

**Price \$55**

**REGULATIONS  
GOVERNING THE SUBDIVISION OF LAND  
IN THE  
TOWN OF WARWICK  
FRANKLIN COUNTY, MASSACHUSETTS**

**Effective Date of Subdivision Control Law in Warwick: November 9, 1987  
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**ARTICLE I**  
**Authority and Purpose**

**§ 1-1. Statutory authority.**

The Warwick Planning Board enacted these Regulations under the authority granted by MGL C. 41 § 81-Q of the General Laws, as amended, and by all subsequent amendments thereto, to govern the subdivision of land in the Town of Warwick. For matters not specifically covered by these Rules and Regulations, reference is made to the Subdivision Control Laws, Sections 81-K through 81-GG of Chapter 41 of the Massachusetts General Laws as most recently amended.

**§ 1-2. Purpose.**

- A. These Subdivision Regulations for the Town of Warwick have been enacted for the purpose of protecting the environment, and the safety, convenience and welfare of the inhabitants of the Town of Warwick by regulating the laying out and construction of ways in subdivisions providing access to all lots therein and by ensuring sanitary conditions in the subdivisions and, in proper cases, parks and open areas. The powers of the Planning Board and the Board of Appeals under these regulations shall be exercised to accomplish the above purposes and the following:
- (1) The provision of adequate access to all of the lots in a subdivision by ways that will be safe and convenient for travel.
  - (2) Minimizing congestion in such ways and in the adjacent public ways.
  - (3) Reducing danger to life and limb in the operation of motor vehicles.
  - (4) Securing safety in the case of fire, flood, panic, and other emergencies.
  - (5) Ensuring compliance with the applicable Zoning Bylaws of Warwick
  - (6) Securing adequate provision for water, sewerage, drainage, underground utility service, streetlighting, police, fire and other requirements, where necessary, in a subdivision.
  - (7) Coordinating the ways in a subdivision with each other, with the public ways in the Town of Warwick and with the ways in neighboring subdivisions.
  - (8) In proper cases, creating parks and open areas.
  - (9) Preventing overcrowding of land.

- (10) Conserving the value of land and buildings.
  - (11) Encouraging energy efficiency.
  - (12) Preserving the rural nature of the community.
- B. It is the intent of the Subdivision Control Law and these regulations that any subdivision plan filed with the Planning Board shall receive the approval of said Board if said plan is complete at the time of submission, conforms to the Subdivision Control Law and these regulations, complies with the recommendations of the Board of Health, complies with the rules and regulations of the Planning Board pertaining to subdivisions of land, and to applicable state and federal regulations; provided, however, that such board may, when appropriate, waive, as provided for in MGL C. 41, § 81-R, such provisions of the rules and regulations as deemed advisable (MGL C. 41, § 81-M).
- C. It is the intent of the Warwick Subdivision Rules and Regulations that any subdivision plan filed with the Planning Board may receive the approval of said Board if consistent with the recommendations of the Warwick Fire Chief, the Warwick Police Chief, Warwick Board of Health, the Warwick Conservation Commission, and the Warwick Highway Superintendent.

## **ARTICLE II**

### **Definitions**

#### **§ 2-1. Terms defined.**

Terms and words not defined in these regulations shall have the meanings defined in MGL C. 41, § 81-L. The following terms and words shall have the following meanings:

**APPLICANT** – The person or persons who apply for approval of a proposed subdivision plan. The “applicant” or “applicants” must be the owner or owners of all the land included in the proposed subdivision. An agent, representative or his/her assigns may act for an owner, provided a properly executed power of attorney (or other written evidence acceptable to the Board) is submitted. In the case of a general or limited partnership, all general partners must join in the application and must submit documentation of the legal existence of the partnership and its authority to do business in Massachusetts. In the case of a trust, all trustees must join in the application and submit documentation of the legal existence of the trust and its authority to do business in Massachusetts. In the case of a corporation, the application shall be made by the President, shall have the corporate seal affixed, and shall be accompanied by a list of all officers and directors, plus documentation of the legal existence of the corporation and its authority to do business in Massachusetts. An attorney acting on behalf of any

applicant shall be licensed to practice law in Massachusetts and shall submit a written statement of representation.

BOARD – The Planning Board of the Town of Warwick.

CLASS I SUBDIVISION – A subdivision with ten (10) or more lots.

CLASS II SUBDIVISION – A subdivision with four (4) to nine (9) lots.

CLASS III SUBDIVISION – A subdivision with three (3) lots or fewer.

CONSULTANT OR CONSULTING SERVICES – Includes, but is not limited to, architects, biologists and other environmental experts, chemists, engineers, geologists, landscape architects, planners, lawyers, sanitarians, and surveyors.

DEAD-END STREET (CUL-DE-SAC) – A street which joins another street at only one (1) end.

ENGINEER – A licensed professional engineer.

LOT – An area of land in one ownership, with definite boundaries, used, or available for use, as the site of one (1) or more buildings.

MAJOR STREET – A street having the primary purpose of carrying through traffic equal to that generated by ten (10) or more lots and the secondary purpose of providing access to abutting property.

MINOR STREET – A street having the primary purpose of carrying through traffic equal to that generated by fewer than ten (10) lots.

OWNER – The owner of record as shown at the Franklin County Registry of Deeds or Land Court.

SUBDIVISION:

A. The division of a tract of land into two (2) or more lots and shall include resubdivision. A division of land is not a subdivision when the division of a tract of land in two (2) or more lots if, at the time when it is made, every lot within the tract so divided has frontage on:

- (1) A public way or a way which the Town Clerk certifies is maintained and used as a public way.

- (2) A way shown on a plan theretofore approved and endorsed in accordance with the Subdivision Control Law or these regulations; or
  - (3) A way in existence when the Subdivision Control Law became effective in the Town of Warwick having, based upon findings 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.
- B. Such frontage shall be of at least such distance as is then required by zoning or other bylaw, if any, for the erection of a building on such lot.
- C. 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 in which two (2) or more buildings were standing when the Subdivision Control Law went into effect in the Town of Warwick into separate lots on each of which one (1) such building remains standing shall not constitute a “subdivision.”

SUBDIVISION CONTROL LAW – Refers to MGL C. 41 §§ 81-K to 81GG, titled “Subdivision Control,” as last amended.

SURVEYOR – A licensed professional land surveyor.

ZONING – The Town of Warwick Zoning Bylaw.

### **ARTICLE III General Regulations**

#### **§ 3-1. Plan believed not to require approval.**

- A. Any person who wishes to record a plan of land at the Registry of Deeds or to file a plan of land with the Land Court and who believes that his plan does not require approval under the Subdivision Control Law or these regulations may submit his plan and application (use Form A) to the Planning Board, accompanied by the necessary evidence to show that the plan does not require approval and the appropriate filing fee (see Appendix D). One Mylar original and five (5) copies of said plan shall be furnished to the Planning Board (one (1) copy for the Planning Board, one (1) copy for the Town Clerk, one (1) copy for the Board of Assessors, and two (2) copies for the Applicant). Said plan shall be prepared by an engineer or surveyor. Plans submitted for a determination that



approval under the Subdivision Control Law or these regulations is not required, shall be delivered to the Planning Board at a meeting of said Board, or shall be sent by registered mail to the Planning Board, postage prepaid. If so mailed, the date of receipt by the Planning Board, or the Town Clerk on behalf of the Planning Board, shall be the date of submission of the plan.

- B. The applicant shall provide written notice to the Town Clerk of such filing, together with a copy of the application form. Such notice shall be given by delivery or sent by registered mail and shall describe the land to which the plan relates, sufficient for identification and shall state the date on which such plan was submitted to the Planning Board, and shall include the name and address of the owner(s) of the subject land.
- C. A plan submitted under §3-2 shall be prepared in accordance with the applicable requirements of the Franklin County Registry of Deeds, and shall, at a minimum, show the following information:
- (1) The name(s) of the record owner(s) of the subject land, and the names of the owners of all adjacent land as determined from the most recent tax records of the Town;
  - (2) The location of all existing buildings on the subject land;
  - (3) The location of all easements and rights of way located on or serving the subject land;
  - (4) The existing and proposed boundaries, lot area, and frontage of the subject land and of each parcel and lot created or altered by the plan;
  - (5) The zoning classification of the subject land;
  - (6) A locus plan at a scale of 1" = 100 feet, showing the subject land in relation to the nearest intersecting street(s);
  - (7) The locations, widths, and names of all abutting ways;
  - (8) A notation reading:

Endorsement of this Plan does not certify  
compliance with the zoning required for a building lot.

- D. Frontage on Ways In Existence - In determining whether an existing way or a way in existence in 1987, when the Subdivision Control Law came into effect in Warwick, provides adequate frontage to qualify a plan as not a subdivision, the Board's determination shall be based upon the following:

- (1) Is the right-of-way at least 4 feet wider than the traveled way to allow for utilities and public services.
- (2) Does the existing horizontal and vertical alignment of the roadway provide safe visibility?
- (3) Is the roadway at least sixteen (16) feet wide with an additional two (2) feet of shoulder on each side to provide space for snow removal?
- (4) Is the roadway constructed with adequate drainage?
- (5) Will the way provide safe year-round access for two wheel drive vehicles, police and fire?
- (6) If the application is for 8 or more lots , is it surfaced in a manner equal to or better than in practice for public ways as determined by the Highway Superintendent or have provisions been made for such surfacing without cost to the town?
- (7) Have provisions been made for public utilities without cost to the town?

The Board will use the above criteria to determine (find) whether or not a way in existence when the Subdivision Control Law became effective in Warwick provides adequate frontage and will, in fact, be adequate to provide for the needs of vehicular traffic (including police and fire) in relation to the proposed use of the land, and for municipal services to serve such land and the buildings erected or to be erected thereon. In the case of a plan involving the creation of three (3) or fewer lots fronting on a public way or a private way approved by the Planning Board, there is a rebuttable presumption that the lots comply with the standards.

- E. Frontage on a Public Way - When the lots shown on a plan presented for endorsement under §3-1 are claimed to have frontage on a public way, the way must physically exist and must provide safe and viable access to the proposed lots. Additionally, the Planning Board may require documentation evidencing the layout and acceptance of the way as a public way.
- F. Frontage on a Subdivision Way - A way shown on an approved subdivision plan will be considered as frontage for purposes of §81L only if either: (a) the way and any associated municipal services are fully constructed in accordance with the Planning Board's approval of such subdivision plan, or (b) such construction has been adequately secured in accordance with M.G.L. c. 41, §81U.
- G. Adequacy of Access - In addition to determining that all lots shown on a plan presented for endorsement under §3-1 have the required frontage on one of the three types of ways specified in M.G.L. c. 41, §81L, before endorsing a plan as "Planning Board approval under the Subdivision Control Law not required" as

well as the notation of 3-1 C (8), the Planning Board must also determine that each lot shown on the plan has practical access from the way upon which the lot fronts, in that there are no legal or physical impediments which prevent present adequate access to the lot.

- H. Time Limit – Pursuant to G.L. c. 41, §81P, if the Board fails to act upon a plan submitted under §3-1, or fails to notify the Town Clerk and the applicant of its action within twenty-one (21) days from the date the plan has been submitted to the Town Clerk, the Board shall be deemed to have determined that approval under the Subdivision Control Law or these regulations is not required, and shall forthwith make such endorsement on the plan. If the Board fails to make such endorsement, the Town Clerk shall issue a certificate to the same effect.
- I. If the Board determines that the plan does not require approval, it shall forthwith, at a regularly scheduled Planning Board meeting and without a public hearing, endorse on the plan the words “Planning Board approval under the Subdivision Control Law not required” in addition to the notation of 3-1 C (8). The Board shall then sign said endorsement. Said plan shall then be returned to the applicant, and the Board shall notify the Board of Assessors and the Town Clerk of its action. The applicant shall provide the Board with three (3) copies of the endorsed print.
- J. If it deems necessary, the Planning Board shall have the plan reviewed by an engineer before making a determination. The cost shall be borne by the applicant.
- K. If the Planning Board determines that the Plan does require approval under the Subdivision Control Law and these regulations, it will so inform the applicant and return the plan. The Board shall also notify the Town Clerk of its action. If the Planning Board fails to act upon a plan submitted under this section within twenty-one (21) days after its submission, it shall be deemed to have determined that approval under the Subdivision Control Law is not required.
- L. If the Planning Board determines that the Plan does require approval, said plan may not be recorded until such subdivision approval is obtained in accordance with the provisions outlined in the following sections.

### § 3-2. Planning Board approval required for subdivision.

No person shall make a subdivision, within the meaning of the Subdivision Control Law or these regulations, 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 and approved by the Planning Board as hereinafter provided.

**§ 3-3. Zoning.**

Subdivisions shall meet the requirements pertaining to lot size, frontage, and all other requirements under existing zoning laws. No subdivision rules can dictate the size, shape, width, frontage, or use of lots except that they shall be in compliance with all applicable zoning requirements.

**§ 3-4. Access Adequacy.**

- A. General. Plans shall be endorsed as not requiring approval under the Subdivision Control Law or these regulations, and subdivision plans shall be approved only if each building lot to be created by such plan has adequate access as intended under the Subdivision Control Law, MGL C. 41, § 81-K through 81-GG.
- B. Standards of Adequacy. Streets within a subdivision shall be considered to provide adequate access if, and only if, complying with the standards and procedures established in this regulation. Ways providing access to streets within a subdivision shall normally be considered to provide adequate access only if there is assurance that, prior to construction on any lots, access to the subdivision will be in compliance with but not limited to the right-of-way width, pavement width, maximum grade and sight distance requirements of this regulation as applicable to ways within a subdivision.
- C. Obligations. The Board may require as a condition of its approval of a subdivision plan, that the applicant dedicate a strip of land for the purpose of widening access ways to a width as required above and that the applicant either make physical improvements within such way or compensate the town for the cost of such improvements in order to meet the standards specified above.
- D. Waivers. The Board may waive strict compliance with these access requirements only upon its determination, following consultation with the Selectmen, Highway Superintendent, Police Chief and Fire Chief, and that the way in fact will be sufficient to serve the needs for access to serve potential uses of land abutting on or served by the way in question, and the purposes of these regulations.

**§ 3-5. Plan Submission.**

- A. Plans submitted for either review and approval under the Subdivision Control Law shall be delivered to the Planning Board at a meeting of said Board, or shall be sent by registered mail to the Planning Board, postage prepaid, c/o the Town Clerk. If so mailed, the date of receipt by the Town Clerk shall be the date of submission of the plan.

- B. The applicant shall provide written notice to the Town Clerk of such filing, together with a copy of the application form. Such notice shall be given by delivery or sent by registered mail and shall describe the land to which the plan relates, sufficient for identification and shall state the date on which such plan was submitted to the Planning Board, and shall include the name and address of the owner(s) of the subject land.
- C. **Submission Fees.** All fees will be received and recorded by the Planning Board. Said Board, will withhold approval of the Plan until the appropriate fees are paid in full. The fees indicated in Appendix D shall accompany the submittal of the application materials and plans specified in the Rules and Regulations, to cover costs of processing the application and professional staff assistance and review.
- D. **Review and Inspection Fees.** The Board may assign its agent and may from time to time, due to the size, scale, or complexity of a given project or its potential impact on the health, safety and welfare of the Town, hire professional and technical assistance to review plans, conduct material testing, conduct property surveys of land and infrastructure, record and file documents and inspect improvements. Determination of the need for outside review shall require a majority vote of the members of the Board. When outside review is determined to be necessary, the expenses for engaging professional and technical assistance and review in connection with a subdivision shall be borne by the applicant. The applicant shall also comply with the Warwick Planning Board Consultant Review Fee Regulation.
- (1) **Notification of Applicant and Assessment of Fees.** The Board shall provide the applicant with a written estimate of the cost for outside review within twenty-one (21) days of making a determination that such review is required. Notification of the services required and estimated cost shall be hand-delivered or sent by certified mail. The applicant shall make an initial deposit in the amount of this estimate within ten (10) days of receiving such notification.
- If review funds charged are insufficient to cover the costs of such review, the Board may determine by 2/3 vote that additional fees are necessary. Notification of the need for additional fees shall be given and payment received in the same manner as that for the initial fee.
- Failure to pay assessed review fees shall be adequate ground for denial of an application without prejudice.
- (2) **Types of Consultants and Qualifications.** In hiring outside consultants, the Board may engage engineers, planners, attorneys, designers, or other appropriate professionals to assist the Board in analyzing a project to ensure compliance with all relevant laws, bylaws and regulations.

Assistance may include, but shall not be limited to application review, site inspection and construction phase monitoring.

All consultants engaged pursuant to this section must meet the following minimum qualifications: an educational degree in or related to the field at issue or at least three years of practice in the field at issue or related field.

The Board shall file notice with the Town Clerk of the selection of a consultant, with a copy of said notice to be sent to the applicant at the same time. Such notification shall include the consultant's name and address, field of expertise and credentials.

- (3) **Appeal of Consultant Selection.** An applicant may make an administrative appeal of the outside consultant selected by the Planning Board to the Board of Selectmen within seven (7) days of the time that notice of selection is filed with the Town Clerk. Grounds for appeal are limited to claims that the consultant selected by the Board has a conflict of interest or does not possess the minimum qualifications. Appeals shall be filed with the Town Clerk and a copy given to the Board of Selectmen.

The required time limits for action upon an application to the Planning Board shall be extended by the duration of the administrative appeal. In the event that the Board of Selectmen does not make a decision within one month following the filing of the appeal, the selection made by the Planning Board shall stand.

Such administrative appeals shall not preclude further judicial review, if otherwise permitted by law, on the grounds provided for in this section.

- (4) **Administration of Fees.** Fees collected from an applicant pursuant to this section shall be deposited with the Town Treasurer who shall establish a special account for this purpose. Expenditures from this account may be made at the direction of the Board with no further appropriation, but only for the purpose of review of the specific project for which the fees were collected.

The appropriate professional and technical review fees (see Appendix D: Fee Schedule) shall be paid to the Town Treasurer under M.G.L. Chapter 44, Section 53G at the time of submission of Preliminary and/or Definitive Plans. Likewise, administrative, non refundable, fees shall be paid at the time of submission of Preliminary and/or Definitive Plans. The inspection fee shall be paid at the time the Board endorses the Definitive Plan. The total dollar amount of the professional and technical review fees which may ultimately be expended may exceed the amount initially deposited in this special account per Appendix D: Planning Board Fee Schedule. The applicant shall be responsible for all professional and

technical review fees incurred in reviewing the applicant's plan and project. The applicant will be reimbursed any deposits, plus accrued interest, if any, which remain after all fees have been paid.

The balance of this account shall at no time be less than one-quarter (1/4) the initial review or inspection deposit, and the applicant shall deposit with the Town Treasurer such additional funds as are required to restore the account to the amount of the initial review or inspection deposit. If the applicant fails to restore the account balance and the balance is insufficient to pay incurred review and inspection fees, all work shall cease and all approvals suspended. The Town Treasurer shall send the invoice directly to the applicant. All fees past due by one month from the date of invoice shall be subject to a monthly interest charge based on additional professional or technical work, including inspections, until outstanding invoices are paid.

At the completion of a project, any excess amount in the special fee account for that project, including accrued interest, if any, shall be repaid to the applicant or the applicant's successor in interest and a final report of said account shall be made available to the applicant or to the applicant's successor in interest. For the purposes of this section, a project shall be considered complete when road construction and utilities have been properly completed or installed in compliance with these rules and regulations and,

- (a) A final Certificate of Occupancy is issued by the Building Inspector, or
- (b) If no Certificate of Occupancy is required, by certification in writing by the Building Inspector that the project is complete, or
- (c) Approval of the project is denied and all appeal periods have elapsed without appeal being filed, or
- (d) Applicant submits written notice to the Board that the application is withdrawn, or
- (e) A majority of the Planning Board finds that outside review of the project is complete and votes to release the funds.

The Town Accountant shall submit an annual report of all special accounts established pursuant to this section as required by MGL Chapter 44 Section 53G.

### § 3-6. Waivers.

The Planning Board may, in special and appropriate cases, waive strict compliance with such portions of these Rules and Regulations, as provided for in Section 81-R, Chapter

41, of the General Laws, where such action is in the public interest and not inconsistent with the purpose and intent of the Subdivision Control Law or these regulations. Waivers are only granted for projects, which provide, as found on substantial evidence by the Planning Board, clear and significant improvements to the quality of a project in meeting the purposes of these regulations in comparison to projects that meet the minimum requirements of the subdivision regulations.

- A. Limited waivers may be granted when appropriate to encourage development, which is in keeping with the character of traditional neighborhood development design, as outlined in the “Traditional Neighborhood Development” publications by the Institute of Transportation Engineers, to encourage more protected open space, playgrounds, walking and bicycle paths, and affordable housing, than required by zoning.
- B. A request for a waiver of a requirement, rule, or regulation shall be made in writing by the applicant, and submitted, whenever feasible, with the submission of the Preliminary Plan. If the Planning Board approves the request for a waiver, it shall endorse the conditions of such waiver (if any) on the plan or set them forth in a separate instrument attached to and referenced to the plan, which shall be deemed a part of the plan. The Planning Board shall notify the applicant in writing of its approval, disapproval, or approval with conditions.
- C. Except as specifically provided in a written waiver from the Planning Board, all projects must be totally in compliance with the subdivision regulations. A subdivision approved and endorsed by the Planning Board must still comply with the rules and regulations for the subdivision of land unless a specific waiver is granted.

**ARTICLE IV**

**Procedure for Submission and Review of Plans**

**§ 4-1. Presubmission review.**

Prior to investing in extensive professional design efforts for preliminary or definitive subdivision plans, it may be beneficial for the prospective applicant to discuss his ideas with the Planning Board. It may be useful in avoiding problems at a later stage of the subdivision review process. Pencil sketches of the prospective subdivision will be helpful in the discussion. So as to promote free exchange of ideas and opinions, statements made in such discussions will not be binding on the applicant, the Board, or the Town, and it is the intent of these regulations that to the extent permitted by law, they will not be considered relevant or admissible in any proceedings for judicial review.

**§ 4-2. Preliminary plan requirements.**



- A. A preliminary plan of a residential subdivision may be submitted by the Applicant to the Planning Board and to the Board of Health for discussion and tentative approval, modification or disapproval by each Board. However, in the case of a nonresidential subdivision, a preliminary plan must be filed. The submission of such a preliminary plan will enable the Applicant, the Planning Board, the Board of Health, other municipal agencies and owners of property abutting the subdivision to discuss and clarify the problems of such subdivision before a definitive plan is prepared. Therefore, it is strongly recommended that a preliminary plan be filed in all cases. A properly executed application Form B shall be filed with the preliminary plan submitted to the Planning Board.
- B. Filing procedure.
- (1) Any person who submits a preliminary plan shall do so by delivery to the Planning Board at a meeting of said Board or by certified or registered mail to the Planning Board c/o the Town Clerk. Receipt of such plan by the Planning Board from the Applicant, or by the Board, via the Town Clerk, at the next regularly scheduled meeting of the Planning Board, shall constitute the date of submission. Such plan shall be accompanied by the completed Form B and a filing fee based on the schedule described in Appendix D. in the form of a certified check or money order made payable to the Town of Warwick. In addition, any person who submits a preliminary plan shall also submit the plan to the Board of Health at the same time (see 4-2.B. (2)).
  - (2) The applicant shall file the original drawing(s) or suitable reproducible(s) and four (4) copies with the Planning Board and two (2) copies with the Board of Health, and two (2) copies with the Conservation Commission and shall give written notice to the Town Clerk by registered mail that such delivery has been made.
- C. Contents. The preliminary plan shall be drawn at a scale of one (1) inch to forty (40) feet on a sheet of paper twenty-four by thirty-six (24 x 36) inches. The plan shall include for the land to be subdivided and where applicable, adjacent parcels the following:
- (1) The subdivision name, boundaries, true North arrow, date, scale, legend and title "preliminary plan."
  - (2) The names and addresses of the owners of record, the applicant and the engineer or surveyor and phone number of contact person.
  - (3) The names of all abutters, as determined from the most recent tax list.
  - (4) Existing and proposed locations and borders of streets, ways, open space and recreation areas, easements and areas where construction of roads of

less than 8% grade will require substantial grading and earth displacement and any public or common areas within the subdivision, in a general manner.

- (5) The proposed system of drainage, including adjacent existing natural waterways, in a general manner.
- (6) The proposed sanitary septic/sewer system and water distribution system, in a general manner.
- (7) The approximate boundary lines proposed, with approximate areas and dimensions.
- (8) The names, approximate locations and widths of adjacent streets.
- (9) Existing (broken line) and proposed (solid line) topography at ten-foot contour intervals, including the finished grade of all lots.
- (10) An index plan at a scale of one (1) inch equals two hundred (200) feet, when multiple sheets are used.
- (11) A locus plan at a scale of one (1) inch equals one hundred (100) feet.
- (12) Initial findings, in a general way, of the environmental impact analysis required within the definitive plan.
- (13) Existing features including stonewalls, trees exceeding sixteen inches diameter at breast height, floodplains and rock outcroppings, habitats of species listed under the Massachusetts Endangered Species Act.
- (14) The location of all natural (perennial and intermittent) waterways, wetlands (whether or not jurisdictional) and water bodies within and adjacent to the subdivision and within 300 ft. downstream of the subdivision's property boundaries, areas within the 100-year floodplain, areas within the inundation areas of any high or significant-hazard dams.
- (15) In the case of a subdivision covering less than all of the land owned by the subdivider, a plan showing, in a general manner, the proposed overall development of remaining land.
- (16) Open space and recreation areas.
- (17) Woods roads and all-terrain vehicle trails.
- (18) Fences.

- (19) Existing building(s) on the lot and on adjoining lots.
- (20) Cellar holes.
- (21) Any other information the applicant wishes to have considered in demonstrating compliance with these regulations or other requirements of law.

D. **Alternative Assessment.** For residential subdivisions, when an applicant is not proposing a Conservation Development (cluster), then the Preliminary Plan submission shall include the cluster plan as an alternative concept for developing the parcel(s). When an applicant is proposing a cluster development plan, the Preliminary Plan submission shall not require an alternate plan.

E. **Action by the Board**

- (1) Within forty-five (45) days of submission of the preliminary plan, the Board shall act to:
  - (a) Approve the plan as presented;
  - (b) Approve the plan with modifications; or
  - (c) Disapprove the plan.

The Planning Board must file its decision with the Town Clerk and submit its decision to the applicant by certified mail within forty-five (45) days of submission of the preliminary plan.

- (2) In the case of disapproval, the reasons why shall be stated. Approval of the plan does not constitute the approval of a subdivision, and no Register of Deeds shall record a preliminary plan.

**§ 4-3. Definitive Plan.**

A. **General.**

- (1) A definitive plan shall be governed by the Subdivision Regulations in effect at the time of submission of such plan or in effect at the time of submission of a Preliminary Plan, provided that a definitive plan evolved therefrom shall have been submitted to the Planning Board within seven (7) months from the date of submission of the Preliminary Plan.

- (2) A definitive plan shall also be governed by the zoning bylaws in effect at the time of submission of such plan or a preliminary plan from which a definitive plan is evolved, in accordance with the provisions of MGL C. 40A, § 6, as amended.
- (3) All filings for any action under these regulations must be accompanied by both paper copies and electronic copies. Electronic copies must be in accordance with the most up to date version of the “MassGIS Standard for Digital Plan Submission to Municipalities” meeting the requirements for Level I submission standards. Electronic copies must be submitted on a CD-Rom or other appropriate media approved by the Planning Board and must be accompanied by the completed checklist required in the MassGIS standard.

B. Filing procedure.

- (1) Any person who submits a definitive plan shall do so by delivery to the Planning Board at a meeting of said Board or by certified or registered mail to the Planning Board c/o the Town Clerk. Receipt of such plan by the Planning Board, or the Town Clerk on behalf of the Planning Board, shall constitute the date of submission. Such plan shall be accompanied by the completed Form C and a filing fee per Appendix D. in the form of a certified check or money order made payable to the Town of Warwick. In addition, any person who submits a definitive plan shall also submit the plan to the Board of Health at the same time (see 4-2.B. (2)).
- (2) The applicant shall file with the Planning Board the following:
  - (a) An original reproducible drawing of the definitive plan and five (5) contact prints thereof. The original drawing will be returned to the applicant after a decision on the plan by the Board.
  - (b) One (1) properly executed application including Form C.
  - (c) Filing fees shall follow the schedule defined in § Appendix D. The filing fee shall be in the form of a certified check or money order made payable to the Town of Warwick. Any additional expenses for professional assistance related to the application including the review of the plans, survey or inspections shall also be paid by the applicant prior to any determination by the Board.
  - (d) A certified list of abutters.
  - (e) Four (4) copies of easement agreements for each easement shown on the definitive plan on file with the Registry of Deeds and four

(4) copies of any conservation restrictions or covenants or any other documents relevant to ownership or use of the land on file with the Registry of Deeds, or certified as to what will be filed

(3) The applicant shall file with the Board of Health and the Conservation Commission the following:

(a) At the time of the filing of the definitive plan with the Planning Board, two (2) copies shall also be filed with the Board of Health, and two (2) copies shall also be filed with the Conservation Commission.

(b) Two (2) copies of the application with the properly executed Form C.

C. Board of Health Review

The Board of Health shall report, in writing, to the Planning Board and subdivider its approval or disapproval of said Plan. In the event of disapproval, it shall make specific findings as to which, if any, of the lots shown on said plan cannot be used as building sites without injury to the public health. The Board of Health shall include specific findings and the reasons therefore in such report, and, where possible, it shall make recommendations for adjustments necessary for the Plan's approval. Any approval by the Planning Board shall be on the condition that lots deemed injurious to the public health shall not be built upon without prior consent of the Board of Health. The Planning Board shall endorse on the Plan such conditions, specifying the lots to which said conditions apply. Failure by the Board of Health to report on the proposed subdivision within forty-five (45) days after the filing of the plan shall be deemed approval of the Plan by the Board of Health.

D. Review by other Town Officials

The Planning Board within ten days of the date of submission of a Definitive Plan shall transmit two (2) copies to the Board of Selectmen for review of the layout of the proposed improvements shown on the plans. The Board of Selectmen shall, within 45 days after filing of the plan, report in what respect, if any, the proposed streets and improvements would fail to comply with the standards for design, construction and acceptance by the Town, and may also make recommendations and suggestions to the Planning Board which in their opinion would improve the subdivision and its future development as an integral part of the entire town. If the Board of Selectmen fails to report to the Planning Board within 45 days after the filing of the plan, the plan shall be deemed as approved by the Board of Selectmen.

The Planning Board within ten days of the date of submission of a Definitive Plan shall transmit two (2) copies to the Conservation Commission for review of the layout of the proposed improvements shown on the plans to determine if the proposed subdivision or parts thereof are subject to the provisions of the Wetlands Protection Act. The Conservation Commission shall, within 45 days after filing of the plan, report in what respect, if any, the proposed subdivision or parts thereof, fails to comply with the Wetlands Protection Act, and may also make recommendations and suggestions to the Planning Board which in their opinion would improve the subdivision and its future development so as to be in compliance with the Wetlands Protection Act. If the Conservation Commission fails to report to the Planning Board within 45 days after the filing of the plan, the plan shall be deemed as approved by the Conservation Commission.

E. Contents of the Definitive Plan

- (1) The definitive plan shall be prepared by a registered civil engineer and/or registered land surveyor. It shall be clearly and legibly drawn in black ink upon Mylar. The plan shall be at a scale of one (1) inch to forty (40) feet, unless otherwise specified by the Planning board. Sheet size shall not exceed twenty-four by thirty-six (24 x 36) inches. If multiple sheets are used, they shall be accompanied by an index sheet showing the entire subdivision. The data required below may be on separate sheets as is necessary. One copy of the plan shall be on mylar at the same scale as the Warwick Board of Assessor's map sheet of the area so the Assessors may overlay the mylar on the Zoning Map Sheet.
- (2) The definitive plan shall have the following information:
  - (a) The subdivision name, boundaries, true North arrow, date, scale, legend denoting signs and symbols located on the plan and not otherwise explained, and bench mark. All elevations shall be tied to the United States Geological Survey bench marks if within five hundred (500) feet of the subdivision using the Datum of 1984 (WGS 84). GPS coordinates of each corner shall be noted accurate to a radius of thirty (30) feet or less and the plan legend shall state the accuracy using the Datum of 1984 (WGS 84).
  - (b) The names, addresses, and phone numbers of the owners of record, the applicant, the engineer and/or surveyor and/or their official seals and certificate numbers.
  - (c) The names of all abutters, as determined from the most recent tax list.

- (d) Existing and proposed lines of streets, rights-of-way, easements and public or common areas, open space and recreation areas, within the subdivision. Proposed names of new streets shall be shown in pencil until they have been approved by the Planning Board.
- (e) The location, names and paved widths and layout widths of present street(s) bounding, approaching or within reasonable proximity of the subdivision.
- (f) The proposed system of drainage, including adjacent existing natural waterways, in a general manner.
- (g) Zoning districts of all the areas shown on the plan.
- (h) A locus plan showing the location of the subdivision at a scale of one (1) inch equals one hundred (100) feet and an index plan at a scale of one (1) inch equals two hundred (200) feet.
- (i) Existing (broken line) and proposed (solid line) topography at ten-foot contour intervals, including the finished grade of all lots.
- (j) A table listing lot numbers with the corresponding lot size and street frontage for every lot.
- (k) The boundary lines proposed, with areas and dimensions.
- (l) The location of all natural (perennial and intermittent) waterways, wetlands (whether or not jurisdictional) and water bodies within and adjacent to the subdivision and within 300 ft. downstream of the subdivision's property boundaries, areas within the 100-year floodplain, areas within the inundation areas of any high or significant-hazard dams.
- (m) The location of significant site features, such as existing stonewalls, fences, buildings, trees exceeding sixteen inches diameter at breast height, floodplains and rock outcroppings.
- (n) The boundaries (including metes and bounds description) and acreage of open space and recreation areas.
- (o) The location(s) of all permanent monuments properly identified as to whether proposed or existing. Each lot corner shall have a permanent monument of a design and material approved by the building inspector. The bounds of roads, easements, and such

other infrastructure as the onsite engineer or building inspector specifies, shall have permanent monuments installed according to good engineering practice and of a design and material approved by the building inspector.

- (p) The locations of all snowmobile trails, woods roads, all-terrain vehicle trails, cellar holes, and fences.
- (q) In the case of a subdivision covering less than all of the land owned by the subdivider, a plan showing, in a general manner, the proposed overall development of remaining land.
- (r) The locations of all easements, conservation restrictions or covenants or any other documented agreements relevant to ownership or use of the land on file with the Registry of Deeds, or certified as to what will be filed.
- (s) The location and results of all percolation tests to evaluate subsurface conditions for each lot in the prospective subdivision. The tests will be done in accordance with the State Sanitary Code.
- (t) If an on-site sewage system is to be used the location(s) and result(s) of soil tests completed to determine what the soil type(s) is/are good for and the layout of the sewage treatment works and sewer system.
- (u) Locations of all habitats of species listed under the Massachusetts Endangered Species Act.
- (v) Locations of the following unless waived by the Planning Board: sidewalks, curbs, gutters, street lighting standards, and all utilities whether above or below ground.
- (w) The size and location of existing and proposed water supply facilities and the required water supply protective radius.
- (x) Size and location of all existing and proposed drinking water facilities.
- (y) Size and location of all fire hydrants, pumps, and water lines between hydrants and pumps, source(s) of water for fire protection and storage cisterns and dry hydrants.
- (z) Sufficient data, including the length, bearings, radii and central angle, to determine the exact location, direction and length of every street, way, lot line and boundary line and to establish these



lines on the ground. If the proposed subdivision is within five hundred (500) feet of a monument of the Massachusetts coordinate mapping system, it shall be tied into said system.

- (aa) A statement to be signed by the applicant, which is to read “All ways to be owned and maintained by the Homeowners Association, or by the sum of the owners of the lots within the subdivision,” unless the ways are accepted by Town Meeting.
- (bb) A statement that the plan complies with Warwick Zoning Bylaws and Subdivision Rules and Regulations.
- (cc) A statement that lots shall not be further subdivided or a certification signed by the engineer that the roads, water supply, sewage treatment and fire protection are adequate to allow additional subdivision of the lots and stating the allowable extent of additional subdivision. The engineer shall submit documentation to support the certification.
- (dd) A civil engineer’s stamp and signature on each and every page.
- (ee) A registered land surveyor’s stamp and signature.
- (ff) Typical street cross-sections for each class of street within the subdivision, drawn at 1” = 4’, showing location of all elements within the street right-of-way including street sections showing paving, crown, berm, shoulder and distance to the right-of-way line, as well as typical cross-sections of any altered drainage courses or off-street paths shall be drawn.
- (gg) Suitable space to record the action of the Board and signatures of Board members.
- (hh) Every sheet shall have the date, such as, “Revised dated 01/01/09.”
- (ii) Any relevant information that the Board identified as necessary in the review of the preliminary plan.
- (jj) Street profiles shall be prepared as follows:
  - [i] A horizontal scale of one (1) inch equals forty (40) feet shall be used.
  - [ii] A vertical scale of one (1) inch equals four (4) feet shall be used.

- [iii] The existing grade of the road center line shall be drawn in a fine black solid line.
- [iv] The existing right side line shall be drawn in a fine black dotted line.
- [v] The existing left side line shall be drawn in a fine black dashed line.
- [vi] All elevations shall refer to the United States Coast and Geodetic Survey bench marks if within five hundred (500) feet of the proposed subdivision.
- [vii] Proposed roadway center-line grades shall be drawn in heavy red lines with precise elevations at points of vertical tangency, points of vertical contact high point and low point.
- [viii] Rates of roadway gradient shall be shown in percentage.
- [ix] The size, location and rates of gradient of proposed stormwater drains, sewer lines, catch basins and manholes, as well as required new waterways and sizes of all pipes shall be shown.
- [x] The invert and rim elevations of each manhole or catch basin shall be shown.
- [xi] As long as the work is related to the proposed subdivision, profiles shall be shown, even if the new work is outside said subdivision.
- [xii] Water mains will be shown in profile to demonstrate sufficient clearance of other structures.
- [xiii] The size and location of all other utilities to be placed in the right-of-way shall be shown. These shall be placed so as to minimize flood damage.
- [xiv] The location of any intersected public or private way shall be shown.
- [xv] The location of all school bus stops and waiting areas.

## F. Environmental impact report.

- (1) In order to more fully ensure the health, safety and welfare of the Town of Warwick and its inhabitants, all prospective Class II Subdivisions of between four (4) and nine (9) lots shall be required to submit a detailed environmental impact report. Further, the Board may require said report or portions of it for smaller subdivisions where the information contained in such a report would be necessary to evaluate the prospective subdivision's impact upon a particular piece of land. The report would include the following:
  - (a) A description of the topography, geology and soil characteristics of the proposed subdivision and contiguous area and an analysis of the natural land features to sustain the proposed development; an analysis of stormwater runoff, soil erosion and other potential land capability effects of the proposed subdivision; and a description of the measures planned to protect the natural land features against potential deterioration resulting from the proposed subdivision.
  - (b) Identification of surface and subsurface water features within the proposed subdivision, as well as those water features potentially affected by it, including underground aquifers, brooks, streams, rivers, lakes and wetlands, and a description of the measures planned to protect those surface and subsurface features against potential deterioration resulting from the proposed subdivision.
  - (c) A description of special physical conditions existing within the proposed subdivision, (e.g., floodplains, unique landscape features, etc.) and a description of the measures to accommodate these special conditions.
  - (d) An analysis of airborne emissions to be generated by the proposed subdivision or incident to it, in relation to state and federal air pollution standards and in relation to state and federal regulations for implementing those standards, as well as nearby off-site emission sources potentially affecting air quality of the proposed subdivision.
  - (e) Identification of any existing or potential on- or off- site sources of noise which might significantly inhibit speech or sleep [above fifty (50) dBA] and a description of the measures to alleviate the problem.
  - (f) Identification of any notable aesthetic characteristics on or near the proposed subdivision, including features of historical,

architectural, archaeological or scenic interest and a description of the measures designed to protect these aesthetic features.

- (g) Identification of potential impacts on agricultural and forestry resources.
- (2) A biotic study.
- (a) Based on a review by a wildlife biologist, a description of the biotic community, listing types of vegetation and animals likely to be found within the proposed subdivision and/or contiguous area including within the sub-watershed and areas downstream of the proposed subdivision.
  - (b) Identification by a wildlife biologist, of any rare species or rare and endangered species habitat in the vicinity potentially affected by the proposed subdivision, a description of any potential disruption of wildlife populations, habitats, and wildlife movements, which may result from the proposed subdivision and the methods to be taken to limit these disruptions.
  - (c) Address potential impacts with recommendations to minimize impacts of the proposed subdivision.
- (3) A land use study.
- (a) An analysis of land use within the proposed subdivision in relation to surrounding land uses and especially as it affects any loss of agricultural or forestry land or decrease in farm or forest production or viability.
  - (b) An assessment of the economic impact of the proposed subdivision upon education (the number of additional children in the school system), the demand for municipal services and facilities (water, sewage treatment, solid waste management, road maintenance, fire and police protection and recreation), traffic, utilities and streetlights.

G. Development Impact Statement. In order to more fully ensure the health, safety and welfare of the Town of Warwick and its inhabitants, all prospective Class 1 Subdivisions of ten (10) or more lots and all non-residential subdivisions shall be required to submit a detailed development impact statement. Further, the Board may require said report or portions of it for smaller subdivisions where the information contained in such a report would be necessary to evaluate the prospective subdivision's impact upon a particular piece of land. The

Development Impact Statement shall comply with Appendix C and include the following:

- (1) **Contents.** The board shall in the case of a Class I Subdivision or may in the case of a Class II Subdivision require an Applicant for a subdivision to submit a Development Impact Statement (DIS) on the effects the proposed action has or will have on: 1) the immediate neighborhood and land area; 2) surrounding neighborhoods; and 3) the community at large.

The DIS shall include a detailed assessment of the probable impacts of the proposed action on a wide variety of environmental, fiscal, and socioeconomic elements and factors.

Environmental factors shall mean any destruction, damage, or impairment, actual or probable, to any natural resources of the Town and shall include but not be limited to water pollution, air pollution, improper sewage disposal, pesticide pollution, excessive noise, impairment and eutrophication of rivers, streams, floodplains, lakes, ponds, or other surface or subsurface water resources, destruction or degradation of wetlands, open spaces, natural areas, parks, or historic, archaeological districts, buildings and sites.

Fiscal and socioeconomic impacts shall mean the effects on traffic circulation and safety, neighborhood character, school enrollment, public facilities, municipal and community services, associated fiscal expenditures and revenues, and on housing and other development activity.

The DIS shall contain detailed information describing the nature and extent of the proposed work and its potential impacts; any adverse short-term and long-term consequences which cannot be avoided should the work be performed; and all measures to be utilized to minimize adverse consequences, particularly environmental damage.

The DIS shall also develop, describe, and objectively weigh alternatives to the proposed development, which are allowed by the Zoning Bylaw.

- (2) **Procedure.** On submission to the Board of a residential subdivision creating more than ten (10) lots or dwelling units and all nonresidential subdivisions, the applicant is required to submit a DIS (see Appendix C). The Board may require portions of the DIS to be carried out for smaller subdivisions, if in their opinion, the sensitivity of the land warrants an investigation. After a preliminary scoping session to be held between the applicant and the board with input as appropriate from the public abutters, the Police, Fire and Highway Departments and the Town Finance Committee, or its agent, and upon submission of evidence and a

written request from the applicant, the Board may waive any section(s) of the requirements which it deems non-applicable to the proposed project or may require additional information on any aspect of the requirements. The entire cost of the DIS will be the responsibility of the Applicant. The DIS shall be prepared by an interdisciplinary team of professionals qualified, experienced, and where applicable, licensed in their fields. Such team may include a civil engineer, traffic engineer, architect, landscape architect, land use planner, hydro-geologist, hydrologist, biologist, financial planner, and other environmental, financial, and other professionals. The applicant shall consult with the Board as to choice of said professionals, and conflict of interest shall be avoided to the extent possible.

- H. Compliance with the Wetlands Protection Act. In accordance with MGL C. 131, § 40, no person shall remove, fill, dredge or alter any watercourse, pond, floodplain or wetland and buffer areas within the jurisdiction of the Conservation Commission without filing written intention to perform said work with the Local Conservation Commission and with the Commonwealth Department of Environmental Protection. Permission for such work must be obtained from the Conservation Commission.
- I. Public hearing.
  - (1) Before approval, modification, or disapproval of the definitive plan is given, a video or audio recorded public hearing shall be held by the Board. Said public hearing shall be held after the Board of Health makes its report and other town agencies have made their reports as applicable, or after the forty-five day period to report expires. Notice of the specific time and place shall be given by the Board at the expense of the applicant by advertisement in a newspaper of general circulation in the Town of Warwick once in each of two (2) successive weeks, the first publication being not less than fourteen (14) days before the date of such hearing. Copies of the definitive plan shall be available to the public through the Town Clerk's office and to each abutting resident, landowner or abutter to a landowner within three hundred (300) feet of the site who has so requested, not less than fourteen (14) days before the date of the public hearing.
  - (2) A copy of said notice of public hearing shall be mailed by the Board, by registered or certified mail, to all owners of land abutting the proposed subdivision and to the abutters of the abutters within three hundred (300) feet of the site. The Planning Board shall also send notice of a public hearing to the following: the Board of Selectmen, the Board of Health, the Conservation Commission, the Fire Department, the Superintendent of Schools, the Building Commissioner and the Highway Department. The expense of these notifications shall be borne by the applicant.

- J. Approval, approval with conditions, modification or disapproval. After the required public hearing but within ninety days (90) days from the date of submission, in the case of a subdivision where a preliminary plan has been filed, the Planning Board shall take final action upon the definitive plan. It shall approve the plan as submitted, approve the plan with conditions and modifications, disapprove the plan with prejudice, or disapprove the plan without prejudice to its being resubmitted with specific additional information or modifications. If the Board is considering approval of the plan with conditions or modifications, it shall provide notice of such conditions or modifications to the applicant and to the public, and shall provide reasonable opportunities to comment. The Board shall state with its vote reasons for its action and shall summarize the supporting evidence. In the case of a subdivision plan where no preliminary plan has been submitted, the Planning Board shall take final action within one hundred and thirty-five (135) days from the date of submission. Final action is the filing of the Planning Board decision with the Town Clerk and submission of its decision to the applicant by certified mail.
- K. Performance guaranty. Before endorsement of the Board's approval upon a definitive plan of a subdivision, the applicant shall agree to complete the required improvements specified in Article VI of these rules and regulations for all lots within the subdivision within a specified period of time. Such construction and installation shall be secured by one method, or in part by one and in part by another, of methods (1), (2) and (4) of the following methods:
- (1) by a proper bond, sufficient in the opinion of the Planning Board to secure performance of the construction of ways and the installation of municipal services required for lots in the subdivision shown on the plan, and the Planning Board may require that the applicant specify the time frame within which such construction shall be completed;
  - (2) by a deposit of money or negotiable securities, sufficient in the opinion of the Planning Board, after consultation with Town Counsel, to secure performance of the construction of ways and the installation of municipal services required for lots in the subdivision shown on the plan, and the Planning Board may require that the applicant specify the time frame within which such construction shall be completed;
  - (3) by a covenant executed and duly recorded by the owner of record, running with the land, whereby such ways and services shall be provided to serve any lot and that other provisions of the plan as approved or modified and any conditions on approval have been and are being met 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 for the date of such deed; or,

- (4) by an agreement between the applicant and the lender executed after the recording of the 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 provide for the retention by the lender of funds sufficient in the opinion of the Planning Board to secure the construction of ways and 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 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.

L. Endorsement.

- (1) Upon approval or modification of the definitive plan, a majority of the Board shall endorse it as approved or modified. This shall be done following the twenty-day statutory appeals periods, provided that the Town Clerk notifies the Board that no appeal has been filed within this period. After the approved definitive plan has been endorsed, the applicant shall file with the Board one (1) reproducible copy and three (3) contact prints of said definitive plan.
- (2) Approval of the definitive plan does not constitute the laying out or acceptance by the Town of Warwick of streets or easements within a subdivision.
- (3) A failure by the applicant to request endorsement of the plan or failure by the applicant to provide an adequate performance guaranty within six months of the Planning Board's vote of approval shall result in automatic rescission of the definitive plan approval.

M. Evidence of performance and release of performance guaranty.

- (1) Requirements. Before the Board shall fully release the interest of the Town in a performance bond, deposit or covenant, the Board shall require the following:



- (a) Written evidence from a registered civil engineer of the Board's choosing, that the streets and drainage pattern conform to the Planning Board's requirements in accordance with the definitive plan.
  - (b) Written evidence from a registered civil engineer of the Board's choosing that the water mains, sanitary sewers, storm sewers and hydrants conform to specifications and the Board's requirements in accordance with the approved definitive plan.
  - (c) Written evidence, from a registered land surveyor of the Board's choosing, that all permanent bounds and monuments on all street lines and on the lot or lots within the subdivision are in place and are accurately located in accordance with the approved definitive plan.
  - (d) Written evidence from a registered civil engineer of the Board's choosing that the streets and drainage system shall have been in use through one (1) full winter and shall have performed as designed.
  - (e) Written evidence that all fees to cover inspection for release of the performance guaranty have been paid by the applicant.
  - (f) Written evidence that all provisions of the plan have been and will continue to be complied with.
- (2) Upon completion of all said improvements and satisfaction of the above requirements, the applicant shall notify the Board and the Town Clerk, by delivery or by registered or certified mail, requesting release from the performance guaranty. The Board shall act on such request within forty-five (45) days.
  - (3) The Board may grant partial release from such security for partial completion of improvements, provided that the completed portion provides a reasonable system for circulation and utilities pending completion of the rest.
  - (4) Full security shall not be released until the integrity of road pavement and drainage has been verified following a full winter of use, until trees and other vegetation have been established, until either the way has been duly laid out and accepted as a public way or other provisions for their continued maintenance in perpetuity have been accepted by the Board,

until the record (“as built”) plans have been received and until final clean-up has been completed.

- N. Recording of the plan. The applicant shall notify the Planning Board in writing within ten (10) days after the definitive plan, as approved and endorsed, has been recorded at the Franklin County Registry of Deeds and, in the case of registered land, with the recorder of the Land Court, of such recording, noting book, page number and date of recording.
- O. Recording of the plan. Failure of the applicant to record the definitive plan at the Franklin County Registry of Deeds within six (6) months of its endorsement or to comply with the construction schedule of the performance agreement shall constitute sufficient cause for rescission of such approval, in accordance with the requirements of MGL C. 41 § 81-W, as amended.

#### § 4-4. Subdivision standards in the Floodplain

All subdivision proposals shall be reviewed to determine whether such proposals will be reasonably safe from flooding. If any part of a proposed subdivision is located within the Special Flood Hazard Area as defined by the Federal Insurance Administration (FIA) Flood Hazard Boundary Maps or within the 100-Year Floodplain as defined by the Federal Emergency Management Agency’s Flood Insurance Rate (FIRM) maps, it shall be reviewed to assure compliance with the Town of Warwick Zoning Bylaw and the following:

- A. The proposed subdivision design is consistent with the need to minimize flood damage.
- B. All public and private utilities and facilities, such as ways, sewer, gas, electrical and water systems (as appropriate), shall be located and constructed to minimize or eliminate flood damage, and in particular, shall be located outside the 100-year floodplain.
- C. Adequate drainage systems shall be provided to reduce exposure to flood hazards.
- D. Base flood elevation (the level of the one-hundred-year flood) data shall be provided for proposals greater than five (5) lots or five (5) acres, whichever is the lesser, for that portion within the Flood Hazard Area or the 100-Year Floodplain.

## **ARTICLE V Design Standards**

### **§ 5-1. Basic Requirements**

The subdivider shall observe all design standards for land division as hereinafter provided. These standards shall be considered minimum standards and shall be varied from or waived only as provided in Section 7. State Construction Standards shall be followed, and all matters left open or undefined in those Standards shall be specified by the Board on a case by case basis. Specification of matters not covered by the State Construction Standards shall be made by the Board or its engineering consultant on a case by case basis, based wherever possible on the publications of the American Association of State Highway and Transportation Officials (AASHTO) or other publications cited in Section 7 of these regulations.

### **§ 5-2. Relationship to Town Plans**

The design and layout of a proposed subdivision should be guided by the goals and objectives of any existing master plans, open space and recreation plans, village plans, or statements of goals and objectives for the Town of Warwick Subdivision Rules and Regulations and Zoning Bylaw including but not limited to purposes five through eight inclusive of the Zoning Bylaws.

### **§ 5-3. Lot Size and Frontage**

All lots shall be of such size and dimensions as to meet at least the minimum requirements of the Zoning by-law.

### **§ 5-4. Protection of Natural Features**

All natural features such as trees of over sixteen inches diameter at breast height, water courses, one hundred year floodplains, wetlands, ponds and other water bodies, marshes, stonewalls, scenic points, and historic sites shall be preserved to the extent possible.

### **§ 5-5. Access Through Another Municipality**

In case access to a subdivision crosses land in another municipality, the board may 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 adequate performance bond has been duly posted or that such access is adequately improved to handle prospective traffic. The covenant required under Section 4.3 shall

include the requirement that no lot in the subdivision may be sold or built upon until any access in another jurisdiction has received the necessary approval of such jurisdiction.

### § 5-6. Street Classifications

- A. Streets in subdivisions shall be classified as major and minor.
  - (1) Major Street: A street having the primary purpose of carrying through traffic equal to that generated by ten (10) or more lots and the secondary purpose of providing access to abutting property.
  - (2) Minor Street: A street having the primary purpose of carrying through traffic equal to that generated by fewer than ten (10) lots.

### § 5-7. Streets

- A. The Planning Board may require higher standards than those set forth herein for the design and construction of streets within a subdivision, provided that such requirements are necessary and are intended to benefit a substantial area outside the subdivision.
- B. Location.
  - (1) All streets in the subdivision shall be designed so that they will provide safe vehicular travel and shall provide a convenient system for providing safe vehicular traffic. Due consideration shall also be given by the subdivider to the attractiveness of the street layout, in order to obtain the maximum livability and amenity of the subdivision. Common driveways shall not be used to provide vehicular access to lots within a subdivision if, in the opinion of the Planning Board, they are being used to circumvent the requirements of these Subdivision Regulations.
  - (2) The design and layout of the proposed subdivision shall conform, so far as is practicable, to the Development Guidelines contained in Appendix A and to the Town Master Plan, Open Space and Recreation Plan, or Community Development Plan, as adopted by the Planning Board or the Town.
  - (3) A dead-end street (cul-de-sac) shall be permitted as a Minor Street only. Dead-end streets shall not be longer than six hundred (600) feet including the turnaround unless, in the opinion of the Planning Board, a greater length is necessitated. Dead-end streets shall be provided at the closed end with a turnaround having an outside roadway diameter of at least one hundred (100) feet and a property line diameter of at least one hundred

twenty (120) feet. Only one dead end shall be allowed per subdivision and it shall provide access to two (2) or fewer lots. No island within the cul-de-sac shall be allowed.

C. Alignment.

- (1) Streets shall be laid out so as to intersect, as near as possible, at right angles. No street shall intersect another street at less than sixty (60°).
- (2) Streets entering on opposite sides of another street shall be laid out directly opposite each other or with a minimum offset of one hundred and fifty (150) feet between their respective centerlines.
- (3) Minimum centerline radii will be as follows: Major Street, five hundred (500) feet; Minor Street, two hundred (200) feet.
- (4) Property lines at street intersections shall be cut back to provide for curb radii.
- (5) At three and a half feet above the pavement at the intersection of the subdivision road with the existing street, the minimum sight distances shall be as follows: Major Streets, three hundred fifty (350) feet; Minor Streets, two hundred and fifty (250) feet.
- (6) Street jogs with center-line offsets of less than one hundred twenty-five (125) feet should be avoided.

D. Grade. The maximum grades for streets shall be as follows: Major Street, six percent (6%); and Minor Street, eight percent (8%). Roads shall be designed to avoid puddles.

E. Road Width, Right of Way (R.O.W.), and Curb Radius.

- (1) The minimum width of a Right-of-Way, Road Width, and Curb Radius shall be as follows:

**Right-of-Way and Street Design Standards**

<b>Subdivision Classification</b>	<b>Class II</b>	<b>Class III</b>	<b>Class I</b>
<b>Street Classification</b>	<b>Minor</b>		<b>Major</b>
1. Minimum Right-of-Way Width (feet)	55 (See note 1)		60
2. Minimum Pavement Width (Traveled Way) in feet	20 (See note 1)		24 (See note 2)
3. Minimum Radius of Curves (at Centerline of Traveled Way) in feet	200		500
4. Minimum Property Line Radius at Intersections of Streets and Ways in feet	30		40
5. Minimum Road Crown (in inches)	4		6
6. Minimum Vertical and Horizontal Sight Distance in feet (see note 3)	250		350
7. Minimum Percent Grade	1		1
8. Maximum Percent Grade	8% (See note 4)		6%
9. Roadway Shoulder from Edge of Pavement to Bottom of Slope in Substantial Cut (feet)	4		3 (See note 5)
10. Roadway Shoulder from Edge of Pavement to Top of Slope in a Substantial Fill (feet); with Guard Rail	5		4 (See note 5)

Notes:

1. To be determined by Board at the review of the Preliminary Plan.
2. This includes two 12' travel lanes and two 8' paved shoulders.
3. Clear sight distance in travel lane at 3.5 feet above pavement.
4. Ten percent may be allowed for short distances.
5. From outside edge of paved shoulder.
6. Actual width to be determined by Board.

In addition, there must be at least a twenty (20) foot setback from any adjacent owner's property line to any edge of the right-of-way. Greater road width shall be

required by the Planning Board when deemed necessary for present and future vehicular travel.

- (2) The centerline of the roadway shall coincide with the centerline of the right-of-way unless otherwise requested by the Board.

F. Adequate Access from Public Ways.

- (1) Where the street system within a subdivision does not connect with or have, in the opinion of the Planning Board, adequate access from a public way, the Planning Board may require, as a condition of approval, that such adequate access be provided by the subdivider, or that the subdivider make physical improvements in accordance with the provision of these regulations from the boundary of the subdivision to a public way.
- (2) Where the physical condition or width of the public way from which a subdivision has its access is considered by the Planning Board to be inadequate to carry the traffic expected to be generated by such subdivision, the Planning Board may require the subdivider to dedicate a strip of land for the purpose of widening the abutting way to a width at least commensurate with that required in a subdivision, and to make physical improvements to and within such public way to the same standards required within the subdivision. Any such work performed within such public way shall be made only with the permission of the governmental agency having jurisdiction over such way, and all costs of any such widening or construction shall be borne by the subdivider.
- (3) A Class I Subdivision needs to have access from two separate points.

**§ 5-8. Easements.**

- A. Easements for utilities shall be at the side or rear of lots wherever possible. They shall be contiguous from lot to lot. Easements shall be at least twenty (20) feet in width.
- B. Where a subdivision is bisected by or adjacent to a watercourse, either natural or man-made, the Board may require that there be a stormwater or drainage easement of at least twenty (20) feet in width to conform to the path of the watercourse and to provide for any construction related to that watercourse.
- C. The Board may require an easement for watercourses that are not within a subdivision but may be affected by it.

**§ 5-9. Natural features.**

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.

**§ 5-10. Open spaces.**

Before approval of a plan, the Planning Board may also require the plan to show a park or parks suitably located for playground or recreation purposes or for providing light and air. The park or parks shall not be unreasonable in area in relation to the land being subdivided and to the prospective uses of such land. The Board may require that no building be erected upon such area until the land is either purchased by the town or is deeded in gift to the town or to a neighborhood civic association. This land may be held in said status for a period of three (3) years, at which time, if the land is not deeded or purchased, it may be included in a new subdivision proposal.

**§ 5-11. Drainage.**

- A. The storm drainage system shall be designed to intercept all stormwater drainage from the particular subdivision or any additional runoff that may be created by that subdivision.
- B. The Rational Method or the Soil Conservation Service Method shall be used in determining the quantity of stormwater to be carried by the system. The system shall be designed for a minimum twenty-five year-storm frequency.
- C. Wherever possible, stormwater should be directed into the nearest part of the drainage system. Where storm drainage encroaches on privately owned land, a drainage easement shall be acquired by the developer.
- D. Stormwater shall not be permitted to cross the surface of the roadway. It must be piped underneath.
- E. Catch basins shall be placed on both sides of the street. They shall be placed at street intersections to intercept stormwater runoff.
- F. The maximum distance between catch basins shall be three hundred (300) feet.
- G. The minimum diameter of storm drainage pipes shall be twelve (12) inches.



- H. All new culverts should be placed so as to maximize stream connectivity. Culvert specifications shall reflect the Massachusetts River and Stream Crossing Standards ([http://www.streamcontinuity.org/pdf\\_files/MA\\_Crossing\\_Std\\_3-1-06.pdf](http://www.streamcontinuity.org/pdf_files/MA_Crossing_Std_3-1-06.pdf)).
- I. The method of construction and the materials used in construction shall conform to the most recent MassHighway Standards and Specifications for Highways, Bridges and Waterways.
- J. No open water body or wetland shall be filled unless in compliance with the Massachusetts Wetlands Protection Act.
- K. Where a portion of a subdivision lies within an aquifer recharge area, storm drainage shall be directed, when appropriate, to retention basins in order to artificially recharge the groundwater.
- L. Leaching catch basins may be required at the option of the Board. These basins shall be at least six (6) feet deep and four (4) feet in diameter (inside measurements), constructed of concrete blocks or precast concrete units. Leaching basins shall be backfilled for at least one (1) foot around all sides with one and one-half (1 ½) inches of washed stone, topped with peastone, and shall be cross-connected with a twelve-inch equalizer drainpipe. Covers on basins shall conform to industry standards. Placement of catch basins shall be such as to prevent the ponding of water.
- M. Post construction stormwater runoff shall be no greater than preconstruction levels.

### § 5-12. Sewerage.

If a public sewerage system is available and the connection is feasible the subdivision should be connected according to the requirements of the Sewer District and/or Town. Where a public sewerage system connection is not available or feasible, a private on-site sewerage system shall be designed and constructed in conformity with Title 5 of the State Environmental Code of the Massachusetts Department of Environmental Protection and subject to the approval by and in conformity with the Town of Warwick Board of Health and its rules and regulations.

Where a cluster subdivision is proposed, a shared on-site sewerage system shall be allowed if designed and constructed in conformity with Title 5 of the State Environmental Code of the Massachusetts Department of Environmental Protection and subject to the approval by and in conformity with the Town of Warwick Board of Health and its rules and regulations. A portion of the common land may also be used for the construction of retention and detention facilities and leaching areas, if associated with drainage or septic disposal systems serving the cluster development, and if such use, in

the opinion of the Planning Board, enhances the specific purpose of the cluster development to promote better overall site planning. Easements shall be no larger than reasonably necessary and the Planning Board shall require adequate assurances and covenants that such facilities shall be maintained by the lot owners within the cluster development.

### § 5-13. Water.

Private on-lot water systems shall be located and constructed in accordance with the Board of Health Regulations governing private wells in the Town of Warwick and in accordance with the setback and other requirements of Title 5 for private septic systems. Such water systems shall be subject to the approval of the Town of Warwick and the Warwick Board of Health. In addition, a local water supply shall be provided within the subdivision for fire fighting purposes. If twenty-five (25) or more people are to be provided with water a determination shall be made as to whether or not a public water supply should be installed to comply with DEP Safe Drinking water regulations.

## ARTICLE VI Required Improvements for Approved Subdivisions

The improvements required in these Rules and Regulations for the Subdivision of Land must be installed to the satisfaction of the Board of Selectmen. A schedule for the installation of improvements shall be filed with the Board of Selectmen who will provide the developer with a check list of required inspections to be made by the Highway Superintendent or the Board of Selectmen. Failure to file such a schedule, or otherwise to give adequate notice as to when such improvements can be inspected may significantly delay certification of such improvements and subsequent release of bond or covenant.

### § 6-1. Clearing and grubbing of right-of-way.

- A. No clearing or excavating shall be started on any part of the street until the Tree Warden has designated, in writing, those trees which are to remain in the tree belt. If the construction of a new subdivision road will impact a road designated as a local scenic road according to Chapter 40, Section 15C, review and approval by the Planning Board to cut or remove trees is required. Such trees to be preserved shall be protected during construction by fenders or boxes, and their root systems shall be disturbed as little as possible.
- B. No matter such as stumps, trunks, limbs of trees, brush, boulders or similar material shall be buried or left within the limits of the right-of-way lines.

**§ 6-2. Foundation of roadway.**

## A. Subbase.

- (1) Within the roadway area, including driveway aprons, sidewalks and grass strips, all material shall be removed to subgrade, and any unsuitable material below subgrade, in the opinion of the town-appointed engineer, shall be removed and shall be replaced with proper bankrun gravel and brought to proper compaction. The depth of the subgrade will be a minimum of sixteen inches but may be greater based on existing conditions as specified by the town-appointed engineer.
- (2) Where fill is required, it shall be placed in uniform lift layers not deeper than eight (8) inches and shall be spread uniformly with the large stones at the bottom.
- (3) Any gravel used as fill in the subbase shall be composed of hard, durable stone and coarse sand, practically free from loam and clay and containing no stone having a dimension greater than six (6) inches, and, when spread and compacted, shall present a stable foundation.
- (4) Each layer shall be thoroughly compacted to AASHTO (American Association of State Highway and Transportation Officials) standards, and rolling shall continue until a firm, even surface true to line and grade is achieved. Any depressions shall be filled and rerolled, and any soft or unsuitable areas shall be removed and replaced with suitable material and rolled.
- (5) The subgrade shall be shaped and finish graded at the required depth below and parallel to the proposed pavement surface, in conformance with the typical street cross section.
- (6) Inspections shall be required after completion of the subbase (AASHTO).

## B. Gravel base.

- (1) The gravel base course shall consist of not less than eighteen (18) inches of well-compacted gravel placed upon the subbase, for the entire width of the roadway, in layers not greater than six (6) inches deep.
- (2) When spreading the gravel, care should be taken to rake forward and distribute the largest stones so they will be at the bottom of the gravel base course and evenly distributed.
- (3) Each layer shall be thoroughly compacted to the proper density, and rolling shall continue until a firm, even surface true to line and grade is

achieved. Any depression that appears during or after rolling shall be filled with gravel and rerolled.

- (4) The gravel used in the base course shall conform to AASHTO standards, except that it shall contain no stones having a dimension greater than three (3) inches.
- (5) The gravel base surface shall be shaped and finish graded at the required depth below and parallel to the proposed pavement surface, in conformance with the typical street cross section.
- (5) Inspections shall be required before commencement and after completion of the gravel base (AASHTO).

**§ 6-3. Surfacing of roadway.**

- A. The roadway and driveway aprons shall be paved the entire width, including under the berms, and the surface treatment shall be compacted bituminous concrete placed in two (2) layers.
- B. The first layer or binder course shall be Class I bituminous concrete pavement, Type I-1, binder course mix, laid at a thickness of two (2) inches, in accordance with Section 460 of MassHighway's Standard Specifications for Highways, Bridges and Waterways, latest edition.
- C. The second layer or surface course shall be Class I bituminous concrete pavement, Type I-1, top course mix, laid at a thickness of two (2) inches, in accordance with Section 460 of MassHighway's Standard Specifications for Highways, Bridges and Waterways, latest edition.
- D. The plant mix material shall be delivered to the site in a hot and easily workable condition when weather conditions are satisfactory so that it can be properly placed on the appropriate base. Irregularities in the existing foundation material shall be eliminated by the use of extra bituminous material, in accordance with Section 460 of MassHighway's Standard Specifications for Highways, Bridges and Waterways, latest edition.
- E. All bituminous concrete shall be spread by an approved mechanical spreader in a uniformly loose layer to the full width required and to such thickness that each course, when compacted, shall have the required thickness and shall conform to grade and the typical street cross section. Hand spreading of bituminous concrete material will be allowed only for special areas which do not permit mechanical spreading and finishing.

- F. Each course of bituminous material shall be rolled with a self-propelled, equally balanced, tandem roller weighing not less than five (5) nor more than ten (10) tons. Places inaccessible to the power roller shall be compacted by means of hand or vibratory tampers. Any displacement caused by the roller shall be corrected by raking and adding fresh mixture where required.
- G. Traverse joints shall be formed by laying and rolling against a form of the thickness of the compacted mixture placed across the entire width of the pavement. When the laying of the mixture is resumed, the exposed edge of the joint shall be painted with a thin coat of hot asphalt or asphalt cement thinned with naphtha. The fresh mixture shall be raked against the joint and thoroughly tamped with hot tampers and rolled.
- H. The final bituminous surface shall show no deviation greater than one-fourth (1/4) inch when tested with a sixteen-foot straightedge placed parallel to the center line of the surface course.
- I. Finished roadway and driveway apron surfaces less than the required thickness or containing any soft or imperfect places will not be approved.
- J. All roadways shall be brought up to the finish grade as shown on the definitive plan, and all manhole covers, gate boxes, gas drips and other access to underground utilities shall be set flush with the surface of the road, grass strip or sidewalk.
- K. Streets and roads shall be constructed with the following minimum widths of traveled surface:
  - Major Street – 24 feet
  - Minor Street – 20 feet
- L. Inspections shall be required upon completion of the binder and surface courses (AASHTO).

#### § 6-4. Curbs and berms.

Curbing will be required only where the Planning Board determines that special conditions of topography, drainage requirements, steep roadway grade or high traffic density so required. Unless these conditions exist, curbing will not be required, and the adjoining shoulder, grass plot and ditch shall be graded and treated to carry the surface water runoff adequately without erosion.

When it is the opinion of the Planning Board that curbs and or berms are required, they shall be constructed using Cape Cod curbing (See Appendix E) along both sides of major roads but curbing may not be required along Minor Streets. Their construction

shall meet requirements set forth by MassHighway in its latest volume of Standard Specifications for Highways and Bridges.

**§ 6-5. Sidewalks and School Bus Stops**

- A. Sidewalks of not less than five (5) feet in width shall be constructed on one (1) or both sides of the street starting at the property line when, in the opinion of the Board, such sidewalks are necessary for public safety or to support pedestrian circulation within the subdivision.
- B. Sidewalk construction shall meet requirements set forth by MassHighway in its latest volume of Standard Specifications for Highways and Bridges.
- C. All Class I Subdivisions located in an area where school busing is provided or is likely to be provided in the future must provide at least one bus waiting area for school children. This area must be between 30 square feet and 100 square feet as directed by the Planning Board depending on the size of the subdivision (number of students generated). The waiting area shall not include the width necessary to meet the sidewalk.

**§ 6-6. Grass strips.**

All cleared areas of a right-of-way not to be planted with ground-cover plantings, including all disturbed areas over all culverts in drainage easements, shall be loamed with not less than six (6) inches' compacted depth of good quality loam and seeded with lawn grass seed. Seeding shall be done at appropriate times of the year and in a manner to ensure growth of grass. No utility poles, transformers, signs or similar items shall be placed within the grass plot within three (3) feet of the edge of the pavement.

**§ 6-7. Street signs.**

Street name signs of a design conforming to the type in general use in the town shall be furnished, set in concrete and erected at all street intersections prior to the occupancy of any house on the street. Signs may be purchased from the Town of Warwick Highway Department.

**§ 6-8. Streetlighting.**

Streetlighting shall be installed along any street the Board deems appropriate. Light standards to be used shall be subject to the approval of the Planning Board and, when used, be spaced no less than every five hundred (500) feet. Streetlighting shall be designed to avoid unnecessary glare or light pollution.

**§ 6-9. Monuments and markers.**

- A. Granite monuments shall be installed at all street intersections and at all points where, in the opinion of the Board, permanent monuments are necessary. Such monuments shall conform to the standard specifications of the Superintendent of Highways and shall be set according to such specifications.
- B. Iron rods or other markers suitable to the Board shall be installed at every corner of each lot within the subdivision. Their locations shall be noted on the definitive plan.
- C. No permanent monument or marker shall be installed until all construction, which might disturb or destroy the monument or marker is completed.
- D. All monuments and markers shall be installed before final release of the security for the performance guarantee.

**§ 6-10. Trees and planting.**

- A. All landscaping and planting within the rights-of-way will come under the supervision of the Tree Warden. A twelve-foot minimum width will be required on the utility side and a ten-foot minimum width on the opposite side for tree belts. Trees are to be planted no greater than forty (40) feet apart. Trees should be planted in locations, which avoid overhead or underground utilities. The Planning Board recommends that the following trees not be planted: all species of willow, catalpa, Norway maple poplar or other tree species considered invasive in Massachusetts. Trees approved by the Planning Board to be planted include: Red Maple, Sugar Maple, Katsura Tree, Green Ash, Ginkgo (male only), Thornless Common Honeylocust, Tupelo, Scarlet Oak, English Oak, Red Oak, London Plane Tree, Littleleaf Linden, Valley Forge Elm, Princeton Elm, 'Allee' Lacebark Elm, and Japanese Zelkova.
- B. On the side of the street where overhead wires are present, large and medium growing trees should be planted within the front yard of the individual property owner, away from such wires.

**§ 6-11. Utilities.**

All electrical, telephone, fire alarm and other wires and cables shall be installed underground unless, in the opinion of the Board and the appropriate utility company, such installation is impractical or not in the best interest of the town. If located within a flood-prone area, as determined by the Board, transformers, switching equipment or

other vital components shall be floodproofed and approved by the Board or a Board-appointed engineer at the subdivider's expense. If the Board determines that undergrounding the utilities is impractical because of ledge, high groundwater or flooding, then the utility poles must be set back at least seven feet from the edge of the road or shoulder if any.

#### § 6-12. Subdivision Fire Protection.

A Class I Subdivision (10 dwelling units or more) shall meet ISO rural fire flows of 500 gallons per minute for 2 hours. It may do this by providing 60,000 gallons of water in one or more cisterns, or by a well with a fire pump and hydrant system, or by a combination of the two. Each cistern shall have a dry hydrant with paved off road parking for the fire truck, a provision for filling the cistern, and access to the cistern for repair and cleaning. The fire pump shall be capable of pumping five hundred (500) gallons per minute at a residual pressure of twenty (20) pounds per square inch (psi). If a well is the sole source of fire flows the pump shall be able to provide the required flow for two (2) hours. If a combination of cistern storage and fire pumping from a well is used, the system must be capable of providing a fire flow equivalent to 500 gallons per minute for two (2) hours. For example, if the fire pump can provide 500 gallons per minute for one hour, then the cistern storage shall be thirty thousand (30,000) gallons. A subdivision of less than 10 dwelling units shall provide a pro rata amount of fire flows. For example, a five-unit subdivision shall provide thirty thousand gallons of water storage or have a fire pump capable of pumping 500 gallons per minute for one hour or combination which could provide 500 gallons of fire flow for one hour. The fire chief may provide for the location of the cisterns and other operational details. If the density and number of dwelling units requires a higher flow rate to comply with ISO standards the higher flow rate shall be met and may be met using a mix of cisterns and fire pumps. These fire water sources shall be available for general fire fighting outside of the subdivision unless there is a specific agreement to the contrary.

#### § 6-13. As-built plans.

After final approval of all the improvements in the subdivision and before final release of the performance guaranty, the applicant shall furnish the Board with two (2) copies of an as-built plan, showing location and grades of roads, as built, as well as all utilities, as installed, including inverts of drainage and sewerage systems.

#### § 6-14. Final cleanup.

After completion of construction and before release of the performance guaranty, the subdivider shall removal all temporary structures, debris, surplus materials and rubbish and shall otherwise leave the area in a neat and orderly appearance. Burning of the rubbish and waste material is prohibited.



**ARTICLE VII  
Administration**

**§ 7-1. Inspections.**

- A. General requirement.
  - (1) Inspections shall be carried out at appropriate times during the development of the subdivision when the following stages of progress have been reached.
    - (a) Before clearing and grubbing, the Tree Warden shall designate those trees which are to be preserved in the tree belt.
    - (b) The roadway shall be inspected at the stages of subbase, gravel base, binder course and surface course.
    - (c) The sanitary and storm drainage systems shall be inspected before the filling of utility trenches.
    - (d) Sidewalks shall be inspected upon completion of the subbase, permanent binder and finish courses.
    - (e) Curbs, loaming and seeding operations may also be inspected by a Board-appointed engineer.
  - (2) At the completion of all improvements in the subdivision, the Board-appointed engineer shall make an inspection before final release of the performance guaranty.
- B. A qualified engineer or surveyor chosen by the Planning Board shall carry out such inspections in behalf of the town. The inspecting engineer will be onsite every day.
- C. Construction of streets and installation of utilities may be phased, provided that each section shall not be less than five hundred (500) feet in length.
- D. Inspection costs shall be borne by the subdivider (refer to Section 3-4 D Review and Inspection Fees and Appendix D).
- E. Each specified construction stage should be completed to the satisfaction of the inspector, in writing, before further work will be done. Further work performed

without this approval will result in returning the construction to the status necessary to perform the required inspection.

- F. The developer has the responsibility to ensure that the approved construction plans are implemented and construction criteria are met. Surveillance and field revisions by town officials and inspectors cannot be construed as fulfilling this responsibility.

**§ 7-2. Permission required.**

No building shall be erected within a subdivision without permission from the Building Inspector.

**§ 7-3. Waiver of compliance.**

Strict compliance with the requirements of these rules and regulations may be waived when, in the judgment of the Board, such action is in the public interest, consistent with Section 3-7, and not inconsistent with the Subdivision Control Law.

**§ 7-4. Fees.**

Expenses for advertising, notices, inspections and professional review will be borne by the applicant (refer to Section 3-4 D and Appendix D).

**§ 7-5. Severability.**

The invalidity of any of the foregoing rules, regulations and requirements shall not affect the validity of the remainder. Any part of these regulations subsequently invalidated by a new commonwealth law or modification of an existing commonwealth law shall automatically be brought into conformity with the new or amended law and shall be deemed to be effective immediately. If modification of any part of these regulations is in the opinion of the subdivider required by law, the necessary modification shall be brought to the attention of the Board by the subdivider at the earliest feasible time or otherwise may be deemed waived.

**§ 7-6. Higher standard to govern.**

Whenever these rules and regulations made under the authority hereof differ from those prescribed by any local bylaw or other local regulation, the provision which imposes the greater restriction or the higher standard shall govern.

**§ 7-7. Statutory rules and regulations.**

For matters not covered by these rules and regulations, reference is made to MGL C. 41, § 81-K to 81-GG, inclusive.

**APPENDIX A  
Development Guidelines by Landscape Type**

The following provides criteria for categorizing land into four (4) landscape types, based on landform, vegetation and existing development. For each landscape type, guidelines are provided for development consistent with town goals and character. The layout and construction of ways within subdivisions should be designed to comply with these guidelines and so as to facilitate vegetative cover and building development consistent with them. Included in these guidelines are considerations beyond subdivision control, such as suggested building materials. These are included here as a reference, for possible implementation at the developer's option.

Developers who believe that alternative guidelines would better meet the general goals being sought are encouraged to state those alternative guidelines as a part of their plan submittal.

**Open Plain**

IDENTIFICATION -- Flat land generally cleared of trees, now cropland or fields.

OBJECTIVES -- To maintain the open sweep of the land; avoid shapeless suburbia.

BUILDING SITING -- Cluster tightly, avoid scattered structures, repetitive yard dimensions.

ROAD LOCATION -- Lanes in clusters possibly rectilinear, others curving in response to minor land features.

VEGETATIVE COVER -- Protect any existing tree belts, plant street trees within clusters; mow, plow, graze.

BUILDING DESIGN -- Strong colors and textures, wood preferred; variation in basic building designs encouraged.

OTHER CONSIDERATIONS -- Agriculture encouraged.

## APPENDIX A: Development Guidelines by Landscape Type

### **Wooded Plain**

IDENTIFICATION -- Flat land, generally wooded.

OBJECTIVES -- To avoid "suburban" development character, protect forest ecology.

BUILDING SITING -- Cluster preferred; scattered buildings away from or on edges of clearings, screened from roads.

ROAD LOCATION -- Frequent curves, staggered intersections.

VEGETATIVE COVER -- Clear underwood, only selectively clear trees.

BUILDING DESIGN -- Less critical than in other areas.

OTHER CONSIDERATIONS -- Better suited to development than most landscape types.

### **Mountain**

IDENTIFICATION -- Mountainous land and associated highlands, predominantly steep and wooded.

OBJECTIVES -- To protect the fragile mountain ecology, protect the visual quality of the town's backdrop.

BUILDING SITING -- Cluster on less steep portions and in land folds, away from crests.

ROAD LOCATION -- Follow contours, minimizing cuts and fills.

VEGETATIVE COVER -- Preserve existing cover to degree possible.

BUILDING DESIGN -- Low structures, slope-following; no large, light surfaces, bright paint or exposed metal; muted color, soft form; wood, earth, weathered silvers, grays, browns.

OTHER CONSIDERATIONS -- Extraordinary care necessary to avoid erosion; development generally undesirable.

### **Village**

IDENTIFICATION -- Land in the vicinity of concentrated development, whose character is established by existing development.

OBJECTIVES -- To continue and provide consistency with the pattern and character of existing development.

BUILDING SITING -- Compact clustering; avoid scattered structures.

ROAD LOCATION -- Short rectilinear segments in clusters, others curving in response to land features.

VEGETATIVE COVER -- Retain or plant street trees, preserve other trees where feasible.

BUILDING DESIGN -- Anything consistent with scale, texture and colors of nearby structures; wood preferred; variety in basic building designs encouraged.

OTHER CONSIDERATIONS -- Better suited to development than most landscape types.

**APPENDIX B**

**Forms**

(71 pages)

Note: need to start numbering of next page (Appendix C) to follow forms. Use Insert > Page Numbers > Format > Start at...

**APPENDIX C**

**Development Impact Statement**

In accordance with Article IV.3 of the Town of Warwick’s Subdivision Rules and Regulations, the Applicant shall submit, at the request of the Planning Board, a Development Impact Statement (DIS).

It is an Applicant’s responsibility to prepare and document the DIS in sufficient detail to permit an adequate evaluation by the Planning Board; however the Board may request in writing additional data. It is necessary to respond to all sections of the DIS except when the Board grants a written exemption.

The Board may waive any section(s) of the requirements when, in its opinion, and upon submission of evidence from the Applicant, the requirements are non-applicable to the proposed project.

The entire cost of the DIS shall be the responsibility of the Applicant.

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Name of Project \_\_\_\_\_

Date of Submission \_\_\_\_\_

Location of Project \_\_\_\_\_

Name(s) of Applicant(s) and Owner(s), if different \_\_\_\_\_

Address(s) and Telephone Number(s) \_\_\_\_\_

Name of Individual(s) preparing this DIS \_\_\_\_\_

Address(s) and Telephone Number(s): \_\_\_\_\_

Professional Credentials \_\_\_\_\_



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### I. PROJECT DESCRIPTION

- A. Describe the project including the number of lots; the number and type of dwelling units (e.g., single family, two family, condominium or apartment); the number of buildings and the number of dwelling units per building, if appropriate; number of bedrooms; number and square footage of buildings and the number of parking spaces if not residential; and approximate price (rent or purchase as appropriate) per dwelling unit or per square foot if not residential.

### II. EXISTING BASELINE CONDITIONS

- A. Describe the site's topography, predominate soil types and characteristics (particularly related to drainage), and significant geological features. Indicate approximate percentages of the site covered by various soil types and slopes (e.g., 0 – 3%, 3-8%, 8-15%, and greater than 15%).
- B. What is the site's total acreage? Give approximate acreage of existing land use(s) including developed areas identifying separately significant uses such as roads, residential, commercial, and industrial uses. Give the approximate acreage of the undeveloped areas identifying separately significant uses such as farmland, flood plain, forested, wetlands, and surface waters.
- C. Is any part of the site located in an area or in close proximity to an area or location that is of special concern or of special interest. Map areas such as water supply protection district, historic district or site, distinctive rock formation, trees larger than 30 inches in diameter at breast height, vernal pools, high or significant hazard dams, priority habitats, and wetlands.

### III. NATURAL RESOURCES

- A. Land
1. Describe the potential and probable impacts of the proposed development on the existing baseline conditions, described in Section II above.
  2. Describe any limitations on the proposed project caused by subsurface conditions, and the methods to be used to address those limitations.
  3. Describe procedures and findings of percolation tests conducted on the site.
  4. Give the approximate acreage of land that will be permanently affected by construction of the proposed project (identifying separately significant uses such as roads, residential, commercial and industrial).
  5. Describe proposed rough grading plans and highlight the differences between the existing topography and the rough grading plans.
- B. Air
1. Describe possible sources and duration of significant amounts of odors, smoke and dust.

## APPENDIX C: Development Impact Statement

2. Describe precaution to be taken to eliminate or minimize the adverse environmental effects of the smoke, dust or odors generated.
3. Describe the relationship of the location of the proposed project and prevailing wind patterns to nearby residences, businesses, recreation areas, and other public areas.
4. If incineration of any kind, including but not limited to residential outdoor wood burning boilers or furnaces, is proposed for the proposed project, describe the effects resultant emissions will have on air quality in the area. Include proof that the anticipated incineration will comply with the latest local, state and federal standards.

### IV. WATER AND WETLANDS

- A. Evaluate how and to what extent the project will affect any protected resource areas as defined in M.G.L. Chapter 131, Section 40.
- B. Discuss compliance with Massachusetts DEP Stormwater Management Guidelines and directives.
- C. Evaluate how and to what extent the project will affect the quality and quantity of any existing or potential public or private water supplies, reservoirs and groundwater.
- D. Describe the methods to be used during construction to control erosion, sedimentation and siltation including use of sediment basins, mulching, matting, or temporary vegetation; approximate size and location of land to be cleared at any given time and length of time to stabilization; covering of soil stockpiles; and other control methods used. Evaluate effectiveness of proposed methods on the site and the surrounding areas.
- E. Describe the permanent methods to be used to control erosion and sedimentation. Include descriptions of:
  1. Any areas subject to flooding or ponding;
  2. Proposed surface drainage system;
  3. Proposed land grading and permanent vegetation cover;
  4. Methods to be used to protect existing vegetation;
  5. The relationship of the development to the topography;
  6. Any proposed alterations of shorelines, marshes or seasonal wet areas;
  7. Estimated increase of peak runoff caused by altered surface conditions, and methods to be used to return water to the soils.
- F. Discuss proposed compliance with the EPA permit program for sedimentation control as well as the probability that the project will increase pollution or turbidity levels within receiving waterway and the precautions to be taken to minimize the effects.

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- G. Discuss the project's effect on the waterway's aquatic biota and use as habitats.
- H. Discuss the project's effects on groundwater quality and supply and efforts to recharge groundwater supplies.
- I. Discuss what effect the project will have on increasing the incidence of flooding, including areas outside the subdivision.
- J. Discuss the effect of the proposed sewage disposal methods on surface and groundwater supplies and quality.
- K. Discuss the effect of the project on Estimated Rare Species Habitat Areas including Natural Communities as defined by the Massachusetts Natural Heritage Endangered Species Program (see VI-C below).
- L. Discuss the location of the project area in relation to the inundation areas of any upstream high or significant hazard dams.

### V. NOISE

- A. Describe the time, duration and types of noises generated by the project (including traffic generated from the development), both during and after construction.
- B. Discuss what effect these noises will have on both humans and wildlife.
- C. Describe the controls, which will be used to eliminate or minimize the effects of these noises.

### VI. LOCAL FLORA AND FAUNA

- A. Discuss the project's effects on land-based ecosystems, such as the indigenous wildlife, stream bank cover, and vegetal or wooded growth.
- B. Describe proposed types and amounts of vegetal cover.
- C. Map and discuss the existence, if any, of rare plant, wildlife or fish species in the project area including those identified by the Massachusetts Natural Heritage and Endangered Species Program:

### VII. BUILT ENVIRONMENT

## APPENDIX C: Development Impact Statement

- A. Land Use
  - 1. Describe how the project conforms with the growth plans for the area and the Town, in general.
  - 2. Describe the project's compatibility with adjacent or nearby existing land uses, and private development plans, if known, for adjacent or nearby areas.
  - 3. Describe any existing or proposed public or common recreational or open areas within the subdivision.
  - 4. Discuss the site's proximity to transportation, shopping, educational facilities, recreational facilities, etc.
  
- B. Density
  - 1. Provide a tabulation of proposed buildings by type, size (number of bedrooms, floor area), ground coverage, and a summary showing the percentage of the tract to be occupied by buildings, parking and other impervious areas, and usable open space.
  
- C. Zoning
  - 1. Indicate the zoning designations for the site and adjacent areas. Discuss the need for a dimensional variance or special permit, if applicable.
  
- D. Architecture
  - 1. Describe the architectural style of the proposed buildings, including the type of materials to be used, the heights of the structures in relation to the surrounding area, and the landscaping techniques to be used.
  - 2. Describe the location of common areas and service facilities (laundry, trash, garbage disposal) and discuss the visual impact of both.
  - 3. Discuss the project's overall visual impact in relation to the surrounding area and possible interference with natural views.
  
- E. Historic Buildings, Historic Sites and Archaeological Sites
  - 1. Map the location and explain the significance of any historic buildings or historical or archaeological sites on or adjacent to the project and the project's potential impacts on such buildings or sites.

## VIII. PUBLIC FACILITIES

- A. Water Supply, Flow, Pressure and Distribution
  - 1. Describe the groundwater and/or surface water supply to be used.
  - 2. Identify where the connection(s) to the water distribution system is or are proposed, if appropriate.
  - 3. Quantify the demands of the project for consumption and fire protection and describe the impact of such demand on the water supply and distribution system.

## APPENDIX C: Development Impact Statement

4. Analyze the availability of adequate flow and pressure through the water distribution system to the proposed project site.
- B. Sanitary Wastewater Connection, Collection and Facilities
1. Identify the quantity and type of wastewater which will be generated by the project.
  2. Describe the proposed sewage system and identify where the connection(s) to the municipal collection or a central collection system is/are proposed, if applicable..
  3. Quantify the average and peak daily flow rates and describe the impact of such disposal on the municipal or central wastewater collection and treatment system or ground water.
- C. Storm Drainage Facilities/Low Impact Development Techniques Employed
1. Describe the proposed on-site storm drainage system and identify where the connection(s) to the municipal or central system is or are proposed, if applicable.
  2. Provide drainage calculations that prove compliance with Massachusetts DEP Stormwater Management Guidelines for “Best Management Practice”.
  3. Describe provisions for maintaining those parts of the system that will not become part of the municipal system.
  4. Describe inclusion of proposed low impact development measures including:
    - a. Site Planning Process: The site planning process shall be documented and shall include the following steps: 1) identify and map critical environmental resources, 2) delineate potential building envelopes avoiding environmental resource areas and appropriate buffers, 3) develop methods to minimize impervious surfaces, and to protect and preserve open space.
    - b. No Untreated Discharges: All stormwater runoff generated from land development and land use conversion activities shall not discharge untreated stormwater runoff directly to a wetland, local water body, municipal drainage system, or abutting property, without adequate treatment.
    - c. Channel Protection: Protection of channels from bank and bed erosion and degradation shall be provided by attenuating the 24-hour extended detention storage of runoff of the post-development 1-year, 24-hour return frequency storm event or controlling the peak discharge rate from the 2-yr storm event to the pre-development rate as required by the MA DEP LID Management Policy.
    - d. Overbank Flooding Protection: Protection of channels from bank and bed erosion and degradation shall be provided by attenuating the 24-hour extended detention storage of runoff of the post-development 1-year, 24-hour return frequency storm event or

- controlling the peak discharge rate from the 2-yr storm event to the pre-development rate as required by the MA DEP LID Management Policy.
- e. Downstream overbank flood and property protection shall be provided by attenuating the post-development peak discharge rate to the pre-development rate for the 10-year, 24-hour return frequency storm event as required by the MA DEP LID Management Policy.
  - f. Extreme Flooding Protection: Extreme flooding and public safety protection shall be provided by attenuating the peak discharge rate from the 100-yr, 24-hour return frequency storm event to the predevelopment rates or controlling and safely conveying the 100-year, 24 hour return frequency storm event such that flooding is not exacerbated or evaluating the 100-year, 24-hour return frequency storm event to demonstrate no increased flooding impacts off-site, as required by the MA DEP LID Management Policy.
  - g. Recharge: a) Annual groundwater recharge rates shall be maintained, by promoting infiltration and recharge through the use of structural and non-structural methods. At a minimum, annual recharge from the post development site shall equal the annual recharge from pre-development site conditions. b) The stormwater runoff volume to be recharged to groundwater should be determined using the methods prescribed in the latest version of the Massachusetts DEP Stormwater Management Manual or an equivalent qualifying local manual.
  - h. Structural Practices for Water Quality: Presumed Compliance with Massachusetts Water Quality Standards. All structural stormwater management facilities shall be selected and designed using the appropriate criteria from the most recent version of the Massachusetts DEP Stormwater Management Manual. For other structural stormwater controls not included in the Massachusetts Stormwater Management Manual, structural best management practices (BMPs) must be designed to remove 80% of the average annual post development total suspended solids (TSS) and 40% for total phosphorus [TP], and [30%] for total nitrogen (TN). It is presumed that a BMP complies with this performance goal if it is: a) Sized to capture the prescribed water quality volume; b) Designed according to the specific performance criteria outlined in the Massachusetts Stormwater Management Manual or an approved local equivalent; c) Constructed properly; and d) Maintained regularly.
  - i. Water Quality Volume: The prescribed water quality volume required in the sizing of a structural stormwater practice shall be calculated as  $1.2 \times \text{total watershed area} \times \text{runoff coefficient (Rv)}$ , where  $Rv = 0.05 + 0.009 (I\%)$  and  $I\% = \text{percent of impervious}$

- area or 0.50 inches x the total impervious area of the drainage area and 1.0 inches x the total impervious area of the drainage area in critical areas, as specified in the Massachusetts DEP Stormwater Policy.
- j. Hydrologic Basis for Design of Structural Practices: For facility sizing criteria, the basis for hydrologic and hydraulic evaluation of development sites are as follows:
- i. Impervious cover is measured from the site plan and includes any material or structure on or above the ground that prevents water from infiltrating through the underlying soil. Impervious surface is defined to include, without limitation: paved parking lots, sidewalks, roof tops, driveways, patios, and paved, gravel and compacted dirt surfaced roads.
  - ii. Off-site areas shall be assessed based on their “pre-developed condition” for computing the water quality volume (i.e. treatment of only on-site areas is required). However, if an offsite area drains to a proposed BMP, flow from that area must be accounted for in the sizing of a specific practice.
  - iii. Off-site areas draining to a proposed facility should be modeled as “present condition” for peak-flow attenuation requirements.
  - iv. The length of sheet flow used in time of concentration calculations is limited to no more than 50 feet for predevelopment conditions and 50 feet for post development conditions.
  - v. Detention time for the one-year storm is defined as the center of mass of the inflow hydrograph and the center of mass of the outflow hydrograph.
  - vi. The models TR-55 and TR-20 (or approved equivalent) will be used for determining peak discharge rates.
  - vii. The standard for characterizing pre-development land use for on-site areas shall be woods.
  - viii. For purposes of computing runoff, all pervious lands in the site shall be assumed prior to development to be in “good hydrologic condition” regardless of conditions existing at the time of computation.
  - ix. If an off-site area drains to a facility, off-site areas should be modeled, assuming an “ultimate buildout condition” upstream for assessment of 100-year flows for sizing of spillways.
  - x. Flooding and channel erosion impacts to receiving streams due to land development projects shall be determined at each point of discharge from the development project and such determination shall include any runoff from the

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- balance of the watershed which also contributes to that point of discharge.
- xi. The specified design storms shall be defined as a 24-hour storm using the rainfall distribution recommended by the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) or the Northeast Regional Climate Center “Atlas of Precipitation Extremes for the Northeastern United State and Southeastern Canada.”
  - xii. Proposed residential, commercial, or industrial subdivisions shall apply these Stormwater Management criteria to the land development as a whole. Individual lots in new subdivisions shall not be considered separate land development projects, but rather the entire subdivision shall be considered a single land development project. Hydrologic parameters shall reflect the ultimate land development and shall be used in all engineering calculations.
  - k. Sensitive Areas: Stormwater discharges to critical areas with sensitive resources (i.e., mussel beds, swimming beaches, aquifer recharge areas, water supply reservoirs) may be subject to additional criteria, or may need to utilize or restrict certain LID Management practices at the discretion of the Planning Board. The Planning Board may designate sensitive areas and specific criteria for these areas after conducting a public hearing.
  - l. Hotspots: Stormwater discharges from land uses or activities with higher potential pollutant loadings, known as “hotspots,” as defined in the most recent version of the MA DEP Stormwater Management Manual—requiring the use of infiltration practices without pretreatment is prohibited.
- D. Disposition of Stormwater
- 1. Indicate the location of any and all proposed outfalls.
  - 2. Describe the effect of the outfalls and their discharge on the receiving waters, i.e., increased flows, pollution, etc.
  - 3. Discuss the quantity of stormwater to be discharged.
- E. Refuse Disposal
- 1. Estimate the quantity and types of refuse that will be generated by the project.
  - 2. Describe the proposed methods of refuse disposal.
- F. Traffic Facilities
- 1. Discuss the expected impact of traffic generated by the proposed development on area roadways. Discussion shall include existing average



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and peak traffic volumes and composition, projected average and peak traffic generation and composition, intersection impacts and analysis of area roadway and intersection capacities. Methodologies used to make projections shall be included. At a minimum, the analysis should include:

- a. The existing Level of Service (LOS – see definition below) of relevant road systems including quantitative and qualitative measurements of operational factors including speed, travel delay, freedom to maneuver and safety;
  - b. The expected change in the condition of relevant road systems as a result of the proposed development;
  - c. The comparison on a per acre basis of the total vehicular traffic generation from the proposed development with:
    - i. The existing and potential vehicular traffic generation from all other developments accessing relevant road systems; and,
    - ii. The vehicular traffic generation which would be expected to produce a LOS below LOS “C”.
  - d. In determining the impact of vehicular traffic generation from a development, the following standards and definitions shall be used unless the Applicant demonstrates to the Board that given the nature of the proposed project or applicable road systems, other standards are appropriate):
    - i. Trip generation rates for land uses as listed in the most recent update of Trip Generations, Institute of Transportation Engineers, Washington D.C.
    - ii. Levels of Service (LOS) as used by traffic engineers to define the various operating conditions that occur on a roadway or intersection when accommodating various traffic volumes. Although LOS is a qualitative measure of traffic flow, it is an acceptable measurement for determining overall impact of development on roadway networks. LOS “A” is associated with relatively freeflow and average overall traffic speed in excess of thirty (30) miles per hour. LOS “B” represents stable flow with minor delays and speeds of 25 miles per hour or greater. LOS “C” corresponds to the design capacity of a road system and indicates stable flow with delays, and speeds of 20 miles per hour or more. LOS “D”, “E” and “F” corresponds to decreasing abilities to travel greater than 15 miles per hour and correspond to the overcapacity of the road system.
2. Describe the proposed pedestrian circulation pattern.
  3. Discuss the location and number of on-street and off-street parking spaces proposed.

### G. Electric Power and Gas

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1. Discuss the source of the electric power and the method of supplying the project.
2. Discuss the source of natural gas, if available, and the method of supplying the project.
3. Discuss plans to underground electric.

### IX. COMMUNITY SERVICES

#### A. Schools

1. Discuss the effect of the project on the school system, including number and ages of children generated by the project.
2. Describe the location of the schools to be affected and the capacity of those schools to accommodate the additional children generated by the project.
3. Discuss the effect that the additional children generated by the project will have on school bus routing or the need for additional bus routes.

#### B. Recreation

1. Describe existing recreational facilities in the area of the proposed project including active and passive types and identify the age groups participating; the general condition of the facilities; and the current level of use. Also state whether those recreational facilities, parks and open spaces are available to all residents.
2. Describe recreational facilities to be provided by the proposed development including active and passive types and identify the age groups that will likely use the new facilities. State any expected use limitations, e.g., hours of operation, and whether the facilities will be available to everyone or just residents of the project.
3. Indicate location and width of existing and proposed sidewalks, bike paths and other pedestrian ways on site and in adjacent areas.

#### C. Police

1. Describe the expected impact on police services, time and manpower needed to protect the proposed development and service improvements necessitated by the proposed development.

#### D. Fire

1. Describe the expected impact on fire services and service improvements necessitated by the proposed development.
2. Describe on-site fire fighting capabilities; on-site alarm or other warning devices; fire-flow water needs, and the source and delivery system proposed to meet those needs.

#### E. Public Works

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1. Calculate the total linear feet of roadway to be publicly maintained and plowed.
2. Calculate the linear feet of street drains, culverts, sanitary sewers, and waterlines to be publicly maintained.
3. Analyze projected need, responsibility and costs to the Town of roadway and utility maintenance.

### X. HUMAN CONSIDERATIONS

#### A. Aesthetics and Visual Impact

1. Discuss the likely change in the present character of the area due to the project, i.e., land use, density of development, etc.
2. Discuss the measures to be taken to minimize any adverse effects of the project, i.e., architecture, buffers, etc.
3. Describe the type, design, location, function and intensity of all exterior lighting facilities. Attention given to safety, privacy, security, and daytime and nighttime appearance shall be detailed.

#### B. Parks, Forests and Recreational Areas

1. Discuss how the location and construction of the project will affect existing and potential park and recreation areas, open spaces, natural areas, and scenic vistas.

#### C. Public Health

1. Discuss the project's effects on residents' public health due to changes in water quality, air quality, noise levels, etc.

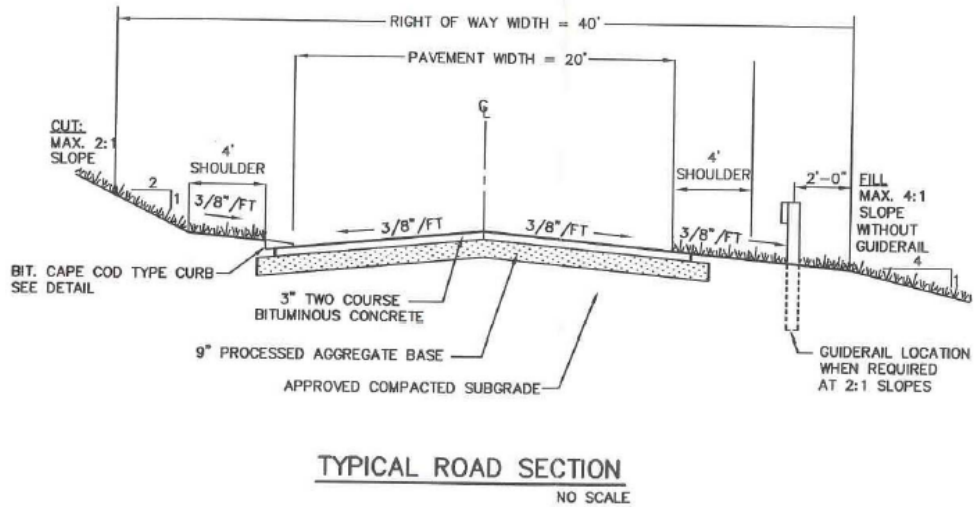
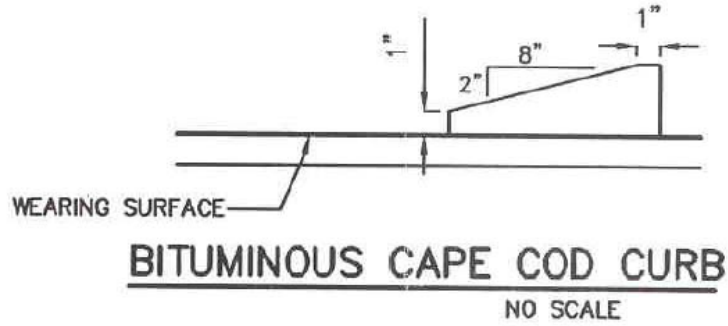
**APPENDIX D**  
**Planning Board Fee Schedule**

Type of Plan	Necessary Forms or Fee	\$ Amount	Description
Approval Not Required Plan	Form "A"	\$135 for each new parcel created or modified, or for a plan with no boundary changes	Non refundable
Preliminary Plan	Form "B" Checklist	\$100 plus \$0.50/ft. of roadway	Non refundable
	Review Fee	\$1,000 plus \$0.50/ft. of roadway as a preliminary payment into a town account to hire consultants and additional payments into the account as needed.	Partially Refundable*
Definitive Plan where Preliminary Plan <b>WAS</b> filed	Form "C" Checklist	\$250 plus \$2.00/ft. of roadway	Non refundable
	Review Fee	\$1,500 plus \$2.00/ft. of roadway	Partially Refundable*
	Inspection Fee	\$3.00/ft. of roadway	Partially Refundable*
Definitive Plan where Preliminary Plan was <b>NOT</b> filed	Form "C" Checklist	\$500 plus \$3.00/ft. of roadway	Non refundable
	Review Fee	\$2,500 plus \$3.00/ft. of roadway as a preliminary payment into a town account to hire consultants and additional payments into the account as needed.	Partially Refundable*
	Inspection Fee	\$3.00/ft. of roadway	Partially Refundable*

\*Note: The balance of any and all review and inspection fees not expended to fund professional and technical assistance for a project will be refunded to the applicant.

APPENDIX E

Bituminous Cape Cod Curb Diagrams



Source: Jefferson Crossing, Farmington, CT; Buck and Buck Engineers, Hartford, CT.