



**TOWN OF NORFOLK
PLANNING BOARD**
ONE LIBERTY LANE
NORFOLK, MASSACHUSETTS 02056

TEL: (508) 528-2961
FAX: (508) 541-3300

www.norfolk.ma.us

NOTICE OF PUBLIC HEARING

Notice is hereby given, in accordance with M.G.L., Ch. 41, Sec. 81Q, as most recently amended, that a public hearing will be held by the Norfolk Planning Board on Tuesday, October 11, 2022 at 7:30 p.m. in meeting room 124 at the Norfolk Town Hall, One Liberty Lane.

The Norfolk Planning Board will discuss proposed revisions to its "Rules and Regulations for Subdivision of Land and Site Plan Approval & Special Permit Rules and Regulations". The purpose of the proposed amendments to the regulations is to renumber and reformat to correspond with the new ECode format. A copy of the proposed regulations is available for review on the Town website at www.norfolk.ma.us or in the Planning Board Office of the Municipal Building during regular business hours.

For the Board,

Eric Diamond (signature)

Eric Diamond, Clerk
NORFOLK PLANNING BOARD

/bjf

cc: Town Clerk
Planning Boards of Millis, Medway, Franklin,
Foxboro, Wrentham, Medfield, Walpole
Board of Health
Conservation Commission
DPW
Police Chief
Fire Chief
Building Commissioner
Board of Selectmen

2022 SEP 21 PM 2:49

TOWN CLERK
NORFOLK

DIVISION 3

PLANNING BOARD

Chapter 320

SPECIAL PERMIT RULES AND REGULATIONS

ARTICLE I Planning Board Organization

- § 320-1. General provisions.
- § 320-2. Officers.
- § 320-3. Chairperson.
- § 320-4. Vice Chairperson.
- § 320-5. Clerk.
- § 320-6. Alternate members.
- § 320-7. Quorum.
- § 320-8. Regular meetings.
- § 320-9. Special meetings.

ARTICLE II Applications to Planning Board

- § 320-10. Application form.
- § 320-11. Filing period.
- § 320-12. Plan of land to accompany petition.
- § 320-13. Certified list of abutters.
- § 320-14. Application fees.

ARTICLE III Procedure

- § 320-15. Notice.
- § 320-16. Hearings to be public.
- § 320-17. Representation and absence.
- § 320-18. Order of business.

ARTICLE IV Disposition by Planning Board

- § 320-19. Voting requirement.

- § 320-20. Withdrawal.
- § 320-21. Application review.
- § 320-22. Reconsideration.
- § 320-23. Reapplication.
- § 320-24. Time limitation on grants; extensions.
- § 320-25. Policies and advice.

ARTICLE V Special Permits for Open Space Preservation Developments

- § 320-26. Applicability and effect.
- § 320-27. Contents of concept plans.
- § 320-28. Waiver of requirements for small projects.

ARTICLE VI Special Permits for Complex Sites with Mixed and Residential Uses (Comprehensive Plans)

- § 320-29. Applicability and effect.
- § 320-30. Contents of comprehensive plans.
- § 320-31. Procedures for comprehensive plans.

ARTICLE VII Schedule of Fees

- § 320-32. Application fees.
- § 320-33. Review by outside consultants.
- § 320-34. Review fees.

[HISTORY: Adopted by the Planning Board of the Town of Norfolk, as amended 11-12-2002. Subsequent amendments noted where applicable.]

ARTICLE I

Planning Board Organization**§ 320-1. General provisions.**

The Planning Board is authorized under § 310-7.6 of the Zoning Bylaw of the Town of Norfolk as a permit granting/special permit granting authority. The Board as a special permit granting authority is governed by and shall act in accordance with Chapter 40A of the General Laws of Massachusetts, as amended, and the Zoning Bylaw of the Town of Norfolk, as amended. These rules and regulations govern the method of operation of the day-to-day activities of the Board in connection with special permits and are in accordance with the applicable law and bylaw. These rules may be changed by the concurrence of three Board members at a regular or special meeting. These rules and any changes are effective as of the date filed with the Town Clerk. Wherever these rules and regulations are not definitive and the Massachusetts General Laws do not place restrictions, the Board's operation shall be governed by Robert's Rules of Order, as most recently revised.

§ 320-2. Officers.

The officers of the Planning Board shall consist of a Chairperson, Vice Chairperson and Clerk. The election of these officers shall take place no later than the first meeting after June 1. The election shall be by simple majority of the Board members present. From time to time it may become necessary to fill a vacant position; this shall take place at the first convenient time following the termination, resignation, or otherwise removal of an officer. All officers shall be members of the Board. Associate members shall not hold an office, nor shall they be allowed to participate in the election of officers.

§ 320-3. Chairperson.

- A. The Chairperson may vote and be recorded on all matters coming before the Board. Subject to these rules, he/she shall decide all points of order, unless overruled by a majority of the Board in session at the time. He/she shall appoint such committees as may be found necessary or desirable.
- B. In addition to powers granted by general laws and local bylaws, and subject to these rules and further instructions of the Board, the Chairperson shall transact the official business of the Board, supervise the work of the Clerk, request necessary help, direct the work of all subordinates, and exercise general supervisory powers. He/she shall, at each meeting, report on all official transactions that have not otherwise come to the attention of the Board.

§ 320-4. Vice Chairperson.

The Vice Chairperson shall act as Chairperson in case the Chairperson is absent, disabled, or otherwise unable to perform his/her duties.

§ 320-5. Clerk.

Subject to the direction of the Board and its Chairperson:

- A. Prior to each meeting, the Clerk or his/her designee shall call each full and associate member of the Board to remind them of the meeting and to assure that at least five members will be present for the meeting and scheduled hearings.
- B. Upon acceptance by the Board of applications for hearings for special permits, the Clerk shall prepare the forms for the legal advertising of the hearings and submit them to the Director of Planning and Land Use.
- C. The Clerk shall take notes during the hearing and deliberations and cause the hearing and deliberations to be recorded in accordance with the Open Meeting Law.¹ After deliberations by the Board, the Clerk shall be responsible for drafting the legal decision as directed by the Board, using the detailed record and the notes from the hearing and deliberations. After the draft decision has been reviewed and voted on by the Board, the Clerk shall be responsible for delivering the final draft to the Director of Planning and Land Use in a timely manner in order that the decision may be printed, signed by members of the Board, and stamped by the Town Clerk prior to the legal deadline.
- D. The Clerk shall draft other correspondence as directed by the Board to be submitted to the Director of Planning and Land Use for printing and mailing.

§ 320-6. Alternate members.

The Chairperson of the Board shall designate an alternate member to sit on the Board in case of the absence, inability to act, or conflict of interest on the part of any Board member. In the event of a vacancy on the Board, the Chairperson may designate an alternate member to act as a member of the Board until someone is appointed to fill the unexpired portion of the vacated term.

§ 320-7. Quorum.²

Four members of the Planning Board shall constitute a quorum. The quorum may be made up of any combination of members and associate members.

1. Editor's Note: See MGL c. 30A, §§ 18 through 25.

2. Editor's Note: Amendment pending.

§ 320-8. Regular meetings.³

Regular meetings of the Planning Board shall be held at 7:00 p.m. on Tuesdays. If a regular meeting day falls on a holiday or federal, state, or Town election day, the meeting shall be held on the day following or at such time and place advertised.

§ 320-9. Special meetings.

Special meetings may be called by the Chairperson, or at the request of two members. Notice thereof shall be given to each member at least 48 hours before the time set. Notices shall be posted publicly as required by law on the bulletin board at the Town Hall.

ARTICLE II

Applications to Planning Board**§ 320-10. Application form.**

Every application for action by the Board shall be made on the official form. These forms shall be furnished by the Town Clerk or Director of Planning and Land Use upon request. Any communication purporting to be an application shall be treated as mere notice of intention to seek relief, until such time as it is made on the official application form. All information called for by the form shall be furnished by the applicant in the manner therein prescribed. Failure to provide all requested information may be cause for the Board to reject the application.

§ 320-11. Filing period.

Every application shall be filed within time limits specified in MGL c. 40A, as amended.

§ 320-12. Plan of land to accompany petition.

Every application and petition to the Board shall be accompanied by 12 copies of the following described plan: the plan shall be drawn as required in the "Important Instructions and Information for Applicants" accompanying the application.

§ 320-13. Certified list of abutters.

All applications shall be accompanied by a list of abutters provided to the petitioner by, and certified by, the office of the Board of Assessors. The list shall contain the names and the addresses of all abutters and abutters to abutters of the property line as long as any portion of such land of the abutters to abutters is within 300 feet of such property line. Owners of land directly opposite on any public or private street or way, as they appear on the most recent applicable tax list, shall be included on the abutters list. Any fee for this list shall be paid by the petitioner at the Assessors' office or as may be specified by the Assessors' office.

3. Editor's Note: Amendment pending.

§ 320-14. Application fees.

All applications shall be accompanied by a check, payable to the Town of Norfolk, in the amount listed on the most recently revised fee schedule.⁴ In some instances, the Board may be requested to waive or reduce the applicable fee. In general, Town of Norfolk boards or committees and religious, charitable, or other nonprofit organizations may be granted a reduced fee that covers, as a minimum, specific administrative costs (including postage, secretarial time, and mandatory legal advertising). The Board shall also consider the complexity of the application and the time required to hear it. When submitting a request for a fee reduction or waiver, the applicant shall cite the reasons for the request, whereupon the Board shall make a determination.

ARTICLE III

Procedure**§ 320-15. Notice.**

Notice of hearings shall be advertised as required by the provisions of MGL c. 40A. In addition, a copy of the advertised notice shall be sent by mail at least 14 days prior to the date of the hearing, postage prepaid, to the applicant or petitioner, to all parties on the list provided in accordance with § 320-13, to the Planning Board of every abutting town, to the Building Commissioner/Zoning Officer, and to all those required by the law.

§ 320-16. Hearings to be public.⁵

All hearings shall be open to the public and in accordance with MGL c. 30A, §§ 18 through 25, as amended ("Open Meeting Law").

§ 320-17. Representation and absence.

An applicant may appear in his own behalf, or be represented by an agent or attorney. In the absence of any appearance without due cause by or on behalf of an applicant, the Board may decide on the matter using the information it has otherwise received.

§ 320-18. Order of business.

- A. Introduction of the Board members.
- B. Reading of newspaper advertisements, petition, and legal notices by the Clerk, together with presentation of exhibits, if any.
- C. Applicant's presentation.
- D. Opponent's presentation, if any, and questions by those seeing information.

4. Editor's Note: The fee schedule is on file in the Town office.

5. Editor's Note: Amendment pending.

- E. Applicant's rebuttal, restricted to matters raised by opponent's presentation.
- F. Members of the Board who are hearing the case may direct appropriate questions during the hearing.

ARTICLE IV

Disposition by Planning Board

§ 320-19. Voting requirement.

The concurring vote of at least four members of the Board shall be necessary to grant a special permit. Any amendments or conditions proposed to an original motion to grant a special permit shall be declared passed, based on the amendments receiving more "yeas" than "nays." The record shall show the vote of each member upon each question or, if failing to vote, indicate reasons for its decision. A detailed record of proceedings, including the vote on each question, shall be filed with the Town Clerk within 14 days of a decision becoming final. A decision shall be considered final when three members sign the written decision, thus certifying it.

§ 320-20. Withdrawal.

An application may be withdrawn by notice in writing to the Clerk at any time prior to the hearing by the Board. After an advertisement, withdrawal is permitted by Board approval only.

§ 320-21. Application review.

All applications shall be reviewed by the Board. If the Board decides by the concurring vote of three members that an application is incomplete, in error, or requests a special permit for a use or purpose which the Board has no authority to grant under the Norfolk Zoning Bylaw,⁶ it shall be deemed invalid and the fee returned. If desired, the applicant may resubmit a completed/corrected application, which shall be treated as a new application.

§ 320-22. Reconsideration.

Once an application has been voted upon and the meeting adjourned, reconsideration of that decision can only occur by a majority vote of those who originally voted on the decision and only prior to date stamping by the Town Clerk, except as directed by the court under MGL c. 40A.

§ 320-23. Reapplication.

No application or petition which has been unfavorably and finally acted upon after hearing by the Planning Board shall be acted favorably upon within two years after the date of final

6. Editor's Note: See Ch. 310, Zoning.

§ 320-23

SPECIAL PERMIT RULES AND REGULATIONS

§ 320-27

unfavorable action except by decision of the Board or unless otherwise required by the provision of MGL c. 40A, § 16, as amended.

§ 320-24. Time limitation on grants; extensions.

- A. If an application is granted by the Board, all permits necessary for the prosecution of the work shall be obtained and construction shall be commenced within one year from the date of filing of the Board's decision in the office of the Town Clerk.
- B. Reasonable extension of said time not exceeding one additional year per extension request may be granted by application to the Board for any good cause or in the case of an appeal in accordance with MGL c. 40A, § 17.

§ 320-25. Policies and advice.

- A. Advice, opinions, or information given by any Board member or any other official or employee of the Town shall not be binding on the Board.
- B. In order to preserve the integrity of the public hearing process, it is the policy of the Board to accept information relative to any case at the appropriate public hearing, and to discourage individuals from ex parte communications with members of the Board with respect to pending special permit applications.

ARTICLE V

Special Permits for Open Space Preservation Developments

§ 320-26. Applicability and effect.

The rules and regulations set forth in this article apply to all applications for special permits for open space preservation (OSP) developments under § 310-8.2 of the Zoning Bylaw. They supplement, but do not replace, other articles of these rules and regulations as they may apply to such special permit applications.

§ 320-27. Contents of concept plans.

A concept plan submitted pursuant to § 310-8.2I(3) of the Zoning Bylaw (application for OSP development special permit) shall not be considered complete unless it includes all of the following information:

- A. The OSP development name, boundaries, North point, date, legend, title "Concept Plan," and scale.
- B. The names of the record owner and the applicant, and the name of the landscape architect that prepared the plan.
- C. The names, approximate location, and widths of adjacent streets and verification that adequate stopping sight distance is achieved.

- D. The proposed topography of the land shown at a contour interval of two feet. Elevations shall be based on the Town datum [National Geodetic Vertical Datum of 1929 (NGVD)].
- E. The location of existing landscape features, including forests, farm fields, meadows, wetlands, riverfront areas, water bodies, archaeological and historic structures or points of interest, rock outcrops, boulder fields, stone walls, cliffs, high points, major long views, forest glades, major tree groupings, noteworthy tree specimens, and habitats of endangered or threatened wildlife, and the areas to be protected as delineated in Step One of the design process [Zoning Bylaw, § 310-8.2E(1)(a)]. Proposals for all site features to be preserved, demolished, or moved shall be noted on the concept plan.
- F. Information on adjacent open space or resource areas that may be enhanced by the proposed subdivision shall be included in the concept plan.
- G. All on-site local, state, and federal regulatory resource boundaries and buffer zones shall be clearly identified and all wetland flag locations shall be numbered and placed upon the concept plan. (A condition of the OSP special permit will be the approval of the delineation by an order of conditions/request for determination of applicability by the Norfolk Conservation Commission.)
- H. Lines showing proposed private residential lots, as located during Step Four of the design process [Zoning Bylaw, § 310-8.2E(4)], with approximate areas and frontage dimensions.
- I. All existing and proposed features and amenities, including trails, recreation areas, pedestrian and bicycle paths, community buildings and off-street parking areas, shall be shown on the plan and described in a brief narrative explanation where appropriate.
- J. The existing and proposed lines of streets, ways, easements and any parcel of land intended to be dedicated for public use or to be reserved by deed covenant for use of all property owners in the subdivision, or parcels of land or lots to be used for any purpose other than private residential, shall be so designated within the subdivision in a general manner.
- K. Proposed roadway grades.
- L. Official soil percolation tests for the purpose of siting wastewater treatment options are not required for the concept plan. However, a narrative explanation shall be prepared by a registered professional engineer, detailing the proposed wastewater systems that will be utilized by the development and its likely impacts on site and to any abutting parcels of land. For example, the narrative will specify whether individual on-site or off-site systems, shared systems, alternative to Title 5 systems,⁷ or any combination of these or other methods will be utilized.
- M. A narrative explanation prepared by a registered professional engineer, proposing systems for stormwater drainage and its likely impacts on site and to any abutting parcels of land. For example, the narrative will specify whether soft or hard engineering methods will be used and the number of any detention/retention basins or infiltrating catch basins; it is not intended to include specific pipe sizes. Any information needed to

7. Editor's Note: See 310 CMR 15.00.

§ 320-27

SPECIAL PERMIT RULES AND REGULATIONS

§ 320-30

justify this proposal should be included in the narrative. The approximate location of any stormwater management detention/retention basins shall be shown on the plan and accompanied by a conceptual landscaping plan.

- N. A narrative explanation prepared by a registered professional engineer, detailing the proposed drinking water supply system.
- O. A narrative explanation of the proposed quality, quantity, use and ownership of the permanent open space. Open space parcels shall be clearly shown on the plan.
- P. All proposed landscaped and buffer areas shall be noted on the plan and generally explained in a narrative.
- Q. A list of all legal documents necessary for implementation of the proposed development, including any conservation restrictions, land transfers, and master deeds, with an accompanying narrative explaining their general purpose.
- R. A narrative indicating all requested waivers, reductions, and/or modifications as permitted within the requirements of this bylaw and the Planning Board Rules and Regulations.⁸

§ 320-28. Waiver of requirements for small projects.

For proposed open space preservation developments containing fewer than four building lots, the Planning Board may waive the requirements for specific items of information required in § 320-27 above.

ARTICLE VI

Special Permits for Complex Sites with Mixed and Residential Uses (Comprehensive Plans)

§ 320-29. Applicability and effect.

The rules and regulations set forth in this article apply to all applications for special permits for planned multilot developments (PMLD) that require a comprehensive plan under §§ 310-11.4A(2) and 310-12.4A(2) of the Zoning Bylaw. They supplement, but do not replace, other articles of these rules and regulations as they may apply to such special permit applications.

§ 320-30. Contents of comprehensive plans.

- A. A comprehensive plan submitted pursuant to § 310-11.4A(2) or 310-12.4A(2) of the Zoning Bylaw (complex sites with mixed and residential uses) shall not be considered complete unless it includes all of the following information:
 - (1) The project development name, boundaries, North point, date, legend, title "Comprehensive Plan," and scale.

⁸ Editor's Note: Amendment pending.

- (2) The names of the record owner and the applicant, and the names of the engineer, architect, and landscape architect that prepared the plan.
- (3) The names, approximate location, and widths of adjacent streets and verification that adequate stopping sight distance is achieved.
- (4) The proposed topography of the land shown at a contour interval of two feet. Elevations shall be based on the Town datum [National Geodetic Vertical Datum of 1929 (NGVD)].
- (5) The location of existing landscape features, including forests, farm fields, meadows, wetlands, riverfront areas, water bodies, archaeological and historic structures or points of interest, rock outcrops, boulder fields, stone walls, cliffs, high points, major long views, forest glades, major tree groupings, noteworthy tree specimens, and habitats of endangered or threatened wildlife.
- (6) All on-site local, state, and federal regulatory resource boundaries and buffer zones shall be clearly identified and all wetland flag locations shall be numbered and placed upon the comprehensive plan.⁹
- (7) All existing and proposed features and amenities, including trails, recreation areas, pedestrian and bicycle paths, community buildings and off-street parking areas, shall be shown on the plan and described in a brief narrative explanation where appropriate.
- (8) A total circulation concept for both vehicles and pedestrians shall include existing and proposed lines of streets, ways, easements, proposed roadway grades, location and materials for sidewalks and other pedestrianways, proposed parking areas, emergency access, links among different sections of the development (especially when both residential and commercial uses are proposed) and links to off-site areas where appropriate.
- (9) A landscape plan that addresses street trees, buffers between different uses and between the project and abutters, local space adjacent to housing units or other buildings, and common areas throughout the project.
- (10) The location and orientation of all buildings and any recreation, assembly or common areas in relation to the street network and pedestrian facilities.
- (11) A streetscape plan that includes streetlights, walkways, fences, benches, landscaping, building facades and/or any other amenities that contribute to a pleasant neighborhood environment.
- (12) Official soil percolation tests for the purpose of siting wastewater treatment options are not required for the comprehensive plan. However, a narrative explanation shall be prepared by a registered professional engineer, detailing the proposed wastewater systems that will be utilized by the development and its likely impacts on site and to any abutting parcels of land. For example, the narrative will specify whether individual on-site or off-site systems, shared

9. Editor's Note: Amendment pending.

systems, alternative to Title 5 systems,¹⁰ or any combination of these or other methods will be utilized. The proposed locations of these facilities shall be included on the plan.

- (13) A narrative explanation prepared by a registered professional engineer, proposing systems for stormwater drainage and its likely impacts on site and to any abutting parcels of land. For example, the narrative will specify whether soft (natural) or hard (structured) engineering methods will be used and the number of any detention/retention basins or infiltrating catch basins; it is not intended to include specific pipe sizes. Any information needed to justify this proposal should be included in the narrative. The approximate location of any stormwater management components shall be shown on the plan.
 - (14) A narrative explanation prepared by a registered professional engineer, detailing the proposed drinking water supply system.
 - (15) Architectural building elevations of the proposed buildings for the proposed project.
- B. With the exception of the architectural elevations and details, the elements above shall be included on a single sheet in order to clearly illustrate that they can be integrated into a feasible project that meets the requirements of the Zoning Bylaw.¹¹ Additional sheets may be required to provide detailed information on specific elements of the comprehensive plan.

§ 320-31. Procedures for comprehensive plans.

Any application for special permits for planned multilot development (PMLD) that requires a comprehensive plan under §§ 310-11.4A(2) and 310-12.4A(2) of the Zoning Bylaw must include such comprehensive plan. The procedures for Planning Board consideration of the comprehensive plan shall be as follows:

- A. The public hearing on the PMLD special permit shall be opened. The first item to be considered shall be the comprehensive plan.
- B. After comments and discussion on the comprehensive plan are completed, the Planning Board shall deliberate and vote on the comprehensive plan. The hearing shall be kept open to further consider the PMLD special permit.
- C. A minimum of four votes shall be required to approve a comprehensive plan. The Board's decision shall be in the form of a letter informing the applicant of its decision. The decision letter may include conditions of the decision.
- D. If a comprehensive plan is denied, the applicant may submit a new comprehensive plan for consideration. Once a plan is approved, the applicant may submit a more detailed site plan and other information that may be required for consideration by the Planning Board of the PMLD special permit.

¹⁰. Editor's Note: See 310 CMR 15.00.

¹¹. Editor's Note: See Ch. 310, Zoning.

ARTICLE VII
Schedule of Fees

§ 320-32. Application fees.

- A. Special permit: \$750, plus \$75 per each additional special permit request pertaining to the same site.
- B. *Open space preservation special permit: \$1,000.
- C. *Planned multilot development special permit: \$750.
- D. Extension request for special permit, unadvertised: \$200.
- E. Addendum and changes/modifications and/or relief from conditions: \$500.
- F. Repetitive petition: \$250.

*Please note: In addition to the application fee, the applicant will be required to reimburse the Town for any advertisement fees and all costs incurred by the Town to have an engineer/consultant review the proposal as deemed necessary by the Planning Board (see § 320-33).

§ 320-33. Review by outside consultants.

- A. When reviewing an application for a special permit, the Board may determine that the assistance of outside consultants is warranted due to the size, scale, or complexity of a proposed project, or because of a project's potential impacts. The Board may require that applicants pay a review fee consisting of the reasonable costs incurred or expected to be incurred by the Board for the employment of outside consultants engaged by the Board to assist in the review of an application.
- B. In hiring outside consultants, the Board may engage engineers, planners, lawyers, urban designers or other appropriate professionals who can assist the Board in analyzing a project to ensure compliance with all relevant laws, bylaws, and regulations.
- C. Funds received by the Board pursuant to this section shall be placed in a special account established by the Board for this purpose. Expenditures from this special account may be made at the direction of the Board without further appropriation. Expenditures from this special account shall be made only in connection with the review of a specific project or projects for which a review fee has been or will be collected from the applicant. Failure of an applicant to pay a review fee shall be grounds for denial of the application.¹²
- D. Review fees may only be spent for services rendered in connection with the specific project from which they were collected. Accrued interest may also be spent for this purpose. At the completion of the Board's review of a project, any excess amount in the account, including interest, attributable to the project shall be repaid to the applicant or the applicant's successor in interest. For the purpose of this regulation, any person or

¹² Editor's Note: Amendment pending.

entity claiming to be an applicant's successor in interest shall provide the Board with documentation establishing such succession in interest.

- E. Any applicant may take an administrative appeal from the selection of the outside consultant to the Select Board. The grounds for such an appeal shall be limited to claims that the consultant selected has a conflict of interest or does not possess the minimum required qualifications. The minimum required qualifications shall consist either of an educational degree in, or related to, the field at issue or three or more years of practice in the field at issue or a related field.¹³
- F. The required time limit for action upon an application by the Board shall be extended by the duration of the administrative appeal. In the event that no decision is made by the Select Board within one month following the filing of the appeal, the selection made by the Board shall stand.¹⁴

Please note: The above regulation is designed to implement the provisions of Chapter 593 of the Acts of 1989, MGL c. 44, § 53G, as amended.

§ 320-34. Review fees.

- A. The special municipal account review fees are to be made in connection with the review of a specific project or projects for which a review fee has been or will be collected from the applicant (§ 320-33). The review fees may be requested of the applicant in the determination of the Board that outside consultants are required and are in addition to the general fees set forth for an application for hearing before the Board (§ 320-32). The failure of an applicant to pay a review fee, when requested, shall be grounds for denial of the application (§ 320-33C).
- B. The review fee schedule as outlined in Subsection D shall be considered the initial deposit for the purposes of establishing the special revolving account for the project. Any additional costs associated with the review of the project shall be borne by the applicant. The review fee schedule shall be amended as necessary with the concurrence of the Board members and shall become effective on the stamped date of the Town Clerk.
- C. All review fees shall be payable to the Planning Board Review Account and shall be deposited with the Town Treasurer/Collector into a special revolving account for the project.
- D. Review fee schedule.
 - (1) Special permits: \$500 per request per lot.
 - (2) *Planned multilot development (PMLD) special permits: \$500 plus \$150 per lot.

13. Editor's Note: Amendment pending.

14. Editor's Note: Amendment pending.

- (3) *Open space preservation special permits: \$1,500 plus \$150 per lot.

*See also Chapter 325, Subdivision of Land and Site Plan Approval Regulations, § 325-10.2, Fee schedule, as most recently amended, if part of a subdivision plan (preliminary and/or definitive) and/or involves site plan approval.

Chapter 325

SUBDIVISION OF LAND AND SITE PLAN APPROVAL REGULATIONS

ARTICLE 1 Purpose and Authority

- § 325-1.1. Purpose.
- § 325-1.2. Authority.

ARTICLE 2 General Provisions

- § 325-2.1. Definitions.
- § 325-2.2. Access to lots.
- § 325-2.3. Regulation of new subdivisions.
- § 325-2.4. Plan preparation.
- § 325-2.5. Application, review and inspection fees.
- § 325-2.6. Presubmission review.

ARTICLE 3 Procedure for Submission and Approval of Plans

- § 325-3.1. Plan believed not to require approval.
- § 325-3.2. Preliminary plan.
- § 325-3.3. Definitive plan.
- § 325-3.4. Implementation of definitive plan.

ARTICLE 4 General Requirements and Design Standards

- § 325-4.1. Basic requirements/design guides.
- § 325-4.2. Relation to surrounding areas.
- § 325-4.3. Minimum lot.

- § 325-4.4. Access through another municipality.
- § 325-4.5. Reserve strips.
- § 325-4.6. Further subdivisions.
- § 325-4.7. Resubdivision.
- § 325-4.8. Blocks.
- § 325-4.9. Access and maintenance easements.
- § 325-4.10. Pedestrianways/walkways.
- § 325-4.11. Open space, parks and playgrounds.
- § 325-4.12. Protection of natural features.
- § 325-4.13. Water system.
- § 325-4.14. Streets.
- § 325-4.15. Slopes.
- § 325-4.16. Driveways.
- § 325-4.17. Street cross sections.
- § 325-4.18. Walkways on existing roadways.
- § 325-4.19. Stormwater management system.
- § 325-4.20. Uniform street numbering system.

ARTICLE 5 Required Improvements for Subdivisions

- § 325-5.1. Basic requirements.
- § 325-5.2. Streets and roadways.
- § 325-5.3. Stormwater drainage system construction specifications.
- § 325-5.4. Water systems.
- § 325-5.5. Sanitary sewers.
- § 325-5.6. Private utilities.
- § 325-5.7. Retaining walls.

NORFOLK CODE

- § 325-5.8. Fire alarm system.
- § 325-5.9. Street trees.
- § 325-5.10. Loaming and seeding.
- § 325-5.11. Street signs.
- § 325-5.12. Streetlights.
- § 325-5.13. Guardrails.
- § 325-5.14. Bounds.
- § 325-5.15. Curb-cut ramps.
- § 325-5.16. Final cleanup.
- § 325-5.17. Certificates of compliance.
- § 325-5.18. Maintenance.
- § 325-5.19. Stop-work orders.

ARTICLE 6
Administration

- § 325-6.1. Authority.
- § 325-6.2. Waivers; planned development.
- § 325-6.3. References.
- § 325-6.4. Severability.
- § 325-6.5. Amendments.
- § 325-6.6. Inspection/observation of improvements.

ARTICLE 7
Site Plan Approval: Administrative Requirements

- § 325-7.1. Authority.
- § 325-7.2. Precedence.
- § 325-7.3. Applicability.
- § 325-7.4. Requirements.
- § 325-7.5. Submission.
- § 325-7.6. Site plan submittal fee.
- § 325-7.7. Hearing.
- § 325-7.8. Decision.
- § 325-7.9. Incomplete and withdrawn applications.

- § 325-7.10. One-year limitation of grants; extensions.
- § 325-7.11. Appeal of decision.

ARTICLE 8
Regulations for Nonresidential and Mixed-Use Developments in the Business and Commercial Zoning Districts

- § 325-8.1. Purpose.
- § 325-8.2. Authority.
- § 325-8.3. Basic requirements.
- § 325-8.4. Design guidelines for streets, roadways and utilities.
- § 325-8.5. Street, roadway and utility construction standards.
- § 325-8.6. Reference to additional local standards.

ARTICLE 9
Earth Relocation/Removal

- § 325-9.1. Definitions.
- § 325-9.2. Basic requirements.
- § 325-9.3. Application for earth removal in conjunction with definitive plan approval.
- § 325-9.4. Requirements for approval.
- § 325-9.5. Monitoring and reporting.
- § 325-9.6. Termination date.
- § 325-9.7. Severability.
- § 325-9.8. Violations and penalties.

ARTICLE 10
Fees

- § 325-10.1. Application, review and inspection fees.
- § 325-10.2. Fee schedule.

Appendix A, Supplemental Requirements

[HISTORY: Adopted by the Planning Board of the Town of Norfolk effective 7-28-2000, as amended through 9-16-2010. Subsequent amendments noted where applicable.]

ARTICLE 1
Purpose and Authority

§ 325-1.1. Purpose.¹

These subdivision regulations are adopted under the provisions of Chapter 41 of the General Laws consistent with the purpose of protecting the safety, convenience and welfare of the inhabitants of the Town of Norfolk 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 areas. The powers of a planning board and of a board of appeal under the subdivision control law shall be exercised 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; for lessening congestion in such ways and in the adjacent public ways, for reducing danger to life and limb in the operation of motor vehicles; for securing safety in the case of fire, flood, panic and other emergencies; for insuring compliance with the applicable zoning ordinances or by-laws; for securing adequate provision for water, sewerage, drainage and other requirements where necessary in a subdivision; and for coordinating the ways in a subdivision with each other and with the public ways in the city or town in which it is located and with the ways in neighboring subdivisions." (MGL Chapter 41, Section 81M.)

§ 325-1.2. Authority.

Under the authority vested in the Planning Board of the Town of Norfolk by MGL c. 41, § 81Q, said Board hereby adopts these amended rules and regulations governing the subdivision of land in the Town of Norfolk. Such rules and regulations as amended shall be effective on July 28, 2000.

ARTICLE 2
General Provisions

§ 325-2.1. Definitions.

As used in these rules and regulations, the following terms shall have the meanings indicated:

AASHTO — American Association of State Highway and Transportation Officials.

APPLICANT — A person (as hereinafter defined) who applies for the approval of a plan of a subdivision (Article 3) or approval of a site plan (Article 7). "Applicant" shall include an owner, or his agent or representative, or his assigns. The applicant may or may not be the developer.

1. Editor's Note: Amendment pending.

BASE FLOOD — The "base flood elevation" shall be the level of flooding having a 1% chance of being equaled or exceeded in any given year, as designated on Flood Insurance Rate Maps (FIRM) cited in the Zoning Bylaw or, in the absence of such designation, to be verified by the Planning Board based upon the best available information regarding flood hazards, including any available United States Geologic Survey, Natural Resources Conservation Service, and Corps of Engineers studies.

BENCH MARK — A mark made in a durable, nongrowing object of known position and elevation as a reference point. All bench marks shall be referenced to the National Geodetic Vertical Datum (NGVD) of 1929.

BIKEWAY — A way designed to be used principally or exclusively by a bicycle or similar unpowered vehicle.

BLOCK — An area of land enclosed on two or more sides by street right-of-way.

BOARD — The Planning Board of the Town of Norfolk.

BRIDLE PATH — A way designed to be used principally or exclusively for equestrian purposes.

CUL-DE-SAC — A street with only one outlet to a through street.

DEFINITIVE PLAN — The plan of a subdivision as duly submitted with appropriate and completed application to the Board for approval, to be recorded in the Registry of Deeds or filed with the Land Court when approved by the Board, and as distinguished from a preliminary plan.

DESIGNER — A registered professional engineer (civil) and/or a registered professional land surveyor licensed to practice in the Commonwealth of Massachusetts.

DEVELOP — To construct a street, install utilities, erect a house or other structure, or take other action in furtherance thereof.

DEVELOPER — A person (as hereinafter defined) who proposes to develop either a subdivision under a plan of a subdivision approved pursuant to Article 3 of these rules and regulations or a site plan in accordance with the provisions of Article 7 of these rules and regulations. The developer may or may not be the applicant.

DRAINAGE — The control of surface water within the tract of land to be subdivided or the site plan.

EASEMENT — A right acquired by public authority or other person to use or control property for a utility or other designated purpose.

ENDORSED BY — Bearing a certification or endorsement signed by a majority of the members of the Planning Board as applied to a plan or other instrument required or authorized by the Subdivision Control Law² to be recorded.

FOOTPATH — See "walkway."

2. Editor's Note: See MGL c. 41, §§ 81K through 81GG.

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-2.1

§ 325-2.1

LOT — See Town of Norfolk Zoning Bylaw for definition.³

LOT AREA — The horizontal area of the lot exclusive of any area in a street or recorded way open or proposed to be open to public use. For lots created subsequent to September 9, 1974, at least 75% of the lot area required for zoning compliance shall be land other than that under any body of water, including watercourses, or any bog, swamp, wet meadow, or marsh, as defined in MGL c. 131, § 40, to be determined by the Building Commissioner, following consultation with the Conservation Commission.

MONUMENT — A permanent marker to indicate a boundary.

MUNICIPAL SERVICES — Sanitary sewers, storm drains, water pipes, gas pipes, electrical lines, telephone lines, cable television system, fire alarm and similar systems and their respective appurtenances. (See "private utilities" and "public utilities.")

OWNER — As applied to real estate, the person holding the record title to a parcel, tract or lot of land, as shown by the certified record in the Land Registration office or the Registry of Deeds or Registry of Probate.

PEDESTRIANWAY — A way providing public access for pedestrians near the right-of-way of an existing way, consisting of an easement of at least 20 feet, which is normally parallel to the street. Pedestrianways are primarily designed and intended to be used by pedestrians for convenient circulation or access to schools, playgrounds, shopping, churches, transportation, parks, conservation areas and/or other facilities. See Article 8 for B-1 and C-1 District requirements.

PERSON — An individual, or two or more individuals or a group or association of individuals, a partnership, trust or corporation, or governmental agency having common or undivided interests in a tract of land.

PLANNING BOARD REPRESENTATIVE/AGENT — Town employee or private consultant authorized by the Planning Board to review subdivisions and administer the regulations.

PRELIMINARY PLAN — A plan of a proposed subdivision or resubdivision of land prepared and duly submitted in accordance with § 325-3.2 in order to facilitate preparation of a definitive plan.

PRIVATE UTILITIES — This term shall include telephones, cable television, electric light and power, and gas lines whether installed on, above or beneath the surface of the ground.

PUBLIC UTILITIES — This term shall include only sanitary sewers, fire alarms, stormwater drains and water pipes and their appurtenances, which may become the property or responsibility of the Town.

RECORDED — Recorded in the Registry of Deeds of Norfolk County, except that, as affecting registered land, it shall mean filed with the Recorder of the Land Court (MGL c. 41, § 81L).

REGISTERED MAIL — Registered or certified mail.

REGISTRY OF DEEDS — The Norfolk County Registry of Deeds and, where appropriate, shall include the Land Court of Norfolk County.

3. Editor's Note: See Ch. 310, Zoning, § 310-2.1, Definitions.

ROADWAY — That portion of a way which is designed and constructed for vehicular travel.

SIDEWALK — A paved way within the right-of-way of a street, normally parallel to the street, primarily designed and intended for use by pedestrians.

STANDARD SPECIFICATIONS — Massachusetts Highway Department (MHD) (formerly the "Commonwealth of Massachusetts, Department of Public Works") Standard Specifications for Highways and Bridges, latest edition, as amended.

STREET — See Town of Norfolk Zoning Bylaw for definition.⁴

- A. **PRIMARY** — A street which carries traffic equivalent to that generated by 50 dwelling units or more, or which serves property either used or zoned for business or industry.
- B. **SECONDARY** — A street which carries traffic equivalent to that generated by more than seven but fewer than 50 dwelling units, and which is not capable of extension to serve more than 50 dwelling units.
- C. **RESIDENTIAL** — A street which carries traffic equivalent to that generated by seven or fewer dwelling units, and which is not capable of extensions. A cul-de-sac that cannot be extended.
- D. **THROUGH** — A street with an outlet to more than one paved public way.

SUBDIVISION — The division of a tract of land into two or more lots and shall include resubdivision, and, when appropriate to the context, shall relate to the process of subdivision or the land or territory subdivided; provided, however, that the division of a tract of land into two or more lots shall not be deemed to constitute a subdivision within the meaning of the Subdivision Control Law⁵ if, at the time when it is made, every lot within the tract so divided has frontage on a public way or a way which the Town Clerk of the Town of Norfolk 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 before March 31, 1954, 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. Such frontage shall be of at least such distance as is then required by the Zoning Bylaw.⁶ Conveyances or other instruments adding to, taking away from, or changing the size and shape of lots in such a manner as not to leave any lot so affected without the frontage above set forth, or the division of a tract of land on which one of such buildings remains standing, shall not constitute a subdivision (MGL c. 41, § 81L).

SUBDIVISION CONTROL — The power of regulating the subdivision of land granted by the Subdivision Control Law, MGL c. 41, §§ 81K through 81GG, inclusive, as amended.

TOWN — Town of Norfolk, Massachusetts.

⁴ Editor's Note: See Ch. 310, Zoning, § 310-2.1, Definitions.

⁵ Editor's Note: See MGL c. 41, §§ 81K through 81GG.

⁶ Editor's Note: See Ch. 310, Zoning.

WALKWAY — A way near the right-of-way of a street consisting of a parcel or easement of at least five feet, which is normally parallel to the street. Walkways/footpaths are primarily designed and intended to be used by pedestrians for convenient circulation or access to schools, playgrounds, shopping, churches, transportation, parks, conservation areas and/or other facilities. See Article 8 for B-1 and C-1 District requirements.

§ 325-2.2. Access to lots.

Primary access for each lot shown on a definitive plan or a plan not requiring subdivision control (81P) shall be from the street on which its frontage is measured. See the Zoning Bylaw.⁷

§ 325-2.3. Regulation of new subdivisions.

No person shall make a subdivision, within the meaning of the Subdivision Control Law,⁸ 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 Planning Board as hereinafter provided (MGL c. 41, § 81O).

§ 325-2.4. Plan preparation.

All plans submitted to the Board shall be prepared and stamped by a Massachusetts registered professional engineer and/or land surveyor, as appropriate. Form D, Designer's Certificate, shall be completed and submitted to the Board.⁹

§ 325-2.5. Application, review and inspection fees.

See Article 10 for applicable application, review and performance/observation inspection fee schedule. Review fee administration shall be as follows:

- A. General requirements. When reviewing an application for subdivision or site plan approval, the Board may determine that the assistance of outside consultants is warranted due to the size, scale or complexity of a proposed project or because of a project's potential impact. The Board may require that the applicant pay a review fee consisting of the reasonable costs incurred by the Board for the employment of outside consultants engaged by the Board to assist in the review of an application, in accordance with Chapter 593 of the Acts of 1989.¹⁰
- B. Eligible consultants. In hiring outside consultants, the Board may engage engineers, planners, lawyers, urban designers, or other appropriate professionals who can assist the

7. Editor's Note: See Ch. 310, Zoning.

8. Editor's Note: See MGL c. 41, §§ 81K through 81GG.

9. Editor's Note: Forms can be obtained from the Planning Board office.

10. Editor's Note: See MGL c. 44, § 53G, Employment of outside consultants.

Board in analyzing a project to ensure compliance with all relevant laws, bylaws and regulations.

- C. Fund administration. Funds received by the Board pursuant to this section shall be deposited with the Town Treasurer/Collector who shall establish a special account for this purpose. Expenditures from this special account may be made at the direction of the Board without further appropriation. Expenditures from this special account shall be made only in connection with the review of a specific project or projects for which a review fee has been or will be collected from the applicant. Failure of an applicant to pay a review fee shall be grounds for denial of the application. If an applicant wishes to receive interest on the balance remaining in his review fee special account, a form must be completed titled "Client Group Account, Client Account Application – Certification of Taxpayer Identification Number."
- D. Fund expenditures. Review fees may only be spent for services rendered in connection with the specific project from which they were collected. Accrued interest may also be spent for this purpose. At the completion of the Board's review of a project, any excess amount in the account, including interest, attributable to a specific project shall be repaid to the applicant or the applicant's successor in interest. For the purpose of this regulation, any person or entity claiming to be an applicant's successor in interest shall provide the Board with documentation establishing such succession in interest.
- E. Administrative appeal. Any applicant may take an administrative appeal from the selection of the outside consultant to the Board of Selectmen. Such appeal must be taken within 10 business days of the decision by the Board to so select, and it must be made by certified mail, return receipt requested, addressed to the Board of Selectmen, with a copy to the Planning Board. The date of mailing shall control. In the event such an appeal is taken, the applicant shall, at the same time, execute and deliver to the Planning Board an offer of extension to the application made under the Subdivision Control Law¹¹ for a period of not less than 30 days. The grounds for such an appeal shall be limited to claims that the consultant selected has a conflict of interest or does not possess the minimum required qualifications. The minimum required qualifications shall consist either of an educational degree in, or related to, the field at issue or three or more years of practice in the field at issue or a related field. The required time limit for action upon an application by the Board shall be extended by the duration of the administrative appeal. In the event that no decision is made by the Board of Selectmen within one month following the filing of the appeal, the selection made by the Planning Board shall stand.
- F. Review fee retainer. At the time of submission, the applicant shall provide payment in the amount(s) specified in the fee schedule, by check or money order payable to "Norfolk Planning Board Review Account." The applicant shall maintain a balance in such account of at least 50% of the initial payment amount. Additional retainage of higher amounts may be required in the case of extraordinary size or complexity of projects. The Planning Board may periodically bill the applicant for the purpose of maintaining the required minimum balance.

11. Editor's Note: See MGL c. 41, §§ 81K through 81GG.

§ 325-2.6. Presubmission review.

Prior to investing in professional design efforts for subdivision plans, it will often prove useful to review the proposed development of a parcel of land with the Planning Board in order that general approaches and potential problems can be freely explored. Pencil sketches, which need not be professionally prepared, will assist the discussion, and might show some but not all of the information required on a preliminary plan. Such review shall be without prejudice to the Planning Board and the applicant for the purposes of preliminary and definitive plan review.

ARTICLE 3
Procedure for Submission and Approval of Plans

§ 325-3.1. Plan believed not to require approval.

- A. Submission of plan. Any person wishing to cause to be recorded in the Registry of Deeds or to be filed with the Land Court a plan of land and who believes that his plan does not require approval under the Subdivision Control Law¹² may submit an original reproducible copy of said plan and four contact prints thereof and two original copies of a properly executed Form A to the Planning Board agent,¹³ accompanied by the necessary evidence to show that the plan does not require approval and the appropriate filing fee (see § 325-2.5). Said person shall file, by delivery or registered mail, a written notice with the Town Clerk, stating the date of submission to the Board for such determination, accompanied by a copy of said application and describing the land to which the plan relates sufficiently for identification. If the notice is given by delivery, the Town Clerk shall, if requested, give a written receipt therefor.

- B. Contents. Said plan shall be legibly drawn in accordance with the rules and regulations of the Register of Deeds, MGL c. 36, § 13A, as amended, pertaining to plan size, material, lettering and related requirements. The plan scale shall be 40 feet to the inch and contain the following:
 - (1) Identification of the plan by name of owner of record and location of the land in question, distance to the nearest intersection street, the scale, North point and date.
 - (2) The statement "Approval under Subdivision Control Law not required," and sufficient space for the date and the signatures of all members of the Board.
 - (3) Zoning classification and location of any zoning district boundaries that may lie within the locus of the plan. The Assessors' map blocks and lot numbers of the subject property shall be shown.
 - (4) In the case of the creation of a new lot, the remaining land area and frontage of the land in the ownership of the applicant shall be shown.

12. Editor's Note: See MGL c. 41, §§ 81K through 81GG.

13. Editor's Note: Forms can be obtained from the Planning Board office.

- (5) Notice of any proceedings and copies of decisions by the Zoning Board of Appeals, including but not limited to variances and special permits (exceptions), regarding the land or any buildings thereon.
 - (6) Names of abutters from the most recent local tax list unless the applicant has knowledge of any changes subsequent to the latest available Assessors' records.
 - (7) Names and status (private or public) of streets, ways and easements shown on the plan, to include, but not be limited to, the construction materials of the way; the width of the pavement, if any; the width of the layout of the way or easement; and the book/page of record for the ways and easements.
 - (8) Bearings and distances of all lines of the lot or lots shown on the plan.
 - (9) Location of all existing buildings, including setback, side yard and rear yard designations on land under consideration.
 - (10) Location of all bounds, fences, and walls on land under consideration.
 - (11) All plans shall show the edge of wetlands, the edge of the 100-year floodplain, the edge of isolated areas subject to flooding, the banks of intermittent streams, the banks of perennial streams, the banks of lakes and ponds, the banks of rivers, the edge of riverfront zones, and the edge of the 100-foot wetland buffer zones as applicable. The limits of these resource areas shall be determined in accordance with applicable Massachusetts Department of Environmental Protection regulations (310 CMR 10.00 to 10.60) and any Town of Norfolk Zoning Bylaw, Town bylaw or Town regulation relative to wetland protection, aquifer protection, and/or water resource protection.
 - (12) One-half-inch-diameter circles shall be provided to indicate house numbers assigned by the Board, except that two one-half-inch circles shall be provided for corner lots.
 - (13) Frontage at property and setback line, and area dimensions of each proposed lot.
 - (14) All plans shall be annotated above the signature block with the following statement: "Planning Board endorsement is not a determination as to conformance with Zoning Bylaw."
- C. Endorsement of plan not requiring approval. If the Board or its authorized agent determines that the plan (Form A) does not require approval under the Subdivision Control Law,¹⁴ it shall without a public hearing and within 21 days of submission endorse the plan. Planning Board endorsement is not a determination as to conformance with zoning regulations. The original plan shall be returned to the applicant, and the Board shall also notify the Town Clerk, in writing, of its action. However, endorsement does not signify buildable lots.
- D. Determination that plan requires approval. If the Board determines that the plan does require approval under the Subdivision Control Law, it shall, within 21 days of the

14. Editor's Note: See MGL c. 41, §§ 81K through 81GG.

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-3.1

§ 325-3.2

submission of the plan, so inform the applicant, in writing, and return the plan. The Board shall also notify the Town Clerk, in writing, of its action.

- E. Recording. The applicant shall file the approved plan at the Registry of Deeds and shall notify the Board by presenting written evidence of the recording of said plan documents within 30 days of approval.

§ 325-3.2. Preliminary plan.

The applicant is responsible for/encouraged to review copies of the regulations of other Town departments/boards before preparing plans and to become aware of any fees/charges of other Town of Norfolk entities.

- A. Submission of a preliminary plan.

- (1) A preliminary plan for a residential subdivision may be submitted by the applicant for discussion and approval by the Board. A preliminary plan for a nonresidential subdivision shall be submitted to the Board. The submission of such a preliminary plan will enable the subdivider, the Board, other municipal agencies, and owners of property abutting the subdivision to discuss and clarify the potential problems of such subdivision before a definitive plan is prepared. Therefore, although not mandatory for a residential subdivision, it is strongly recommended that a preliminary plan be filed in every case.
- (2) Any person submitting a preliminary plan shall give written notice to the Town Clerk, by delivery or registered mail; such notices shall identify the tract, the date of submission, and the name and address of the owner (use Form B).¹⁵ The applicant shall file 13 prints with the Planning Board. Two prints shall be filed with the Board of Health directly. The Planning Board will distribute plans in accordance with § 325-3.3E(2).
- (3) At the time of filing of the preliminary plan, the following shall be submitted:
 - (a) Thirteen copies of plan (with one additional copy if open space preservation plan) and two additional copies of plan to Board of Health (submitted directly to Board of Health).
 - (b) Five copies of narrative of concept of how stormwater drainage will be addressed.
 - (c) Ten copies of narrative as to proposed scope of traffic review.
 - (d) Form B, Application for Approval of a Preliminary Plan; Form D, Designer's Certificate; and Form M-1, Control Form and Preliminary Plan Checklist.¹⁶
 - (e) Three copies of certified list of abutters as specified in § 325-3.3E(3).
 - (f) Application/review fee for earth relocation/removal permit.

15. Editor's Note: Forms can be obtained from the Planning Board office.

16. Editor's Note: Forms can be obtained from the Planning Board office.

- (g) Application fee and review fee.
 - (h) Completed bank tax ID form for review fee funds.
 - (i) Letter regarding use of Board's consultant. See § 325-2.5.
 - (j) Good-standing approval from Treasurer/Collector's office.
- B. Contents. The preliminary plan shall be drawn on reproducible paper at a scale of 40 feet to one inch, and on a maximum sheet size of 24 inches by 36 inches. All plans submitted to the Board shall be prepared and stamped by a Massachusetts registered professional engineer and/or land surveyor, as appropriate. Form D, Designer's Certificate, shall be completed and submitted to the Board. The applicant's engineer or surveyor must certify on Form M-1 that the submission is complete. The plan shall be designated as a "preliminary plan," and to form a clear basis for discussion of the details of the subdivision and for preparation of the definitive plan, the plan shall contain the following:
- (1) The subdivision name, if any, boundaries, North arrow, date, scale, legend and title "Preliminary Plan."
 - (2) The names and addresses of the record owner of the land and the subdivider and the name, seal, and address of the designer, engineer and surveyor who made the plan, all of which shall appear in the lower right-hand corner.
 - (3) Identify abutting property owners by names and addresses, as determined from the most recent local tax list, unless the applicant shall have more recent knowledge of such abutters.
 - (4) The locus (scale one inch equals 1,000 feet) of the land shown on the plan with sufficient information to accurately locate the proposed subdivision. All plans shall contain a location overview plan at a scale of between one inch to 100 feet and one inch to 400 feet depending on the size of the subdivision. The location plan shall show the entire subdivision layout; adjacent streets, if any, or streets within a reasonable distance, sufficient to identify the location of the subdivision and its access from a public street; and shall be shown on the title sheet.
 - (5) The existing and proposed lines of streets, ways, easements and any public or common areas within the subdivision, in a general manner.
 - (6) Major features of the land such as existing walls, fences, monuments, buildings, wooded areas, outcroppings, ditches, swamps, water bodies and natural waterways. Aerial photographs when available shall be provided. Location and area of dry land satisfying lot area requirements (see Zoning Bylaw¹⁷) shall also be indicated.
 - (7) A general description of the type of systems of sewage disposal, water installation and surface drainage in a general manner, including adjacent existing natural waterways.

17. Editor's Note: See Ch. 310, Zoning.

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-3.2

§ 325-3.2

- (8) The approximate boundary lines of proposed lots, with lot numbers, approximate areas and dimensions. Lot numbers are to be unique along a given street including extensions.
- (9) The names, approximate location and widths of adjacent streets and of streets approaching or within 500 feet of the subdivision. Information to demonstrate that adequate stopping sight distance can be achieved shall also be provided (see Article 4).
- (10) The topography of the land with a two-foot contour interval based on the Town datum [National Geodetic Vertical Datum of 1929 (NGVD)]. Water bodies and their maximum annual elevations shall be shown with the date of measurement. The FEMA community panel number, zone designation, and base flood elevation shall be indicated on the plans.
- (11) Soil type based on the standards of United States Department of Agriculture, Natural Resources Conservation Service.
- (12) Letter designation or names of the proposed streets.
- (13) Preliminary profiles of existing grades and approximate proposed finished grades of the roadway, drainage and utilities.
- (14) Area of contiguous land and water of the applicant not presently being subdivided, with a sketch plan showing a feasible future street layout for such contiguous land, if any.
- (15) The zoning classification of land shown on the plan and the location of any zoning district boundaries, including any overlay zoning, floodplains and wetland districts.
- (16) The Assessors' map, block, and lot numbers of subject property shall be shown.
- (17) Easements and rights-of-way applicable to the area shown on the plan.
- (18) Appropriate title block and signature space shall be provided. Reference to an approved preliminary plan or definitive plan for the site shall also be indicated, if applicable.
- (19) All proposed waivers to be requested or a statement to the effect that no waivers are being requested shall be indicated on the plans.

C. Approval of a preliminary plan.

- (1) The Board may give such preliminary plan approval, with or without modification or suggestion, after the Board's review and, at the Board's option, review with the Board of Health, the Conservation Commission, the Board's engineer/consultant, Highway Department, Board of Water Commissioners and other Town agencies. Such approval does not constitute approval of the subdivision but enhances the definitive plan review/approval process.
- (2) Within 45 days after the proper submission of a preliminary plan, each Board (Planning and Health) shall file its findings in accordance with MGL c. 41, § 81S, as amended.

- (3) The original of the preliminary plan will be returned to the applicant. Approval shall be effective for seven months from the date of plan submittal.
- D. Disapproval of a preliminary plan. In the event of disapproval of a preliminary plan, the Board shall state the reasons for its disapproval in accordance with MGL c. 41, § 81S.

§ 325-3.3. Definitive plan.

The applicant is responsible for/encouraged to review copies of the regulations of other Town departments/boards before preparing plans and to become aware of any fees/charges of other Town of Norfolk entities.

- A. Submission of a definitive plan. In order to maintain statutory rights under the preliminary plan, the definitive plan(s) 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 plans(s) if it is duly submitted within seven months of the preliminary plan submittal. Any person who submits a definitive plan of a subdivision to the Board for approval shall file with the Board all items required in Subsections A, B, C and D of this section and the appropriate filing fee (see § 325-2.5) for a definitive plan to be duly submitted in accordance with these rules and regulations and the General Laws of Massachusetts.
 - (1) Such submission shall be made to the Planning Board or its agent and include the following: a reproducible drawing of the definitive plan, and the following contact prints thereof shall be dark line on white background. The Planning Board agent shall distribute the prints as indicated in Subsection E(2).
 - (a) Where floodplain/wetlands are involved on a definitive plan, the applicant must file the definitive plan with the Norfolk Conservation Commission simultaneously with the filing of the definitive plan with the Planning Board. A final decision by the Planning Board will be forthcoming only after the applicant has obtained a written report from the Conservation Commission, stating that the basic location of the roadway layout and drainage structures can be built without being in violation of the Wetland Protection Act, MGL c. 131, § 40, and Town of Norfolk bylaws. Also, where floodplain/wetlands are involved on a definitive plan, the applicant shall clearly delineate the location of the same and indicate the percent of land area for each lot that is floodplain/wetlands.
 - (b) Consideration may be given to lack of improvements on roads leading to the subdivision. The applicant may be required to make necessary improvements on roads leading to the subdivision. When the subdivision requires modification to an existing Town road under the jurisdiction of the Board of Selectmen, the applicant must simultaneously file the plan with the Selectmen. A final decision by the Planning Board will be forthcoming only after the applicant has obtained approval from the Board of Selectmen to undertake the modification.
 - (2) At the time of filing of the definitive plan, the following shall be submitted:

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-3.3

§ 325-3.3

- (a) Thirteen copies of the plan (one additional when open space preservation subdivision) and two additional copies of the plan to the Board of Health (submitted directly to Board of Health).
 - (b) Five copies of stormwater/drainage report.
 - (c) Ten copies of impact statement.
 - (d) Five copies of traffic assessment (study) (with additional copies as may be requested on a case-by-case basis).
 - (e) Form C, Application for Approval of a Definitive Plan;, Form D, Designer's Certificate; and Form M-2, Control Form and Definitive Plan Checklist.¹⁸
 - (f) Three copies of certified list of abutters as specified in Subsection E(3).
 - (g) Application for earth removal from Board of Selectmen (where applicable).
 - (h) Earth relocation/removal application from Planning Board (where applicable).
 - (i) Application to Highway Superintendent for street excavation permit and, when applicable, Scenic Roads Act¹⁹ hearing and shade tree hearing.
 - (j) Application fee and review fee.
 - (k) Earth relocation/removal application and review fee (when applicable).
 - (l) Completed bank tax ID form for review fee funds.
 - (m) Letter regarding use of Board's consultant. See § 325-2.5.
 - (n) Good-standing approval from Treasurer/Collector's office.
- (3) The definitive plan shall be prepared by a project team which shall include a professional civil engineer (PE) and a professional land surveyor (RLS) registered in Massachusetts and professional personnel of other disciplines as specified in applicable sections of these rules and regulations. All professional personnel shall maintain current registration or certification if available for that discipline in Massachusetts.
- (a) The classification and precision of surveys shall conform to Class A or better of the most recent Land Court Manual of Instructions, Commonwealth of Massachusetts. It is recommended that all other survey and definitive plan preparation, where not herein specified, be guided by the Manual of Instructions.
 - (b) The plan shall be a scale of one inch equals 40 feet or such other scale as the Board may accept to show details clearly and adequately. All plans shall contain a location overview plan at a scale of between one inch to 100 feet and one inch to 400 feet depending on the size of the subdivision. The

18. Editor's Note: Forms can be obtained from the Planning Board office.

19. Editor's Note: See MGL c. 40, § 15C.

location plan shall show the entire subdivision layout, adjacent streets, if any, or streets within a reasonable distance, sufficient to identify the location of the subdivision and its access from a public street, and shall be shown on the title sheet.

- (c) Sheet sizes shall be 24 inches by 36 inches, including a three-fourths-inch border.
 - (d) All plans shall include a plat of the locus and a facsimile of a one-square-mile section of the current Zoning Map at a scale of one inch equals 1,000 feet, showing the relation of the subdivision to the highway and major streets in the Town.
 - (e) All plans shall include a title sheet. If multiple sheets are used, they shall show each lot in its entirety on one sheet and shall be accompanied by an index sheet showing the entire subdivision at a scale of one inch equals 200 feet. A listing of drawings (plan sheets) and revision status, as well as a legend of symbols, shall also be provided.
 - (f) Appropriate title block and signature space shall be provided in accordance with the typical detail in Appendix D.²⁰ The title block shall be located in the lower right-hand corner of each plan sheet, and the signature space for both the Planning Board and Town Clerk shall be located on the right side of each plan sheet. Reference to an approved preliminary plan or definitive plan for the site shall also be indicated, if applicable.
 - (g) All plans shall contain a location overview plan at a scale of between one inch to 100 feet and one inch to 400 feet depending on the size of the subdivision. The location plan shall show the entire subdivision layout, adjacent streets, if any, or streets within a reasonable distance, sufficient to identify the location and the access to the land, and shall be shown on the title sheet.
- (4) The applicant shall also file by delivery or registered mail a notice with the Town Clerk, stating the date of submission to the Board for such approval, accompanied by a copy of the completed Form C, Application for Approval of a Definitive Plan.
- B. Contents. The applicant's engineer or surveyor must certify on Form M-2 that the submission is complete. The definitive plan shall contain the following information:
- (1) A cover sheet, which includes an overall plan view of the subdivision lots with designations as to what page(s) of the plan those lots can be found in greater detail and a key plan indicating what can be found on each plan sheet, and a title, appearing in the lower right-hand corner of each sheet, showing the name of the subdivision, if any; the date; scale; North arrow; and the names and seals of the designer, engineer and surveyor who made the plan. A revision block shall also be provided on each sheet, indicating the number, date and description of all revisions.

20. Editor's Note: Appendix D can be obtained from the Planning Board office.

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-3.3

§ 325-3.3

- (2) North arrow, whether true, magnetic or grid, along with a bench mark and so indicated, and the boundaries of the subdivision indicated by shading.
- (3) Location and ownership of abutting property as it appears on the certified list of abutters, unless the applicant shall have more recent knowledge of such abutters, so indicated, including all abutting land owned by the applicant not presently being subdivided and location and ownership of all other land within 500 feet of the boundaries of the land shown in the subdivision.
- (4) Major features of the land, such as existing waterways, swamps and water bodies, natural drainage courses, walls, fences, buildings, wooded areas, outcroppings and ditches, old foundations, burial grounds, wells and other structures which exist on or near the site at the time of survey. Where available, aerial photographs may be required. Location and area of dry land, satisfying the requirements for continuous buildable lot area of the Zoning Bylaw,²¹ shall be indicated. The limits of any vegetated wetland, including any swamp, wooded swamp, meadow, bog or marsh, shall be established in the field by a professional botanist and shall be mapped through a field survey of the botanist's markings and shown on the plan. FEMA panel number, zone designation, and base flood elevation shall be indicated on the plan.
- (5) Lines of existing and proposed streets, setback lines, ways, lots, lot numbers of each lot designated numerically in sequence, easements, and public or common areas within the subdivision. The name designation of proposed streets shall be shown in pencil. Half-inch circles are to be shown on each lot for house numbers to be assigned by the Board (two half-inch circles for corner lots). Lot numbers are to be unique along a given street, including extensions.
- (6) Sufficient data to determine the location, direction and length of every street and way line, lot line and boundary line, and to establish these lines on the ground. This shall include the lengths and bearings of plan and boundary lines of all subdivision lot lines, including lot frontage on the streets, of the radii, tangents, and central angles of all curves in lot lines and street lines. All angle points or intersections of tangents along the street lines shall be shown. Areas of lots with lot numbers and the area and frontage on public ways as set forth in MGL c. 41, § 81L, of adjoining lands of the applicant not included in the subdivision shall be shown.
 - (a) The surveyor shall submit mathematical computations (lot closures and build factor calculations) for all lots under consideration.
 - (b) Subdivision streets shall be listed separately on the plan as parcels (i.e., Parcel A, Parcel B, Parcel C, etc.), with the square footage of these parcels included. Parcels are not subject to the application fees as lots.
 - (c) If the subdivision street is to be only partially constructed, the constructed portion and unconstructed portion are to be identified as separate parcels. Each parcel (street) is to include the length of roadway in feet and miles.

21. Editor's Note: See Ch. 310, Zoning.

- (7) Location of all permanent monuments properly identified as to whether existing or proposed. The proposed subdivision shall be tied into the nearest existing Town, county, or state bound.
- (8) Location, names, pavement widths, right-of-way widths, and designation as public or private of all streets or private ways bounding, approaching or within reasonable proximity of the subdivision.
- (9) The zoning district classification of land shown on the plan and the location of any zoning district boundaries that lie within the locus of the plan and the applicable minimum lot size, frontage, and front, side and rear yard setback requirements as appropriate.
- (10) Assessors' map, block, and lot of subject property shall be shown on the plan.
- (11) Indication of all existing and proposed easements and rights-of-way applying to the land and their purposes, whether or not within the subdivision, and any decision on appeal or any variance or exceptions (special permits) made by the Zoning Board of Appeals applicable to the subdivision of the land or any buildings thereon.
- (12) If the property that comprises the subdivision or any part or boundary thereof has been examined, approved, and confirmed by the Massachusetts Land Court, such information shall be noted on the plan, with case numbers and other pertinent references to Land Court procedure, and the same requirement shall apply to any adjoining parcels of land of the applicant.
- (13) Suitable space to record the action of the Planning Board and the signatures of all members of the Board, including, where appropriate, the words "Deeds of easements to be recorded herewith" or the words "Covenants to be recorded herewith." The signature space shall appear on the right side of each plan sheet and shall include space for the Town Clerk.
- (14) Frontage at property and setback line, and dimensions of each proposed lot. Base lines shall be clearly indicated on all submitted plans showing stations at all points of curvature, points of tangency, angle points, and 100-foot stations.

NOTE: Items in Subsection B(15) through (22) shall be submitted on separate sheets of the same size and material as the plan sheet. Each sheet shall bear title block and signature block as required in Subsection B(1) and (13) above. Items in Subsection B(21) shall be submitted in text and tabular form.

- (15) Plan and profile.
 - (a) Existing profiles of the street exterior and center lines drawn in fine black line; dot long dash for left, short dash for right side, and solid for center line. Proposed profile on the finished center line drawn in heavy black solid line of proposed streets at a horizontal scale of one inch equals 40 feet and vertical scale of one inch equals four feet, or such other scales acceptable to the Board.
 - (b) Existing and proposed center line grades are to be shown on plan profile sheets. Grades are to be shown at fifty-foot intervals at even stations and

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-3.3

§ 325-3.3

half stations. Elevations are also to be shown at the PVC, PVI, and PVT of vertical curves and at twenty-five-foot intervals along the vertical curve. All existing and proposed intersections and sidewalks, curb-cut ramps, bikeways and walkways, storm drains and water lines shall be shown with all proposed grade elevations calculated. Elevations are to be referenced to the Town datum (National Geodetic Vertical Datum of 1929, NGVD). Gradients shall be shown by figures expressed in percent.

(16) Contour plan/grading plan.

- (a) Existing and proposed topography shall be shown at two-foot contour intervals. In no case shall earth removal exceed more than 10,000 cubic yards for the construction of the roadway whether in the layout or on adjacent lots. There shall also be indicated by differentiating symbols the contour line for four feet above said high-water mark. All lot grading must be indicated on the plans to ensure that proper lot drainage and site grading issues are addressed. All bench marks shall be noted, as well as items required in Subsection D. Existing contours shall be shown as dashed lines with all existing topography screened and proposed contours solid.
- (b) The Board may require certification of compliance with MGL c. 21E, as most recently amended, with respect to the existence of contamination or threat of contamination on the site. Removal of earth shall be performed in accordance with the requirements set forth in Article 9 and in accordance with Chapter 156, Earth Removal, of the Town of Norfolk bylaws, as most recently amended, as specified by other agencies. The grading plan shall indicate conformance, as applicable.

(17) Utility plan.

- (a) Size and location of existing and proposed water supply mains, hydrants, gas, electric, telephone, cable television, fire alarm, streetlighting, sanitary sewers, and storm drains, and including all appurtenances and easements pertinent thereto, logs of borings and test pits, and method of carrying water to the nearest watercourse or easements for drainage as needed, whether or not within the subdivision. Location of proposed driveways shall be indicated on the plan.
- (b) If the Planning Board approves off-site surface water discharge, the applicant or developer shall clearly indicate what course the discharge will take and shall present to the Board evidence from their engineer that such discharge is satisfactory and permitted by public or private ownership of adjacent street or property. In general, surface water shall be contained on-site.
- (c) All transformers are to be located outside the right-of-way on easements for individual lots.
- (d) The utility installation shall not interfere with the installation of sidewalks, trees, retaining walls, guardrails or other subdivision improvements.

- (e) The Board is to be supplied a copy of the plan prepared by the electric utility company, showing the proposed location of the transformers, and the Board's agent is to make a site observation of transformer pad locations prior to installation of the transformers. The final location of transformers and easements shall be approved by the Board prior to construction and shall be shown on the as-built plan.
- (18) Drainage calculations. Drainage calculations shall be submitted in a suitable form, along with amplifying plans outlining drainage areas within and affecting the subdivision. A plan shall also be submitted showing the route followed by all drainage discharging from the subdivision to the primary receiving watercourse or other large body of water or on-site disposal.
- (19) Tree plan. For the area within the proposed street right-of-way and 10 feet beyond and parallel thereto, show the following superimposed on the contour plan:
 - (a) Existing trees if in living viable condition and having a trunk in excess of 12 inches in diameter measured four feet above grade, or if of special importance because of species or distance from other trees, or if field-marked for location by the Planning Board or its agent; in each case, indicating whether such tree is to be retained or removed.
 - (b) Proposed plantings and easements in accordance with Town bylaws and these rules and regulations (Articles 4 and 5).
- (20) Cross sections. Typical cross sections of each street, roadway, drainage ditch and sidewalk to be constructed.
- (21) Impact studies and assessments.
 - (a) The applicant shall inform the Planning Board of any and all impacts that the proposed development may have on the abutters, neighborhood, community and Town. These impacts include the aspects of traffic, water supply, solid waste disposal, sewerage, stormwater drainage, fire/police protection and infrastructure in general, as well as environmental contamination issues of noise, water, air, etc. The applicant shall also indicate the measures which will be implemented to mitigate the results of these impacts.
 - (b) The Board may additionally require at its discretion that the applicant prepare and submit impact studies and assessments for specific aspects that the Board believes to be of paramount concern to the health, safety and welfare of the Town. The need for a study/assessment will be based upon the Board's determination that a potential significant impact(s) exists and mitigation measures are required.
 - (c) The Board may require an impact statement as to the effect of a proposed subdivision on schools, police, fire protection, traffic, and municipal services.

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-3.3

§ 325-3.3

- (d) The impact study shall include impact of drainage on abutting public water supply as well as impact on the public water supply in general.
 - (e) The applicant shall use appropriate professionals to perform the necessary studies/assessments, and the appropriate number of copies of the results shall be presented in a written report to the Board, as required.
- (22) Sedimentation and erosion control plan. A comprehensive sedimentation and erosion control plan shall be submitted to the Board and/or other Town agencies, showing the staging of construction and the measures to limit waterborne and wind-induced erosion, which shall include quick-rooting vegetation, expeditious stabilization of disturbed area, hay bales, diversions, siltation fences, and sedimentation basins. The predevelopment and construction stage sediment loadings in all watercourses shall be calculated using the Universal Soil Loss Equation.
- (23) Traffic congestion control and analysis. Maintenance of a high level of service on Town roadways is important to the preservation of safety, convenience and character of the Town of Norfolk. New development shall only be permitted when the projected traffic to be generated by the development can be accommodated either by existing roadway capacity or through proposed improvements that will ensure safety and the preservation of Norfolk's Town character.
- (a) Definitions. As used in this subsection, the following terms shall have the meanings indicated:

ADEQUATE — A level of service "B" or better for rural, scenic and residential streets, and for new streets and intersections to be created in connection with the proposed project, and "C" or better for all other streets and intersections.

ADJACENT ROAD NETWORK — All primary and secondary roads located within a 1/2 mile radius of the nearest point of the proposed development, including proposed primary and secondary roads necessitated by new land development activity which will generate traffic. The adjacent road network may include roadways within adjacent towns.

CAPITAL TRANSPORTATION IMPROVEMENTS — Major and generally costly tasks aimed at improving local transportation networks, including but not limited to the planning of, engineering for, acquisition of land for, and construction of roads, turn lanes, intersection improvements and signalization, but not including routine maintenance.

LEVEL OF SERVICE (LOS) — A measurement of the adequacy of a roadway segment or intersection to handle the existing or proposed flow of traffic. Level of service shall be calculated using the methodology of the most recent edition of the Transportation Research Board Highway Capacity Manual.

PEAK PERIODS — The times during the day and week which represent the maximum levels of traffic flow and shall be determined for the specific use

proposed; generally, commuter peaks are considered to be from 7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m. Monday through Friday. Retail peaks occur on Saturdays, weekday evenings, and major holidays or seasons.

TRIP GENERATION — The addition of motor vehicle trips to area roadways as a result of any given type of land use activity or development which attracts or produces such trips. Trip generation figures shall be calculated using the numbers presented in the most recent edition of the Institute of Transportation Engineers Trip Generation Manual.

- (b) Traffic impact analysis. To assist the Town in reviewing the potential impacts of traffic generated by a proposed use or development of land, all applications for subdivision approval or site plan approval must be accompanied with 10 copies of the traffic impact analysis, unless waived by the Board following a finding that traffic impacts caused by the proposed use or development of land will be insignificant, and that level of service (LOS) will be maintained or improved as a result of the project.
 - [1] The traffic impact analysis must document the existing traffic conditions in the vicinity of the proposed project, and the potential impacts of the traffic generated by the proposed development on the adjacent road network. Any measures proposed to mitigate adverse traffic impacts shall be identified and described.
 - [2] Any project which would result in a significant decrease (one full level or below LOS C) in level of service on any part of the adjacent road network during peak periods shall:
 - [a] Reduce the scale of the project to maintain the adjacent road network at the existing level of service during peak periods; or
 - [b] Phase the project to match the availability of planned local improvements to the adjacent road network which will maintain an adequate level of service following construction; or
 - [c] Undertake the necessary capital improvements to improve or maintain the adequacy of the adjacent road network; or
 - [d] Provide an off-site roadway or improvements bond for the necessary off-site capital improvements equal to the development's cost of lessening congestion that results from the proposed development as determined by the Planning Board, its agent or representative.
 - [3] Contents of traffic impact analysis. The following information shall be included in the traffic impact analysis for the adjacent roadway network. The Board may waive any sections of these requirements it deems appropriate upon request and on a case-by-case basis:
 - [a] Existing traffic conditions: average daily and peak hour volumes, average and peak speeds, accident data, LOS of

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-3.3

§ 325-3.3

intersections and street segments likely to be affected by the proposed development.

- [b] Projected traffic conditions for the design year of the project.
 - [c] Projected impact of proposed development: peak hour and daily traffic to be generated by the development; sight lines at new intersections; proposed traffic controls; projected post-development LOS and volumes on affected streets.
 - [d] Monitoring of post-development projections shall occur approximately 12 months after full build-out is complete. The post-development traffic report shall catalogue activity related to LOS, volumes and safe access, and approval of this report shall be the basis of the final bond release.
 - [e] Data submitted for initial approval/review shall be no more than six months old at the date of application, unless due to significant recent development the Board determines there will be a significant impact on the numbers.
- (24) Curb tie and alignment plan. A curb tie and alignment plan shall be submitted, showing the following information:
- (a) Station and offset to all curbs at their point of curvature (PC), point of tangency (PT), and point of compound curvature (PCC).
 - (b) Existing and proposed bounds with a tie in to the nearest town, county, or state bound.
 - (c) Chart indicating all proposed bounds with north and east coordinates and station and offset.
 - (d) Bearings, distances, and curve data for all existing and proposed baselines, curblines, and right-of-way lines.
 - (e) Widths of existing and proposed traveled ways, grass strips, and sidewalks.
 - (f) Stations of all intersecting existing and proposed base lines.
 - (g) Chart indicating the location by station of curb cut ramps along with the roadway identification.
- (25) Waivers, construction sequencing and timing. The plans shall indicate all waivers requested by the applicant and approved by the Planning Board. The plans shall also show the proposed construction sequencing and timing for the subdivision.
- (26) Detail plan. A plan shall be prepared and submitted indicating all the details in plan, section, and elevation as required to fully understand and complete the proposed project in accordance with the Planning Board's rules and regulations. Details included in the Planning Board rules and regulations and required for the proposed project shall be included on the detail plan. In addition, the Planning Board may require additional details to be included with the contact plans which

it believes will assist the contractor and the Town of Norfolk to fully understand the proposed project.

- (27) Wetland and water resource protection. The attention of the applicant is directed to provisions of MGL c. 131, § 40, Removal, fill, dredging or altering of land bordering waters, and to any Town of Norfolk Zoning Bylaw and bylaw regulations relative to wetland protection, aquifer protection, and/or water resource protection.
- C. Staking. To facilitate review of the definitive plan by the appropriate authorities, at the time of filing of the definitive plan, the applicant shall stake the center line of all proposed streets at a minimum of every 100 feet with the center line stations, including intersections with existing roadways.
- D. Soil survey and percolation tests. The Board or its agent may require soil surveys and/or test pits or borings, which are to be prepared at the expense of the applicant, in order to establish the suitability of the land for the proposed storm drainage system and proposed street construction. See also Norfolk Board of Health regulations.
- (1) Test pits, borings or soundings shall be taken along the center line of each street shown on the plan at intervals of at least every 200 feet and at locations such as cut sections and areas of questionable foundation material where the subsurface conditions may be, in the opinion of the Board or its agent, factors affecting the quality and service life of the street. Test pits shall be made under the supervision of an agent of the Planning Board, and shall not be backfilled until the applicant has been notified by the Board or its agent that all necessary inspection and sampling has been completed. Where borings are used, samples shall be taken at five-foot intervals and at each change in strata. Soundings shall be taken in areas of unsuitable material for the purpose of determining the hard bottom contours. Test pits and boring, where required, shall extend to a minimum depth of five feet below the street profile grade or to bedrock, whichever is less. The applicant shall indicate on the plan a proposed layout of the subsurface exploration program complete with location, spacing, and type of exploration proposed.
- (2) Soil surveys, when required by the Board or its agent, shall include a test excavation not less than seven feet below finished grade at a frequency of one per every four lots, location of which must be shown on the contour plan, and a report thereon, a percolation test at a frequency of one per every four lots, location of which must be shown on the contour plan, and a report thereon. Percolation test shall be in accordance with Title 5 of the Commonwealth of Massachusetts State Environmental Code, as supplemented.²²
- (3) All information concerning the test pits, borings or soundings (location, depth, soil strata, depth of water table) shall be submitted to the Board in a written report to be made, evaluated and stamped by a registered professional engineer.
- E. Procedure.
- (1) Review by Board of Health as to suitability of land.

22. Editor's Note: See 310 CMR 15.00.

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-3.3

§ 325-3.3

- (a) At the time of filing of the definitive plan, the applicant shall also file with the Board of Health two contact prints of the definitive plan, dark line on white background, together with any and all information specified in the Board of Health's rules and regulations, which may include percolation and other tests as well as septic system details and other information as the Board of Health may require. The Board of Health shall, within 45 days after filing of the plan, report to the Planning Board, in writing, its 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 health, and include such specific findings and the reasons therefor in such report, and where possible, shall make recommendations for the adjustment thereof.
 - (b) Failure of the Board of Health to make such a report within 45 days after the plan is filed with its office shall be deemed approval by that Board. The Board of Health shall send a copy of its report, if any, to the person who submitted said plan. Every lot so located that it cannot be served by a connection to the municipal sewer system shall be provided with septic tank and drain field satisfactory to the Board of Health and/or the Commonwealth of Massachusetts Sanitary Code minimum standards as the Board of Health shall determine. A note shall be added to all plans as follows: "No dwelling will be constructed on any lot without first securing from the Board of Health the disposal works construction permit required by Title 5 of the State Environmental Code." The approval of a definitive subdivision plan by the Board does not absolve the developer of any other requirements of the Board of Health or other Town boards.
- (2) Review by other Town officials.
- (a) The Planning Board agent will transmit copies of the definitive plan to Town officials other than the Board of Health as follows: one copy each to the Conservation Commission, Board of Water Commissioners, Highway Department and the Police Department/Fire Department and also two copies to the Planning Board's Engineer.
 - (b) Before the definitive plan is approved, the Board will request written statements from the above officials prior to the public hearing with regard to the proposed improvements in the following respect, but not limited to:
 - [1] Conservation Commission as to potential involvement with MGL c. 131, § 40, and the effects of the subdivision on streams, wildlife and similar considerations within the scope of the Conservation Commission.
 - [2] The Board's Engineer as to the design of the street system, location of easements, monuments, drainage system, water system and, if applicable, a sewage system and their appurtenances, and relationship to existing water and drainage systems.
 - [3] Fire Department as to location of hydrants and emergency access.

- [4] Police Department as to street safety, both vehicular and pedestrian, and access for emergency vehicles.
 - [5] Highway Department as to the design of the street system, including the feasibility of snow removal from sidewalks and roadways.
 - [6] Board of Water Commissioners as to the design of the water system, as applicable.
- (3) Public hearing. Before taking any action to approve, modify and approve or disapprove a definitive plan, the Board shall hold a hearing at which parties in interest shall have an opportunity to be heard, in person or by agent or attorney. Notice of the time and place of such hearing and of the subject matter, sufficient for identification, shall be published in a newspaper of general circulation in the Town of Norfolk once in each of two successive weeks, the first publication to be not less than 14 days before the date of the hearing, and by mailing a copy of such notice to the applicant and to all owners of land abutting the land and all owners of land within 300 feet of a property line of the land shown on the plan as indicated in the certified list of abutters obtained by the applicant from the Norfolk Board of Assessors.
- (4) Planning Board procedure.
- (a) The procedure that the Board will follow with regard to approval, disapproval or modification of the definitive plan submitted by the applicant will be that as set forth in MGL c. 41, § 81U, as amended. In summary, the Board, after receiving the plan and profiles, will review same to determine whether they are in compliance with its adopted rules and regulations, the Zoning Bylaw and other applicable statutes.
 - (b) The Planning Board may require that a subdivision plan 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, the Board shall endorse the plan to require that no building may be erected on such park or parks for a period of not more than three years without the Board's approval.
 - (c) Before approval of the plan, the Board shall establish that the street pattern is safe and convenient, that proper provision is made for street extension and that all other purposes of the General Laws are met. The Board may, as a condition of granting approval under MGL c. 41, § 81U, impose reasonable requirements designed to promote the health, convenience, safety and general welfare of the community and to benefit the Town. In such event, the Board shall endorse such conditions on the plan to which they relate, or set forth a separate instrument attached thereto, to which reference is made on such plan and which shall, for the purpose of the Subdivision Control Law,²³ be deemed to be a part of the plan.

23. Editor's Note: See MGL c. 41, §§ 81K through 81GG.

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-3.3

§ 325-3.4

- (5) Approval or disapproval.
- (a) The action of the Board with respect to such plan shall be by vote, copies of which shall be filed with the Town Clerk and sent to the applicant. If the Board modifies or disapproves such plan, it shall state in its vote the reasons for its action. Failure of the applicant to submit revised plans and other required submittals within six months of approval with modifications shall automatically rescind approval of the plan. If subdivision approval is granted by the Board, the applicant shall submit a revised plan reflecting any and all conditions of approval within 60 days of filing of Form C-1, Certificate of Approval of a Definitive Plan, or Form C-2, Certificate of Approval with Modifications of a Definitive Plan, with the Town Clerk. The Board shall rescind its disapproval if, within six months of such disapproval, the applicant submits revised plans and other required submittals fully conforming to the rules and regulations of the Board and resolving the specific reasons for disapproval. The Planning Board, on its own motion or on the petition of any interested person, shall have the power to modify, amend, or rescind its approval of a plan of a subdivision, or to require a change in a plan as a condition of its retaining the status of an approved plan (MGL c. 41, § 81W).
 - (b) A note shall be added to the approved plan, adjacent to the signature block, on all pages with the following words: "Conditionally approved in accordance with MGL c. 41, § 81U, as shown in covenant to be recorded herewith."
 - (c) Final approval, if granted, shall be endorsed on the original drawing of the definitive plan by the signatures of a majority of the Planning Board but not until the statutory twenty-day appeal period has elapsed following the filing of the Board's certificate of approval or disapproval, as the case may be, with the Town Clerk and said Clerk has notified the Board that no appeal has been filed. If appeal has been made, said endorsement shall be made after the entry of the final decree of the court sustaining the approval of such. Final approval shall be subject to the construction specifications contained herein and to the rules and requirements of the Town departments, agencies and the Board of Health. Prior to endorsement by the Planning Board, the applicant shall submit the approved version of the plan on an electronic file format acceptable to the Planning Board, which is compatible with AutoCAD Release 14 (or any subsequent release which the Town of Norfolk adopts). After the definitive plan has been approved and endorsed, the Board shall return the original to the applicant. The Board may extend the time period permitted by statute between submission of a definitive plan and action thereon upon written request of the applicant. Approval of the definitive plan does not constitute the laying out or acceptance by the Town of streets shown on the plan.

§ 325-3.4. Implementation of definitive plan.

- A. Performance guarantee.

- (1) Before endorsement of the Board's approval of any definitive subdivision plan, the applicant shall agree:
 - (a) To complete [except in the case of any portion of the subdivision for which a surety company performance bond, a bank passbook, a performance bond secured by a deposit of money, or a lender's agreement shall have been filed pursuant to Subsection A(3)(a), (b), (c) and (d)] the required improvements for the subdivision, specified in these rules and regulations, within two years of the date of such approval;
 - (b) To complete the required improvements for any portion of the subdivision for which a surety company performance bond or a performance bond secured by a deposit of money or lender's agreement shall have been filed pursuant to Subsection A(3)(b), (c) and (d) within two years of the date of the performance bond or within two years of the date of the Board's approval of the definitive plan, whichever date shall occur the earlier; and
 - (c) That no building permits shall be issued until at least the binder course of the bituminous concrete, as specified in these rules and regulations, has been applied to the streets which serve that structure.

NOTE: There is a 25% contingency added to all bond estimates, and the Board retains a minimum of 10% of the original bonding amount. This is released only after the subdivision street(s) has been accepted by a vote of Town Meeting.

- (2) The procedure for posting of a performance guarantee is presented in Appendix A.²⁴
- (3) Construction of ways and installation of municipal services for an approved subdivision shall be secured by one, or in part by one and in part by the other, of the following methods which may from time to time be varied by the applicant with the written consent of the Board:
 - (a) 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. The Planning Board may also require that the application specify the time within which such construction shall be completed. Letters of credit are not considered proper bond. The Planning Board may require that the developer post a proper bond to secure repair and reconstruction of adjacent public ways that may be damaged from construction operations and/or utility improvements associated with the subdivision over and above typical wear and tear. In cases deemed appropriate by the Planning Board, the Board or its agent will establish baseline roadway conditions by performing a roadway condition survey and document the condition of adjacent roadways in a report to the Planning Board with the cost borne by the applicant. The Planning Board or its agent will then establish the value of the bond. After completion of the project, the Planning Board or its agent will determine

24. Editor's Note: Appendix A is included as an attachment to this chapter.

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-3.4

§ 325-3.4

the extent of any damage present and the amount of any bonded funds to be withheld necessary to repair the affected roadways.

- (b) By a deposit of money 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. The Planning Board may also require that the applicant specify the time within which such construction shall be completed.
 - (c) 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 acquires 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 provides that no lot shall be built upon until such ways and services have been provided to serve such 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. Failure to so complete the required improvements within two years of the date of the Board's approval of the definitive plan shall automatically rescind approval of said plan.
 - (d) 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.
- (4) A note shall be added to all plans as follows: "Plans subject to covenants, conditions and restrictions set forth in a covenant(s) dated (blank) to be recorded herewith."
- B. Time for completion. If the ways in any subdivision are not completed and the utilities aforesaid are not installed within the time so agreed to by the applicant or so required by the Board, including any extensions granted by the Board, any such bond may be enforced and any such deposit may be applied by the Planning Board for the benefit of the Town. Ways or portions thereof not completed within the time required shall thereafter be completed in accordance with the design and construction standards of the Board in effect at the time of approval upon the expiration of such time.

C. Endorsement.

- (1) No endorsement will be made until the applicant has paid all bills owed to the Board and all taxes, assessments, and charges owed to the Town of Norfolk have been paid and a municipal lien certificate has been provided to the Planning Board.
- (2) All performance observation/inspection fees (Planning Board consulting engineer observation fee and Town Highway Department inspection fee) are to be paid prior to endorsement of the definitive plan and are to be placed in separate accounts. All unexpended funds are to be returned to the applicant at the time of street acceptance by the Town of Norfolk. All such accounts are to be maintained at a minimum of 50% of the amount of the original submittal.
- (3) Running descriptions of all roads and easements shall be provided for review and approval prior to endorsement.
- (4) Deeds to individual lots containing drainage easements within their boundaries shall contain a covenant such that the easements are to be kept clear of trees, plantings, fences, other structures, and the like to provide for accessibility by the Town to perform maintenance to drainage structures after street/easement acceptance at a Town Meeting. Copies of deeds of the lots affected by this type of easement and all other easements (sight line, turning, utility, slope, both temporary and permanent, etc.) are to be submitted to the Planning Board for review and approval prior to endorsement. In addition, the applicant shall provide the Town of Norfolk with easements for all those areas off the subdivision limits that contain drainage, slope (temporary and permanent) or other types of easements.
- (5) At least 15 days prior to submittal of the plan for endorsement, all required covenants shall be provided to the Planning Board with an attorney's certification that title to the premises shown on said plan and appurtenances thereto, including any off-site easements and rights-of-way, are in the applicant's name and are free of all encumbrances set forth and will not preclude any required subdivision improvements.
- (6) All unconstructed portions of any right-of-way shall be conveyed to the Town. A running description of this property is to be submitted to the Board for review and approval prior to endorsement with the property conveyed to the Town prior to the release of any and all lots in the subdivision.

- D. Recording. The applicant shall file the approved set of definitive plan documents (including details, etc.) and covenant, if any, at the Registry of Deeds, and shall notify the Board, in writing, presenting evidence of the recording of said plan and the covenant within 30 days of approval. The applicant shall deliver to the Board one copy of the approved and recorded definitive plans, and a copy of an affidavit filed by the owner stating that the title to the premises shown on said plan and appurtenances thereto is in the applicant's name and is free of all encumbrances or with encumbrances as set forth.

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-3.4

§ 325-3.4

- E. Release of lots. The applicant shall submit to the Board a completed Form H²⁵ to seek approval for the release of lots. Lots are only released after the applicant submits an up-to-date Form K, Inspection Report; all earth removal operations, if any, have been completed and affected area restored as per earth removal regulations (see Article 9); the bituminous binder course is in place and observation has been conducted with the Form K signed, signifying approval by the Board's consultant/agent; and guardrails, if any, have been installed and observation has been conducted and the Form K has been signed off, signifying approval of the installation by the Board's consultant/agent. Access to all released lots shall be continually maintained. The approved Form H shall be filed at the Registry of Deeds and written proof of filing submitted to the Board as described above (Subsection D). Prior to the release of any lots, all trees and brush that are required to be removed at existing Town ways shall be removed, after required Shade Tree and Scenic Roads Act hearings,²⁶ and all traffic control devices installed. Deeds to land as a gift of land for future roadways shall also be provided.
- (1) The applicant shall submit all requests for the setting of bond, reductions in the amount of bond to be held, release of bond, inspection requests, as-built inspections and the like to the Board, in writing. Requests shall be accompanied by the most up-to-date Form K, Subdivision Inspection Checklist.
 - (2) Conveyance of utilities and easements to the Town. Prior to the release by the Board of a surety bond or deposit or, in the case of a covenant, the issuance of a release form, the applicant shall execute a Form L, transferring to the Town, without cost, valid unencumbered title to all common utilities, sewers, storm drains, water mains, and appurtenances thereto, constructed and installed in the subdivision or portion thereto to be approved, and conveying to the Town without cost and free of all liens and encumbrances perpetual right and easements to construct, inspect, repair, renew, replace, operate and forever maintain the aforesaid underground utilities, with any manholes, pipes, conduits and other appurtenances, and to do all acts incidental thereto, in, through and under the whole of all streets in the subdivision or portion thereof to be approved, and if any such utilities have been constructed and installed in land not within such streets, then in, through and under an easement as shown on the definitive plan.
- F. Reduction or release of performance guarantee.
- (1) Reduction of bond surety. The penal sum of any such bond or the amount of any deposit held under Subsection A(3)(a) and (b) may, from time to time, be reduced by the Board and the obligations of the parties thereto released by said Board in whole or in part. If release is by reason of covenant, a new plan of the portion to be subject to the covenant may be required by the Board. The procedure for reduction of bond surety is presented in Appendix A.²⁷
 - (2) Final release of performance guarantee. Upon completion of improvements required in these rules and regulations, security for the performance of which was given by bond, deposit or covenant, or upon the performance of any covenant

25. Editor's Note: Forms can be obtained from the Planning Board office.

26. Editor's Note: See MGL c. 87, Shade Trees, and MGL c. 40, § 15C, Scenic road designations.

27. Editor's Note: Appendix A is included as an attachment to this chapter.

with respect to any lot, the developer or owner, at his expense, will cause to be published in a newspaper of general circulation in the Town of Norfolk, at least seven days prior to the releasing of the performance bond or surety, an announcement that such release is contemplated. He shall also send by registered mail to the Town Clerk and the Board a written statement that said construction or installation in connection with which such bond, deposit or covenant has been secured has been completed in accordance with the requirements contained in these rules and regulations. Such statement shall contain:

- (a) Name and address of the applicant.
 - (b) A compliance certificate signed under oath by the developer and his engineer that the development has been completed according to the rules and regulations of the Planning Board and the Town of Norfolk Zoning Bylaw.²⁸
 - (c) Copies of or reference to the requisite number of inspection forms and reports.
 - (d) Copy of or reference to the as-built acceptance plan approved by the Board.
 - (e) Written evidence from the Town Highway Department, Water Department, and Building Department as to construction of all ways and sidewalks, installation of monuments, street signs, pavement, lighting, gutters and curbs, required grading and drainage, water mains, hydrants and appurtenances, adequate lot drainage, planting and seeding, all in accordance with the definitive plan.
 - (f) Written evidence from the Board of Health as to the installation of sewage disposal facilities, if applicable, all in accordance with the definitive plan.
- (3) Determination of incompleteness.
- (a) If the Board determines that said construction, installation, or filing of as-built plans has not been completed, it shall specify to the Town Clerk and to the developer, in writing, by registered mail, the details wherein said construction and installation shall have failed to comply with the requirements contained in these rules and regulations. Upon failure of the Board to act on such application within 45 days after the receipt of the application by the Town Clerk and the Board, all obligations under the bond shall cease and terminate by operation of law, and any deposit shall be returned and any such covenant shall become void.
 - (b) In the event that said forty-five-day period expires without such specification, or without the release and return of the deposit or release of the covenant as aforesaid, the Town Clerk shall issue a certificate to such effect, duly acknowledged, which may be recorded.
- (4) Determination of completeness. If the Board determines that said construction, installation, or filing of as-built plans has been completed, it shall notify the

²⁸ Editor's Note: See Ch. 310, Zoning.

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-3.4

§ 325-3.4

Town Treasurer/Collector within 45 days on an executed release form that it releases the interest of the Town in such bond or deposit and that it shall be returned to the person or persons who furnished the same, or in the case of covenant, it shall issue a written release of the covenant on an executed release form.

- G. As-built acceptance plans. Prior to binder installation, a redline as-built plan indicating the location and grades of all water and drain lines, including water stub connections, shall be submitted to the Planning Board for review and approval. The plan may consist of redline pencil markings on the approved definitive plan. The redline as-built plan must be endorsed by a registered land surveyor or professional civil engineer. Prior to the final release, the developer shall file with the Board an as-built acceptance plan of completed street or streets. The plan shall show all plans and profiles corrected and certified by the applicant's engineer/consultant to be actual as-built locations and profiles of all streets, ways and utilities, including those installed by others such as electric, telephone, and gas. Said plans shall be prepared in a manner suitable for recording at the Registry of Deeds. The title portion of the plan shall include the station numbers, the length of roadway shown on the plan in number of feet as well as the miles of roadway shown on the plan. All expenses by the Board to review accuracy of said plans will be borne by the applicant.
- (1) The developer shall provide the Planning Board with one set of reproducible plans and four sets of prints of the completed subdivision. The plans must be prepared by a registered professional engineer and land surveyor.
 - (2) Acceptance plan shall show both a plan and profile view of the street as constructed based upon the definitive plan. The plan shall be drawn at a scale of one inch equals 40 feet horizontal and one inch equals four feet vertical on a sheet 24 inches by 36 inches.
 - (3) Plan view. The following shall be shown as a minimum:
 - (a) Widths, lengths, bearings, including radii, tangents, and central angles of all curves, of all boundary lines of streets and easements and curblines.
 - (b) Station and offset to POC, PRC, PCC and POT of all curblines.
 - (c) All required bounds with indication that same have been correctly set with coordinates and station and offset.
 - (d) Name, lot, and house number of each abutting owner appearing on the most recent tax list.
 - (e) North arrow and a minimum of two bench marks referenced to the National Geodetic Vertical Datum (NGVD) of 1929. The bench marks shall not be located on growing features, such as trees.
 - (f) Edge, width, and cross slope of traveled ways; indication as to type of edging, or curb; location of ditches, easement structures, and driveways.
 - (g) Storm drainage and sanitary sewer systems, including major structures, culverts, retention/detention systems; size, type, and class of pipe and subdrains; manholes, catch basins, gutter inlets, flared and metal ends, field

stone masonry ends, length and width of scour protection, and the location, type, size, and class of service lines to each abutter.

- (h) Water systems, including size, type, and class of pipe; location and size of all valves, boxes, and fittings; hydrants; air release valves; and the location, type, size, and class of service lines to each abutter.
 - (i) Gas service, including size and type of pipe, location of all valves and boxes, and the location, type, and size of service lines to each abutter.
 - (j) Electric, telephone, cable television, and fire alarm systems, including location, size and type of conduits, handholes/pull boxes, streetlight poles, utility poles, transformers, and the location, type, and size of service lines to each abutter.
 - (k) Location of all retaining walls, street signs, guardrails, and curb-cut ramps.
 - (l) Location, species, and date of installation of all trees.
 - (m) Horizontal and vertical sight distances at all intersections in all directions.
 - (n) Gutter line elevations shall be indicated at all fifty-foot stations, including POCs, PCCs, PRCs, and PTs.
- (4) Profile view. The following shall be shown as minimum:
- (a) Center line and easement profiles, grades, and elevations with elevations being shown at fifty-foot stations and at drainage structures.
 - (b) All vertical curves, length, stopping sight distance, and elevations at twenty-five-foot stations and at the PVC and PVT.
 - (c) Storm drainage and sanitary sewer systems, water system, structures, culverts, sizes, slopes, rim, and invert elevations.
- (5) Description. A running description of all ways and easements (drainage, slope, both temporary and permanent, cul-de-sac, tree, utility, etc.) shall be provided. Once the running descriptions are approved by the Planning Board, a deed for the property and a Form L (grant of easements) shall be submitted.
- (6) Certifications. The following notes shall appear on the acceptance plan and be endorsed by the surveyor and engineer:
- (a) I hereby certify that (street) has been laid out and the bounds have been set as shown on this plan.
 _____ Signature
 _____ Date
 - (b) I hereby certify that this plan shows the actual as-built locations, profiles and elevations of the roadways, drainage facilities and utilities based upon a field survey made during the period from _____ to _____.

Surveyor

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-3.4

§ 325-4.1

Engineer _____ Date

- (7) Signatures. Suitable space for endorsement by members of the Planning Board and Board of Selectmen shall be provided.
- H. GIS as-built submission.
- (1) Prior to final release, the developer shall file with the Board one print copy and one electronic copy of plans conforming to the requirements of Subsection G and to the requirements set forth herein for incorporation in the Norfolk GIS system.
- (2) All plans shall utilize the Massachusetts State Plane Coordinate System using the North American Datum of 1983 (NAD83) and the North American Vertical Datum of 1988 (NAVD88) through bounds with published coordinates such as National Geodetic Survey, Mass Highway, etc. The datum and units used shall be clearly shown. In cases where there are no suitable geodetic bounds in the vicinity, the plan shall be tied into existing physical features such as catch basins, manholes, utility poles, etc. In such cases, ties to two or more physical features shall be made for at least two different identifiable points on the plan such as property corners.
- (3) The plans shall be prepared at a scale of one inch equals 40 feet or other such scale approved by the Board. All plans submitted under this section shall be submitted on a Windows-compatible CD-ROM. Acceptable electronic file formats include "AutoCAD.dwg" and "AutoCAD.dxf." Other formats may be acceptable if compatible with the Norfolk GIS system. The Town may require a fee from the applicant for the expense of integrating the plans into the Town's GIS system.
- (4) To maintain an updated GIS database, the Town at its discretion may revise format and content requirements for electronic submittals.

ARTICLE 4

General Requirements and Design Standards

§ 325-4.1. Basic requirements/design guides.

- A. The subdivider shall observe all design standards for land subdivision as hereinafter provided. These standards shall be considered minimum standards and shall be varied from or waived only as provided in Article 6. All subdivisions shall be designed and improvements made by the applicant consistent with the requirements of Articles 4 and 5. Refer also to Article 6 of these rules and regulations for additional design and construction standards.
- B. Design and construction shall reduce, to the extent reasonably possible, the following:
- (1) Volume of cut and fill;
- (2) Area over which existing vegetation will be disturbed, especially on land within 200 feet of a river, pond, or stream, or having a slope of more than 15%;

§ 325-4.1

NORFOLK CODE

§ 325-4.4

- (3) Number of mature trees removed;
 - (4) Visual prominence of man-made elements which are not necessary for safety or orientation;
 - (5) Visibility of building sites from existing streets;
 - (6) Blockage of vistas through new development;
 - (7) Removal of existing stone walls;
 - (8) Number of driveways exiting onto existing streets or collector roads;
 - (9) Alteration in groundwater or surface water levels or chemical constituents;
 - (10) Disturbance of important wildlife habitats, outstanding botanical features, or scenic or historic environs;
 - (11) Soil loss or instability during and after construction.
- C. Design and construction shall increase, to the extent reasonably possible, the following:
- (1) Configuration using collector streets to avoid traffic on streets providing house frontages;
 - (2) Visual prominence of natural features of the landscape;
 - (3) Street layout facilitation of solar orientation of houses;
 - (4) Use of curvilinear patterns.
- D. Referenced standard. A Policy on Geometric Design of Highways and Streets, by the American Association of State Highway and Transportation Officials (AASHTO), latest edition, as amended.

§ 325-4.2. Relation to surrounding areas.

The subdivision shall be in conformity with the respective zoning requirements and the general layout shall harmonize and conform to plans for Norfolk, as adopted by the Planning Board.

§ 325-4.3. Minimum lot.

No lot area or width in a subdivision shall be less than the minimum required by the Zoning Bylaw for the district in which it is located.

§ 325-4.4. Access through another municipality.

- A. In case access to subdivision crosses land in another municipality, the Board shall require certification, from appropriate authorities, that such access is in accordance with the Master Plan and subdivision requirements of such municipality and that a legally

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-4.4

§ 325-4.9

adequate performance bond has been duly posted or that such access is adequately improved to handle prospective traffic.

- B. If a proposed subdivision encompasses the Town of Norfolk and an adjoining town, at least one point of access must be provided in the Town of Norfolk.

§ 325-4.5. Reserve strips.

Reserve strips prohibiting access to streets or adjoining property shall not be permitted, except where, in the opinion of the Board, such strips shall be in the public interest.

§ 325-4.6. Further subdivisions.

In case a tract is subdivided into larger parcels than ordinary building lots or if a subdivision is adjacent to a tract capable of subdivision, such parcels and streets shall be arranged so as to allow the logical and economic extension of streets, utility easements, drainageways, and public areas into such parcels and adjacent tracts.

§ 325-4.7. Resubdivision.

The resubdivision of all or part of land covered by an existing plan shall be governed by these regulations. Such resubdivision shall show clearly that area or areas which are being replatted and shall show the file number of all previous plans of these same areas with dates of filing.

§ 325-4.8. Blocks.

In general, block lengths shall not be less than 300 feet nor more than 2,000 feet.

§ 325-4.9. Access and maintenance easements.

The deeds of all lots containing easements whose purpose is access to and/or maintenance of surface or subsurface features shall clearly state that no permanent plantings or structures, including but not limited to buildings, driveways, and fences, shall be installed within such easements. No barriers to the maintenance of drainage structures are allowed.

- A. Layout. Wherever possible, easements shall be continuous from block to block and their layout shall create as few irregularities as possible. The minimum easement width shall be 20 feet, except that tree easements, if necessary, shall not be less than 10 feet (see Subsection D) and certain easements for pedestrian walkways shall not be less than five feet (see § 325-4.10).
- B. Watercourses. Streams or watercourses shall be provided with an emergency/maintenance access easement conforming substantially with the average high-water mark of its course, but in no case less than 20 feet in width centered on its midpoint. Parallel streets or pedestrianways and/or appropriate access may be required in connection therewith. The placement of streams or watercourses into open or covered culverts shall be kept to a minimum.

C. Utilities.

- (1) Easements for utilities across lots shall generally follow lot lines or shall be centered on the rear or side lot lines and shall not be less than 20 feet in width.
- (2) Easements for utilities along roads shall follow and be outside of the right-of-way lines and shall be not less than five feet in width.

D. Trees. Trees shall be located within the grass strip of the street right-of-way. However, in cases where the Planning Board determines that it is preferable to locate them outside the right-of-way, tree easements shall follow and be outside of the right-of-way lines and shall be 10 feet in width. Trees shall be planted at forty-foot or lesser intervals on both sides of all streets. The applicant shall show the location and species of trees on the subdivision plan at the time of submittal. (See also § 325-5.9.)

§ 325-4.10. Pedestrianways/walkways.

- A. Pedestrianways or footpaths shall be required to provide convenient circulation or access to schools, playgrounds, shopping, churches, transportation, parks, conservation areas and/or other facilities. If not within a street right-of-way, such ways shall consist of an easement of at least 20 feet wide, except that walkways shall consist of an easement of at least five feet wide.
- B. Walkways shall be required on the applicant's property along the entire frontage (from side line to side line) of all existing public ways which immediately abut the proposed subdivision as well as all proposed public ways for the purpose of assuring safe and adequate pedestrian access to, from and within the subdivision.
- C. To facilitate review of the proposed plan by the appropriate authorities, the applicant shall stake the side line of the proposed walkways along existing roadways at fifty-foot intervals.
- D. See also § 325-5.2J for construction details.

§ 325-4.11. Open space, parks and playgrounds.

The Planning Board may require that a subdivision plan show a park or parks suitably located to serve the future residents of the subdivision 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.

- A. If such a park or parks is required, the subdivision plan shall include an appropriate endorsement requiring that no building may be erected on such site for three years without the approval of the Planning Board.
- B. Any open space park or playground shall provide at least 50 feet of continuous frontage on a street, and pedestrianways will normally be required to provide access from each of the surrounding streets, if any, to which the open space, park or playground has no frontage. Further, such parks and/or playgrounds shall be required to have maintenance provided for by covenants and agreements acceptable to the Board, until public acquisition by the community.

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-4.11

§ 325-4.14

- C. Land designated for park or playground purposes shall not include wetlands, ledge, or other lands unsuitable for recreation purposes.

§ 325-4.12. Protection of natural features.

- A. Due regard shall be shown for all natural features such as large trees, watercourses, scenic points, historic spots and similar community assets which, if preserved, will add attractiveness and value to the subdivision.
- B. Prior to the removal of any trees over four inches in diameter in the right-of-way and within any tree easement and prior to grading, the developer shall mark all trees proposed for removal and the developer shall plot these marked trees on the plan. All trees except those approved for removal by the Planning Board shall be protected against construction damage. The grade below these trees shall be retained as necessary in order to ensure their preservation, including the use of tree wells, where necessary.

§ 325-4.13. Water system.

- A. All buildings in a subdivision or other structures therein intended for human occupancy and all fire hydrants shall be connected to and served by the Town water supply system, as available or as extended at the expense of the developer of the subdivision.
- B. The definitive plans shall indicate the existing and proposed locations of all water lines, including their type, size, and class. All proposed valves and fittings shall be located on the plans and identified by its station. Proposed valves shall be located so that they line up with the edge of traveled way, gutter line, or street line. The existing nearest hydrant(s) to the development shall be located on the plans. Hydrants shall be located at all low points, and hydrants or manual air-release valves shall be located at all high points of the proposed water mains.

§ 325-4.14. Streets.

- A. Arrangement. The proposed streets shall be considered in their relation to existing and planned streets, topographic and geologic conditions, public convenience and safety, and for safe vehicular travel. Due consideration shall also be given by the developer to the attractiveness of the street layout in order to obtain the maximum amenity of the subdivision and to avoid excessive cut and fills. Long, straight roadway sections should be avoided. The maximum length of a straight segment on a residential or secondary street shall be 500 feet. In addition, the proposed streets shall provide for appropriate continuation and connection of existing primary and secondary streets, and the extension of primary and secondary streets onto adjoining land.
- B. Access to primary streets and through streets.
- (1) Intersections of secondary and residential streets with primary streets will not be allowed with offsets between intersections of less than 350 feet whether on the same or opposite sides of the primary or through street.

- (2) Subdivisions, and extensions to subdivisions, including or capable of including 25 lots or more shall have at least two points of access to an existing through street separated by a minimum distance of 350 feet or shall have two separate passable access routes via existing primary street(s) to an existing through street where the points of access are.
- C. Reconstruction of adjacent public ways. In cases where the development of a subdivision may cause congestion or a danger to pedestrian or vehicular traffic on the adjacent public ways, remedial measures satisfactory to the Planning Board may be required. Such measures may include, but are not limited to, the addition of alternate access roads or reconstruction of the adjacent public ways.
- D. Street jogs. Street jogs (i.e., the continuation of a street through an intersection where the center line of the paved surface is not aligned on both sides of the intersection) are prohibited.
- E. Reverse curves. Reverse curves on streets may be separated by a straight section of road of at least 150 feet in length if a street has a design speed of 30 miles per hour or less. This can be addressed on a case-by-case basis during the plan review process to ensure that public safety is not impacted.
- F. Right-of-way widths and alignments. On all classifications of streets, the characteristics as shown in the following chart titled "Right-of-Way Widths and Alignments Based on Design Speed" shall be the minimum acceptable (see also Figures 31 to 34).²⁹

Right of Way Widths and Alignments Based on Design Speed			
Street Classification	Residential	Secondary	Primary
Design speed (miles per hour)	20	25	30
Minimum curb to curb (feet)	24	26	28
Minimum right-of-way (feet)	50	60	60
Minimum curb radius at intersections (feet) [1]	20	20	25
Minimum traveled way center-line radius (feet) no superelevation	90	170	280
Traveled way coincident with center line	Not required	Not required	Required
Stopping sight distance (feet) [2]	125	150	200
Intersection sight distance (feet) [2]	200	340	400
Minimum intersection spacing center line to center line (feet)	350	350	350
Two-way traffic volume ADT/DHV	<400/<200	<800/<300	<800/<400
Minimum grade	1%	1%	1%
Maximum grade	10%	8%	6%

Sight Distance Summary		
85th Percentile Speed (miles per hour)	Stopping Sight Distance (feet)	Corner Sight Distance (feet)
35	225 to 250	390

29. Editor's Note: Figures 31 to 34 can be obtained from the Planning Board office.

Sight Distance Summary		
85th Percentile Speed (miles per hour)	Stopping Sight Distance (feet)	Corner Sight Distance (feet)
40	275 to 325	445
45	325 to 400	500
50	400 to 475	555
55	450 to 550	610
60	525 to 600	665
65	650 to 725	720
70	625 to 800	775

- [1] The intersection of roads with differing design speeds shall be designed in accordance with § 325-4.14G(2).
- [2] For design purposes, sight distances shall be based on the 85th percentile speed, which is the speed below which 85% of the vehicles are traveling.
- [3] At intersections where the gradient exceeds 3%, a leveling area of not less than 100 feet is required. Refer to § 325-4.14H(3).

G. Intersections.

- (1) Rights-of-way shall be laid out so as to intersect as nearly as possible at right angles. No right-of-way shall intersect any other right-of-way at less than 75°. Intersections of existing and proposed streets will not be allowed at intervals of less than 350 feet between center lines.
- (2) Property lines at right-of-way intersections shall provide for a curb radius on the roadway as indicated in Subsection F, Right-of-way widths and alignments. The curb radius at the intersection shall be as required by Subsection F and shall be sufficient to accommodate "WB-50" vehicle turning movements. In instances where streets of differing design speeds intersect, the smaller curb radius requirement shall be required.
- (3) In instances where there are state roadways involved, the curb radius required by state regulations shall be provided. The state-required radius is not required to be paved, but rather, the difference in area between the state and local radii requirements shall be provided in the form of granite rubble block pavement, as indicated in Figure 35.³⁰
- (4) Both the horizontal and vertical sight distance and stopping sight distance at intersecting roadways within a subdivision and at subdivision roadways intersecting with existing roadways shall be provided as indicated in Subsection F, Right-of-way widths and alignments.

³⁰. Editor's Note: Figure 35 can be obtained from the Planning Board office.

- (5) Horizontal and vertical stopping sight distances in all directions at existing and proposed intersections shall be noted on the plans.

H. Vertical alignment.

- (1) All changes in grade shall be connected by vertical curves of sufficient length to afford adequate sight distances as indicated in the following chart:

Design Speed (miles per hour)	Stopping Sight Distance (feet)
20	125
25	150
30	200

- (2) Vertical curves.

- (a) For crest vertical curves, the length in feet shall be computed from the following formulas:

When S is less than L, $L = \frac{AS^2}{100\{(\text{SQRT}(2h \text{ SUB } 1) + \text{SQRT}(2h \text{ SUB } 2)) \text{ SUP } 2\}}$

When S is greater than L, $L = 2S - \frac{200(\text{SQRT } h \text{ SUB } 1 + \text{SQRT } h \text{ SUB } 2) \text{ SUP } 2}{A}$

Where:

- L = Length of vertical curvature
 S = Sight distance
 A = Algebraic difference in grades, percent
 h_1 = 3.50 feet (eye of driver)
 h_2 = 2.0 feet (height of object)

- (b) For sag vertical curves, the length in feet shall be computed from the following formulas:

When S is less than L, $L = \frac{AS \text{ SUP } 2}{400 + 3.5S}$

When S is greater than L, $L = 2S - \frac{400 + 3.5S}{A}$

Where:

- L = Length of vertical curvature
 S = Sight distance
 A = Algebraic difference in grades, percent

- (c) Minimum length of a sag or crest vertical curve shall be 100 feet. All vertical curves shall show the following on the profiles:

[1] Point of vertical intersection (PVI) station and elevation.

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-4.14

§ 325-4.14

[2] High point or low point station and elevation.

- (3) The grade of any proposed street meeting another existing or proposed street within or adjacent to the subdivision shall not exceed 2% for a distance of not less than 100 feet, measured from the nearest edge of right-of-way of the other street.

I. Culs-de-sac.

- (1) The paved portion of culs-de-sac, whether temporary or permanent, shall not be less than 250 feet in length and not exceed 500 feet in length measured from the intersection (center line) of the nearest intersecting through street to the farthest end of the paved turnaround, and shall not provide access to more than seven lots.
- (2) Culs-de-sac, whether permanent or temporary, shall provide a turnaround at the closed end(s) having a property line diameter of 120 feet, a radius at the outer edge of traveled way of 47 feet, and a landscaped island in the center having a maximum radius of 15 feet. Islands shall be designed to allow for proper emergency vehicle and snowplow access. A "not a through street" sign shall be provided at the entrance to a cul-de-sac and its location shown on the subdivision plan. In the case of a temporary turnaround, the plan shall show an easement(s) to accommodate the specifications of this subsection. The frontage of lots abutting a temporary turnaround shall be measured along the permanent street right-of-way and not the "bulb" of the cul-de-sac. See detail (Figure 43).³¹ Any easement in any turnaround shown on a plan approved under the Subdivision Control Law,³² other than an easement appurtenant to a lot abutting the turnaround, shall terminate following the approval and recording of a plan showing extension of the roadway and the recording of a certificate by the Planning Board of the construction of such extension.
- (3) Provisions for future through access.
 - (a) All culs-de-sac, except those determined by the Planning Board to be permanent in nature, shall include a right-of-way running from the closed end(s) of the cul-de-sac to the terminus points as described below for purposes of providing future through access. The width of said right-of-way shall be equal to the right-of-way width of the cul-de-sac street. Said right-of-way shall be laid out and construction plans included as part of the subdivision plan. The land in the right-of-way shall be turned over to the Town of Norfolk as a gift of land prior to release of any lot in the subdivision.
 - (b) The terminus point of the right-of-way shall be both to any adjacent Town-owned conservation land and as follows:
 - [1] First, to any street which abuts the property line of the parcel being subdivided, other than the street which forms the intersection with the paved portion of the cul-de-sac;

31. Editor's Note: Figure 43 can be obtained from the Planning Board office.

32. Editor's Note: See MGL c. 41, §§ 81K through 81GG.

- [2] Second, if Subsection I(3)(b)[1] is not applicable, to any right-of-way or street easement of at least 20 feet right-of-way width which abuts the property line of the parcel being subdivided;
 - [3] Third, if Subsection I(3)(b)[1] and [2] are not applicable, to the point on the property line of the parcel being subdivided which is closest to the closed end of any cul-de-sac existing on any adjacent parcel;
 - [4] Fourth, if Subsection I(3)(b)[1], [2] and [3] are not applicable, to the point on the property line of the parcel being subdivided which is closest to any existing through street on any adjacent parcel, other than the street which forms the intersection with the parcel portion of the cul-de-sac;
 - [5] Fifth, if Subsection I(3)(b)[1], [2], [3] and [4] are not applicable, to the point on the property line of the parcel being subdivided which is closest to any adjacent landlocked (i.e., without adequate frontage) parcel; and
 - [6] Sixth, if Subsection I(3)(b)[1], [2], [3], [4] and [5] are not applicable, to the point on the property line of the parcel being subdivided which is closest to the largest adjacent buildable parcel of land.
- (c) For purposes of this regulation, references to the point "closest" shall exclude wetlands. The easement created by this subsection shall, to the extent practicable, be laid out to exclude lakes, ponds, wetlands, woodlands, watercourses and steep terrain.
- (4) An easement for access and maintenance shall also be provided from all culs-de-sac to any adjacent Town-owned conservation land. Such easements shall have a minimum width of 20 feet.
 - (5) The surface slope of the traveled way within the turnaround required under Subsection I(2) shall not exceed 4%.
 - (6) Cul-de-sac plantings.
 - (a) The applicant shall submit a landscape plan for the central portion of a cul-de-sac. The following are permitted:
 - [1] Trees.
 - [2] Planting with ground cover and spreading mulch between plants for weed control.
 - [3] Planting perennial grass by either sod or seed.
 - [4] Planting ornamental shrubs of a type acceptable to the Board.
 - [5] Retaining existing vegetation with the approval of the Board.

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-4.14

§ 325-4.17

- (b) The standards of the American Nursery and Landscape Association and the specifications of the Massachusetts Association of Landscape Professionals shall apply to landscaping subject to these regulations.³³
- J. Half streets. A "half street" is a portion of a proposed street running astride a common boundary line, said portion being within a subdivision under consideration. Half streets shall be prohibited.
- K. Sight distances at intersections. Horizontal and vertical sight distances in all directions at intersections shall be noted on the plans. Sight distances at intersections shall be provided as indicated in Subsection F, Right-of-way widths and alignments.
- L. Stopping sight distance. Stopping sight distance is the sum of two distances: the distance traversed by the vehicle from the instant the driver sights an object necessitating a stop to the instant the brakes are applied and the distance required to stop the vehicle from the instant brake application begins. For all stopping sight distance calculations, the height of the driver's eye is considered to be 3.5 feet above the road surface and the height of the object is considered to be 2.0 feet above the road surface in accordance with AASHTO policy. Stopping sight distances shall be provided as indicated in Subsection F, Right-of-way widths and alignments.

§ 325-4.15. Slopes.

Excavated cuts shall have a maximum slope of three horizontal to one vertical; cut slopes greater than 15 feet in height shall be benched and approved by the Board.

§ 325-4.16. Driveways.

Driveway locations shall be shown on the plan. All driveways shall be designed and constructed starting from the gutter line. The slope of the driveway shall be upwards toward the sidewalk to be constructed or to a point allowing for a sidewalk to be constructed in the future. Sloping driveways downward towards the right-of-way line is prohibited. A detail and cross section of the proposed driveway shall be indicated on the plans. See driveway detail in "Town of Norfolk Regulations for Street Excavations," as most recently amended.

§ 325-4.17. Street cross sections.

- A. Cross sections shall be drawn for all proposed roadways and existing roadways to be reconstructed. They shall be drawn at fifty-foot stations and at all proposed culverts at a scale of eight feet to the inch horizontally and vertically.
- B. Sufficient space is to be provided between cross sections to allow the proposed roadway template to be drawn without overlapping the adjoining sections.
- C. The following shall be shown on the sections:
- (1) Edges of existing roads, drives, walks, bordering vegetated wetlands, lawns, etc.

33. Editor's Note: Amendment pending.

- (2) Existing walls, poles, hydrants, mail boxes, etc.
- (3) All existing trees 12 inches and over noting the diameter, species of tree, station and offset.
- (4) Elevation, station, and description of wells, cesspools, and on-site septic systems, and a description and elevation of sills of buildings.
- (5) Existing culverts shall be shown as long dashed lines.
- (6) Water elevations shall be shown as a dashed line with elevation and date taken.
- (7) Approximate elevation of the top of rock for above and below existing grade.
- (8) The profile grade is to be noted on each template. The template shall consist of the finished grade and the proposed subgrade line baseline, and right-of-way lines.
- (9) Stations shall be located below the cross section and increase going up the plan sheet.
 - (a) Guide vertical elevations and horizontal distances in both directions shall be shown on each cross section.
 - (b) A summary table shall be shown with the cross sections showing the cubic yards between the stations for cut, fill, muck excavation, and rock excavation, and gravel borrow. A total for each category shall be shown along with the final amount of cubic yards of earth to be removed from the site or gravel borrow to be brought into the site.
- (10) Limits of rock and muck excavation.
- (11) Planimeter readings are to be shown to the right of each template using the abbreviations C = Cut, F = Fill, M = Muck Excavation, R = Rock Excavation, GB = Gravel Borrow.

§ 325-4.18. Walkways on existing roadways.

- A. Walkways shall be required on the applicant's property along all existing public ways which immediately abut the proposed subdivision for the purpose of assuring safe and adequate pedestrian access to and from the subdivision. Sidewalks shall not be interrupted by steps or abrupt changes in level greater than 1/2 inch.
- B. In general, walkways on existing roadway (layouts) shall be constructed with minimum change to the natural rural appearance of the street. Walkways shall follow the natural contours of the land and preserve both trees and shrubs to the extent possible to comply with the guidelines in § 325-5.2J.
- C. To facilitate review of the proposed plan by the appropriate authorities, the applicant shall stake the side line of the proposed walkway at fifty-foot intervals.
- D. The width of the walkway shall be five feet minimum. Where such a walk cannot be constructed respecting the existing contours and natural features of the land such as

trees, shrubs, stone walls, etc., a minimum width of three feet shall be allowed with prior written approval of the Planning Board.

§ 325-4.19. Stormwater management system.

A. General.

- (1) The stormwater management system shall collect, convey, treat, and recharge stormwater in a manner which will ensure protection of property, preservation of water resources, minimization of environmental impacts, and protection of public and environmental health by providing adequate protection against pollution, flooding, siltation and other problems caused by poor drainage. The stormwater management system shall comply with the following:
 - (a) Adhere to standard engineering practice.
 - (b) Conform to the stormwater management standards of Subsection C.
 - (c) Conform to the current edition of the Massachusetts Department of Environmental Protection's "Massachusetts Stormwater Handbook."
 - (d) Maintain predevelopment drainage patterns and predevelopment hydrological conditions in groundwater and surface waters as nearly as possible.
 - (e) Include a strategy for source control and best management practices (BMPs).
 - (f) Recharge runoff from pervious surfaces.
 - (g) Recharge roof water in separate facilities.
 - (h) Provide treatment train for the water quality volume that reduces the contaminant burden in stormwater to the maximum extent possible (MEP) using best management practices (BMPs).
 - (i) Maintain or enhance surface water quality and groundwater quality.
 - (j) Protect or enhance resource areas subject to regulation under the Massachusetts Wetlands Protection Act (MGL c. 131, § 40) (WPA).
 - (k) Utilize low-impact design where practicable.
 - (l) Collect and convey surface water for applicable design storms.
 - (m) Avoid any increase in the peak rate or volume of stormwater discharge at the property boundary for each storm event specified hereinafter.
 - (n) Implement an operation and maintenance (O&M) plan that complies with DEP guidelines and ensures proper function of the stormwater management system and provides an acceptable future maintenance burden.
 - (o) Provide a sufficient level of health and environmental protection during construction.

- (2) Refer to the construction requirements, standards and requirements of § 325-5.3.
- B. Submissions. Design of the stormwater management system shall be prepared by a Massachusetts registered professional engineer and all submitted plans, calculations, and reports shall bear the engineer's signature and seal. Deep hole observations shall be conducted under the direction of a Massachusetts licensed soil evaluator. Submissions shall comply with the minimum content requirements as set forth hereinafter:
- (1) Plans, profiles, and sections conforming to the requirements of these rules and regulations showing the stormwater management system and existing and proposed buildings, surface grades, surface treatments, and utilities.
 - (2) A stormwater management report, including calculations and a detailed narrative describing predevelopment and post-development conditions, the design and function of the stormwater management system, and the procedures and methods used for analysis.
 - (3) Predevelopment and post-development watershed plans showing existing and proposed buildings, surface grades, surface treatments, catch basins and culverts, watercourses, watershed and catchment boundaries, flow lines, Natural Resources Conservation Service (NRCS) soil boundaries and hydrologic soil groups.
 - (4) Pipe flow calculations based upon the Rational Formula, providing pipe diameter, inverts, slope, velocity (flowing full), length, capacity, design flow, and v/c ratio.
 - (5) Stormwater basin design calculations shall be provided based upon TR-20.
 - (6) Logs of soil borings or deep observation holes.
 - (7) Soil permeability test data.
 - (8) Groundwater monitoring data.
 - (9) Plans showing the limits of all resource areas subject to regulation under the WPA based upon a field survey of points established pursuant to an order of resource area delineation or an order of conditions issued within two years of the date of submission.
 - (10) An operation and maintenance plan.
 - (11) Organization documents for the party responsible for operation and maintenance of the stormwater management system which shall include details of the mechanism used to provide funding in perpetuity.
- C. Standards. The stormwater management system shall comply with the standards set forth hereinafter (and more fully defined in the current version of the Massachusetts Stormwater Handbook).
- (1) Standard 1. No new stormwater conveyances (e.g., outfalls) may discharge untreated stormwater directly to or cause erosion in wetlands or waters of the Town of Norfolk.

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-4.19

§ 325-4.19

- (2) Standard 2. Stormwater management systems shall be designed so that post-development peak discharge rates do not exceed predevelopment peak discharge rates.
- (3) Standard 3. Loss of annual recharge to groundwater shall be eliminated or minimized through the use of infiltration measures, including environmentally sensitive site design, low-impact development techniques, stormwater best management practices and good operation and maintenance. At a minimum, the annual recharge from the post-development site shall approximate the annual recharge from the predevelopment conditions based on soil type. This standard is met when the stormwater management system is designed to infiltrate the required recharge volume as determined in accordance with the Massachusetts Stormwater Handbook.
- (4) Standard 4. Stormwater management systems shall be designed to remove 80% of the average annual post-construction load of total suspended solids (TSS). This standard is met when:
 - (a) Suitable practices for source control and pollution prevention are identified in a long-term pollution prevention plan and thereafter are implemented and maintained;
 - (b) Structural stormwater best management practices are sized to capture the required water quality volume determined in accordance with Massachusetts Stormwater Handbook; and
 - (c) Pretreatment is provided in accordance with the Massachusetts Stormwater Handbook.
- (5) Standard 5. For land uses with higher potential pollutant loads, source control and pollution prevention shall be implemented in accordance with the Massachusetts Stormwater Handbook to eliminate or reduce the discharge of stormwater runoff from such land uses to the maximum extent practicable. If through source control and/or pollution prevention all land uses with higher potential pollutant loads cannot be completely protected from exposure to rain, snow, snow melt and stormwater runoff, the proponent shall use the specific structural stormwater BMPs as provided in the Massachusetts Stormwater Handbook. Stormwater discharges from land uses with higher potential pollutant loads shall also comply with the requirements of the Massachusetts Clean Waters Act, MGL c. 21, §§ 26 through 53, and the regulations promulgated thereunder at 314 CMR 3.00, 314 CMR 4.00 and 314 CMR 5.00.
- (6) Standard 6. Stormwater discharges within the Zone II or Interim Wellhead Protection Area of a public water supply and stormwater discharges near or to any other critical area require the use of the specific source control and pollution prevention measures and the specific structural stormwater best management practices determined by the Department to be suitable for managing discharges to such area as provided in the Massachusetts Stormwater Handbook. A discharge is near a critical area if there is a strong likelihood of a significant impact occurring to said area, taking into account site-specific factors. Stormwater discharges to outstanding resource waters and special resource waters shall be removed and set

back from the receiving water or wetland and receive the highest and best practical method of treatment. A "stormwater discharge" as defined in 314 CMR 3.04(2)(a)1 or (b) to an outstanding resource water or special resource water shall comply with 314 CMR 3.00 and 314 CMR 4.00. Stormwater discharges to a Zone I or Zone A are prohibited, unless essential to the operation of the public water supply.

- (7) Standard 7. A redevelopment project is required to meet the following stormwater management standards only to the maximum extent practicable: Standard 2, Standard 3, and the pretreatment and structural stormwater best management practice requirements of Standards 4, 5 and 6. Existing stormwater discharges shall comply with Standard 1 only to the maximum extent practicable. A redevelopment project shall also comply with all other requirements of the stormwater management standards and improve existing conditions.
- (8) Standard 8. A plan to control construction related impacts including erosion, sedimentation and other pollutant sources during construction and land disturbance activities (construction period erosion, sedimentation and pollution prevention plan) shall be developed and implemented.
- (9) Standard 9. A long-term operation and maintenance plan shall be developed and implemented to ensure that the stormwater management system functions as designed.
- (10) Standard 10. All illicit discharges to the stormwater management system are prohibited.

D. Geotechnical testing.

- (1) Soil borings logs shall be provided to classify soils within proposed surface stormwater basins and subsurface absorption systems and throughout the drainage study area. Logs of deep observation holes shall be provided within surface stormwater basins and subsurface absorption systems; a minimum of one deep observation hole log shall be provided for each 5,000 square feet of basin area or a minimum of two soil logs per basin, whichever is greater. One boring shall extend to impervious strata or to refusal. The other boring shall extend to the elevation of the design bottom elevation of the basin and shall be used to perform a bore hole permeability test. Additional soil boring or deep observation hole logs shall be provided to classify soils throughout the drainage study area, particularly in locations where available Natural Resources Conservation Service mapping is indeterminate or classifies soils as Udorthents.³⁴
- (2) In situ field bore hole permeability test data shall be provided within surface stormwater basins and subsurface absorption systems; a minimum of one permeability test shall be provided for each location. For larger surface stormwater basins and subsurface absorption systems, additional permeability tests may be required as determined by the Board. Permeability testing shall be witnessed by the Board of Health agent or the Planning Board agent. If permeability testing is desired to be performed in soils of low permeability,

34. Editor's Note: Amendment pending.

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-4.19

§ 325-4.19

laboratory tests for hydraulic conductivity shall be performed on undisturbed samples by the Falling Head Permeability Test using flexible membrane triaxial test cells with back pressure (U.S. Army Corps of Engineers Engineering Manual EM 1110-2-1906, Appendix VII).

- (3) A minimum of one monitoring well shall be installed within each stormwater basin. Monitoring wells shall extend to a depth of 10 feet below existing grade or four feet below the design elevation of the bottom of the stormwater basin whichever is deeper. The elevation of groundwater shall be recorded by a Massachusetts licensed soil evaluator, professional engineer, or professional land surveyor once in each of four months. When observations are taken during the months of May through December, the design groundwater elevation shall be adjusted to reflect spring high groundwater conditions using the Frimpter Method.

E. Hydrologic analysis.

- (1) The drainage study area shall encompass the project site and all tributary upgradient areas. The boundary of the drainage study area and the analysis points shall be the same for the predevelopment condition and the post-development condition.
 - (a) Predevelopment and post-development plans of the drainage study area shall show existing and proposed buildings, paved areas, and surface treatment for all open areas. The plans shall show existing and proposed elevations based upon one-foot contour intervals. The plans shall show existing and proposed catch basins and culverts, watercourses, watershed and catchment boundaries, and flow lines, Natural Resources Conservation Service (NRCS) soil boundaries and hydrologic soil groups.
 - (b) Times of concentration shall be determined based upon distance, slopes, and surface materials. A minimum time of concentration to be used shall be 0.1 hour.
- (2) Pipe flow calculations shall be provided for the closed drain system based upon the Rational Formula as follows:

- (a) Rational Formula.

$$Q = CiA$$

Where:

- | | | |
|---|---|---------------------------------------|
| Q | = | Peak rate of flow |
| C | = | Coefficient of runoff |
| i | = | Rainfall intensity in inches per hour |
| A | = | Area of watershed in acres |

- (b) A weighted coefficient of runoff "C" is to be determined for each incremented drainage area based on the following minimum values:

- [1] Roofs and pavement: 0.90.
- [2] Lawns, flat (2% maximum), sandy soil: 0.10.

- [3] Lawns, average (2% to 7%), sandy soil: 0.12.
- [4] Lawns, steep (>7%), sandy soil: 0.18.
- [5] Lawns, flat (2% maximum), heavy soil: 0.15.
- [6] Lawns, average (2% to 7%), heavy soil: 0.20.
- [7] Lawns, steep (>7%), heavy soil: 0.30.
- [8] Woodland: 0.20.
- [9] Wetlands, ponds, basins: 0.90.

(c) Rainfall intensity.

- (3) Inlets shall provide capacity to accommodate the design storm. Spread shall not encroach on travel lanes of streets or the top of curbs or berms.
- (4) Stormwater basin analysis shall be based upon Technical Release 20 (TR-20) as follows:

(a) Rainfall.

- [1] Two-year-frequency storm event: 3.2 inches.
- [2] Ten-year-frequency storm event: 4.8 inches.
- [3] Twenty-five-year-frequency storm event: 5.5 inches.
- [4] Fifty-year-frequency storm event: 6.2 inches.
- [5] One-hundred-year-frequency storm event: 6.8 inches.

(b) Curve number (CN). Weighted curve numbers shall be calculated using the following values. For cover types not stated, refer to TR-20.

Hydrologic soils group	A	B	C	D
Lawns, poor	68	79	86	89
Lawns, fair	49	69	79	84
Lawns, good	39	61	74	80
Impervious areas, pavement, roofs	98	98	98	98
Woods, poor	45	66	77	83
Woods, fair	36	60	73	79
Woods, good	30	55	70	77
Wetlands, ponds, basins	8	98	98	8

(c) Curve numbers for conditions not included in the above shall be obtained from TR-20 documentation.

F. Design storms.

- (1) Stormwater runoff shall be analyzed for the two-year-frequency storm event, ten-year-frequency storm event, twenty-five-year-frequency storm event, fifty-year-frequency storm event, and 100-year-frequency storm event.
- (2) The design storm for all components of the closed stormwater collection system, including catch basin grates and other inlets, drain lines, and the bypass capacity of separator structures, is the twenty-five-year-frequency storm event.
- (3) The design storm for cross culverts and devices protecting occupied buildings is the 100-year-frequency storm event.
- (4) The design storm for surface stormwater basins and subsurface absorption systems is the 100-year-frequency storm event. The runoff for design of surfaces providing sheet flow, swales, and drainage ditches that convey runoff to surface stormwater basins and subsurface absorption systems is the excess runoff resulting from storm events greater than the twenty-five-year-frequency storm event but less than the 100-year-frequency storm event.
- (5) The required recharge volume is the volume resulting from multiplying the factors set forth below times the total post-development impervious surface within the project area for each Natural Resources Conservation Service Hydrologic Soil Group as set forth hereinafter.³⁵

Hydrologic Soil Group	Required Recharge
HSG A Soil	0.60 inch of runoff
HSG B Soil	0.35 inch of runoff
HSG C Soil	0.25 inch of runoff
HSG D Soil	0.10 inch of runoff

- (6) The water quality volume to be treated is 1.0 inch of runoff multiplied by the total post-development impervious surface within the project area for discharges to critical areas and 0.5 inch of runoff multiplied by the total post-development impervious surface within the project area for discharges to all other areas. Discharges to critical areas include systems accommodating runoff from land uses with higher potential pollutant loads, discharges to areas with infiltration rates greater than 2.4 inches per hour, and discharges to a designated Zone II.

G. Design criteria.

- (1) The closed stormwater collection system shall accommodate the design storm without surcharging and shall provide a free discharge to stormwater basins above the maximum 100-year storm elevation. All components of the system shall accommodate the design storm, including catch basin grates and other inlets, drain lines, and the bypass components of water quality structures.

35. Editor's Note: Amendment pending.

- (a) Cross culverts and devices protecting occupied buildings shall accommodate the design storm event without surcharging.
 - (b) Surface stormwater basins and subsurface absorption systems shall have the volume to accommodate runoff providing for no increase in the peak rate of discharge or the volume of discharge at the project boundary for the two-year-frequency storm event, ten-year-frequency storm event, twenty-five-year-frequency storm event, fifty-year-frequency storm event, and 100-year-frequency storm event. Base flow from under drains shall be included in the design flow. Inflow volume shall not be decreased based upon runoff captured by roof water recharge systems.
 - (c) Surfaces providing sheet flow, swales, and drainage ditches conveying excess runoff to surface stormwater basins and subsurface absorption systems shall accommodate runoff from storm events exceeding the capacity of the closed stormwater collection system but less than the 100-year-frequency storm event.
 - (d) Recharge facilities accommodating runoff from paved surfaces shall be provided over broad areas of the site and shall recharge the design storm within 72 hours following cessation of precipitation. Separate roof water recharge facilities shall be provided in proximity to the building served to promote recharge over broad areas of the site and shall recharge the design storm within 72 hours following cessation of precipitation. Recharge facilities accommodating runoff from paved surfaces in combination with recharge facilities accommodating runoff from building roofs shall accommodate the required recharge volume.
 - (e) Water quality components shall be provided to remove 80% of the total suspended solids (TSS) for the water quality volume. Water quality components include deep catch basin sumps, water quality structures, and sediment forebays.
 - (f) Water quality components shall abate phosphorous loadings in stormwater in accordance with the Massachusetts Stormwater Handbook.
 - (g) Inflows and outflows across the project boundary shall be maintained. There shall be no concentration of flow at any point on the project boundary unless a downgradient easement is provided extending to an existing watercourse or wetland.
 - (h) There shall be no new point source discharge within 100 feet of a bordering vegetated wetland. Surface stormwater basins and subsurface absorption systems shall not be located within bordering vegetated wetlands. Stormwater basin discharges shall be above any 100-year jurisdictional flood elevation. Surface stormwater basins and subsurface absorption systems shall not be located within floodplains unless compensatory storage is provided.
- (2) The closed stormwater collection system shall consist of precast concrete drain manholes, precast concrete catch basins, and precast concrete water quality structures connected by straight segments of drain line.

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-4.19

§ 325-4.19

- (a) Cross culverts shall consist of straight segments of Class IV reinforced concrete pipe with gasketed joints.
- (b) The velocity of drain lines shall be determined based upon Manning's equation:

$$1.486 V = n R^{2/3} S^{1/2}$$

Where:

V is the cross-sectional average velocity (ft/s)

k is a conversion constant equal to 1.486 for U.S. customary units

n is the Manning coefficient of roughness (independent of units)

R is the hydraulic radius (feet)

S is the slope of the drain line (feet/foot)

- (c) The capacity of drain lines shall be based upon the discharge formula:

$$Q = AV$$

Where:

Q is the volume of flow in cubic feet per second

A is the cross-section area of the pipe

V is the cross-sectional average velocity (ft/s)

- (d) The coefficient of roughness (Manning's n) for reinforced concrete pipe shall be 0.013 and for smooth interior wall high-density polyethylene (HDPE) pipe shall be 0.012.
- (e) The minimum velocity (flowing full) for all drain lines shall be 2.5 feet per second and the maximum velocity (flowing full) shall be 12.0 feet per second flowing full.
- (f) Drain lines shall be Class IV reinforced concrete pipe with O-ring seal joints conforming to ASTM C443. Corrugated polyethylene pipe with smooth interior walls conforming to AASHTO M294, Type S with O-ring seal joints may be used outside streets for systems that will remain forever private. The minimum pipe size shall be 12 inches in diameter. In instances where pipe diameter increases, the change shall be provided at a manhole and the crown of the inflow pipe shall match the crown of the outflow pipe.
- (g) Catch basins shall be five-foot inside diameter and shall have a minimum four-foot-deep sump. Catch basins shall be provided at intervals not to exceed 300 feet on center.
- (h) Separator structures having capacity to treat the water quality volume shall be provided upgradient of all surface stormwater basins and subsurface absorption systems and shall have a bypass capability for larger storms. Separator structures must accommodate cleaning with a clamshell bucket. Separator structures requiring use of a vacuum hose for cleaning shall not be used.

- (i) Pipe shall have the structural strength to accommodate depth of bury or surface loads. All drainage structures shall accommodate AASHTO SH20-44 loadings.
- (3) Roof water recharge systems, surface stormwater basins and subsurface absorption systems be located in areas of permeable soil where there is a minimum of four feet of naturally occurring permeable soil between the bottom of the separate roof water recharge system, surface stormwater basin, or subsurface recharge system and impervious soils or bedrock. A minimum separation of two feet shall be provided the bottom of the separate roof water recharge system, surface stormwater basin, or subsurface recharge system and seasonal high groundwater. Design infiltration rates for roof water recharge systems, surface stormwater basins and subsurface absorption systems shall be either the value obtained from permeability tests of Subsection D or the values set forth in the following table, whichever is less.

Texture Class	NRCS Hydrologic Soils Group	Design Infiltration Rate (inches per hour)
Sand	A	8.27
Loamy sand	A	2.41
Sandy loam	B	1.02
Loam	B	0.27
Silt loam	C	0.52
Sandy clay loam	C	0.17
Clay loam	D	0.09
Silty clay loam	D	0.06
Sandy clay	D	0.05
Silty clay	D	0.04
Clay	D	0.02

- (4) Separate roof water recharge systems shall be provided, having sufficient volume to accommodate one inch of runoff from roofs. Roof water recharge systems shall be located in areas of permeable soil. Where roof water recharge facilities are located within hydrologic soils group (HSG) D soils, dry wells at the same elevation interconnected with equalizing pipes or linear systems of galleys shall be used.
- (5) Surface stormwater basins.
 - (a) Surface stormwater basins, including retention basins, detention basins, and basins providing both retention and detention, shall be designed with the

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-4.19

§ 325-4.19

following objectives to be considered: hydraulic function, safety, maintenance, aesthetics, and when required, water quality.

- (b) Surface stormwater basin(s) shall be designed for aesthetics as well as function by providing a naturalistic free-form layout and attractive plantings.
- (c) Surface stormwater basins may be designed as detention basins, retention basins, or combined detention/retention basins, provided that the design requirement that there be no increase in the peak rate of stormwater discharge and no increase in the volume of stormwater discharge at the property line is achieved by the overall stormwater management system. All detention basins, retention basins, or combined detention/retention basins shall be located in areas of pervious soil and shall be designed to empty such that the required design volume is available within 72 hours following the cessation of precipitation.
- (d) The design elevation of the bottom of the basins shall be set to provide a minimum two-foot separation between the bottom of the basin and spring high groundwater. A minimum of four or more feet of naturally occurring permeable soil shall be provided between the bottom of the basin and impervious soil or bedrock.
- (e) Details of inlet and outlet control structures and the infiltration system at the bottom of the basin shall be provided.
- (f) One foot of freeboard shall be provided above the 100-year design elevation of the basin.
- (g) An emergency spillway above the 100-year design elevation of the basin shall be provided for all basins that provides an unencumbered hydraulic connection and directs excess flow in a manner that avoids damage to public and private property and wetland resource areas.
- (h) Stormwater basin side slopes shall have a maximum slope of a three horizontal to one vertical. The Board reserves the right to limit the depth of basins to the twenty-five-year design water surface to four feet maximum. The Board reserves the right to require forty-two-inch-high nonclimbable fencing surrounding the basin for safety based upon the nature of on-site and neighboring land uses.
- (i) Basin embankments having a height of greater than four feet between the required freeboard elevation and finished grade exterior to the basin shall require geotechnical testing and an embankment design prepared by a Massachusetts geotechnical professional engineer. Sections through such embankments shall be provided and shall show slopes, impervious cores, and surface armoring.
- (j) Infiltration systems within detention/retention basins are required in the bottom of basins. Frames and grates shall be placed six inches above the basin floor to allow sediment to settle.

- (k) Surface stormwater basins, including surrounding maintenance access berms, shall be provided on separate lots not part of any building lot. A ten-foot-wide minimum access and maintenance easement shall extend from the public way to the stormwater basin lot.
- (l) A vehicle-accessible level berm for maintenance access shall be provided, surrounding each surface retention/detention basin or underground leaching structure. The level berm shall extend for a minimum of 15 feet (or the width recommended in the current edition of the Massachusetts Stormwater Handbook if greater) beyond the required freeboard line on the side slope of surface retention/detention basins and 15 feet beyond the structure or distribution piping of underground leaching basins.
- (m) Security fencing or other effective measures shall be provided surrounding surface stormwater basins and subsurface absorption systems. Guardrail shall be provided for basins in proximity to vehicular areas.
- (n) To facilitate screening of the stormwater basin, a tree easement having a minimum width of 10 feet shall be provided around surface stormwater basins and subsurface absorption systems located adjacent to and outside the vehicle accessible level berm. Required plantings within the tree easement consist of evergreen trees planted at a maximum of 15 feet on center in each row. Two rows are required that are staggered to enhance screening. A single row of evergreen shrubs having minimum height of six feet at maturity shall surround the trees. Trees shall be spruce or fir and have a minimum height of eight feet in height at the time of planting.
- (o) The edge of surface stormwater basins shall be measured at the required freeboard elevation. Surface stormwater basins shall comply with minimum setbacks as follows:
 - [1] Property lines: 25 feet.
 - [2] Front setback: 100 feet.
 - [3] Slab on grade buildings: 25 feet.
 - [4] Building cellars or basements: 100 feet.
 - [5] Street intersections: 200 feet.
- (6) Subsurface recharge systems.
 - (a) Subsurface absorption systems shall be designed with the following objectives to be considered: hydraulic function, safety, and maintenance.
 - (b) Subsurface absorption systems shall meet the design requirement that there be no increase in the peak rate of stormwater discharge and no increase in the volume of stormwater discharge at the property line. All subsurface absorption systems shall be located in areas of pervious soil and shall be designed to empty such that the required design volume is available within 72 hours following the cessation of precipitation.

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-4.19

§ 325-4.19

- (c) The design elevation of the bottom of the system shall be set to provide a minimum two-foot separation between the bottom of the basin and spring high groundwater. A minimum of four or more feet of naturally occurring permeable soil shall be provided between the bottom of the basin and impervious soil or bedrock.
- (d) An emergency overflow shall be provided for all systems that directs excess flow in a manner that avoids damage to public and private property and wetland resource areas.
- (e) Subsurface absorption systems shall consist of precast concrete structures capable of supporting HS20-44 loadings. High-density polyethylene (HDPE) recharge systems capable of supporting HS20-44 loadings may be used for systems that will remain forever private. Subsurface absorption systems shall be embedded in a minimum one-foot-thick layer of double-washed 3/4 inch to 1 1/2 inch stone on the top and sides. The top and sides of the stone shall be surrounded by filter fabric.
- (f) The treatment train shall provide for 80% total suspended solids removal prior to inflow into the subsurface absorption system.
- (g) Subsurface absorption systems serving land subdivisions shall be provided on separate lots not part of any building lot. A ten-foot-wide minimum access and maintenance easement shall extend from the public way to the stormwater basin lot.
- (h) To facilitate maintenance, each structure shall be provided with a twenty-four-inch diameter frame and cover adjusted to finished grade at the inlet and outlet. Additional access covers shall be provided such that no portion of any subsurface recharge systems shall be more than 40 feet from an access cover.
- (i) The edge of subsurface absorption systems shall be measured at the outer edge of washed stone or the outer wall of the recharge structure, whichever extends further outward. Subsurface absorption facilities shall comply with minimum setbacks as follows:
 - [1] Property lines: 25 feet
 - [2] Slab on grade buildings: 25 feet
 - [3] Building cellars or basements: 100 feet

H. Mounding.

- (1) A mounding analysis is required when the vertical separation from the bottom of an exfiltration system to seasonal high groundwater is less than four feet and the recharge system is proposed to attenuate the peak discharge from a ten-year or higher twenty-four-hour storm. The mounding analysis must demonstrate that the required recharge volume is fully dewatered within 72 hours. The mounding analysis must also show that the groundwater mound that forms under the recharge system will not break out above the land or increase the water elevation

in bordering vegetated wetlands or open water areas within the seventy-two-hour evaluation period.

- (2) A mounding analysis is also required when recharge is proposed at or adjacent to a site classified as contaminated, that was capped in place, or that has an activity and use limitation (AUL) that precludes inducing runoff to the groundwater, pursuant to MGL c. 21E and the Massachusetts Contingency Plan, 310 CMR 40.00; or is a solid waste landfill pursuant to 310 CMR 19.00; or groundwater from the recharge location flows directly toward a solid waste landfill or MGL c. 21E site. In this case, the mounding analysis must determine whether infiltration of the required recharge volume will cause or contribute to groundwater contamination.
- (3) The Hantush (Hantush 1967; see reference for Standard 3) or other equivalent method may be used to conduct the mounding analysis; however, the Planning Board may require use of a numeric model for larger systems or where required to accurately model groundwater conditions.

I. Off-site discharge.

- (1) In instances where no lots can be developed within a subdivision because no naturally occurring soils are found within the project site which would allow recharge of stormwater within 72 hours, the applicant may petition to allow off-site discharge of stormwater. The Planning Board may waive applicable requirements of § 325-4.19, provided that after due consideration, waiver of strict compliance with the provisions of § 325-4.19 is in the public interest.
- (2) Runoff may be conveyed to surface stormwater basins or subsurface absorption systems on contiguous properties that fully the off-site surface stormwater basins or subsurface absorption systems have sufficient capacity to attenuate the increase in peak rate and volume. The hydrologic analysis shall establish a design point at the outlet of the surface stormwater basins or subsurface absorption systems. Permanent easements shall be furnished, encompassing all off-site stormwater management facilities and providing proper access for maintenance.
- (3) Runoff may be discharged to the municipal storm drain system, provided that the off-site connection conforms to the requirements set forth herein. Detention basins are provided on the project site having sufficient capacity to limit the post-development peak rate of stormwater discharge to the municipal system such that it is no greater than the predevelopment peak rate of stormwater discharge to the municipal system. Any increase in the volume of stormwater runoff discharged to the municipal storm drain system will not cause erosion or increase flooding or ponding of water in a manner that would damage properties or wetland resource areas. All off-site components of the receiving municipal storm drain system shall have sufficient excess capacity such that they can accommodate runoff from the project site, plus all runoff from full build out of all properties in its existing service area for the twenty-five-year-frequency storm event without surcharging. The Board of Selectmen may allow the connection and may as a condition of allowing the connection impose a user fee to be paid by the applicant.

§ 325-4.20. Uniform street numbering system.

A. Purpose:

- (1) To establish a uniform system of numbering primary buildings.
- (2) To promote efficiency in locating primary buildings.
- (3) To provide more expedient emergency response.
- (4) To provide a consistent system to establish mailing addresses.
- (5) To identify the locations and names of all streets and roads in the Town of Norfolk.

B. Properties affected. All primary buildings within the boundaries of the Town of Norfolk shall hereafter be identified by reference to the uniform numbering system. This section shall not apply to the display of date-of-origin numbers for historic buildings, provided that they are displayed so as not to be confused with the assigned street numbers.

C. Numbering system. The uniform numbering system has been developed for all primary buildings based on the following process:

- (1) For purposes of establishing street numbers, a "street" shall be considered any accessway, whether private or public, which serves two or more primary buildings or building lots.
- (2) The starting point of each street is generally determined by the proximity of its starting point to a main Town road. The sequence of numbers advances as the street proceeds from its designated starting point.
- (3) All primary buildings on the left side of the street will have odd numbers.
- (4) All primary buildings on the right side of the street will have even numbers.
- (5) One odd and one even number will be assigned to each fifty-foot interval of road frontage. Possible exceptions to this rule include densely developed or subdivided areas where numbers will be assigned on the basis of existing parcel configuration and/or development, and in rural areas where the interval may be greater than 50 feet as determined by the Planning Board or agent.
- (6) If a primary building has several possible numbers due to extensive road frontage or frontage on more than one road, the assigned number will be based on where the driveway intersects with the street.
- (7) Unused numbers will be held for future use to ensure against the need for renumbering.
- (8) Duplexes, multifamily complexes, mobile home parks, shopping centers, malls, condominiums, and cottage colonies shall be assigned only one number to the primary entrance onto the street. Units shall be internally numbered according to a logical pattern and manner as approved by the Planning Board.
- (9) Corner lots shall be assigned the appropriate street number which corresponds to the street from which the driveway originates.

- (10) Street names and building numbers shall be approved by the Planning Board and other appropriate state and local agencies.
 - (11) All primary buildings must display a numerical address as required by Chapter 134, Buildings, Numbering of, of the Town of Norfolk bylaws, as amended.
- D. New buildings and subdivisions.
- (1) Whenever a primary structure or occupied structure shall be erected or located in the Town of Norfolk, designated numbers shall be affixed upon said structure as provided by Chapter 134 of the Norfolk bylaws and this section. Within 90 days after commencement of the construction of a primary structure, the assigned street number shall be posted so as to be clearly visible from the street. Temporary numbers may be used until permanent numbers are posted consistent with Chapter 134. Temporary numbers shall be replaced as soon as practicable.
 - (2) Every subdivision or site plan submitted to the Planning Board for final approval shall show a street or building number of each lot, unit or structure as applicable. These numbers shall be reviewed and approved by the Planning Board or agent and shall be filed with the office of the Tax Assessor consistent with § 134-6.
- E. Penalty.
- (1) Any property owner who fails to comply with any provision of this section within 60 days of notification shall be subject to a penalty as specified in Chapter 134.
 - (2) Any property owner who affixes upon a structure any number other than that assigned to, or pursuant to, this section shall be subject to a penalty of \$250.
- F. Administration. Administration is performed by the Planning Board.

ARTICLE 5

Required Improvements for Subdivisions

§ 325-5.1. Basic requirements.

- A. The subdivider shall install all of the improvements itemized herein unless waived, in writing, by the Board. All work done under this article shall be done under the direction of the Planning Board.
- B. No aforementioned bond or covenant shall be released until full approval, in writing, of all work done under this article is received by the Planning Board from its designated inspector/observer.
- C. Referenced standards.
 - (1) The Massachusetts Highway Department Standard Specifications for Highways and Bridges, latest edition, as amended, and the Supplemental Specifications to the Standard Specifications for Highways and Bridges, latest edition, as amended.
 - (2) The Massachusetts Highway Department, Construction Standards, Latest Edition, as amended.

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-5.1

§ 325-5.2

- (3) Typical Cross Sections (Appendix C) and Typical Details (Appendix D) of these Subdivision Rules and Regulations.³⁶
 - (4) See also the regulations of other Town of Norfolk boards, commissions, committees, and departments.
- D. Staking prior to construction. Prior to the start of construction of any subdivision, the property shall be staked along both sides of the street right-of-way (or at an appropriate offset distance) at fifty-foot intervals. Finish grades shall be indicated on the stakes. Lot corners and any easements across lots that terminate at the street right-of-way shall also be staked. The Planning Board shall be given written notice that staking is complete at least one week prior to the start of construction.

§ 325-5.2. Streets and roadways.

A. Minimum widths and depths. The following minimum improvement standards shall be required (see Typical Cross Sections):³⁷

(1) Minimum width requirements (in feet).

Street Classification	Right-of-Way	Paved Traveled Way	Grass Strip***	Sidewalks on Outside of Grass Strip
Residential street	40*/50**	14*/24**	1 @ 8 1 @ 13	1 @ 5
Secondary street	50*/60**	16*/26**	2 @ 7	2 @ 5
Primary street	50*/60**	16*/28**	2 @ 11	2 @ 5

Cross slope for traveled way, grass strips, and sidewalks shall be 1/4 inch per foot.

* Based on one-way street with no on-street parking.

** Based on two-way street with no on-street parking.

*** Includes berm, edging or curb.

(2) Minimum depth requirements (in inches).

(a) Roadways.

Street Classification	Processed Gravel	Dense Graded Crushed Stone for Base	Binder Course	Finish Course
Residential street	12	4	2 1/2	1 1/2
Secondary street	15	4	2 1/2	2

³⁶. Editor's Note: Appendix C and Appendix D can be obtained from the Planning Board office.

³⁷. Editor's Note: Typical Cross Sections can be obtained from the Planning Board office.

Street Classification	Processed Gravel	Dense Graded Crushed Stone for Base	Binder Course	Finish Course
Primary street	18	4	3	2

(b) Sidewalks.

Street Classification	Processed Gravel	Binder Course	Finish Course
Residential street	12	1 1/2	1
Secondary street	12	1 1/2	1
Primary street	12	1 1/2	1

B. Clearing and grubbing.

- (1) Clearing and grubbing shall be done in accordance with the relevant provisions of Section 101 of the Massachusetts Highway Department Standard Specifications and Town of Norfolk bylaws. (See also Article 9, Earth Relocation/Removal.)
- (2) All excavation and embankment areas shall be first cleared of all stumps, brush, roots, boulders, debris, and like materials and disposed of off-site. All loam and topsoil within the excavation/embankment areas shall be removed and stockpiled for reuse within the subdivision.
- (3) Brush and stump disposal shall be in accordance with the most recent Board of Health and DEP policy and/or regulations.

C. Excavations. Excavations shall be done in accordance with the relevant provisions of Section 120, Excavation, of the Massachusetts Highway Department Standard Specifications and Town of Norfolk bylaws. When 500 cubic yards or more of earth materials are to be removed from the site or relocated within the site, an earth relocation/removal permit is required. (See also Article 9, Earth Relocation/Removal, for requirements and instructions.)

D. Embankments.

- (1) Construction of all embankment fill shall be done in accordance with the relevant provisions of Sections 120, 150, and 170 of the Massachusetts Highway Department Standard Specifications and Town of Norfolk bylaws and in accordance with the procedures described herein.
- (2) Fill material shall be approved suitable existing material obtained from on-site excavations and shall consist of solid, sound mineral aggregate. It shall be free from deleterious, organic, elastic or foreign matter and shall be adequately graded for satisfactory compaction into a stabilized soil structure.
- (3) Embankments shall not be constructed with material from rock or boulder excavations.

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-5.2

§ 325-5.2

- (4) Off-site fill material shall be gravel borrow conforming to Massachusetts Highway Department Material Specification M1.03.0, Type b. A certificate of compliance indicating the gradation and source of material shall be submitted and approved prior to delivery of any material to the site.
- (5) Fill for embankments shall be placed in uniform layers not exceeding 12 inches in loose measurement depth and compacted to not less than 95% of the maximum dry density as determined by the Standard AASHTO Test Designation T99 compaction test Method C at optimum moisture content. No fill material shall be placed, spread or compacted while the ground fill material is frozen or thawing or during inclement weather conditions. Fill material having excessive moisture content shall not be compacted until the material has been aerated by grading, harrowing or other methods to remove excessive moisture.

E. Gravel base.

- (1) The subgrade shall be brought to proper grade and compacted as shown on the profiles and in accordance with the approved cross section. No gravel base shall be placed until all earthwork and utility installation work has been completed.
- (2) Gravel for roadway base and sidewalk base shall be spread and compacted in layers not exceeding six inches in compacted measurement depth and in accordance with the approved cross section. Material shall be compacted to not less than 95% of the maximum dry density as determined by the Standard AASHTO Test Designation T99 compaction test Method C at optimum moisture content.
- (3) Construction of gravel base and binder courses shall be done in accordance with the relevant provisions of Sections 401 and 405 of the Massachusetts Highway Department Standard Specifications except the gravel base shall be placed in layers whose compacted thickness shall not exceed six inches.
- (4) The standard for a suitable one-foot gravel base beneath the bituminous concrete shall be Massachusetts Highway Department Material Specification M1.03.0 Type C which has a gradation of two-inch minus. A certificate of compliance indicating the gradation and source of material shall be submitted and approved prior to delivery of any material to the site. A sieve test of the materials shall be conducted with results provided prior to installation of same.

F. Dense-graded crushed stone for roadway base.

- (1) Construction of all dense-graded crushed stone for roadway base shall be done in accordance with the relevant provisions of Section 402 of the Massachusetts Highway Department Standard Specifications and in accordance with the procedures described herein.
- (2) Processed gravel for base shall conform to Massachusetts Highway Department Material Specification M2.01.7. A certificate of compliance indicating the gradation and source of material shall be submitted and approved prior to delivery of any material to the site.

- (3) A plan showing as-built surface grades of the completed dense-graded crushed stone layer shall be submitted to the Board for approval prior to installation of the bituminous concrete binder course. This survey shall consist of obtaining center-line and both gutter elevations at fifty-foot stations. In areas where the roadway gradient and cross slope do not agree with what is shown on the contact plans, the applicant shall reconstruct and resurvey those areas until the proper gradient and/or cross slope is placed and compacted until written authorization has been obtained from the Planning Board or its engineer on the Form K.³⁸
- G. Bituminous concrete pavement, temporary berm, sidewalks, and driveways.
- (1) Materials and construction methods of the bituminous concrete pavement, tack coat, sidewalks, and driveways shall conform to the relevant provisions of Sections 460 and 701 of the Massachusetts Highway Department Standard Specifications and in accordance with the procedures described herein. Pavement shall be placed and compacted in two courses, binder and finish. All driveways and curb cut ramps shall slope toward the roadway and end at the roadway gutter line. (See driveway detail in "Town of Norfolk Regulations for Street Excavations," as most recently amended.) Driveways shall commence their downward slope to the roadway from the right-of-way/street line and the ramps from the sidewalk. No driveways or ramps which slope away from the roadway will be accepted. Edging or curb (as applicable) shall be continued into the driveway/ramp cut to prevent erosion at the cut. A tack coat of bituminous material shall be applied by mechanical means immediately prior to installation of top course of pavement.
 - (2) A temporary berm shall be constructed on the roadway binder course to direct stormwater runoff to the closed drainage system until a permanent curb/berm is installed. The temporary berm shall be a bituminous concrete dribble berm. At steep grades (greater than 4%) and at low points, a temporary cape cod berm shall be used.
- H. Slant granite curbing. Sloped granite edging shall be required on both sides of all traveled ways and shall be set after the binder course is placed and before the top course is placed. A dribble berm and/or temporary cape cod berm, as appropriate, shall be installed at the time of binder course installation and shall be continuously maintained in working order until the final course of bituminous concrete is installed. Materials and construction methods shall conform to the relevant provisions of Massachusetts Highway Department Standard Specifications M9.04.2 and be in accordance with the procedures described herein. Certificates of compliance shall be required in accordance with § 325-5.17.
- I. Curb and edging.
- (1) Sloped granite edging shall be installed in four-foot-minimum lengths, except where shorter lengths are dictated to form a required radius. It shall be set on a compacted gravel bedding at an angle providing a four-inch reveal. The nose of the granite shall be set in a concrete base approximately six inches square, which shall abut against the binder course. The top course of paving shall cover the

38. Editor's Note: Form K can be obtained from the Planning Board office.

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-5.2

§ 325-5.2

concrete and key the granite in place. Joints shall be mortared. Installation of the slant granite curbing shall precede the installation of the bituminous concrete binder course.

- (2) Materials and construction methods shall conform to the relevant provisions of Section 501 of the Massachusetts Highway Department Standard Specifications and be in accordance with the procedures described herein.

J. Walkways.

- (1) Width. The width of the walkway shall be four feet. Where such a walk cannot be constructed respecting the existing contours and natural features of the land such as trees, shrubs, stone walls, etc., a minimum width of three feet shall be allowed with prior written approval of the Planning Board.
- (2) Clearing and grubbing.
 - (a) All excavation areas shall first be cleared of stumps, brush, roots, boulders, debris and like materials, which should then be disposed of off-site. All loam and topsoil within the excavation area shall be removed and stockpiled for reuse.
 - (b) The removal of all trees shall be in compliance with the Shade Tree Act and the Scenic Roads Act, where applicable.³⁹ Trees not protected under these Acts, if in living, viable condition and having a trunk in excess of 12 inches in diameter measured four feet above grade, shall be retained wherever possible. In addition, trees of special importance because of species or distance from other trees shall be field marked by the Planning Board or its agent, indicating in each case whether the tree should be removed or preserved.
- (3) Bituminous paving. Bituminous concrete pavement for sidewalks and driveways shall be installed to conform to the relevant provisions of Sections 460 and 701 of the Massachusetts Highway Department Standard Specifications and in accordance with procedures described therein. Two courses of bituminous concrete pavement for walkways shall be installed to conform to generally accepted engineering practice.
- (4) Grass strip. A grass strip separating the walkway from the road shall be installed wherever possible, consistent with the walkway design procedures described herein.
- (5) Drainage. The paved surface shall be pitched a minimum of 1/4 inch per foot in the direction of existing drainage facilities to provide adequate disposal of surface water, including control of erosion, flooding, and standing water on adjacent lands.

³⁹. Editor's Note: See MGL c. 87, Shade Trees, and MGL c. 40, § 15C, Scenic road designations.

§ 325-5.3. Stormwater drainage system construction specifications.

A. General provisions.

- (1) Refer also to all Board of Health regulations pertaining to drainage, and drainage design details in § 325-4.19.
- (2) Materials and construction methods for the installation of the storm drainage system shall be in accordance with the relevant provisions of Sections 201, 220, 230, 260, and 280 of the Massachusetts Highway Department Standard Specifications, except as modified herein.
- (3) To provide for proper drainage during the construction of all roadways, parking areas and maneuvering aisles, all utility frames (i.e., manholes, catch basins and service boxes) shall be temporarily set to the binder course surface grade. All utility frames shall be reset to finish grade just prior to the placement of the finish course of pavement. Any bituminous concrete removed to facilitate resetting shall be replaced with cement concrete. Where leaching/percolation galleys are used, a collection system with a single discharge point shall be utilized.

B. Frames, grates and covers. Ductile iron, ASTM A536: Manhole frames and covers shall be LeBaron Foundry Co. Catalog No. LK 110 with the word "Drain" on the cover, or "Sewer" for sanitary sewer systems, or an approved equal. Standard catch basin frames and grates shall be LeBaron Foundry Co. Catalog No. LF 248-2 or an equal approved by the Planning Board prior to installation, but in all cases the frames and covers must be manufactured in the United States of America. Cascade catch basin frames and grates shall be LeBaron Foundry Co. Catalog No. LK120D or LK121D or an equal approved by the Planning Board prior to installation, but in all cases the frames and covers must be manufactured in the United States of America. Cement concrete collars shall be placed around the castings after the final setting and as directed. Bricks for adjusting frames shall conform to ASTM C32. Said bricks shall mean "Boston bricks" (red tops). The plans shall note that the detail is to Town specifications if not already noted on the detail.

C. Manholes. Drainage and sanitary sewer manholes shall be precast, reinforced concrete conforming to ASTM C478, minimum four-foot inside diameter, and coated outside with bitumastic in accordance with the manufacturer's recommendations. Joints and lifting holes shall be mastic gasket. Manholes to service pipes larger than 30 inches in diameter shall require a special manhole in accordance with the Massachusetts Highway Department standards. Manholes will be required at every change in direction, slope or diameter in the drainpipes and at intervals not to exceed 400 feet. Manhole steps shall be steel-reinforced polypropylene plastic and formed invert shall be cement concrete for storm drains and brick for sanitary sewers. When inverts in manholes differ more than 2.75 feet, drop manholes shall be installed. All pipe-to-manhole connections shall be by a resilient connector conforming to ASTM C923, latest edition. Storm drain manholes shall be provided with a weep hole where warranted by high groundwater.

D. Catch basins.

- (1) Catch basins shall be precast reinforced concrete conforming to ASTM C478, minimum five-foot inside diameter with a four-foot sump, and coated outside

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-5.3

§ 325-5.3

with bitumastic in accordance with the manufacturer's recommendations. All catch basins, manholes, and frames shall be set on Boston bricks, commonly referred to as "red tops." Hoods shall be installed in all catch basins and shall be LeBaron Foundry Co. Catalog No. L202 or an approved equal. Standard catch basin frames and grates are required on all catch basins where the slope is not greater than 4%. Cascade catch basin frames and grates are required where the slope is greater than 4%. Joints shall be mastic gasket.

- (2) Catch basins shall be installed on both sides of the roadway on continuous grades at intervals not to exceed 250 feet, at low points and sags in the roadway, and near the corners of intersecting streets. Catch basins shall be provided with inlet stones. Catch basin to catch basin connections will not be allowed. Drains must enter a catch-basin-type structure prior to entering a manhole. Catch basins shall also be provided on all upgradient legs of intersections prior to the PC or PT of the intersection curb returns. Storm gutter inlets shall be required at every catch basin with a granite transition from vertical to slant curb pieces/sections. [See Subsection D(3).]
 - (3) Curb inlet stones. Curb inlet stones shall be provided at all catch basins located within the roadway. Curb inlet stones and transition curbs are to be installed at the time the granite curbing is installed. See Massachusetts Highway Department 9.04.1 for materials.
 - (4) Transition curbs. Granite transition curbs shall be provided for all curb inlet stones located in roadways that have sloped granite curb or bituminous concrete slab. Transition curbs are to be installed at the time the granite curbing is installed. See Massachusetts Highway Department 9.04.1 for materials.
- E. Flared and metal ends. Discharge ends of storm drains shall be provided with flared/metal ends conforming to Massachusetts Highway Department standards. Backfill shall be placed and thoroughly compacted around the flared/metal ends. End walls may be used when approved by the Planning Board.
- F. Fieldstone masonry ends. Culverts shall be provided at both ends with fieldstone masonry ends. Materials and construction methods for masonry ends in cement mortar shall conform to the relevant provisions of Section 685 of the Massachusetts Highway Department Standard Specifications.
- G. Security bars. Removable security bars shall be provided at the entrance and outface of all culverts or open pipe drains. Bars shall be constructed of a design approved by the Planning Board or its agent, and the grate shall be installed in a manner approved by the Planning Board or its agent. A suitable drawing of the grate and method of installation shall be submitted for approval with the plans for the drains and appurtenances.
- H. Scour protection. The discharge ends of all drains and culverts shall be protected with a riprap apron of a width not less than five feet plus the outside diameter of the pipe. The length of the apron shall be a minimum of 20 feet measured from the end wall or flared/metal end. Riprap shall conform to Massachusetts Highway Department Material Specification M2.02.0. Stone for pipe ends will not be allowed.

- I. Subdrains. When it is determined that the water table will destabilize the proposed roadway, or sometimes to control erosion in cut slopes, installation of subdrains will be required. Materials and construction methods shall conform to Section 260 of the Massachusetts Highway Department Standard Specifications.
- J. Trench excavation. Trench excavation shall conform to the relevant provisions of Section 140 of the Massachusetts Highway Department Standard Specifications and in accordance with the procedures described herein.
- K. Pipe bedding. The pipe shall be bedded in well compacted granular material placed on a flat trench bottom. The granular bedding shall have a minimum thickness of one-fourth the outside pipe diameter, four inches minimum, and shall extend halfway up the pipe barrel at the sides. The remainder of the side fills and a minimum depth of 12 inches over the top of the pipe shall be filled with carefully compacted gravel borrow conforming to Massachusetts Highway Department Material Specification M1.03.0, Type C or an approved backfill material. The granular bedding material shall conform to Massachusetts Highway Department Material Specification M2.01.4.
- L. Pipe installation and backfilling.
- (1) Pipe shall be installed and backfilled in accordance with the relevant provisions of Section 230 of the Massachusetts Highway Department Standard Specifications and in accordance with the procedures described herein.
 - (2) Pipe laying shall begin at the downstream end of the installation with the bell or groove end of the first section upstream. The pipe shall be laid to the lines and grades specified with the pipe sections closely jointed. When bell and spigot pipes are used, bell holes shall be dug in the bedding to accommodate the bells. They shall be deep enough to ensure that the bell does not bear on the bottom of the hole but shall not be excessively wide in the longitudinal direction of the installation.
 - (3) When the pipe sections are laid, the barrel of each section shall be in contact with the quadrant shaped bedding throughout its full length exclusive of the bell. Where lift holes in the pipe have been provided, such holes shall be refilled with an acceptable grade of concrete after laying, and the concrete shall be thoroughly cured before backfill material is placed.
- M. Leaching pit or basin.
- (1) Pits shall be located a minimum of 100 feet from any source of water supply, 50 feet from buildings, and 20 feet from existing property lines adjacent to the subdivision perimeter. The bottom of the leaching pit shall be at least two feet above groundwater and five feet above rock. Clear distance between two pits shall be at least three times the outside diameter of the larger pit. Leaching pits will not be located in clay soils or where there is less than 10 feet of soil above a rock formation. Overflow provisions shall be provided at each leaching pit or cluster of leaching pits to the satisfaction of the Planning Board.
 - (2) Soil percolation tests shall be conducted at the proposed location of each pit by a registered professional engineer at half the depth and at the full estimated depth of the leaching pit. The required wall area or effective absorption area shall be

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-5.3

§ 325-5.5

determined from the soil percolation test. The applicant shall submit to the Planning Board the results of the soil percolation tests and the design of the leaching pits for review and approval.

- (3) Leaching pits shall be precast, reinforced concrete conforming to ASTM C478. Watertight ductile iron manhole frames and covers shall be LeBaron Foundry Co. Catalog No. LBW 268-1 with the word "Drain" on the cover or an approved equal. Double-washed crushed stone conforming to Massachusetts Highway Department Material Specification M2.01.2 shall be placed in the bottom of the pit to a minimum depth of six inches and around the pit to a minimum thickness of 12 inches. Leaching structures shall be preceded by acceptable pretreatment to allow the settlement of solids and separation of oil/grease from the collected stormwater.

§ 325-5.4. Water systems.

- A. Materials and construction methods shall conform to the relevant provisions of Section 301 of the Massachusetts Highway Department Standard Specifications and the Norfolk Water Department and be in accordance with the procedures described herein.
- B. Hydrants shall be located at all low points, and hydrants or manual air release valves shall be located at all high points of the proposed water mains. Cement concrete collars shall be installed around all valve boxes.
- C. Curb stops and boxes shall be located only within the proposed roadway right-of-way.

§ 325-5.5. Sanitary sewers.

Materials and construction methods shall conform to the relevant provisions of Sections 201 and 230 of the Massachusetts Highway Department Standard Specifications and the Norfolk Board of Health and be in accordance with the procedures described herein. A low-pressure air test shall be performed on all installed sanitary sewers in accordance with ASTM C828, latest edition.

- A. Sanitary sewer pipe and fittings shall be polyvinyl chloride (PVC), SDR 35, conforming to ASTM D3034, latest edition. Large diameter PVC gravity sewer pipe and fittings shall conform to ASTM F679, latest edition.
- B. Joints for PVC pipe and fittings shall conform to the relevant ASTM as stated in Subsection A.
- C. The pipe shall be bedded as described in § 325-5.3K.
- D. The pipe shall be installed and backfilled as described in § 325-5.3L.
- E. All pipe-to-manhole connections shall be by a flexible manhole sleeve of high-quality synthetic rubber. This sleeve will allow for lateral and angular alignment as the pipe connection is made and shall conform to ASTM C923, latest edition.

§ 325-5.6. Private utilities.

All private cable utilities, including telephone, electric power, fire alarm, and cable communications lines, shall be placed underground. All private cable utilities shall be installed using conduits, manholes, handholes and appurtenances required by each utility company. These private cable utilities along with gas distribution lines shall be installed with a minimum cover of 36 inches.

§ 325-5.7. Retaining walls.

Retaining walls shall be installed where required and deemed necessary by the Planning Board. They shall be cemented stone masonry conforming to the relevant provisions of Section 685 of the Massachusetts Highway Department Standard Specifications, Construction Standards, and in accordance with the procedures described herein. Maximum visible height of retaining walls shall be four feet.

§ 325-5.8. Fire alarm system.

The fire alarm system, if any, shall be installed in accordance with the recommended practices of the National Fire Protection Association. The number, type, and location of fire alarm boxes shall be established by the Norfolk Fire Department.

§ 325-5.9. Street trees.

Trees shall be planted within the grass strip (or, if determined necessary by the Planning Board, in tree easements) at thirty-five-foot or lesser intervals, on both sides of all streets. They shall be at least 12 feet in height and three inches in caliper at the time of planting. All trees shall be planted no later than one month after installation of the first course of bituminous concrete and shall be guaranteed for one year after street acceptance. A written copy of said guarantee shall be provided to the Planning Board prior to street acceptance.

- A. Tree species. The species of street trees shall be chosen from the following species or such other tree variety, as appropriate, and as may be approved by the Planning Board:
- (1) *Acer pseudoplatanus* – sycamore maple.
 - (2) *Acer rubrum* – red maple and varieties.
 - (3) *Acer saccharum* – sugar maple and varieties.
 - (4) *Carpinus betulus* – European hornbeam.
 - (5) *Cercidiphyllum japonicum* – katsura tree.
 - (6) *Ginkgo biloba* – ginkgo variety.
 - (7) *Liquidambar styraciflua* – sweetgum var.
 - (8) *Quercus palustris* – pin oak.
 - (9) *Quercus rubra* – red oak.

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-5.9

§ 325-5.11

- (10) *Zelkova serrata* – Japanese zelkova.
 - (11) *Sophora japonica* – Japanese pagoda tree.
 - (12) *Fraxinus pennsylvanica* – green ash var.
 - (13) *Pyrus calleryana* – Redspire Callery pear.
 - (14) *Gleditsia triacanthos inermis* – thornless honeylocust var.
 - (15) *Platanus acerifolia* – Bloodgood London plane tree.
 - (16) *Tilia cordata* – littleleaf linden and varieties.
 - (17) *Tilia tomentosa* – silver linden.
- B. There shall be at least three species of trees planted per street. No species of tree planted adjacent to any other tree shall be the same species as that tree.
- C. The grass strip/tree easement areas shall be surfaced with not less than six inches of topsoil which shall be seeded and rolled or otherwise vegetated to the satisfaction of the Planning Board.
- D. Tree wells are required for the protection of existing trees where deemed necessary by the Tree Warden. Materials and planting methods shall conform to the relevant provisions of Section 771 of the Massachusetts Highway Department Standard Specifications (including but not limited to staking and wiring of all trees). Prior to installation of the trees, the planting method shall be submitted to the Planning Board.

§ 325-5.10. Loaming and seeding.

The removal of topsoil from the development area will not be allowed. Not less than six inches of good quality loam shall be placed within the right-of-way, cut and fill areas, easements, lots, etc. Materials and construction methods for loam borrow and topsoil shall conform to the relevant provisions of Section 751 of the Massachusetts Highway Department Standard Specifications and be in accordance with the procedures described herein. Materials and construction methods for seeding shall conform to the relevant provisions of Section 765 of the Massachusetts Highway Department Standard Specifications and be in accordance with the procedures described herein. Seed for the grass strips shall conform to Massachusetts Highway Department Material Specification M6.03.0, Grassplots and Islands. After loam and seed has been placed in retention/detention basins and at slopes equal to or steeper than 3:1, a jute mesh matting, or an approved equal, shall be installed in accordance with the manufacturer's recommendations for slope stabilization. All loaming and seeding shall be installed no later than one month after installation of the first course of bituminous concrete.

§ 325-5.11. Street signs.

The applicant shall furnish and erect necessary streets signs to designate the name of each street (and, in the case of culs-de-sac, the designation "Not A Through Street") in the development prior to the occupancy of any house on the street. Signs shall conform to those used by the Town and approved by the Highway Superintendent.

§ 325-5.12. Streetlights.

The applicant shall be responsible for paying fees established by the Town of Norfolk to defray the cost of installation and initial operation of streetlights at locations approved by the Planning Board. In determining required locations, the Planning Board may consult with the Board of Selectmen and the Norfolk Highway Department. Streetlight fixtures and standards shall conform to fixtures and standards as most recently installed in the Town of Norfolk at the time of application. Refer to Appendix D for lighting pole and fixture standards.⁴⁰

§ 325-5.13. Guardrails.

- A. Guardrails shall be required along roadways in at least the following areas:
- (1) Culvert crossings.
 - (2) Where side slopes are steeper than three horizontal to one vertical.
 - (3) Where, in the opinion of Planning Board, it is necessary for public safety.
- B. Materials and construction methods shall conform to the relevant provisions of Section 601 of the Massachusetts Highway Department Standard Specifications and be in accordance with the procedures described herein. Posts shall be pressure-treated wood, rectangular in section six inches by eight inches, chamfered on top, and at least six feet three inches long with flat tops and butts, conforming to Massachusetts Highway Department Material Specification M8.07.0B.2. Rail elements shall conform to AASHTO M180, Class A, Type 4, beams of corrosion-resistant steel. Guardrail shall not be ramped. A guardrail detail shall be provided for approval.
- C. Wood posts and rails.
- (1) Wood posts and rails are to be used only on very-low-speed roads having a design speed of 15 miles per hour and 20 miles per hour and parking areas and are to be pressure treated. Prior Planning Board approval is required for use of this type of barrier.
 - (2) Wood posts shall conform to the materials and construction as described in Subsection B. Spacing of posts shall be a maximum of six feet three inches center to center. See detail.⁴¹
 - (3) Wood rails shall be four inches by eight inches and of a length where joints are to be located only at the posts. Rails shall be of the same species and stress grade as the wood posts. Rails shall be treated in accordance with Massachusetts Highway Department Material Specification M8.07.0B.2. Two five-eighths-inch carriage bolts shall be used to fasten the rail to the post and countersunk. Nuts shall be installed so that they cannot be backed off. The number of rails, either one or two, to be used for the wood guardrail shall be determined by the Planning Board.

40. Editor's Note: Appendix D can be obtained from the Planning Board office.

41. Editor's Note: The detail can be obtained from the Planning Board office.

§ 325-5.14. Bounds.

- A. Materials and construction methods shall conform to the relevant provisions of Section 710 of the Massachusetts Highway Department Standard Specifications and be in accordance with the procedures described herein.
- B. Bounds shall be set on both street lines at all angle points, at the beginning and end of curves, and at all intersections.
- C. Certification, in writing, shall be made by the registered land surveyor for the developer to the Planning Board that, as determined by a survey after completion of construction, the bounds have been properly set in accordance with the approved plan and rules and regulations of the Planning Board. Tie sketches to bound points shall be furnished to the Planning Board and to the Highway Superintendent on sheets of paper 8 1/2 inches by 11 inches with a suitable title block.
- D. Iron-pipe monumentation driven at least three feet six inches into the ground with a minimum of six inches exposed and with a diameter of 3/4 inch is required for all easement corners.
- E. Bounds are to be installed at the time the sidewalk top course is installed.

§ 325-5.15. Curb-cut ramps.

All ramps must comply with the Americans with Disabilities Act regulations⁴² and with Architectural Access Board regulations (521 CMR 1 to 47) in force and effective on the date of street acceptance.

- A. Curb-cut ramps must be provided in curbed areas that have sidewalks. The location of the curb-cut opening and ramp must be carefully coordinated with respect to the pedestrian crosswalk lines, if any. This planning must ensure that the ramp opening (at the fully depressed curb) is situated within the parallel boundaries of the crosswalk markings.
- B. Ramps for the handicapped are not limited to intersections and marked crosswalks, and ramps should also be provided at other appropriate or designated points of pedestrian concentration, such as loading islands, mid-block pedestrian crossings, and locations where pedestrians could not otherwise recognize the proper place to cross the roadway. Because nonintersection pedestrian crossings are generally unexpected by the motorist, warning signs should be installed and adequate visibility provided by prohibiting parking.
- C. Ramps for the handicapped should have a textured, nonskid surface. This texture not only provides a measure of safety for the user but also warns a blind person of the presence of the ramp.

42. Editor's Note: See 42 U.S.C. § 12101 et seq.

§ 325-5.16. Final cleanup.

- A. Upon completion of all the work in the subdivision, the applicant shall remove from the right-of-way and all adjoining properties all temporary structures, rubbish and debris, surplus material, and other objectionable materials and shall leave the area(s) in a neat and orderly condition.
- B. All storm drainage and sanitary sewer pipes and structures shall be cleaned and flushed, at the applicant's expense, prior to final inspection and acceptance.

§ 325-5.17. Certificates of compliance.

Certificates of compliance shall be submitted to the appropriate, responsible agency as indicated on Form K, Subdivision Inspection Checklist,⁴³ for approval of all materials being used in accordance with the relevant provisions of Section 6.00 of the Massachusetts Highway Department Standard Specifications.

§ 325-5.18. Maintenance.

- A. All roads and utilities, including basin cleaning and snow removal, shall be maintained by the applicant until final inspection and acceptance by the Town. Annual work such as cleaning catch basins, repairing curbing, pothole repair and snow removal/sanding must be completed by the developer. If released from restrictions with regard to sale of lots or buildings on lots by the posting of a bond, the subdivider shall maintain the roads for the vehicular travel in a manner satisfactory to the Planning Board. Further, the subdivider shall guarantee the maintenance of the roads in a subdivision in a condition which meets all the requirements of these rules and regulations to the satisfaction of the Planning Board, by posting a bond with two or more sureties approved by the Board or by a surety company authorized to do business in the commonwealth, in a penal sum as required by the Board to secure the maintenance as herein provided, or by a deposit of money or negotiable securities sufficient in amount, in the opinion of the Board, to secure the aforesaid maintenance. Such bond shall be held until the streets are accepted by the Town.
- B. The bond shall be subject to forfeiture as liquidated damages upon failure of the developer to perform the required roadway maintenance within a reasonable time upon notice by the Town of Norfolk.

§ 325-5.19. Stop-work orders.

At any time during the course of construction, the Board may issue an order to cease some or all work within the subdivision or to undertake corrective or remedial work whenever the applicant has violated these rules and regulations, plan specifications, or conditions of approval. The applicant shall comply with all such orders, and failure to do so shall entitle the Board to rescind or amend plan approval or to take, at the applicant's expense, any corrective or remedial action.

43. Editor's Note: Form K can be obtained from the Planning Board office.

ARTICLE 6
Administration

§ 325-6.1. Authority.

- A. The Planning Board shall be the administrative agency of these regulations and shall have all the powers assigned to it by MGL c. 41, §§ 81A to 81GG.
- B. The Planning Board may assign as its agents appropriate Town agencies or officials and may hire professional assistance to review plans and inspect/observe improvements, at the cost of the applicant.
- C. The Board, on its own motion or on the petition of any interested person, shall have the power to modify, amend, or rescind its approval of a plan of a subdivision, or to require a change in a plan as a condition of its retaining the status of an approved plan, in accordance with MGL c. 41, § 81W.

§ 325-6.2. Waivers; planned development.

- A. Waiver of compliance.
 - (1) Strict compliance with the requirements of these rules and regulations may be waived only when, in the judgment of the Board, such action is in the public interest and not inconsistent with the Subdivision Control Law.⁴⁴ In waiving strict compliance, the Board may require such alternative conditions as will serve substantially the same object as the standards or regulations waived.
 - (2) Request for waivers from Planning Board. Waiver requests shall be submitted with and stated on the definitive plan or contained in a separate instrument attached thereto and referred to on said plan. All such requests for waivers shall be heard at the public hearing for the definitive plan.
- B. Planned development. The Planning Board will give consideration to suggestions offered by the developer that will tend to provide for the most efficient use of land in harmony with its natural features.

§ 325-6.3. References.

- A. For matters that may arise during subdivision procedures that are not covered by these regulations, the following are accepted as standards in their applicable portions:
 - (1) Sections 81K to 81GG of Chapter 41 of the Massachusetts General Laws.
 - (2) Suggested Land Subdivision Regulations, Housing and Home Finance Agency (HHFA).
 - (3) A Policy on Geometric Design of Highways and Streets, American Association of State Highway and Transportation Officials, latest edition, as amended.

⁴⁴ Editor's Note: See MGL c. 41, §§ 81K through 81GG.

- (4) Standard Specifications for Highways and Bridges, Massachusetts Highway Department (formerly the "Commonwealth of Massachusetts, Department of Public Works"), latest edition, as amended.
 - (5) Construction Standards, Massachusetts Highway Department (formerly the "Commonwealth of Massachusetts, Department of Public Works"), latest edition, as amended.
- B. Compaction testing for installation of water and other lines shall be in accordance with Massachusetts Highway Department specifications, the Town of Norfolk Highway Department, or the Town of Norfolk Water Department, whichever is the most stringent.

§ 325-6.4. Severability.

If any section, paragraph, sentence, clause, or provision of these regulations shall be proved to be invalid for any reason, the invalidity shall apply only to the material so affected, and the remainder of these regulations shall be deemed valid and effective.

§ 325-6.5. 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, in accordance with MGL c. 41, § 81Q.

§ 325-6.6. Inspection/observation of improvements.

- A. See Article 10 for fee schedule relative to observation/observation of improvements. Applicants are to pay a fee for the observation/observation of improvements. This fee is in two parts and is to be paid at the time of endorsement of the plan by the Planning Board. The Planning Board consulting engineer observation fee and Town Highway Department observation fee are payable at the time of endorsement of the definitive plan. All unexpended funds are to be returned to the applicant at the time of street acceptance by the Town of Norfolk. Town Highway Department observation fees are authorized under MGL c. 44, § 53E 1/2. The rate paid is for observations made by Town of Norfolk employees at the hourly pay rate of employees who are authorized to make observations for the Norfolk Planning Board.
- B. The proper inspecting/observation Town official and/or agent shall indicate on Form K1, Subdivision Observation Checklist,⁴⁵ the date of observation and the approval signature and shall file such form, and an observation report, if any, with the Board subsequent to each observation.
- C. The Planning Board or its agent, Highway Superintendent or his agent, Health Department, Tree Warden, Water Department, Police Department, and Fire Department shall be separately notified, in writing, at least 48 hours prior to the commencement of any of the work.

45. Editor's Note: Form K1 can be obtained from the Planning Board office.

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-6.6

§ 325-6.6

D. If any of the designated work below is commenced without proper notification being given as specified, such work shall be performed at the risk of the developer or owner. Sufficient lines and grades shall be provided by the developer or owner for the purpose of verifying that installation is in accordance with the definitive plans.

- (1) Erosion and sedimentation controls. Prior to work commencing within the subdivision, the installation of all erosion and sedimentation controls required by the subdivision approval is to be observed.

Observation No. 1: Erosion and Sedimentation Controls.

- (2) Clearing and grubbing of right-of-way. The entire area between excavation/embankment areas shall be cleared, except trees of aesthetic value and those over four-inch caliper may be allowed to remain, provided that they are located at least five feet outside the street line and are approved by the Tree Warden and the Planning Board. Loam and topsoil shall be removed and stacked.

Observation No. 2: Clearing and Grubbing of Right-of-Way.

- (3) Excavation. Earth shall be excavated to the lines and grades shown on the plans. Earth removal shall be performed as per the requirements of Article 9 and in accordance with Town of Norfolk bylaws (Chapter 156, Earth Removal), as most recently amended. Muck, rock, clay, boulders, and other unstable material shall be removed to a depth as directed by the inspector/observer.

Inspection No. 3: Excavation.

- (4) Embankments. Embankments shall be constructed of approved materials as specified with appropriate compaction test results provided.

Observation No. 4: Embankment Construction.

- (5) Staking. Roadways are to be staked at fifty-foot intervals at their center line and at right-of-way line prior to work commencing on the storm drainage system.

Observation No. 5: Staking.

- (6) Storm drainage system. Storm drainage system shall be installed in conformity with the definitive plan and Water Department requirements with appropriate compaction test results provided prior to backfilling. These shall include all drains, catch basins, manholes, culverts, retention/detention basins, and subdrains called for in such plan. In no case shall any drain pipe or culvert be within two feet of the subgrade plane. All drainage installation shall be inspected prior to backfilling.

Observation No. 6: Below Grade Storm Drain Installation.

Observation No. 22: At Surface Storm Drains.

Observation No. 39: Retention/Detention Basins and Appurtenances.

- (7) Sanitary sewer system. All sanitary sewer mains, manholes, laterals, testing, and associated equipment shall be installed in conformity with the definitive plan and

as required. All sewer installation and low-pressure air testing shall be inspected and completed prior to backfilling.

Observation No. 7: Below Grade Sanitary Sewer Installation.

Observation No. 8: Sanitary Sewer Laterals Installation.

Observation No. 9: Sanitary Sewer Testing.

Observation No. 23: At Surface Sanitary Sewers.

- (8) Water system. All water mains, laterals, hydrants, and associated equipment shall be installed in conformity with the definitive plan. Installation and testing, including but not limited to compaction testing, shall be inspected. Prior to acceptance, the following shall be accomplished:

Observation No. 10: Below Grade Water Main Installation.

Observation No. 11: Water Main Testing and Disinfection.

Observation No. 12: Water Main Laterals Installation.

Observation No. 24: At Surface Valve Boxes.

Observation No. 25: At Surface Curb Boxes.

Observation No. 31: Hydrants, Finish Grade.

- (9) Subgrade of right-of-way. Subgrade shall be brought to the proper grade and cross section, and fine graded and compacted in accordance with the specifications and to the satisfaction of the inspector/observer.

Observation No. 13: Fine Grade and Compact Subgrade.

- (10) Processed gravel base and base. The gravel for the roadway base and driveway, sidewalk, and curb-cut ramp bases shall be installed in layers not exceeding six inches in compacted depth and as specified.

Observation No. 14: Gravel Base for Roadway, First Course of Six Inches Compacted Processed Gravel.

Observation No. 14A: Gravel Base for Roadway, Second Course of Six Inches Compacted Processed Gravel.

Observation No. 14B: Gravel Base for Roadway, Third Course of Six Inches Compacted Processed Gravel.

Observation No. 15: Dense Graded Crushed Stone Base, Final Course.

Observation No. 16: Processed Gravel Base for Sidewalks, First Course of Six Inches Compacted Processed Gravel.

Observation No. 17: Processed Gravel for Sidewalks, Final Course.

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-6.6

§ 325-6.6

- (11) Dense-graded crushed stone base. The dense-graded crushed stone for base shall be installed as specified.

Observation No. 18: Dense Graded Crushed Stone for Roadway Base.

Observation No. 18A: Survey of Center Line and Both Gutter Lines.

- (12) Bituminous concrete pavement.

(a) The bituminous concrete pavement for roadways, sidewalks, driveways, and curb-cut ramps shall be installed as specified in two courses, binder and finish, and driveways constructed starting at the gutter line and sloping up towards the right-of-way.

(b) A tack coat of bituminous material shall be applied by mechanical means immediately prior to installation of top course of pavement.

Observation No. 19: Roadway Binder Course/Temporary Berm.

Observation No. 21: Sidewalk Binder Course.

Observation No. 26: Roadway Tack Coat.

Observation No. 26A: Roadway Finish Course.

Observation No. 27: Sidewalk Tack Coat.

Observation No. 27A - Sidewalk Finish Course

- (13) Curb and edging. Curb and edging shall be installed as specified.

Observation No. 20: Curb/Edging Installation.

Observation No. 20A: Curb Inlet Stone Installation.

Observation No. 20B: Transition Curb Installation.

- (14) Curb-cut ramps and transformer pads. Transformer pad location to be approved by Planning Board or its agent and constructed pad observed by Planning Board agent.

Observation No. 28: Curb-cut Ramps.

Observation No. 28A: Transformer Pads.

- (15) Loam and seed. Loam and seed shall be installed in all grass strips and on embankment/excavation slopes as specified and to the satisfaction of the inspector/observer.

Observation No. 30: Loam and Seed.

- (16) Retaining walls. Retaining walls shall be installed as specified.

Observation No. 32: Retaining Walls.

- (17) Guardrails. Guardrails shall be installed as specified.
Observation No. 33: Guardrails.
- (18) Street trees and plantings. Street trees and plantings shall be installed as specified.
Observation No. 34: Trees and Planting (developer to provide documentation of tree warranty).
- (19) Street signs and bounds. Street signs and bounds shall be installed as specified.
Observation No. 35: Bounds and Monuments.
Observation No. 37: Street Signs.
- (20) Fire alarm system. Fire alarm systems shall be installed as specified.
Observation No. 36: Fire Alarm Installation.
- (21) Streetlights. Streetlights shall be installed as specified.
Observation No. 38: Streetlights.
- (22) Final cleanup. Final cleanup shall be accomplished to the satisfaction of the inspector.
Observation No. 40: Final Cleanup Observation.
- (23) Maintenance. Streets and appurtenances shall be maintained as specified to the satisfaction of the inspector/observer.
Observation No. 41: Maintenance.
- (24) As-built/acceptance plan/running description of roadway and easements. See § 325-3.4G for additional steps to finalize completion of Form K, Observation Report, and acceptance by the Town of subdivision roadways.
Observation No. 42: Acceptance Plans/Running Descriptions.
- (25) Deed/easement submittal. Proper deed for street right-of-way and proper easements to the benefit of the Town of Norfolk.
Observation No. 43: Deeds/Easements.
- (26) Other. Special conditions of approval or other items that may have been required within the approval conditions.
Observation No. 44: Miscellaneous other items.

NOTE: See § 325-3.4G for additional steps to finalize completion of Form K and acceptance by the Town of Norfolk subdivision roadways.

ARTICLE 7

Site Plan Approval: Administrative Requirements

§ 325-7.1. Authority.

The administrative requirements herein are authorized by the Town of Norfolk Zoning Bylaw, § 310-6.11, Site plan approval, and references to special permit granting authority.

§ 325-7.2. Precedence.

In case of conflict with the enabling statute, the Zoning Bylaw, and these regulations, the order of precedence shall be statute, bylaw, then these regulations.

§ 325-7.3. Applicability.

In all districts, no building shall be constructed or externally enlarged and no use shall be expanded in ground area or established in an existing building except in conformity with a site plan bearing an endorsement of approval by the Planning Board. This provision shall not apply to single-family homes, including additions or enlargements, which are permitted in the district in which the property is located as a matter of right. (See Norfolk Zoning Bylaw, § 310-6.11, Site plan approval.)

§ 325-7.4. Requirements.

- A. Presubmission review. The applicant is encouraged to follow the procedure outlined for preliminary plans as noted in § 325-2.6 of these rules and regulations. The applicant is encouraged to review copies of the regulations of other Town departments/boards before preparing plans and to become aware of any fees/charges of other Town of Norfolk entities.
- B. The site plan shall be drawn on a reproducible Mylar at a scale of 20 feet to the inch, and on a maximum sheet size of 24 inches by 36 inches, all existing (dash line) and proposed (solid line) in compliance with the requirements of § 310-6.11, Site plan approval, of the Zoning Bylaw. Site plans shall be drawn to meet requirements of the Registry of Deeds for the recording of same. Separate sheets shall be used to retain plan legibility.
- C. The name and address of the developer and/or applicant (if different from the owner) and interest of applicant if not the owner or developer shall be indicated.
- D. All of the provisions of Articles 4 and 5 shall apply to projects submitted for site plan approval, substituting the words "site" for "subdivision" and "applicant" for "subdivider." See also Article 8 for items that may pertain to site plans.
- E. Contents. The site plan shall contain, at a minimum, the following information to assist the Planning Board in evaluating the site plan:

- (1) The names and addresses of the record owner of the land and the name, seal, and address of the designer, engineer, and surveyor who made the plan, all of which shall appear in the lower right-hand corner.
- (2) A signature block located on the right side of each drawing with suitable space to record the action of the Planning Board and the signatures of the members of the Board.
- (3) A locus plan drawn to a scale of one inch equals 1,000 feet, showing the general location of the site in relation to all adjacent and nearby roads, railroads, waterways, and utility easements; name of development; scale and North arrow; date of plan and legend.
- (4) The lot shall be tied into the nearest town, county, and state bound. Bearings and curve data distances of all lot lines. Locations of driveways and parking and service areas and names of all parties of interest, including abutters, owners of land directly opposite on any public or private street or way, and abutters to the abutters within 300 feet of the property line, as they appear on the most recent applicable tax list, including those in other cities or towns. The plan shall also show the location of easements, rights-of-way, public or private ways, and other reservations, existing, planned or proposed, on, adjacent to, or intersecting the subject site.
- (5) Assessors' map, block, and lot numbers of subject property.
- (6) Zoning district(s) and any boundary of zoning districts within the lot, along any lot line, or within any adjoining property.
- (7) Topography for the entire site shall be shown in two-foot intervals except where the Board requires that a one-foot contour interval be used. Contours and elevations of existing and proposed features shall be based on the National Geodetic Vertical Datum of 1929 (NGVD). Existing contours are to be shown as dashed lines and proposed contours are to be shown as solid lines. A note shall be added to the plans that states: "Grading is as indicated on the approved site plan."
- (8) The location and dimensions (including height) of all existing and proposed buildings and structures, including ground coverage, gross floor area, and breakdown of indoor and outdoor floor area. Open area uses and other uses and improvements. All doorways and their way of opening shall be shown for all existing and proposed buildings. Location of buildings existing on the tract to be developed and on adjacent tracts within a distance of 100 feet from the property line, indicating whether existing buildings on the tract are to be retained, modified, or removed. Existing soil conditions and soil suitability test results.
 - (a) A statement of the amount of area of land involved in the site, the percentage of the site proposed to be covered by buildings and parking areas, the number of square feet of gross floor area, the area to be proposed to be devoted to open space, the area proposed to be paved for parking, driveways, loading space, and sidewalks, the total number of parking spaces

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-7.4

§ 325-7.4

proposed and required by the Zoning Bylaw⁴⁶ for the uses proposed, the number of employees expected per shift, and the total floor area of proposed commercial, industrial, office or other use.

- (b) Where the Zoning Bylaw sets requirements related to the above figures, those requirements also shall be listed in a manner that permits comparison of the required versus the proposed quantities.
- (9) Existing and proposed front, side, and rear yard dimensions. Proposed dimensions shall be in accordance with the Town of Norfolk Zoning Bylaw, as most recently revised.
- (10) Parking lots, showing driveway entrances and exits designed for safe ingress and egress, curb cuts, layout of parking spaces, aisles, pedestrian walks, necessary ramps, and representative cross sections of all proposed service and parking areas and driveways. All of the above shall be in accordance with the applicable sections of the Town of Norfolk Zoning Bylaw, as most recently revised. All parking and access shall comply with the Architectural Access Board and Americans with Disabilities Act regulations.⁴⁷ The applicant shall indicate the basis for determining the number of parking spaces. No parking is allowed in front of buildings serving common exterior walkways. Parking lots shall not be located within three feet of any property line, except in the B-1 and C-1 Zoning Districts.
 - (a) The plan for any new retail building shall include an access for fire equipment on at least two sides of the building, such access to be approved by the Fire Chief on the plans prior to construction of the building. Access to present buildings shall be kept clear of hazardous substances and obstacles which may, in the opinion of the Fire Department, impede the proper placement of fire apparatus and personnel in case of fire.
 - (b) Proposed traffic circulation systems, including the volume and proposed direction of projected traffic flows into, out of, and within the site for both vehicles and pedestrians for an average day and for peak hours.
 - (c) Parking lots and off-street loading facilities showing driveway entrances and exits designed for safe ingress and egress, curb cuts, layout of parking spaces and aisles, off-street loading facilities, pedestrian walks, necessary ramps, and representative cross sections of all proposed parking areas and driveways. Also show curb stops.
 - (d) See Article 8 for further details regarding requirements for development of commercial/business properties.
- (11) All existing and proposed landscape features such as fences, walls, planting areas, and walks. Planting details in buffer zones and green belts shall include species, height of species, and spacing of plantings and shall be shown at sufficient scale to illustrate clearly the landscaping design. (See those sections of the Norfolk

⁴⁶. Editor's Note: See Ch. 310, Zoning.

⁴⁷. Editor's Note: See 42 U.S.C. § 12101 et seq.

Zoning Bylaw, as most recently amended, pertaining to landscaping, buffers, and greenbelts and all other applicable sections.) Plans for walks, walls, and fences shall include dimensions and finishes.

- (12) All plans shall show the edge of wetlands, the edge of the 100-year (FEMA) floodplain, the edge of isolated areas subject to flooding, the banks of intermittent streams, the banks of perennial streams, the banks of lakes and ponds, the banks of rivers, the edge of riverfront zones, and the edge of the 100-foot wetland buffer zones. The limits of these resource areas shall be determined in accordance with applicable Massachusetts Department of Environmental Protection regulations (310 CMR 10.00 to 10.60) and any Town of Norfolk Zoning Bylaw, Town bylaw or Town regulation relative to wetland protection, aquifer protection, and/or water resource protection. FEMA panel number, zone designation, and base flood elevation shall be indicated on the plan. Wetland boundaries shall be identified according to the requirements of the Conservation Commission as to criteria and time of year analyzed.
- (13) All facilities for water supply and distribution, fire protection, lighting, and facilities for the prevention of air pollution and protection of the groundwater. All utilities are to be installed underground.
 - (a) The following site lighting information shall be provided: type, height, wattage, footcandle output directly under the light source, and footcandle output at the property line and a photometric layout/diagram showing direction and intensity of outdoor lighting. Lighting fixtures shall be of cutoff design, and not floodlight design, unless otherwise approved by the Planning Board. All lighting is to be placed at the perimeter of parking lots. Footcandle output directly under the light source shall not exceed five and shall not exceed 0.25 at the property line. Lighting (poles and fixtures combined) shall not exceed 15 feet in height.
 - (b) A duplicate site plan showing a photometric diagram/layout to establish the boundaries of the illumination shall be provided. The duplicate site plan need not show the detail of the actual site plan, but shall show the lot, building(s) on the lot, light standard location, and perimeter of the illumination of each light.
- (14) Location and dimensions (including height) of all storage facilities for equipment, material, and other like items.
- (15) Location and dimensions (including height) of facilities for garbage, rubbish, and other waste collection and disposal. Description and plan of capacity and location of means of sewage disposal, together with approval of the Board of Health and evidence of soil suitability for such disposal (test pit locations shall be shown on the plans).
- (16) All facilities for accommodating stormwater drainage and snowmelt runoff from all buildings, driveways, parking areas, and service areas on the site. The site plan shall be accompanied by a storm drainage study based on the design criteria of a twenty-five-year storm, certified by a professional engineer, and a proposed drainage system plan, both surface and subsurface, showing measures proposed to

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-7.4

§ 325-7.4

prevent pollution of surface water or groundwater, soil erosion, increased runoff, changes in groundwater level and flooding. All stormwater drainage shall be contained on site unless otherwise approved by the Planning Board. Major structures, culverts, detention basins, and retention basins shall accommodate the 100-year-frequency storm event. Leaching pits, basins, and galleys shall be installed and shall conform to § 325-5.3M. Soil percolation tests shall be conducted in accordance with § 325-5.3M(2). All facilities for accommodating stormwater drainage shall comply with the relevant subsections of § 325-5.3. Runoff from all structures shall be accommodated into leaching basins unless otherwise approved by the Planning Board. All runoff from parking areas, driveways and service areas on the site shall be directed into a dedicated oil-water separator. Roof runoff shall be discharged into dry wells.

- (17) A plan for the control of erosion, siltation, and dust before and during construction, including appropriate ground cover and street sweeping of adjacent public ways as required by the Board. The Board may require seeding.
- (18) Location and dimensions (including height) of existing and/or proposed freestanding signs and the manner of their external illumination.
- (19) All private wells within 200 feet of the property.
- (20) All public or community water supply wells within 1,000 feet of the property.
- (21) Removal of earth shall be performed in accordance with the requirements set forth in Article 9, in accordance with the Town of Norfolk bylaws and as specified by other agencies. The applicant shall also indicate on the plan the cubic yards of gravel borrow that will be trucked onto the site. The Board may require certification of compliance with MGL c. 21E, as most recently amended, with respect to the existence of contamination or threat of contamination on the site.
- (22) The maximum size vehicle, including trailers, expected to use the site after construction shall be identified by length, width, height, and AASHTO designation.
- (23) All existing and proposed structures shall have indicated on the plans their garage and pedestrian entrances and exits and their openings.
- (24) All existing and proposed public and private utilities, above and below grade, along with their type, size, and class, shall be shown on the plan. All proposed and existing public and private utilities on site shall be located underground.
- (25) All waivers proposed by the applicant and approved by the Planning Board or a statement to the effect that no waivers are being requested shall be indicated on the plan.
- (26) There shall be no impact of drainage on abutting public water supply.
- (27) The construction requirements of parking lots and driveways shall be the same as that for secondary streets. As may be specifically allowed under the Norfolk Zoning Bylaw, parking lots may be other than bituminous pavement as follows:

- (a) Parking areas serving municipal open spaces shall be classified as being in one of two use categories: conservation-passive uses for which vehicle use is infrequent (trips/day) and of low capacity (parking fewer than 20 cars) and recreation-active uses for which vehicle use is frequent (trips/day) and of high capacity (parking above 20 cars).
- (b) Drainage for both conservation-passive and recreation-active parking areas shall be designed such that there is no increased runoff impact from the built condition as compared to the existing condition. All drainage design shall be under the direction of a licensed professional as is required for any site plan documents. The site design shall strive to mitigate existing land deficiencies that create an undesirable impact off site.
- (c) Parking area design shall establish that there is satisfactory subsurface soil material to structurally support the proposed vehicle use. The subgrade shall meet design standards required for local roadway design of residential subdivisions. There shall be a minimum of eight-inch thickness of graded, crushed-stone base meeting the installation and stone material standards of a local residential subdivision street. There shall be a four-inch-thick, dense, graded, crushed-stone layer and four-inch-thick bituminous concrete pavement corresponding to the standards for a local residential subdivision roadway.
- (d) Conservation-passive parking area surfaces may be one of the following surfacing options:
 - [1] Pavers and grass at 1 1/2 inches minimum paver thickness.
 - [2] Natural or synthetic honeycomb pavers a minimum of six inches deep and bearing on fully compacted base material and filled/surrounded with porous granular materials.
 - [3] A two-inch thickness of graded crushed stone with aggregate at 3/4 inch plus one inch size.
- (e) Recreation-active area surfaces may be one of the following surfacing options:
 - [1] Asphalt binder course 2 1/2 inches thick.
 - [2] Permeable asphalt: 2 1/2 inches thick.
 - [3] Compacted stone dust: 2 1/2 inches.
- (f) Parking spaces are to be adequately denoted by permanent measures as approved by the Planning Board.
- (g) Maintenance covenant. All municipal parking areas built for conservation or recreation uses under a special permit shall be subject to a periodic site review by a licensed highway design professional for permit/use reinstatement. A report prepared by a licensed highway design professional on parking area conditions (complete with photographs) shall be submitted at least once every 36 months after construction completion.

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-7.4

§ 325-7.5

- (h) Public access and public safety conditions shall be a condition of any such parking lot use. Such conditions as safe access from a public way, lighting and traffic controls, lane and parking stall markings, parking area travel way, etc., shall be in conformance with the regulations for normal site plan approval.
 - (i) All other aspects and criteria listed in the Zoning Bylaw for granting of any special permit shall be applicable for these conservation and recreation parking area special permits.
 - (j) Parking stalls shall be painted according to Massachusetts Highway Department specifications, as most recently amended. Lines shall be at the head of and along the sides of parking stalls. Lines shall be a minimum of four inches wide and shall be one consistent color, either yellow or white. Stalls are measured from inside edge of lines. All pavement markings shall be painted with reflectorized paint.
- (28) Any additional details that may be pertinent.
- (29) The applicant shall provide a written statement describing how the proposed site plan application meets the general conditions of approval of Norfolk Zoning Bylaw § 310-6.11C.

§ 325-7.5. Submission.

A. General.

- (1) The following shall be submitted to the Planning Board office:
 - (a) Sixteen copies of the site plan.
 - (b) Sixteen copies of the application form "Site Plan Approval Application."
 - (c) Sixteen copies of the site plan approval checklist.
 - (d) Application fee (see Fee Schedule for amount of fee). Note: Please also contact the Board of Health office for its site plan fee.
 - (e) Review fee (see Fee Schedule for amount of fee).
 - (f) Three copies certified list of abutters from Assessors' office.
 - (g) Application to Design Review Board.
 - (h) Copy of any decisions for subject property from Zoning Board of Appeals.
 - (i) Five copies of stormwater drainage report.
 - (j) Ten copies of traffic assessment (study).
 - (k) Completed bank tax ID form for review fee funds.
 - (l) Letter regarding use of Board's consultant. See § 325-2.5.

- (m) Good-standing approval from Treasurer/Collector's office.
- (2) The Planning Board shall distribute, within five business days of acceptance by the Board, one copy each to the Building Commissioner, Board of Health, Conservation Commission, Board of Water Commissioners, Police Chief, Fire Chief, and Highway Superintendent. The agencies receiving these copies shall have up to 21 days to make recommendations to the Planning Board. Should these reviews and that of the Planning Board reveal omissions of required information or instances of noncompliance with Town bylaws and/or rules and regulations, the site plan may be returned to the applicant with a list of the discrepancies noted for correction and resubmittal no later than 45 days from the date of the original filing of the site plan.
 - (3) The application must be accompanied by three copies of a certified list, from the Board of Assessors, of the names and addresses of all abutters and abutters to abutters within 300 feet of the subject property taken from the most recent tax list.
 - (4) If the property was previously granted a special permit or variance from the Zoning Board of Appeals, a copy of the decision and the site plan reviewed by the Board of Appeals must also accompany the application. If the property is before the Board of Appeals for a special permit at the time of application to the Planning Board for site plan approval, a copy of the application form submitted to the Zoning Board of Appeals shall also be submitted to the Planning Board.
 - (5) The site plan shall be prepared by a professional engineer (PE) and a registered land surveyor licensed to practice in the Commonwealth of Massachusetts, as appropriate, and certified by same with their seal, stamp and signature. The proposed use(s) and site development shall conform to the requirements set forth in the Town of Norfolk Zoning Bylaw and other regulations as applicable. The plan shall conform to the administrative requirements set forth herein.
 - (6) Technical data, as deemed by the Planning Board to be necessary, shall be provided to support the site plan and resulting findings.
- B. Traffic congestion control and analysis. The provisions of § 325-3.3B(23)(b)[1] to [3] shall apply to projects submitted for site plan review, substituting the word "applicant" for the word "subdivider" therein.
- C. Waivers. Upon request of the applicant, the Planning Board may waive the requirement to provide any of the planning information listed under § 325-7.4 which it deems not relevant to the proposed development.

§ 325-7.6. Site plan submittal fee.

See Planning Board Fee Schedule (Article 10). Note: Contact the Board of Health regarding its site plan fee(s).

§ 325-7.7. Hearing.

- A. Notice of hearings shall be advertised as required by the provisions of MGL c. 40A, § 11.
- B. The public hearing shall be held within 65 days of the date of the proper filing of the application. The public hearing shall be conducted in accordance with the rules and procedures prescribed by the Planning Board as required by the Zoning Act of Massachusetts General Laws⁴⁸ and shall be open to the public and in accordance with MGL c. 30A, §§ 18 through 25, as amended ("Open Meeting Law").⁴⁹
- C. Representation and absence. An applicant may appear in his own behalf and/or be represented by an agent or attorney. In the absence of any appearance without due cause on behalf of an applicant, the Board may decide on the matter using the information it has otherwise received.

§ 325-7.8. Decision.

- A. Within 90 days of the conclusion of the public hearing, the Planning Board shall vote on site plan approval.
- B. The Planning Board shall have the power to modify or amend its approval of a site plan on application of the person owning or leasing the premises or upon its own motion in the event of changes in physical conditions sufficient to justify such action within the intent of the Zoning Bylaw.⁵⁰ All of the provisions applicable to approval shall, where apt, be applicable to such modification or amendment.
- C. Voting requirement.
 - (1) The concurring vote of at least four members of the Board shall be necessary to grant site plan approval. Any amendments or conditions proposed to an original motion to grant site plan approval shall be declared passed based on a simple majority vote.
 - (2) The record shall show the vote of each member upon each question or, if failing to vote, indicate reasons for its decision.
- D. Written notification of decision/detailed record.
 - (1) The Planning Board shall issue a written decision to the applicant giving the reasons for its decision.
 - (2) A detailed record of proceedings, including the vote on each question, shall be filed with the Town Clerk.
 - (3) If site plan approval is granted by the Board, the applicant shall submit a revised plan reflecting any and all conditions of approval within 60 days of filing of the Board's decision with the Town Clerk.

48. Editor's Note: See MGL c. 40A.

49. Editor's Note: Amendment pending.

50. Editor's Note: See Ch. 310, Zoning.

§ 325-7.9. Incomplete and withdrawn applications.

- A. Application. Prior to acceptance, all applications shall be reviewed by the Planning Board or its agent. If the Planning Board decides that an application is incomplete, it shall be deemed invalid and the fee returned. If desired, the applicant may resubmit a completed application, which shall be treated as a new application.
- B. Withdrawal. An application may be withdrawn, without prejudice, by notice in writing to the Board at any time prior to the hearing by the Planning Board. After an advertisement, withdrawal, without prejudice, only by Planning Board approval.

§ 325-7.10. One-year limitation of grants; extensions.

- A. If an approval is granted by the Planning Board, all permits necessary for the prosecution of the work shall be obtained and construction shall be commenced within one year of the date of filing of the Planning Board's decision in the office of the Town Clerk.
- B. It is recommended that requests for extensions be submitted, in writing, to the Planning Board at least 60 days prior to the expiration date of site plan approval.
- C. Reasonable extension of said time may be granted by the Board for good cause shown.
- D. The Planning Board is herein authorized to assess observation fees and require applicants to have site plan improvements observed during the construction phase of the project as per § 325-6.6A (where applicable) and Form K2, Observation of Site Plan Improvements.⁵¹ See applicable portions of Articles 3, 4, 5 and 6.

§ 325-7.11. Appeal of decision.

Any appeal of the decision of the Planning Board to any order or decision relative to site plan approval shall be made in conformance with the conditions set out by the Zoning Act. All such appeals shall be conducted in accordance with the Zoning Act (MGL c. 40A, § 17).

ARTICLE 8

Regulations for Nonresidential and Mixed-Use Developments in the Business and Commercial Zoning Districts

(Adopted under the Subdivision Control Law, MGL c. 41, §§ 81K to 81GG, inclusive.)

§ 325-8.1. Purpose.

- A. These subdivision regulations are adopted under the provisions of Chapter 41 of the Massachusetts General Laws consistent with the purpose of protecting the safety, convenience and welfare of the inhabitants of the Town of Norfolk 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

⁵¹ Editor's Note: Form K2 can be obtained from the Planning Board office.

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-8.1

§ 325-8.3

subdivisions and in proper cases parks and open areas. The powers of a planning board ... under the subdivision control law shall be exercised 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; for lessening congestion in such ways and in the adjacent public ways, for reducing danger to life and limb in the operation of motor vehicles; for securing safety in the case of fire, flood, panic and other emergencies; for insuring compliance with the applicable zoning ordinances or by-laws; for securing adequate provision for water, sewerage, drainage, underground utility services, fire, police, and other similar municipal equipment, and streetlighting and other requirements where necessary in a subdivision; and for coordinating the ways in a subdivision with each other and with the public ways in the city or town in which it is located and with the ways in neighboring subdivisions." (MGL c. 41, § 81M.)⁵²

- B. To accomplish this purpose, this article provides design standards for nonresidential and mixed-use (commercial/residential) developments and redevelopments within the business and commercial zoning districts of the Town.
- C. For instance, in the B-1 District (Town Center), the regulations provide design standards for redevelopment and new development which promote and enhance the traditional New England "small town" atmosphere (e.g., where buildings are located close to the street). In the C-1 District (Routes 1A/115), the regulations provide design standards for redevelopment and new development which cater to vehicular traffic, rather than pedestrian-oriented uses.

§ 325-8.2. Authority.

Under the authority vested in the Planning Board of the Town of Norfolk by MGL c. 41, § 81Q, the Board hereby adopts these amended rules and regulations governing the subdivision of land in the Town of Norfolk.

§ 325-8.3. Basic requirements.

This article, Article 8, contains specific regulations for nonresidential and mixed-use developments. The following sections of these rules and regulations also remain applicable for nonresidential and mixed-use developments:

- A. Section 325-4.2, Relation to surrounding area.
- B. Section 325-4.3, Minimum lot.
- C. Section 325-4.4, Access through another municipality.
- D. Section 325-4.5, Reserve strips.
- E. Section 325-4.6, Further subdivisions.
- F. Section 325-4.7, Resubdivision.
- G. Section 325-4.11, Open space, parks and playgrounds.

⁵². Editor's Note: Amendment pending.

§ 325-8.3

NORFOLK CODE

§ 325-8.4

- H. Section 325-4.12, Protection of natural resources.
- I. Section 325-4.15, Slopes.
- J. Section 325-4.16, Driveways.
- K. Section 325-4.19, Stormwater management system.
- L. Section 325-5.2B, Clearing and grubbing.
- M. Section 325-5.3, Stormwater drainage system construction specifications.
- N. Section 325-5.4, Water systems.
- O. Section 325-5.5, Sanitary sewers.
- P. Section 325-5.6, Private utilities.
- Q. Section 325-5.8, Fire alarm systems.
- R. Section 325-5.11, Street signs.
- S. Section 325-5.14, Bounds.
- T. Section 325-5.16, Final cleanup.
- U. Section 325-5.17, Certificates of compliance.
- V. Section 325-5.18, Maintenance.
- W. Section 325-5.19, Stop-work orders.

§ 325-8.4. Design guidelines for streets, roadways and utilities.

- A. The subdivider shall observe all design standards for land subdivision as hereinafter provided. These standards shall be considered minimum standards and shall be varied from or waived only as provided in Article 6, Administration.
 - (1) All subdivisions shall be designed and improvements made by the applicant consistent with the requirements of this § 325-8.4.
 - (2) Subdivisions within the B-1 District (Town Center) shall, where practicable, create or encourage land use and street design which is compatible with and encourages pedestrian traffic. Building placement, as close to the street as possible, in conjunction with display windows to the front, further enhances the pedestrian orientation of the area. In addition, shade trees shall be located to frame the streets and roadways, when mature, creating a canopy effect. Street furniture, such as benches, decorative streetlighting and trash receptacles, will help to create an enhanced pedestrian environment.
 - (3) Within the C-1 District (Routes 1A/115), the land use and street design shall, where practicable, be more oriented toward the automobile rather than toward the pedestrian. Adequate landscaping and pedestrian access within the site boundaries of the nonresidential and mixed-use developments shall be provided.

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-8.4

§ 325-8.4

- B. Design and construction shall reduce, to the extent reasonably possible, the following:
- (1) Volume of cut and fill;
 - (2) Area over which existing vegetation will be disturbed, especially on land within 200 feet of a river, pond, or stream, or having a slope of more than 15%;
 - (3) Number of mature trees removed;
 - (4) Visual prominence of man-made elements which are not necessary for safety or orientation;
 - (5) Blockage of vistas through new development;
 - (6) Removal of existing stone walls;
 - (7) Number of driveways exiting onto existing streets;
 - (8) Alteration in groundwater or surface water levels or chemical constituents;
 - (9) Disturbance of important wildlife habitats, outstanding botanical features, or scenic or historic environs;
 - (10) Soil loss or instability during and after construction; and
 - (11) Within the B-1 District (Town Center), the area devoted to motor vehicle travel.
- C. Design and construction shall increase, to the extent reasonably possible, the following:
- (1) Configuration using collector/major arterial streets to avoid traffic congestion on primary streets providing building frontages;
 - (2) Visual prominence of natural features of the landscape;
 - (3) Street layout facilitation of solar orientation of buildings;
 - (4) Use of curvilinear patterns;
 - (5) Within the B-1 District (Town Center), improve the view of, and the view from, buildings and other prominent vistas;
 - (6) Within the B-1 District (Town Center), promote active pedestrianway design so that it is generally more convenient and pleasant for most of the community to walk short distances than to drive; and
 - (7) Within the B-1 District (Town Center), promote the creation of vista terminations.
- D. Referenced standard. A Policy on Geometric Design of Highways and Streets, by the American Association of State Highway and Transportation Officials (AASHTO), latest edition, as amended. The design guidelines herein further amend AASHTO standards insofar as they apply to the Town of Norfolk.
- E. Blocks. In general, the maximum perimeter of blocks formed by streets shall not be less than 300 feet nor more than 2,000 feet. However, in the B-1 District (Town Center), the following regulation shall apply specifically to blocks:

- (1) The maximum perimeter of the blocks formed by streets shall not exceed 2,000 feet.
- (2) Average perimeter of all the blocks within the subdivision shall be 1,000 to 1,600 feet.
- (3) Average block depth, within the subdivision, shall be no less than 200 feet.

F. Access and maintenance easements.

- (1) Layout. Wherever possible, easements shall be continuous from block to block and their layout shall create as few irregularities as possible. The minimum easement width shall be 20 feet, except as otherwise required in the B-1 District (Town Center), within the Business Core, wherein the minimum easement width shall be 13 feet (refer to Figures 28 and 29).⁵³
- (2) Watercourses. Streams or watercourses shall be provided with an emergency/maintenance access easement conforming substantially with the line of its course, but not less than 20 feet in width centered on its midpoint. Streets or pedestrianways, parallel to the streams or watercourses, and/or appropriate accesses may be required in connection therewith. The placement of streams or watercourses into open or covered culverts shall be kept to a minimum.
- (3) Utilities. Easements for utilities across lots shall generally follow lot lines or shall be centered on the rear or side lot lines and shall not be less than 20 feet in width, except as otherwise required in the B-1 District (Town Center), within the Business Core, wherein the minimum easement width shall be five feet or greater, in order to reduce right-of-way widths (refer to Figure 28). In this instance, the utilities may be permitted by the Planning Board to be placed in the two-foot grassed area between the paved way and the property line and the three-foot tree easement immediately abutting the right-of-way. Utilities may also be permitted to be located under parking areas within the right-of-way and pedestrianways abutting the right-of-way.
- (4) Trees. Tree easements, if necessary, shall follow and be outside of the right-of-way lines and shall be 10 feet in width and grassed, except as otherwise required in the B-1 District (Town Center), within the Business Core, wherein the minimum easement width shall be three feet and grassed (refer to Figures 28 and 29). See Norfolk Zoning Bylaw § 310-9.4A(3), Pedestrianways and street trees (B-1), and § 310-10.4A(5), Street trees (C-1).

G. Pedestrian ways/sidewalks.

- (1) Pedestrianways or footpaths shall be required to provide convenient circulation or access to schools, playgrounds, shopping, churches, transportation, parks, conservation areas and/or other facilities. Such ways shall consist of an easement of at least 20 feet, including sidewalks of at least five feet in width (refer to Figure 29).⁵⁴

53. Editor's Note: Figures 28 and 29 can be obtained from the Planning Board office.

54. Editor's Note: Figure 29 can be obtained from the Planning Board office.

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-8.4

§ 325-8.4

- (2) In the B-1 District (Town Center), within the Business Core, such ways shall consist of an easement of at least 11 feet immediately abutting the right-of-way, including sidewalks of at least eight feet in width (refer to Figure 28).⁵⁵
- (3) In the C-1 District (Routes 1A/115), for lots fronting on Routes 1A/115 in the "On Highway" area, such ways shall consist of an easement and setback of at least 70 feet in width immediately abutting the right-of-way in order to accommodate a five-foot-wide sidewalk immediately adjacent to the head-in parking area of the frontage road, on the building side (refer to Figure 36).⁵⁶ See Norfolk Zoning Bylaw § 310-9.4A(3), Pedestrianways and street trees (B-1).
- (4) Pedestrianways within the B-1 District (Town Center) are required to include cement concrete sidewalks, trees and grass strips abutting the right-of-way, street furniture (benches and trash receptacles), and decorative streetlighting. Trees within the sidewalk shall have tree grates and tree guards. Refer to Figure 30.⁵⁷
- (5) All sidewalks within the B-1 District (Town Center) shall be constructed of a minimum of four inches of cement concrete constructed over 12 inches of processed gravel with expansion joints at thirty-two-foot intervals on center and control joints at four feet on center spacing. The width of sidewalk is to be a minimum of eight feet. (See Massachusetts Highway Department Section 701.)

H. Streets.

- (1) Arrangement.
 - (a) The proposed streets shall be considered in their relation to existing and planned streets, topographic and geologic conditions, public convenience and safety, and for safe vehicular travel. Due consideration shall also be given by the developer to the attractiveness of the street layout in order to obtain the maximum amenity of the subdivision and to avoid excessive cut and fills.
 - (b) Long straight roadway sections shall be avoided on streets having a design speed of 30 miles per hour or greater. The maximum length of a straight street in this instance would be 2,200 feet. Further, in the Town Center, straight roadway sections shall be terminated by a "vista termination" [i.e., a lot, building (church with spire, government building, monument/statue site, fountain)] located at an intersection or at the end of streets or pedestrianways. This vista termination shall be prominently visible from one or more streets, or ways, approaching said site.
 - (c) In addition, the proposed streets shall provide for appropriate continuation of existing streets of similar design speed, and the extension of streets into adjoining land.

55. Editor's Note: Figure 28 can be obtained from the Planning Board office.

56. Editor's Note: Figure 36 can be obtained from the Planning Board office.

57. Editor's Note: Figure 30 can be obtained from the Planning Board office.

- (2) Access to feeder streets. Subdivisions, and extensions of subdivisions, serving or capable of serving 25 lots or more shall have at least two points of access to an existing through street separated by a minimum distance of 350 feet or shall have two separate passable access routes via existing primary street(s) to an existing through street where the points of access are separated by a minimum distance of 350 feet.
- (3) Reconstruction. Provision, satisfactory to the Planning Board, shall be made for the reconstruction of adjacent public ways or the addition of alternate access roads or other remedial steps in cases where the development of the subdivision may cause congestion or a danger to pedestrian or vehicular traffic on the adjacent public ways.
- (4) Street jogs. Street jogs (i.e., the continuation of a street through an intersection where the center line of the paved surface is not aligned on both sides of the intersection) are prohibited.
- (5) Reverse curves. Reverse curves on streets may be separated by a straight section of road of at least 150 feet in length if a street has a design speed of 30 miles per hour or less. This can be addressed on a case-by-case basis during the plan review process to ensure that public safety is not impacted.
- (6) Level of service. In addition to the requirements of § 325-3.3B(23), Traffic congestion control and analysis, the following information shall be considered when determining level of service (LOS) flows for traffic analysis. "Level of service (LOS)" is an expression of the quality of traffic flow. It is a commonly used measure of the effectiveness of peak-hour traffic conditions, taking into account such factors as automobile and truck volumes, roadway capacity, roadway speed, grades, parking restrictions, pedestrian activity, the progression of traffic flow along an arterial, roadway types and widths, as well as anticipated delays. Level of service (LOS) is designated in a range from Level A, which is the optimal condition where roadway operating conditions are at their best, to Level F, indicating traffic jam conditions. For instance, LOS A represents free-flowing conditions without stopping, and LOS B, C and D represent increasing levels of delay in approaching intersections, as indicated in the following charts [Subsection H(6)(a) and (b)]. Towns generally strive for operating conditions at LOS C or better; however, during peak flows this is not always possible. Level of service (LOS) D is generally considered as the boundary between acceptable and unacceptable traffic congestions. Level of service (LOS) E and F are generally associated with very long traffic congestion and should be avoided. At these low levels of service, a driver may have to wait for two or more light changes at a signalized intersection, or over a minute to enter and cross another street at an unsignalized intersection. Often it is necessary to design for LOS E conditions in heavily traveled or congested areas.
 - (a) Signalized intersections. Level of service (LOS) for signalized intersections is defined in terms of the average stopped delay in seconds per vehicle approaching the intersection for the peak fifteen-minute analysis period of a peak hour.

Level of Service Criteria for Signalized Intersections	
Level of Service	Expected Delay (seconds)
A	0 to 5.0
B	5.1 to 15.0
C	15.1 to 25.0
D	25.1 to 40.0
E	40.1 to 60.0
F	60.0+

Source: Highway Capacity Manual, Special Report No. 209, 1985

- (b) Unsignalized intersections. Traffic operations at unsignalized intersections are given LOS rankings on the basis of major street turning movements into minor cross streets and the minor cross-street traffic flows. Except for turning movements blocking traffic at constricted locations, typically, major street traffic is minimally affected by minor street flows. The LOS ranking of an unsignalized intersection is determined by calculating the reserve capacity of traffic movements to and from the minor street. "Reserve capacity" is defined as the number of additional vehicles which can be safely accommodated at an unsignalized intersection for a particular traffic movement. Negative reserve capacities indicate that vehicles are (or would be) accepting gaps in traffic that are considered to be less than safe under prevailing conditions. These prevailing conditions are principally affected by the type of control (stop or yield sign), traffic speeds, and sight distances at an unsignalized intersection. Based on available gaps between vehicles on the major street, the reserve capacity of the left turns from the major street and traffic movements from the minor street approach(es) can be determined.

Level of Service Criteria for Unsignalized Intersections		
Reserve Capacity (vehicles per hour)	Level of Service	Expected Delay
400 +	A	Little or no delay
300 to 399	B	Short traffic delays
200 to 299	C	Average traffic delays
100 to 199	D	Long traffic delays
1 to 99	E	Very long traffic delays
0	F	Extreme delays/congestion

Source: Highway Capacity Manual, Special Report No. 209, 1985

- (7) Right-of-way widths and alignments; design speed.
- (a) On all classifications of streets, the following characteristics as shown in the chart below titled "Right-of-Way Widths and Alignments Based on Design Speed" shall be the minimum acceptable (see also Figures 31 to 34).⁵⁸ [Comment: In the following chart, the minimum traveled center-line radius was calculated without superelevation (a superelevation of 0.04 is commonly used). This is supported by AASHTO, as noted in A Policy on Geometric Design of Highways and Streets, page 210. Although superelevation is advantageous for traffic operations, various factors often combine to make its use impractical in many built-up areas. Such factors include wide pavement areas, need to meet the grade of adjacent property, surface drainage considerations, and frequency of cross streets, alleys and driveways. Therefore, horizontal curves on low-speed streets in urban areas are frequently designed without superelevation, counteracting the centrifugal force solely with side friction. Therefore, it is recognized that in areas where there will be cross streets, alleys, driveways and pedestrians, these factors are not well accommodated by superelevated streets.]

Right of Way Widths and Alignments Based on Design Speed				
Street Classification	Drive	Residential	Secondary	Primary
Design speed (miles per hour)	15	20	25	30
Minimum curb to curb (feet)				
Two-way no parking	24	24	26	28
Two-way parking 1 side [1]	32	32	34	35
Two-way parking 2 sides [1]	40	40	42	42
Minimum right-of-way (feet) [2]	50	50	60	60
+ Minimum curb radius at intersections (feet) [3]	20	20	20	25
Minimum traveled way center-line radius (feet) no superelevation	50	90	170	280
Traveled way coincident with center line	Not required	Not required	Not required	Required
Stopping sight distance (feet) [4]	90	125	150	200
Intersection sight distance (feet) [4]	N/A	200	340	400
Minimum intersection spacing center line to center line (feet)	N/A	350	350	350
Two-way traffic volume ADT/DHV	<400/<200	<400/<200	<800/<300	<800/<400
Minimum grade	1%	1%	1%	1%
Maximum Grade [5]	10%	10%	8%	6%

58. Editor's Note: Figures 31 to 34 can be obtained from the Planning Board office.

Sight Distance Summary		
85th Percentile Speed (miles per hour)	Stopping Sight Distance (feet)	Corner Sight Distance (feet)
35	225 to 250	390
40	275 to 325	445
45	325 to 400	500
50	400 to 475	555
55	450 to 550	610
60	525 to 600	665
65	650 to 725	720
70	625 to 800	775

- [1] On-street parking is required in the B-1 District (Town Center) or as noted in § 325-8.5D(13) and in all cases shall be nine feet in width in lieu of a shoulder one foot in width and shall be parallel to the street.
- [2] The right-of-way may be reduced by the Planning Board to accommodate a reduction in the utility easement to a minimum of two feet in width. Refer to Figure 29.⁵⁹
- [3] The intersection of roads with differing design speeds shall be designed in accordance with Subsection I(2).
- [4] For design purposes, sight distances shall be based on the "85th percentile speed," which is the speed below which 85% of the vehicles are traveling.
- [5] At intersections where the gradient exceeds 3%, a leveling area of not less than 100 feet is required. Refer to Subsection J(3).
 - (b) Street design speeds shall be identified on the plans. Posted speed limits shall not exceed design speeds. To facilitate the balance of pedestrians and vehicles in the B-1 District (Town Center), design speeds of 20 miles per hour are encouraged. In other areas, the following criteria shall assist in determining the appropriate design speed to be required:
 - [1] The length of the street, the number of lots being served, and the distance between buildings;
 - [2] The layout and safety concerns of the street, whether straight, curved, sloped, flat; whether paved or gravel; proximity of streetlight poles, stone walls or fences to the paved way;
 - [3] The design speeds of adjoining and surrounding streets;

⁵⁹. Editor's Note: Figure 29 can be obtained from the Planning Board office.

- [4] The number of street intersections existing and proposed in the area, including existing hidden intersections;
- [5] The present and estimated future traffic volumes, the number of parked cars or other obstructions on the street;
- [6] The amount of pedestrian activity in the area;
- [7] Land use interface (e.g., commercial abutting residential);
- [8] The driver's scenic and/or historic view of existing street characteristics and amenities, e.g., existing stone walls, mature canopy trees, wetlands, historic buildings/monuments and sites of importance, rock outcroppings, etc.;
- [9] Proximity to school sites, hospitals, fire and police stations and other public use buildings; and
- [10] Crosswalks, train level crossings as well as farm crossings (e.g., for equipment and animals).

I. Intersections.

- (1) Rights-of-way shall be laid out so as to intersect as nearly as possible at right angles. No right-of-way shall intersect any other right-of-way at less than 75°. Intersections of existing and proposed streets will not be allowed at intervals of less than 350 feet between center lines.
- (2) Property lines at right-of-way intersections shall be cut back to provide for a curb radius on the roadway as indicated in Subsection H(7), Right-of-way widths and alignments; design speed. The minimum curb radius at the intersection shall be 20 feet or greater depending on design speed, and road configuration shall be sufficient to accommodate "WB-50" vehicle turning movements. In instances where streets of differing design speeds intersect, the smaller curb radius requirement shall be required.
- (3) Both the horizontal and vertical sight distance and stopping sight distance at intersecting roadways within a subdivision and at subdivision roadways intersecting with existing roadways shall be provided as indicated in Subsection H(7), Right-of-way widths and alignments; design speed.
- (4) Horizontal and vertical stopping sight distances in all directions at existing and proposed intersections shall be noted on the plans.

J. Vertical alignment.

- (1) All changes in grade shall be connected by vertical curves of sufficient length to afford adequate sight distances as indicated in the following chart:

Design Speed (miles per hour)	Stopping Sight Distance (feet)
15	90

PRELIMINARY DRAFT
 SUBDIVISION OF LAND AND SITE PLAN
 APPROVAL REGULATIONS

§ 325-8.4

§ 325-8.4

Design Speed (miles per hour)	Stopping Sight Distance (feet)
20	125
25	150
30	200

(2) Vertical curves.

- (a) For crest vertical curves, the length in feet shall be computed from the following formulas:⁶⁰

Where:

- L = Length of vertical curvature
- S = Sight distance
- A = Algebraic difference in grades, percent
- h_1 = 3.5 feet (eye of driver)
- h_2 = 2.0 feet (height of object)

- (b) For sag vertical curves, the length in feet shall be computed from the following formulas:

When S is less than L, $L = \frac{AS^2}{400 + 3.5S}$

When S is greater than L, $L = 2S - \frac{400 + 3.5S}{A}$

Where:

- L = Length of vertical curvature
- S = Sight distance
- A = Algebraic difference in grades, percent

- (c) Minimum length of a sag or crest vertical curve shall be 100 feet. All vertical curves shall show the following on the profiles:

- [1] Point of vertical intersection (PVI) station and elevation.
- [2] High point or low point station and elevation.

- (3) Where the proposed grade of any street meeting another existing or proposed street, whether said other street is within or adjacent to the subdivision, exceeds 3%, a leveling area shall be provided for a distance of not less than 100 feet, measured from the edge of right-of-way of the other street. The grade of the center line or of any vertical curve tangent shall not exceed a negative 1%.

- K. Culs-de-sac. Culs-de-sac should be created to accommodate a WB-50 vehicle as specified by AASHTO. A cul-de-sac pavement shall have a minimum outer radius of 47 feet and a maximum inner radius of 20 feet.

⁶⁰. Editor's Note: See the formulas in § 325-4.14H(2).

- (1) The paved portion of culs-de-sac, whether temporary or permanent, shall not be less than 250 feet in length and not exceed 500 feet in length measured from the farthest end of the paved turnaround to the intersection (center line) of the nearest intersecting through street.
- (a) Any easement in any turnaround shown on a plan approved under the Subdivision Control Law,⁶¹ other than an easement appurtenant to a lot abutting the turnaround, shall terminate upon the approval and recording of a plan showing extension of the roadway and the recording of a certificate by the Planning Board of the construction of such extension.
- (b) Cul-de-sac, whether permanent or temporary, shall provide a turnaround at the closed end(s) having a property line diameter of 120 feet, a radius at the outer edge of traveled way of 47 feet, and a landscaped island in the center. Islands shall be designed to allow for proper emergency vehicle and snowplow access. A "not a through street" sign shall be provided at the entrance to a cul-de-sac and its location shown on the subdivision plan. In the case of a temporary turnaround, the plan shall show an easement(s) to accommodate the specifications of this subsection. The frontage of lots abutting a temporary turnaround shall be measured along the permanent street right-of-way and not the bulb of the cul-de-sac. See detail (Figure 43).⁶²
- (c) Provisions for future through access.
- [1] All culs-de-sac, except those determined by the Planning Board to be permanent in nature, shall include a right-of-way running from the closed end(s) of the cul-de-sac to the terminus points as described below for purposes of providing future through access. The width of said right-of-way shall be equal to the right-of-way width of the cul-de-sac street. Said right-of-way shall be laid out and construction plans included as part of the subdivision plan. The land in the right-of-way shall be turned over to the Town of Norfolk as a gift of land prior to release of any lot in the subdivision.
- [2] The terminus point of the right-of-way shall be both to any adjacent Town-owned conservation land and as follows:
- [a] First, to any street which abuts the property line of the parcel being subdivided, other than the street which forms the intersection with the paved portion of the cul-de-sac;
- [b] Second, if Subsection K(1)(c)[2][a] is not applicable, to any right-of-way or street easement of at least 20 feet right-of-way width which abuts the property line of the parcel being subdivided;

61. Editor's Note: See MGL c. 41, §§ 81K through 81GG.

62. Editor's Note: Figure 43 can be obtained from the Planning Board office.

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-8.4

§ 325-8.4

- [c] Third, if Subsection K(1)(c)[2][a] and [b] are not applicable, to the point on the property line of the parcel being subdivided which is closest to the closed end of any cul-de-sac existing on any adjacent parcel;
 - [d] Fourth, if Subsection K(1)(c)[2][a], [b] and [c] are not applicable, to the point on the property line of the parcel being subdivided which is closest to any existing through street on any adjacent parcel, other than the street which forms the intersection with the parcel portion of the cul-de-sac;
 - [e] Fifth, if Subsection K(1)(c)[2][a], [b], [c], and [d] are not applicable, to the point on the property line of the parcel being subdivided which is closest to any adjacent landlocked (i.e., without adequate frontage) parcel; and
 - [f] Sixth, if Subsection K(1)(c)[2][a], [b], [c], [d] and [e] are not applicable, to the point on the property line of the parcel being subdivided which is closest to the largest adjacent buildable parcel of land.
- [3] For purposes of this regulation, references to the point "closest" shall exclude wetlands. The easement created by this subsection shall, to the extent practicable, be laid out to exclude lakes, ponds, wetlands, woodlands, watercourses and steep terrain.
- (d) An easement for access and maintenance shall also be provided from all culs-de-sac to any adjacent Town-owned conservation land. Such easements shall have a minimum width of 20 feet.
 - (e) Cul-de-sac shall not have a grade of greater than 4% for the last 100 feet at the closed end.
 - (f) Cul-de-sac plantings. The applicant shall submit a landscape plan for the central portion of a cul-de-sac. The following are permitted:
 - [1] Trees.
 - [2] Planting with ground cover and spreading mulch between plants for weed control.
 - [3] Planting perennial grass by either sod or seed.
 - [4] Planting ornamental shrubs of a type acceptable to the Board.
 - [5] Retaining existing vegetation with the approval of the Board.
- (2) Standards and specifications. The standards of the American Nursery and Landscape Association and the specifications of the Massachusetts Association of Landscape Professionals shall apply to landscaping subject to these regulations.⁶³

63. Editor's Note: Amendment pending.

- (3) Provisions for future through access (easements).
- (a) An easement shall be provided from the cul-de-sac to the terminus points as described below for purposes of providing future through access. The width of said easement shall be equal to the right-of-way width of the cul-de-sac street, but in no event less than 20 feet wide. Easements serving Town conservation land shall be 20 feet wide.
- (b) The terminus point of the easement(s) shall be both to any adjacent Town-owned conservation land and as follows:
- [1] First, to any street which abuts the property line of the parcel being subdivided, other than the street which forms the intersection with the paved portion of the cul-de-sac;
 - [2] Second, if Subsection K(3)(b)[1] is not applicable, to any right-of-way or street easement of at least 20 feet right-of-way width which abuts the property line of the parcel being subdivided;
 - [3] Third, if Subsection K(3)(b)[1] and [2] are not applicable, to the point on the property line of the parcel being subdivided which is closest to the closed end of any cul-de-sac existing on any adjacent parcel;
 - [4] Fourth, if Subsection K(3)(b)[1], [2] and [3] are not applicable, to the point on the property line of the parcel being subdivided which is closest to any existing through street on any adjacent parcel, other than the street which forms the intersection with the parcel portion of the cul-de-sac;
 - [5] Fifth, if Subsection K(3)(b)[1], [2], [3] and [4] are not applicable, to the point on the property line of the parcel being subdivided which is closest to any adjacent land-locked (i.e., without adequate frontage) parcel; and
 - [6] Sixth, if Subsection K(3)(b)[1], [2], [3], [4] and [5] are not applicable, to the point on the property line of the parcel being subdivided which is closest to the largest adjacent buildable parcel of land.
- (c) For purposes of this regulation, references to the point "closest" shall exclude wetlands. The easement created by this subsection shall, to the extent practicable, be laid out to exclude lakes, ponds, wetlands, woodlands, watercourses and steep terrain.
- L. Half streets. A "half street" is a portion of a proposed street running astride a common boundary line, said portion being within a subdivision under consideration. Half streets shall be prohibited.
- M. Sight distances at intersections. Horizontal and vertical sight distances in all directions at intersections shall be noted on the plans. Sight distances at intersections shall be provided as indicated in Subsection H(7), Right-of-way widths and alignment; design speed. Refer also to the visual corner clearance requirement in the Norfolk Zoning Bylaw, § 310-9.4A(13), pertaining to the B-1 District (Town Center).

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-8.4

§ 325-8.5

- N. Stopping sight distance. "Stopping sight distance" is the sum of two distances: the distance traversed by the vehicle from the instant the driver sights an object necessitating a stop to the instant the brakes are applied and the distance required to stop the vehicle from the instant brake application begins. For all stopping sight distance calculations, the height of the driver's eye is considered to be 3.5 feet above the road surface and the height of the object is considered to be 2.0 feet above the road surface in accordance with AASHTO policy. Stopping sight distances shall be provided as indicated in Subsection H(7), Right-of-way widths and alignment; design speed.
- O. Frontage road design and location. A frontage road, 24 feet in width, shall be constructed on all lots in the On Highway area of the C-1 District (Routes 1A/115), in accordance with the requirements of the Zoning Bylaw⁶⁴ and the construction standards for a primary street as noted in § 325-8.5D(3), Minimum depth requirements. Refer to Figure 36.⁶⁵ The location of drives and streets on the same and opposite sides of a highway shall be in accordance with the applicable sections of the Norfolk Zoning Bylaw, "Location of Drives and Streets on Same Side of Highway" and "Alignment of Drives and Streets on Opposite Sides of Highway."
- (1) Cross easements. Cross easements shall be required by abutting landowners to permit traffic to traverse from one property to another.
 - (2) Maintenance. It shall be the responsibility of the property owners to maintain frontage roads and pedestrianways for safe vehicular and pedestrian travel at all times and in all weather conditions. If, in the opinion of the Police Chief, a hazard to public safety exists for failure to perform such maintenance, the Town reserves the right to undertake such maintenance and back charge the owner reasonable costs thereof.
 - (3) Signage. Stop signs shall be provided at all points of egress, drives and major entrances to the highway areas. Additional traffic signs may be required as deemed necessary by the Board for public safety.
- P. Street layout in the B-1 District (Town Center). Streets shall be laid out within the Town Center District so that no occupied lot is more than 1,500 feet from a primary street, or more than 450 feet from a secondary street, as measured along the street frontage. Street layouts shall be generally rectilinear with deformations as may be physically proper to adapt streets to topographic or other natural conditions, and to generally ensure vista terminations at street intersections.

§ 325-8.5. Street, roadway and utility construction standards.

- A. Basic requirements. The subdivider shall install all of the improvements itemized herein unless waived, in writing, by the Board. All work done under this section shall be done under the direction of the Planning Board.

64. Editor's Note: See Ch. 310, Zoning.

65. Editor's Note: Figure 36 can be obtained from the Planning Board office.

B. No aforementioned bond or covenant shall be released until full approval, in writing, of all work done under this section is received by the Planning Board from its designated inspector/agent. (See also § 325-3.4.)

C. Referenced standards.

- (1) The Commonwealth of Massachusetts, Massachusetts Highway Department (formerly "Department of Public Works"), Standard Specifications for Highways and Bridges, latest edition, as amended, and the Supplemental Specifications to the Standard Specifications for Highways and Bridges, latest edition, as amended.
- (2) The Commonwealth of Massachusetts, Massachusetts Highway Department (formerly "Department of Public Works"), Construction Standards, latest edition, as amended.
- (3) Typical Cross Sections (Appendix C) and Typical Details (Appendix D) of these Subdivision Rules and Regulations.⁶⁶

D. Streets and roadways.

- (1) Minimum widths and depths. The following minimum improvement standards shall be required (see typical cross sections).
- (2) Minimum width requirements (in feet).

Street Classification	Right-of-Way	Paved Traveled Way	Grass Strip***	Sidewalks in Grass Strip****
Drive	50*/60**	13*/24**	2 @ 9	1 @ 5
Local street	50*/60**	14*/26**	2 @ 8	1 @ 5
Secondary street	50*/60**	16*/26**	2 @ 9	2 @ 5
Primary street	50*/60**	16*/28**	2 @ 9	2 @ 5

Cross slope for traveled way, grass strips, and sidewalks shall be 1/4 inch per foot.

* Based on one-way street with no on-street parking.

** Based on two-way street with no on-street parking.

*** Includes berm, edging or curb. Grass strips in the Town Center may be reduced to a two-foot minimum by the Planning Board in order to reduce right-of-way widths.

**** In the Town Center, within the Business Core, sidewalks are required to be a minimum eight feet in width and outside of the right-of-way, within the pedestrianway/walkway.

- (3) Minimum depth requirements (in inches).

66. Editor's Note: Appendix C and Appendix D can be obtained from the Planning Board office.

PRELIMINARY DRAFT
 SUBDIVISION OF LAND AND SITE PLAN
 APPROVAL REGULATIONS

§ 325-8.5

§ 325-8.5

Roadways				
Street Classification	Processed Gravel	Dense Graded Crushed Stone for Base	Binder Course	Finish Course
Drive	8	—	2	1 1/2
Local street	12	4	2 1/2	1 1/2
Secondary street	15	4	2 1/2	2
Primary street	18	4	3	2

Sidewalks			
Street Classification	Processed Gravel	Binder Course	Finish Course
Drive	12	1 1/2	1
Local street	12	1 1/2	1
Secondary street	12	1 1/2	1
Primary street	12	1 1/2	1

- (a) At accessways/driveways to all commercial and industrial sites, provide an eighteen-inch gravel base with three inches of binder and a one-and-one-half-inch finish course from the traveled way to the property line. A tack coat of bituminous material shall be applied by mechanical means immediately prior to installation of the top course of pavement.
 - (b) Parking lots shall be constructed with a twelve-inch gravel base, and with two inches each of binder and finish courses. There shall be a minimum twenty-four-foot-wide paved accessway/driveway connecting linked parking areas.
- (4) Clearing and grubbing.
- (a) Clearing and grubbing shall be done in accordance with the relevant provisions of Section 101 of the Massachusetts Highway Department Standard Specifications and Town of Norfolk bylaws.
 - (b) All excavation and embankment areas shall be first cleared of all stumps, brush, roots, boulders, debris, and like materials and disposed of off site. All loam and topsoil within the excavation/embankment areas shall be removed and stockpiled for reuse within the subdivision. Stump and brush removal shall be in accordance with most recent Board of Health and Department of Environmental Protection (DEP) regulation and/or policy.
 - (c) Excavations.
 - [1] Excavations shall be done in accordance with the relevant provisions of Section 120, Excavation, of the Massachusetts Highway

Department Standard Specifications and Chapter 156, Earth Removal, of the Town of Norfolk bylaws.

[2] When 500 cubic yards or more of materials are to be removed from the site or relocated within the site, an earth relocation/removal permit is required. See also Article 9, Earth Relocation/Removal, for requirements and instructions.

(5) Embankments.

- (a) Construction of all embankment fill shall be done in accordance with the relevant provisions of Sections 120, 150, and 170 of the Massachusetts Highway Department Standard Specifications and Town of Norfolk bylaws and in accordance with the procedures described herein.
- (b) Fill material shall be approved suitable existing material obtained from on-site excavations and shall consist of solid, sound mineral aggregate. It shall be free from deleterious, organic, elastic or foreign matter and shall be adequately graded for satisfactory compaction into a stabilized soil structure.
- (c) Embankments shall not be constructed with material from rock or boulder excavations.
- (d) Off-site fill material shall be gravel borrow conforming to Massachusetts Highway Department Material Specification M1.03.0, Type b. A certificate of compliance indicating the gradation and source of material shall be submitted and approved prior to delivery of any material to the site.
- (e) Fill for embankments shall be placed in uniform layers not exceeding 12 inches in loose measurement depth and compacted to not less than 95% of the maximum dry density as determined by the Standard AASHTO Test Designation T99 compaction test Method C at optimum moisture content. No fill material shall be placed, spread or compacted while the ground or fill material is frozen or thawing or during inclement weather conditions. Fill material having excessive moisture content shall not be compacted until the material has been aerated by grading, harrowing or other methods to remove excessive moisture.

(6) Gravel base.

- (a) The subgrade shall be brought to proper grade and compacted as shown on the profiles and in accordance with the approved cross section. No gravel base shall be placed until all earthwork and utility installation work has been completed.
- (b) Gravel for roadway base and sidewalk base shall be spread and compacted in layers not exceeding six inches in compacted measurement depth and in accordance with the approved cross section. Material shall be compacted to not less than 95% of the maximum dry density as determined by the Standard AASHTO Test Designation T99 compaction test Method C at optimum moisture content.

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-8.5

§ 325-8.5

- (c) Construction of gravel base and binder courses shall be done in accordance with the relevant provisions of Sections 401 and 405 of the Massachusetts Highway Department Standard Specifications except the compacted gravel base layers should be placed in lifts not exceeding six inches in thickness.
 - (d) Graded gravel for roadway subbase and sidewalk base shall conform to Massachusetts Highway Department Material Specification M1.03.1. A certificate of compliance indicating the gradation and source of material shall be submitted and approved prior to delivery of any material to the site.
- (7) Dense graded crushed stone for roadway base.
- (a) Construction of all dense graded crushed stone for roadway base shall be done in accordance with the relevant provisions of Section 402 of the Massachusetts Highway Department Standard Specifications and in accordance with the procedures described herein.
 - (b) Processed gravel for base shall conform to Massachusetts Highway Department Material Specification M.01.7. A certificate of compliance indicating the gradation and source of material shall be submitted and approved prior to delivery of any material to the site.
 - (c) The applicant shall provide as-built survey grades prior to installation of finished binder course. This survey shall consist of obtaining center-line and both gutter elevations at fifty-foot stations. In areas where the roadway gradient and cross -slope do not agree with what is shown on the approved plans, the applicant shall reconstruct and resurvey those areas until the proper gradient and/or cross slope has been obtained. No bituminous concrete shall be placed and compacted until written authorization has been obtained from the Planning Board or its engineer on Form K.⁶⁷
- (8) Bituminous concrete pavement, temporary berm, sidewalks, and driveways.
- (a) Materials and construction methods of the bituminous concrete pavement, tack coat, sidewalks, and driveways shall conform to the relevant provisions of Sections 460 and 701 of the Massachusetts Highway Department Standard Specifications and be in accordance with the procedures described herein; however, sidewalks in the B-1 District (Town Center) shall be constructed of cement concrete as described in § 325-8.4G. A tack coat of bituminous material shall be applied by mechanical means immediately prior to installation of top course of pavement.
 - (b) Pavement shall be placed and compacted in two courses, binder and finish. All driveways and curb cut ramps shall slope toward the roadway and end at the roadway gutter line. Driveways shall commence their downward slope to the roadway from the right-of-way/street line and the ramps from the sidewalk. No driveways or ramps which slope away from the roadway will be accepted. Edging or curb (as applicable) shall be continued into the driveway/ramp cut to prevent erosion at the cut. See driveway detail in

⁶⁷. Editor's Note: Form K can be obtained from the Planning Board office.

Town of Norfolk Regulations for Street Excavations, as most recently amended. In the B-1 District (Town Center), the driveway entrances from the street shall be constructed of bituminous concrete to the edge of sidewalk. That portion of the driveway over the sidewalk shall be constructed of cement concrete as described in § 325-8.4G.

- (c) A temporary berm shall be constructed on the roadway binder course to direct stormwater runoff to the closed drainage system until a permanent curb/berm is installed. The temporary berm shall be a temporary cape cod berm.
- (9) Sloped granite edging and vertical granite curbing. Sloped granite edging shall be required on both sides of all traveled ways, except in the B-1 District (Town Center), where vertical granite curbing shall be required. Materials and construction methods shall conform to the relevant provisions of Massachusetts Highway Department Standard Specification M9.04.1 and M9.04.2 and be in accordance with the procedures described herein. Certificates of compliance shall be required in accordance with § 325-5.17, Certificates of compliance.
- (10) Curbing and edging.
- (a) Sloped granite edging shall be four-foot-minimum lengths, except where shorter length is dictated by radius. It shall be set after the binder course is placed and before the top course is placed on a compacted gravel bedding at a forty-five-degree angle with a seven-inch reveal. The nose of the granite shall be set in a concrete base approximately six inches square which shall abut against the binder course. The top course of paving shall cover the concrete and key the granite in place. Joints shall be mortared. A temporary cape cod berm shall be installed at the time of binder course installation and shall be continuously maintained in working order until the final course of bituminous concrete is installed.
 - (b) Vertical granite curbing shall be upright four-foot-minimum lengths, except where shorter length is dictated by radius. The finished side shall face the traveled way, with a reveal of six inches. Installation of the vertical granite curbing shall precede the installation of the bituminous concrete binder course.
 - (c) Materials and construction methods shall conform to the relevant provisions of Section 501 of the Massachusetts Highway Department Standard Specifications and be in accordance with the procedures described herein.
- (11) Cross sections.
- (a) Cross sections shall be drawn for all proposed roadways and existing roadways to be reconstructed. They shall be drawn at fifty-foot stations and at all proposed culverts at a scale of eight feet to the inch horizontally and vertically.
 - (b) Sufficient space is to be provided between cross sections to allow the proposed roadway template to be drawn without overlapping the adjoining sections.

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-8.5

§ 325-8.5

- (c) The following shall be shown on the sections:
- [1] Edges of existing roads, drives, walks, swamps, lawns, etc.
 - [2] Existing walls, poles, hydrants, mail boxes, etc.
 - [3] All existing trees 12 inches and over noting the diameter, species of tree, station and offset.
 - [4] Indicate elevation, station, and description of wells, cesspools, and on-site septic systems, and a description and elevation of sills of buildings.
 - [5] Existing culverts shall be shown as long dash lines.
 - [6] Water elevations shall be shown as a dashed line with elevation and a date taken.
 - [7] Approximate elevation of the top of rock for above and below existing grade.
 - [8] The profile grade and right-of-way lines are to be noted on each template.
 - [9] The template shall consist of the finished grade and the proposed subgrade lines.
 - [10] Stations shall be located below the cross section and increase going up the plan sheet.
 - [11] Guide vertical elevations and horizontal distances in both directions shall be shown on each cross section.
 - [12] A summary table shall be shown with the cross sections showing the cubic yards between the stations for cut, fill, muck, and rock excavation, and gravel borrow. A total for each category shall be shown along with the final amount of cubic yards of earth to be removed from the site or gravel borrows to be brought into the site.
 - [13] Limits of rock and muck excavation.
 - [14] Planimeter readings are to be shown to the right of each template using the abbreviations: C = Cut, F = Fill, M = Muck Excavation, R = Rock Excavation, GB = Gravel Borrow.
- (12) Sidewalks on existing roadways. Sidewalks shall be required in the applicant's property along all existing public ways which immediately abut the proposed subdivision for the purpose of ensuring safe and adequate pedestrian access to and from the subdivision. Sidewalks shall not be interrupted by steps or abrupt changes in level greater than 1/2 inch. All sidewalk surfaces shall be nonslip. In general, sidewalks on existing roadways shall be constructed with minimal change to the natural rural appearance of the street. Sidewalks shall follow the natural contours of the land and preserve both trees and shrubs to the extent possible to comply with the following guidelines. To facilitate review of the

proposed development by the appropriate authorities, the applicant shall stake the side line of the proposed walkway at fifty-foot intervals.

- (a) Width. The width of the sidewalk shall be five feet in the C-1 District (Routes 1A/115); however, within the B-1 District (Town Center), within the Business Core, the walkway width shall be a minimum of eight feet.
- (b) Clearing and grubbing.
 - [1] All excavation areas shall first be cleared of stumps, brush, roots, boulders, debris and like materials which shall then be disposed of off site. All loam and topsoil within the excavation area shall be removed and stockpiled for reuse.
 - [2] See also earth removal regulations, Article 9.
 - [3] The removal of all trees shall be in compliance with the Shade Tree Act and the Scenic Roads Act where applicable.⁶⁸ Trees not protected under these acts if in living, viable condition and having a trunk in excess of 12 inches in diameter measured four feet above grade shall be retained wherever possible. In addition, trees of special importance because of species or distance from other trees shall be field marked by the Planning Board or its agent, indicating in each case whether the tree should be removed or preserved.
- (c) Bituminous paving. Bituminous concrete pavement for sidewalks and driveways shall be installed to conform to the relevant provisions of Sections 460 and 701 of the Massachusetts Highway Department Standard Specifications and in accordance with procedures described therein; however, sidewalks in the B-1 District (Town Center) shall be constructed of bituminous concrete cement. At least one course of bituminous concrete pavement for sidewalks shall be installed to conform to generally accepted engineering practice. Whenever there is an intersection of sidewalks with streets, public ways, driveways or parking lots, each shall blend to a common level.
- (d) Grass strip. A twenty-five-foot grass strip separating the sidewalk from the road shall be installed wherever possible consistent with the walkway design procedures described herein (refer to Figure 29). However, grass strips within the Business Core of the B-1 District (Town Center) are required to be parallel and along the frontage line for a width of three feet, as noted in Figure 30. Refer to Subsection F, Street trees, which describes the placement of street trees.⁶⁹
- (e) Drainage. The paved surface shall be pitched a minimum of 1/4 inch per foot in the direction of existing drainage facilities to provide adequate disposal of surface water, including control of erosion, flooding, and standing water on adjacent lands.

⁶⁸. Editor's Note: See MGL c. 87, Shade Trees, and MGL c. 40, § 15C, Scenic road designations.

⁶⁹. Editor's Note: Figures 29 and 30 can be obtained from the Planning Board office.

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-8.5

§ 325-8.5

- (13) On-street parking regulations. On-street parking shall be required in the B-1 District (Town Center), within the Business Core, unless otherwise prohibited in specific areas by the Board of Selectmen or Chief of Police. On-street parking may be permitted elsewhere at the applicant's discretion subject to Planning Board approval. The specifications for parallel parking, including handicapped parking, in this area are to be in accordance with § 325-8.4H(7), Right-of-way widths and alignments, and Figure 37.⁷⁰ On-street parking spaces shall not be permitted over crosswalks. In the area of crosswalks, the pedestrianway/sidewalk and associated curb ramp shall extend the width of the adjacent parking spaces (referred to as a "neckdown") such that the parking spaces appear receded from the traveled portion of the street [refer to Figure 37 as noted above, and also to Subsection I(5)].

E. Retaining walls.

- (1) Retaining walls shall be installed where required and deemed necessary by the Planning Board. They shall be cemented stone masonry conforming to the relevant provisions of Section 685 of the Massachusetts Highway Department Standard Specifications, Construction Standards, and in accordance with the procedures described herein. Maximum visible height of retaining walls shall be four feet, unless waived by the Planning Board in the event that terracing, plantings and other decorative elements have been incorporated within the design of the retaining wall.
- (2) Further, terracing, plantings and other decorative elements are encouraged to be incorporated within the design of the retaining wall.

F. Street trees.

- (1) Trees shall be planted at thirty-five-foot intervals on both sides of all streets within the subdivision and on the one side of the adjacent existing public way that is contiguous with the subdivision. Trees shall be located within the existing right-of-way, except in the B-1 District, where they shall be planted within the tree easement. Tree placement shall also be coordinated with streetlight placement in the three-foot-wide tree easement in the B-1 District (Town Center), within the Business Core, as shown in Figure 38. Trees shall also be permitted within the pedestrianway easement within the sidewalk, and must be accompanied with tree grates and tree guards as approved by the Planning Board, and as shown in Figure 39.⁷¹
- (2) Shade trees reinforce the rural character of the Town and provide relief of parking areas and architectural mass. In order for shade trees to achieve stately proportions, they shall be at least 12 feet in height and three inches in caliper when planted, and must reach a minimum mature height of 25 to 35 feet. In the B-1 District (Town Center), the lowest branches shall be at least six feet above ground level in order to accommodate pedestrian activity. All trees shall be planted no later than one month after installation of the first course of bituminous concrete and shall be guaranteed for one year after street acceptance. A written

70. Editor's Note: Figure 37 can be obtained from the Planning Board office.

71. Editor's Note: Figures 38 and 39 can be obtained from the Planning Board office.

copy of said guarantee shall be provided to the Planning Board prior to street acceptance. The species of trees to be used must be approved by the Norfolk Tree Warden with written verification submitted to the Planning Board and are to be selected from the following tree list or such other tree variety, as appropriate, and as may be approved by the Planning Board:

- (a) *Acer pseudoplatanus* – sycamore maple.
 - (b) *Acer rubrum* – red maple and varieties.
 - (c) *Acer saccharum* – sugar maple and varieties.
 - (d) *Carpinus betulus* – European hornbeam.
 - (e) *Cercidiphyllum japonicum* – katsura tree.
 - (f) *Ginkgo biloba* – ginkgo variety.
 - (g) *Liquidambar styraciflua* – sweetgum var.
 - (h) *Quercus palustris* – pin oak.
 - (i) *Quercus rubra* – red oak.
 - (j) *Zelkova serrata* – Japanese zelkova.
 - (k) *Sophora japonica* – Japanese pagoda tree.
 - (l) *Fraxinus pennsylvanica* – green ash var.
 - (m) *Pyrus calleryana* – Redspire Callery pear.
 - (n) *Gleditsia triacanthos inermis* – thornless honeylocust var.
 - (o) *Platanus acerifolia* – Bloodgood London plane tree.
 - (p) *Tilia cordata* – littleleaf linden and varieties.
 - (q) *Tilia tomentosa* – silver linden.
- (3) There shall be at least three species of tree planted on each street. At all street or driveway intersections, trees (and shrubs) shall be set back a sufficient distance from the intersection so that they do not present a sight distance/safety hazard. This regulation shall be considered in conjunction with Subsection D(12)(d), Grass strip.
- (4) Tree wells shall be required for the protection of existing trees where deemed necessary by the Tree Warden. Materials and planting methods shall conform to the relevant provisions of Section 771 of the Massachusetts Highway Department Standard Specifications (including but not limited to staking and wiring of all trees) and the Norfolk Tree Warden and be in accordance with the procedures described herein. The applicant shall provide written verification to the Planning Board that the Norfolk Tree Warden has reviewed and approved the street tree planting plan.

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-8.5

§ 325-8.5

- (5) Shrubs, as approved by the Board and the Tree Warden, shall also be chosen and located within the tree easement to fulfill a specific function of screening and ground cover. Consideration shall be given to the effects of sun exposure or shade, snowplowing and winter salt spray. Shrubs shall be no smaller than 18 inches to 24 inches in height for woody types. The species of shrubs shall be chosen from the following species, unless otherwise specified in writing by the Tree Warden, or other shrub varieties, as appropriate, and as may be approved by the Planning Board:
- (a) *Taxus* spp. – yew, various.
 - (b) *Rhododendron* spp. – rhododendron, various.
 - (c) *Vaccinium corymbosum* – highbush blueberry.
 - (d) *Amelanchier canadensis* – shadbush.
 - (e) *Viburnum* spp. – viburnum, various.
 - (f) *Ligustrum* spp. – privet, various.
 - (g) *Juniperus* spp. – juniper, various.
 - (h) *Forsythia* spp. – forsythia, various.
 - (i) *Rosa* spp. – rose, various.
 - (j) *Spiraea* spp. – spirea, various.
- G. Loaming and seeding. The removal of topsoil from the development area will not be allowed. Not less than six inches of good-quality loam shall be placed within the right-of-way, cut and fill areas, easements, lots, etc. Materials and construction methods for loam borrow and topsoil shall conform to the relevant provisions of Section 751 of the Massachusetts Highway Department Standard Specifications and be in accordance with the procedures described herein. Materials and construction methods for seeding shall conform to the relevant provisions of Section 765 of the Massachusetts Highway Department Standard Specifications and be in accordance with the procedures described herein. Seed for the grass strips shall conform to Massachusetts Highway Department Material Specification M6.03.0, Grassplots and Islands. After loam and seed has been placed in retention/detention basins and slopes equal to or steeper than 3:1, a jute mesh matting or an approved equal shall be installed in accordance with the manufacturer's recommendations for slope stabilization. All loaming and seeding shall be installed no later than one month after installation of the first course of bituminous concrete.
- H. Streetlights.
- (1) The applicant shall be responsible for furnishing and erecting streetlights at locations approved by the Planning Board [refer also to Subsection H(2), Location of decorative streetlights). Streetlight fixtures and standards shall conform to fixtures and standards as most recently installed in the Town of Norfolk at the time of application, except within the B-1 District (Town Center),

within the Business Core, wherein the applicant shall install the decorative streetlight as identified in Figure 40.⁷²

- (2) Location of decorative streetlights.
 - (a) Decorative streetlights within the B-1 District (Town Center), within the Business Core, shall be located within the three-foot tree easement at seventy-five-foot intervals, as approved by the Planning Board. Placement shall be coordinated with abutting properties to ensure the seventy-five-foot interval is maintained, and with street trees within the Business Core as noted in Figure 38.⁷³
 - (b) Metal halide (MH) lamps and fixtures shall be used as they offer the best balance between ideal color, energy efficiency and cost. A light source of 100 watts (for the pole height of 10 feet) shall be required.

I. Guardrails.

- (1) Guard rails shall be required along roadways as per AASHTO's Guide for Selecting, Locating, and Designing Traffic Barriers, 1977, and where, in the opinion of Planning Board, it is necessary for public safety.
- (2) Materials and construction methods shall conform to the relevant provisions of Section 601 of the Massachusetts Highway Department Standard Specifications and be in accordance with the procedures described herein. Posts shall be pressure-treated wood, rectangular in sections six inches by eight inches, chamfered on top, and at least six feet three inches long with flat tops and butts, conforming to Massachusetts Highway Department Material Specification M8.07.OB.2. Wooden rail elements shall conform to AASHTO and Massachusetts Highway Department specifications, and as noted below. Guardrails shall not be ramped. Weathering steel guardrails conforming to Massachusetts Highway Department and AASHTO standards shall also be permitted for streets.
- (3) Wood posts and rails.
 - (a) Wood posts and rails are to be used only on very-low-speed roads and parking areas, and within the B-1 District (Town Center) on streets having a design speed of 15 miles per hour and 20 miles per hour, and are to be pressure-treated. Prior Planning Board approval is required for use of this type of barrier.
 - (b) Wood posts shall conform to the materials and construction methods as described in Subsection I(2). Spacing of posts shall be a maximum of six feet three inches center to center.
 - (c) Wood rails shall be four inches by eight inches and of a length where joints are to be located only at the posts. Rails shall be of the same species and stress grade as the wood posts. Rails shall be treated in accordance with

72. Editor's Note: Figure 40 can be obtained from the Planning Board office.

73. Editor's Note: Figure 38 can be obtained from the Planning Board office.

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-8.5

§ 325-8.5

Massachusetts Highway Department Material Specification M8.07.0B.2. Two five-eighths-inch carriage bolts shall be used to fasten the rail to the post and counter sunk. Nuts shall be installed so that they cannot be backed off. The number of rails, either one or two, to be used for the wood guardrail shall be determined by the Planning Board.

- (4) Curb-cut ramps. Curb-cut ramps must be provided in curbed areas that have sidewalks. The location of the curb-cut opening and ramp must be carefully coordinated with respect to the pedestrian crosswalk lines, if any. This planning must ensure that the ramp opening (at the fully depressed curb) is situated within the parallel boundaries of the crosswalk markings. All ramps must comply with the Americans with Disabilities Act regulations, as most recently revised.⁷⁴
 - (a) Ramps for the handicapped are not limited to intersections and marked crosswalks, and ramps shall also be provided at other appropriate or designated points of pedestrian concentration, such as loading islands, midblock pedestrian crossings, and locations where pedestrians could not otherwise recognize the proper place to cross the roadway. Because nonintersection pedestrian crossings are generally unexpected by the motorist, warning signs shall be installed and adequate visibility provided by prohibiting parking.
 - (b) Ramps for the handicapped, including sloping sides, shall have a textured, nonskid surface. The textured surface shall be roughened in the direction of the slope. This texture not only provides a measure of safety for the user but also warns a blind person of the presence of the ramp.
 - (c) Ramps shall be designed in accordance with Typical Cross Sections (Appendix C) and Typical Details (Appendix D) of these Subdivision Rules and Regulations.⁷⁵ Slope of the ramp shall not exceed 1:12 and shall blend to meet the roadway gutter with a one-half-inch maximum lip for drainage. Where sidewalks are too narrow to install a straight-line curb cut at a slope of 1:12, the sides of the curb cut shall slope at 1:12.
 - (d) The width of curb cuts shall be no less than three feet, not including sloped sides. Sides of curb cuts shall extend not less than 24 inches at the curb. There shall be no vertical curbing at the side of the curb cut.
- (5) Crosswalks. Street and pedestrianway design shall minimize pedestrian crossings on primary streets. Crosswalks shall be required on all sides of all street intersections, and along streets as required by the Board. In the B-1 District (Town Center), within the Business Core, crosswalks shall be coordinated with on-street parking areas, and spaced every 10 parking spaces (or approximately 218 feet as measured to the center of neckdowns), as shown in Figure 37 and as described in Subsection D(13).⁷⁶

74. Editor's Note: See 42 U.S.C. § 12101 et seq.

75. Editor's Note: Appendix C and Appendix D can be obtained from the Planning Board office.

76. Editor's Note: Figure 37 can be obtained from the Planning Board office.

§ 325-8.5

NORFOLK CODE

§ 325-9.2

- (a) Crosswalks at intersections of streets and along streets shall be four feet in width and shall be painted with yellow reflectorized vertical striping as shown in Figure 41.⁷⁷
- (b) Any raised islands in the traveled path of a crosswalk shall be cut through level with the street, or shall have curb cuts at both sides, and a level area at least four feet in width in the part of the island intersected by the crosswalk.

J. Street furniture. Benches and garbage receptacles shall be required within the pedestrianway/walkway as approved by the Planning Board. In the B-1 District (Town Center), within the Business Core, one decorative bench per 75 feet of frontage, or portion thereof, shall be required, and coordinated with abutting properties. Garbage receptacles shall be required adjacent to every other decorative streetlight, as noted in Figures 42 and 30.⁷⁸ Benches and garbage receptacles shall be permanently mounted.

§ 325-8.6. Reference to additional local standards.

Refer to Norfolk Zoning Bylaw sections pertaining to zoning for the B-1 and C-1 Districts for additional local standards.⁷⁹

ARTICLE 9

Earth Relocation/Removal

See MGL c. 40, § 21, Clause 17, and Chapter 156, Earth Removal, of the Town of Norfolk bylaws. See also § 325-3.3B(16) and other relevant sections of these rules and regulations.

§ 325-9.1. Definitions.

For the purpose of this article, the following terms shall have the meanings indicated:

BOARD — The Planning Board of Norfolk.

EARTH — Includes soil, loam, sand, and gravel.

§ 325-9.2. Basic requirements.

- A. Earth which is to be removed in compliance with the requirements of a definitive subdivision plan approved by the Norfolk Planning Board shall be subject to the requirements listed herein.
- B. No earth shall be moved, stripped, stockpiled, or removed from any subdivision street right-of-way or easement being constructed within the Town to another parcel either within or without the Town except as set forth herein. Exceptions to this prohibition

⁷⁷. Editor's Note: Figure 41 can be obtained from the Planning Board office.

⁷⁸. Editor's Note: Figures 42 and 30 can be obtained from the Planning Board office.

⁷⁹. Editor's Note: See Ch. 310, Zoning, Arts. 9 and 10.

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-9.2

§ 325-9.2

may be made by the Planning Board after a finding that each of the following criteria have been met:

- (1) That there has been approval and endorsement of the definitive plan by the Planning Board.
 - (2) The proposed earth to be removed is the absolute minimum required to remove a physical hardship.
 - (3) The removal of earth will not cause a nuisance or be a detriment to the surrounding areas or along the route of transportation, or cause an adverse effect. An earth removal operation shall be deemed to cause an adverse impact to the Town or to property in the vicinity of the site if it:
 - (a) May reasonably be expected to significantly increase surface water flow off the site or to result in any adverse impact on surface water or public or private drinking water wells;
 - (b) May produce noise, dust, or other effects that may be detrimental to the amenities, aesthetics or normal use of property in the neighborhood;
 - (c) May result in a change in topography and cover that will render development of the site in accordance with the approved site plan more difficult or costly;
 - (d) May have an adverse effect on public health or safety or on the health or safety of persons living, working or otherwise present in the neighborhood; or
 - (e) May unduly frustrate the long-term recreation and open space planning objectives of the Town.
- C. In no case shall earth removal exceed five months of operation or removal of more than 10,000 cubic yards of material.
- D. Any earth removal from the subdivision lots must comply with the Norfolk bylaws which are administered by the Board of Selectmen. Generally, this applies to the removal of earth involving more than 500 cubic yards.⁸⁰
- E. The area excavated during the duration of the permit shall be restored to conform to the natural state of the area and surrounding areas by grading, retopsoiling, topsoiling, and planting so that all scars resulting from the removal operation are eliminated insofar as is possible.
- F. The depth of any excavation shall not be made lower than 10 feet above the annual high-water table.

80. Editor's Note: See Ch. 156, Earth Removal.

§ 325-9.3. Application for earth removal in conjunction with definitive plan approval.

All applications for definitive plan approval shall be accompanied by exhibits and documentation deemed necessary by the Planning Board for the proper review of the issuance of an earth removal approval.

- A. Exhibits or documentation shall include but not be limited to the following:
- (1) The street location of the proposed excavation, the proposed depth of excavation and the elevation of the highest annual high-water table, as determined by the test pits and soil boring.
 - (2) Name and address of the legal owner of the land in question.
 - (3) Name and address of petitioner, if different.
 - (4) Names and addresses of all owners of property within 500 feet of property lines of the land.
 - (5) Ten copies of a plan of the land prepared by a registered engineer or land surveyor drawn to scale of 40 feet to the inch, including land boundaries, adjacent streets, location of all structures upon the land, original topography by two-foot contours, proposed final topography by two-foot contours, the limits of proposed earth moving operations, the depth of loam at forty-foot intervals along original contour lines, and drainage provisions to be made after completion of the earth removal project. The plan shall bear appropriate cross sections and a computation of the volume of material to be moved, stockpiled, stripped or removed, certified by the person preparing the plan.
 - (6) A statement estimating the quantity of material to be moved.
 - (7) The period of time during which operations are proposed.
 - (8) The routes of vehicles to be used.
 - (9) The proposed form of bond to be used.
 - (10) Statement of plans for the disposal of rock, tree stumps, and other waste materials, and for the drainage site and excavation during and after the removal operations. For operations within 500 feet of wetlands, the application shall include a statement of plans for the protection of any portion of an underground water source or supply, including without limitation springs, wells, underground reservoirs or aquifers.
 - (11) The area to be stripped of vegetation at any one time, that is, prior to being reseeded and having trees and shrubs planted.
 - (12) Zoning district.
 - (13) Plans of the proposed use, with the necessary documentation to demonstrate the need for earth removal, and that the proposed removal constitutes the minimum removal required.

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-9.3

§ 325-9.5

- B. The Board shall be and hereby is authorized to set a reasonable charge in addition to the normal application fee and review fee for definitive plans if such earth removal warrants an additional charge. The engineering fees shall be paid by the applicant.
- C. A public hearing shall be held on each application for approval under this provision as a part of the public hearing on the definitive subdivision plan.

§ 325-9.4. Requirements for approval.

- A. In approving the removal of earth, the Planning Board may impose reasonable requirements which shall constitute a part of the subdivision approval, and which may include but not be limited to: grading, seeding and planting, construction of necessary fencing and other protection against nuisances, methods of removal, hours of operation, the duration of the removal operation, routes of transportation of material removal, control of drainage, disposition of waste incident to the operation, and providing of adequate vegetation. Any conditions so imposed by the Board shall be listed on the definitive plan prior to endorsement of the plan and approval of the covenant by the Board.
- B. The Board shall require suitable bond or other security adequate to assure compliance with the provisions of the approval to remove earth.
- C. No permit shall be issued until the owner of the site has granted to the Town an easement over the land in question and conveys to the Town the legal right to enter upon said land with equipment and personnel for the purpose of making acceptable restoration in accordance with the approved restoration plan in the event of default of such restoration specific in the permit by the owner or his contractual representative.
- D. The permit shall ensure that the basic requirements of § 325-9.2 are or will be met.
- E. No work shall begin until the Planning Board receives written notice that earth removal is scheduled to begin at least two but no more than four weeks following the date of this notice.

§ 325-9.5. Monitoring and reporting.

- A. The applicant shall be responsible for filing a weekly report from a designated earth relocation/removal monitor. This report shall include a daily count of the number of truckloads, amount of material, verification of street sweeping, and measures taken to ensure no off-site migration of materials, including airborne dust, etc.
- B. Prior to commencement of removal, the applicant shall provide sufficient bond to cover the cost of monitoring the operation should the applicant default on providing monitoring. These reports will be included in the estimate of probable construction cost which will be the basis of the required bond.

§ 325-9.6. Termination date.

Any earth removal operation in a subdivision shall expire upon the termination date stated in the approval.

§ 325-9.7. Severability.

The invalidity of any section of provisions of this regulation shall not invalidate any other section or provision thereof.

§ 325-9.8. Violations and penalties.

Any person, firm, or corporation willfully violating, disobeying, or refusing to comply with any of the provisions of this article shall be prosecuted under the terms of MGL c. 40, § 21, Clause 17, and shall be subject to a fine of not more than \$50 for the first offense, not more than \$100 for the second offense, and not more than \$200 for any subsequent offense. Each day of noncompliance shall constitute a separate offense. The Planning Board may revoke or suspend permission of any person, firm, or corporation holding permission to remove earth if such person, firm, or corporation violates, disobeys, or fails to comply with any of the provisions of this approval.

ARTICLE 10

Fees**§ 325-10.1. Application, review and inspection fees.**

- A. The Norfolk Planning Board fees shall consist of application fees, review fees and advertisement fees as set forth below. The administrative requirements of the review fees are described in § 325-2.5. The application fee and initial review fees shall both be paid at the time of application. Application fees shall be payable to "Town of Norfolk"; review fees shall be payable to "Norfolk Planning Board Review Account." Performance inspections shall be payable to both "Planning Board Review Account" and "Norfolk Inspection Fee Account." Any additional costs incurred by the Planning Board are to be paid in full by the applicant.
- B. Applicants are entitled to receive interest on the balance of their review accounts. To receive such interest, however, applicants must submit a completed form titled "Client Group Account, Client Account Application – Certification of Taxpayer Identification Number."

§ 325-10.2. Fee schedule.

- A. Presubmission review.
 - (1) Application fee: no charge.
 - (2) Application fee: no charge.

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-10.2

§ 325-10.2

- B. 81P plan: plan not requiring subdivision approval. Application fee:
- (1) Each plan submitted is \$200.
 - (2) Each plan resubmitted is \$50 per resubmittal.
- C. Subdivision plans. No additional charge for a stormwater management permit when filed concurrent with subdivision plans.
- (1) Preliminary plans.
 - (a) Application fee: \$600, plus \$120 per lot for each lot over five lots.
 - (b) Review fee: \$2,500, plus \$120 per lot.
 - (c) Advertisement fee: at the expense of the applicant.
 - (d) Each revision to preliminary plans under review.
 - [1] Processing fee: \$300.
 - [2] Review fee: \$1,250, plus \$60 per lot.
 - [3] Advertisement fee: at the expense of the applicant.
 - (2) Definitive subdivision plans.
 - (a) Application fee: \$1,000, plus \$200 per lot for each lot over five lots.
 - (b) Review fee: \$3,000, plus \$200 per lot.
 - (c) Advertisement fee: at the expense of the applicant.
 - (d) Each revision to definitive plans under review.
 - [1] Processing fee: \$750.
 - [2] Review fee: \$1,500, plus \$200 per lot.
 - [3] Advertisement fee: at the expense of the applicant.
 - (3) Amendment, modification, or revision of approved definitive plan.
 - (a) Application fee: \$750.
 - (b) Review fee: \$2,000.
 - (c) Advertisement fee: at the expense of the applicant.
 - (d) Each revision to amendment, modification, or revision of approved definitive plan.
 - [1] Processing fee: \$375.
 - [2] Review fee: \$1,000.
 - [3] Advertisement fee: at the expense of the applicant.

- (4) Approved subdivision work.
 - (a) Snowplowing of subdivision streets: based on length of roadway(s) and rate per mile as established semiannually by the Highway Department.
 - (b) Cleaning/maintenance of subdivision streets: based on length of roadway(s), number of catch basins/drainage basins, etc., and rate as may be established semiannually by the Highway Department.
 - (5) Bonding, including reduction and release requests, inspections, and estimates.
 - (a) Application fee: no charge.
 - (b) Review fee: \$1,000, plus \$50 per lot.
 - (6) Performance inspections/observations.
 - (a) Application fee: no charge.
 - (b) Review fee (both fees are applicable):
 - [1] Planning Board consulting engineer observation fee: \$2,000, plus \$4 per linear foot of roadway.
 - [2] Town Highway Department inspection fee: \$0.50 per linear foot of roadway, with a minimum fee of \$500.
 - (7) Earth relocation/removal permit.
 - (a) Application fee: \$500.
 - (b) Review fee: \$1,000.
 - (c) Advertisement fee: at the expense of the applicant.
- D. Site plan approvals. No additional charge for a stormwater management permit when filed concurrent with site plan.
- (1) Application fee: \$750, plus \$0.10 for every square foot of proposed gross floor area over 5,000 square feet, to a maximum of \$6,000 (for square footage).
 - (2) Review fee: \$2,500, plus \$0.10 for every square foot of proposed gross floor area.
 - (3) Advertisement fee: at the expense of the applicant.
 - (4) Each revision to site plans under review:
 - (a) Processing fee: \$375.
 - (b) Review fee: \$1,000.
 - (5) Performance observations for site receiving site plan approval:
 - (a) Application fee: none.
 - (b) Site observation fee: \$2,000.

PRELIMINARY DRAFT
SUBDIVISION OF LAND AND SITE PLAN
APPROVAL REGULATIONS

§ 325-10.2

§ 325-10.2

- E. Acceptance plans for subdivisions/site plans.
- (1) Application fee: no charge.
 - (2) Subdivision street: \$1,000 per street, plus \$1 per linear foot of roadway.
 - (3) Site plan (as-built plans): \$1,000 per site plan application.
- F. Special permits. See Chapter 320, Special Permit Rules and Regulations, Article VII, Schedule of Fees, for special permit fees.
- G. Extraordinary expenses. The above fees are subject to revision in the event the Planning Board incurs extraordinary expenses in the review of any plan or inspections/observations, including, but not limited to, retention basin and drainage, retaining walls, earth removal and fill, engineering or land surveying, impact analyses, advertising, mailing, or inspection/observation fees. The applicant will be required to reimburse the Town for such additional charges which result from associated professional services.
- H. Form of payment.
- (1) Application fees: payable to "Town of Norfolk."
 - (2) Review fees: payable to "Norfolk Planning Board Review Account."
 - (3) Advertisement fee: payable to "Town of Norfolk."
 - (4) Observation fee: payable to "Planning Board Observation Account."
 - (5) Inspection fee: payable to "Norfolk Inspection Fee Account."
 - (6) Payments for all submissions, reviews, and inspections are to accompany the submittal and request. Payments are to be made by check. All invoices shall be paid within 30 days of receipt.
- I. Assessment of late payment. A late charge of 1 1/2% simple interest shall be charged monthly for bills not paid within 30 days.
- J. Shade Tree and Scenic Roads Act hearings.⁸¹ See separate fee schedule for Shade Tree and Scenic Roads Act hearing applications (currently \$250).
- K. Stormwater permit application (SMP). Application fee payable to the Town of Norfolk in the amount of \$750, with an additional processing fee of \$375 per revision to plan under review. If the SMP is filed concurrent with a site plan or subdivision plan, there is no application fee. The applicant is responsible for review costs.

81. Editor's Note: See MGL c. 87, Shade Trees, and MGL c. 40, § 15C, Scenic road designations.

SUBDIVISION OF LAND AND SITE PLAN APPROVAL REGULATIONS

325 Attachment 1

Town of Norfolk

**Appendix A
Supplemental Requirements**

BONDING PROCEDURE

1. After a covenant has been duly executed, the developer informs the Board, in writing, that he would like to have a bonding figure set. Along with this written request, the developer submits:
 - a. Form K [Subdivision Observation Report(s)] which has been signed by the appropriate agents as denoted on the Form K.
 - b. Duration of the bonding (usually the time by which the subdivision improvements must be completed by as noted in the Covenant).
2. The Board asks its Consultant/Agent to make a site observation.
3. The Board's Consultant/Agent prepares an observation report and prepares a bonding estimate consisting of the costs to complete all subdivision improvements, including but not limited to acceptance plans, with a minimum 25% contingency costs added to the total estimate.
4. The applicant is sent a copy of the Board's Consultant/Agent observation report and bonding estimate and letter from Board providing bond amount.
5. Developer/Applicant submits to the Planning Board office:
 - a. A completed bonding form making sure that the signature of the developer and that of the officer of the security company are notarized on the appropriate form. Bank passbook accounts are to be in the name of the Town of Norfolk for _____ (name of subdivision), otherwise it will not be accepted. Bank passbooks are held at the Town of Norfolk Treasurer's office for safekeeping.
 - b. A letter from the security company on its letterhead stating that it will not release any monies until written authorization has been received from the Norfolk Planning Board. The signature of the security company officer preparing this letter must be notarized. (See Sample A.)
6. Lots are released for the bonded section(s) of the subdivision, provided:
 - a. The applicant submits a properly completed Lot Release Form.

NORFOLK CODE

- b. All earth removal operations have been completed and affected area restored as per Earth Removal Regulations.
 - c. The bituminous binder course is in place and observation has been conducted with the Form K signed signifying approval by the Board's Consultant/Agent.
 - d. Guardrails that are required have been installed and observation has been conducted and the Form K has been signed off, signifying approval of the installation by the Board's Consultant/Agent.
 - e. Sight lines have been achieved; all trees and brush that are required to be removed at existing Town ways shall be removed, after required Shade Tree Scenic Roads Act hearings, and all traffic control devices installed.
 - f. The land in the right-of-way of future roadways has been deeded to the Town as a gift of land.
7. It is the developer/applicant's responsibility to file the Lot Release Form at the Registry of Deeds. No building permits will be issued until a copy of the Lot Release Form verifying its filing at the Registry of Deeds has been provided to both the Planning Board and the Building Commissioner.

NOTE: All bonding documentation is reviewed and approved by the Treasurer/Collector for the Town of Norfolk before the Planning Board takes any action relative to same.

SUBDIVISION OF LAND AND SITE PLAN APPROVAL REGULATIONS

PROCEDURE FOR REDUCTION IN BONDING

When the developer determines that a reduction in bonding for improvements in his subdivision is in order, he must follow this procedure:

1. Developer informs the Board, in writing, he is requesting a reduction in bonding. The request is accompanied by an up-to-date Form K for each subdivision street.
2. The Board asks its Consultant/Agent to make a site observation.
3. The Board's Consultant/Agent prepares an observation report and prepares a bonding estimate consisting of the costs to complete all subdivision improvements, including but not limited to acceptance plans with a minimum 25% contingency added to the total estimate.
4. The applicant is sent a copy of the Board's Consultant/Agent observation report and bonding estimate and letter from Board, establishing new bond amount.
5. Determination is made as to whether a new bonding form and letter from the security company need to be submitted. If new form and/or new letter is required, applicant shall submit same using the following procedure:
 - a. Submit completed bonding form making sure that the signature of the developer and that of the officer of the security company are notarized on the appropriate form. Bank passbook accounts are to be in the name of the Town of Norfolk for _____ (name of subdivision), otherwise it will not be accepted. Bank passbooks are held at the Treasurer's office for safekeeping.
 - b. A letter from the security company on its letterhead, stating that it will not release any monies until written authorization has been received from the Norfolk Planning Board. The signature of the security company officer preparing this letter must be notarized. (See Sample A.)
6. After all paperwork has been completed and approved by the Board, it sends a letter to the security company releasing the appropriate amount of bonding.

NOTE: All bonding documentation is reviewed and approved by the Town Treasurer for the Town of Norfolk before the Planning Board takes any action relative to same.

NORFOLK CODE

SAMPLE A: LETTER FROM SECURITY COMPANY

(BANK'S LETTERHEAD)

Date

Town of Norfolk Planning Board
One Liberty Lane
Norfolk, MA 02056

Re: Subdivision Name, Name of Developer
Subdivision Street(s), Station Numbers

Dear Board:

Please be advised that we have opened and are holding funds in the enclosed passbook account #12345-678 in the names of Haven Realty Trust, Robert Jones, Trustee or the Town of Norfolk Planning Board. Town of Norfolk for _____ (name of subdivision).

The (name of security company, bank) agrees not to release or reduce funds until receiving prior written approval from the Norfolk Planning Board. Moreover, during the time the Norfolk Planning Board holds passbook account #12345-678 as security, we hereby agree not to exercise any "setoff" or claim against this money/security and it will not honor any claim for a lost passbook from any other party other than the Town of Norfolk.

Sincerely yours,

BANK/SECURITY COMPANY NAME

By
Name of Officer and Title

(Notary Public Seal)

The above mentioned has appeared before me on and acknowledged same to be his free act and deed.

Notary Public

My commission expires: