conduits in all locations where these lines pass under roadway surfaces. A flag shall be erected to mark each conduit location.

Subdivisions not served by a public water system shall be provided with an emergency water supply system or, where a natural pond exists, a dry hydrant system, in accordance with the National Fire Code Manual NFPA Volume 12, Section 1231, Suburban and Rural Fire Fighting Regulations of 1975, upon the recommendation of the Nantucket Fire Department. The location, installation and final testing for said systems shall be subject to the approval of the Nantucket Fire Department and shall be of a design capacity as the fire load for the development may require.

A natural pond proposed to be used as a backup source for water for fire fighting shall have adequate access to such pond to accommodate the weight and size of a fire pumper truck.

#### **4.18 SIDEWALKS**

Sidewalks, having a width of not less than four (4) feet, constructed of either brick or Portland Cement Concrete shall be installed on both sides of the roadway along each way in a subdivision. Sidewalks shall be constructed in accordance with the latest revision of the Rules and Regulations of the Massachusetts Architectural Access Board (521 CMR).

Final decision as to the requirement and type of sidewalks will be at the Board's discretion with due consideration being given to size and number of lots in the subdivision, population density of the subdivision, and location of the subdivision in regard to walking distance to both existing and future schools, shopping districts, etc.

#### **4.19 BICYCLE PATHS**

Bicycle paths shall be required and shall be designed as follows:

4.19a Designed to maximize the safety of path users;

4.19b Minimum width - eight (8) feet;

4.19c Materials - Bituminous Concrete over gravel foundation. (Appendix A, Plate No. 11)  
The Board may require that bicycle paths be constructed as necessary to connect the proposed subdivision with the Town's network of major bicycle paths.

#### **4.20 STREET LIGHTS**

Street lights shall be required as designated by the Planning Board.

#### **4.21 BRIDGES**

All bridges shall be built according to ASSHTO H20-44 standards.

#### **4.22 CURBING AND BERMS**

All streets shall have bituminous concrete "Cape Cod Berm", vertical granite, or precast concrete curbing at the discretion of the Board and shall be placed on both sides of all roadways. In the case where granite or precast concrete is used, the curbing shall extend along the entire circumference of curves plus six (6) feet at all intersections from the point of tangency along the side of each roadway.

The Board may waive "Cape Cod Berm" in places where the road's design grade is less than three (3) percent.

#### **4.23 SOIL TESTS (DEEP OBSERVATION HOLES AND PERCOLATION TESTS)**

Soil surveys to establish the suitability of the land for the proposed storm and sanitary drainage installations shall be required for all subdivision submissions. Standard Massachusetts Soil Evaluator Forms shall be submitted, signed by a licensed soil evaluator. The frequency of soil samples required and types of the soil test required will be determined by the Board or its Agent.

#### **4.24 DRIVEWAY APRONS**

Driveway aprons of cobblestone, Belgian block, concrete, brick, or asphalt shall be provided for each lot in the subdivision. Aprons shall extend from the traveled way to two (2) feet beyond the outer edge of any on-site sidewalk/bicycle path or two (2) feet beyond the lot line, whichever is farther. Turning radii shall be provided at each apron's intersection with the traveled way, and apron width may not be less than ten (10) feet.

The Board may require that common aprons be provided for adjoining lots. The Board may modify these requirements to meet local topographical conditions.

## SECTION V

### SPECIFICATIONS FOR CONSTRUCTION OF THE REQUIRED IMPROVEMENTS

#### 5.01 GENERAL

All improvements specified or implied on the Definitive Plan shall be designed and constructed by the applicant in accordance with the provisions of this Section of the *Rules and Regulations* or as directed by the Board. Items not specifically mentioned herein shall be constructed in accordance with the Standard Specifications for Highways and Bridges of the Massachusetts Department of Public Works, dated 1973 and including revisions thereto (hereinafter referred to as the Mass. DPW Specifications), unless specifically directed otherwise by the Board.

All work performed by the applicant as a consequence of these *Rules and Regulations* will be subject to the review and acceptance or approval of the Board. The Board may employ a Registered Professional Engineer to act as its agent for the inspection and supervision of the work. In order for the Board to properly inspect the work as it progresses, the applicant shall keep the Board or its Agent, informed of the progress of the work, and shall at any time provide safe and convenient access to all parts of the work for inspection by members of the Board or its Agent or such persons as the Board may designate. No work will be approved which has been covered prior to inspection by subsequent work. Reference should be made to Section 6 for specific inspections required by the Board.

#### 5.02 SUBDIVISION LAYOUT

The subdivision, including all way lines and drain lines and municipal services, shall be laid out as to line and grade by a Registered Land Surveyor.

Any work which, in the opinion of the Board, has not been properly laid out or does not conform to the plans may be checked by a Registered Land Surveyor employed by the Board. If the Board determines that such work does not conform to the plan, the applicant shall pay all costs which the Board incurs as a consequence of checking the work. The Board may require the removal and correct replacement of any work which has been incorrectly laid out.

#### 5.03 CLEARING, GRUBBING, AND EXCAVATION

All streets shall be graded by removal of all existing brush, stumps and topsoil below the finished grade, to a width of the area occupied by the roadway plus an additional four (4) feet on each side or extending outward to the toe of slopes in fill areas, whichever is greater. Any loam, peat or other material not considered suitable as a subbase shall be completely excavated and replaced with a structural grade material.

#### **5.04 ON-SITE DISPOSAL OF BRUSH AND TREES**

If the Board determines that on-site disposal of brush and trees is appropriate, the Board shall approve the method and location of such disposal, which may include controlled burning with the approval of the Fire Chief, burial, chipping or a combination of these methods.

#### **5.05 SLOPE STABILIZATION AND EROSION CONTROL**

Adequate erosion protection measures (vegetative and/or structural) shall be made to prevent surface water from eroding cut and fill side slopes, road shoulders and other areas brought to final grade and to reduce sedimentation in nearby wetlands and ponds. The applicant shall describe in the application his plan for minimizing erosion and also a proposed method for controlling airborne dust during construction and before landscaping and ground cover has rooted and grown sufficiently to retard erosion.

Erosion protection measures may include the use of mulches and temporary or permanent cover crops. Types of mulch material effective for erosion control are shredded or chopped cornstalks, hay, straw and wood chips. Mulch areas damaged after heavy rainfalls, severe storms and construction activity shall be repaired as soon as discovered.

Where plantings are on areas subject to mulch removal by wind or water flows or where side slopes are steeper than 2:1 or higher than 10 feet, the mulch shall be anchored. Anchoring methods shall include tucking the mulch into the soil with a straight-blade disk, stapling netting (cotton or paper) over the mulch or driving pegs into the mulched area at intervals of about four (4) feet and interlacing them with twine.

The Board may require temporary or permanent diversions, berms, grassed waterways, special culverts, shoulder dikes and land grading, where applicable or such other mechanical measures as are necessary to intercept and divert surface water runoff. Retaining walls may be required where side slopes are steeper than 2:1.

The mouths of all catch basins shall be fitted with filter fabric during the entire construction process to retard siltation.

#### **5.06 DRAINAGE SYSTEM**

The construction of the drainage system, including methods of construction and quality of materials shall conform to the applicable sections of the Mass. DPW Specifications except as modified hereafter or as directed by the Board.

Any storm drains positioned within the street line and in any location subject to vehicular loading shall be selected from the following list of alternatives and shall be in conformance with the Mass. DPW Specifications.

### Storm Drain Specifications

Type	Minimum Required Cover (Feet)*
Ductile Iron Pipe	1.0
Polyvinyl Chloride (pvc) Pipe	2.5
Asphalt Coated Corrugated Metal Pipe	1.5
Reinforced Concrete Pipe (CL III Min. Wall B)	2.5

\* From top of pipe to bottom of subgrade

Pipes made from other materials may be used upon approval of the Board or it's authorized agents.

Leaching catch basins shall be precast units which conform to the Mass. DPW Specifications. The cement concrete shall have a compressive strength of 3,000 psi after 28 days and a design loading conforming to AASHTO HS20-44. The leaching catch basin shall conform to Plate No. 12 as shown in Appendix A.

#### 5.07 SUBSURFACE GRADING AND FILLING

Appropriate cuts and fills shall be undertaken in conformance with the plans and profiles as approved and in conformance with Mass. DPW Specifications.

#### 5.08 ROADWAY PAVEMENT

Roadway pavement shall be constructed of one of the following approved types of pavement sections:

##### **Type 1 - Full Depth Pavement**

3-inch bituminous concrete - Type I-1 Hot Mix  
6-inch gravel (may use 3" gravel over 4" hardening)

##### **Type 2 - Full Depth Pavement**

3-inch bituminous concrete - Type I-1 Hot Mix  
5-inch dense graded crushed stone

##### **Type 3 - Full Depth Pavement**

1-1/2-inch bituminous concrete - Type I-1 Hot Mix  
3-inch emulsified asphalt mix - Type I made with processed dense-graded aggregates

##### **Type 4 - Full Depth Pavement**

2-inch bituminous concrete - Type I-1 Hot Mix  
2-inch emulsified asphalt mix - Type II made with semi-processed, crusher-run, pit-run or bank-run gravel.

##### **Type 5 - Full Depth Pavement**

2-1/2-inch bituminous concrete - Type I-1 Hot Mix  
2-inch emulsified asphalt mix - Type III made with sands or silty sands, mixed in place.

Emulsified asphalt content shall be 14 gallons per ton of aggregate. Cut-back agent for MC-800 cut-back asphalt shall be 4-6 percent of mix. In the case of asphalt in which cold mix or mix in place is used, the finished subgrade shall be primed with no less than two-tenths (2/10) of a gallon of penetrating oil per square yard and let cure for 48 hours before placing the mix.

**Type 6 - Full Depth Pavement**

4-inch emulsified asphalt mix or MC-800 cut-back asphalt - Type 1 made with processed dense graded aggregates  
6-inch gravel ( may use 3" gravel over 4" hardening)

Surface shall be sealed with a stone seal surface treatment as specified in Appendix A.

**Type 7 - Full Depth Pavement**

Belgium Paving Block  
1-1/2-inch stone dust  
6-inch gravel (may use 3" gravel over 4" hardening)

Roadway pavement shall be constructed in conformance with the Mass. DPW Standard Specifications and Supplemental Specifications contained in Appendix A.

**Type 8 - Full Depth Pavement**

Stabilized Gravel Base  
6-inch stabilized and compacted fill consisting of 35% dense-graded crushed stone and 65% crushed stone fines and silts. (See Appendix A and Plate No. 6)

**Type 9 - Full Depth Pavement**

Cobblestone Pavers  
9-inch stone dust  
8-inch gravel (See Appendix A and Plate 14)

**Type 10 - Full Depth Pavement**

Brick Pavers  
1-inch Stone dust  
4-inch dense graded crushed stone base  
12-inch gravel borrow (See Appendix A and Plate 15)

All pavement types which utilize emulsified asphalt or cut-back asphalt material shall be allowed to cure a minimum of 30 days to placement of top course.

**5.09 CLEANING UP**

The entire area of the subdivision shall be cleaned up so as to leave a neat and orderly appearance free from debris and other objectionable materials. All catch basins and manholes

shall be cleaned out.

Following the completion of this and other items of work as required herein, a final inspection will be made.

## SECTION VI

### INSPECTION

#### 6.01 GENERAL

All work performed as a consequence of these *Rules and Regulations* shall be subject to the review of the Board which shall approve and accept or disapprove and reject each phase, or portion, of such work and at completion shall recommend the acceptance of all work or disapproval of the work with reasons therefor. The Board may employ a Registered Professional Engineer to act as its agent in the inspection of the work to insure compliance with these *Rules and Regulations* and to report to the Board his recommendations as to approval or disapproval of the work. Such Engineer will make certain inspections as prescribed herein in order to check the adequacy of the work at various stages prior to such work being covered by subsequent work. The Board, its Engineer, and such other persons as the Board may designate, shall have the right to inspect the work at any time. The applicant shall at any time provide safe and convenient access to all parts of the work for inspection by the Board or its authorized agents.

All work which has been disapproved or is not acceptable to the Board shall be removed and replaced or otherwise corrected to the point of complying with the requirements of the Board for acceptance. Any work which has been covered by subsequent work prior to acceptance, or is otherwise not available or obscured to the point of rendering inspection of the work difficult, shall be considered to be not acceptable to the Board. Such subsequent work shall be removed as directed by the Board or its Agent to insure availability of the work to be inspected as required herein. The release of the performance guarantee shall depend upon the acceptance of all work prescribed herein and as shown on the Definitive Plan.

At points indicated in Section 6.04 the construction of the required improvements shall be inspected by the Board or its Agent. Unless approval of the work completed, including approval of materials used, to each such point has been given in writing, no further work shall be commenced. Such inspections may include the taking of certain samples for laboratory analysis or testing. In such cases, the applicant shall insure that the Board or its Agent, is in no way hindered or obstructed in the course of obtaining such samples. Where such samples are removed from the completed work, the applicant shall replace and restore such work, to the satisfaction of the Board or its Agent, to its condition prior to the taking of the sample.

#### 6.02 NOTIFICATION OF THE ENGINEER

(a) The Planning Board shall be notified at least 48 hours before the completion of each of the stages listed in Section 6.04, in order that they may arrange for proper inspection and approval of the work done. Each stage must be approved by the Planning Board or their Agent before work on the subsequent stage can be started.

(b) In the event the Board or its Agent makes an inspection of the work at the time designated and finds that such work is not at the proper stage of completion or that the work has been covered or otherwise obscured, the Board or its Agent, shall notify the applicant as to the additional steps the applicant shall take to complete the work to the point required, or to the extent the work shall be uncovered or exposed to full view. The applicant shall notify the Board



or its Agent again when the work is ready as prescribed in Section 6.02(a).

(c) The applicant shall be liable for costs and fees incurred by the Board as a result of requests by the applicant for an inspection of the work which, in the opinion of the Board, was not an acceptable stage of completion for such inspection.

(d) To defray the cost of each re-inspection of the same improvement caused by the failure of such improvement to meet the applicable specifications, the subdivider shall at the time of each request for each subsequent inspection, pay the Town of Nantucket the full amount reasonably necessary to cover the costs of such re-inspections.

### **6.03 LINES AND GRADES**

Prior to the inspection of any phase of the work, it shall be the applicant's responsibility to provide sufficient line stakes and grade stakes to insure that a proper inspection may be made. These horizontal and vertical control stakes must be laid out to conform to the lines and grades shown on the approved Definitive Plan or any approved amendment thereto.

### **6.04 REQUIRED INSPECTION**

The following inspections of the required improvements shall be required by the Board.

**Inspection No. 1: Excavation Prior to Subgrading.** An inspection shall be made of the work upon completion of all clearing, grubbing and excavation and all work incidental thereto as may be required. No fill shall have been placed at the time of this inspection.

**Inspection No. 2: Subsurface Grading and Filling.** An inspection shall be made of the compacted fill as may be required to bring the roadways to their proposed grades. The applicant shall notify the Board or its Agent, as to his source of fill as soon as such information is known so that it may be determined if samples and analysis are required. The applicant is advised not to proceed with the filling operation until such time as the Board or its Agent notifies the applicant that the proposed fill is acceptable. If the applicant proceeds with the fill prior to such notice, he does so at his own risk.

**Inspection No. 3: Drainage Facilities and Utilities.** An inspection will be made of the completed drainage system. At the same time or such other time as the work may be available, an inspection will be made of the completed municipal services (without backfill) as required by the Definitive Plan. The inspection of the required municipal services will be made by the agency responsible for the particular service. Each agency so involved will notify the Board or its Agent of the approval of such work.

Backfill of any portion of the municipal services shall not be made until after receipt of notification of approval or acceptance by the Board or its Agent, or the agency responsible.

**Inspection No. 4: Roadway Foundation.** An inspection will be made of the compacted roadway foundation.

**Inspection No. 5: Pavement Surface Course.** An inspection will be made of the completed

roadway pavement. Samples of the mix may be taken by the Board or its Agent for the purposes of determining if the roadway specifications and pavement thickness meet the requirements of the approved roadway section as contained within Section 5.08.

**Inspection No. 6: Final.** An inspection will be made of all work as required on sidewalks, curbing, landscaping, seeding, side slopes, monuments, bounds and cleanup.