

**A. RULES AND REGULATIONS RELATING TO  
THE SUBDIVISION OF LAND**

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**ARTICLE I. PURPOSE**

These rules are intended to promote the public safety, convenience, and welfare in the various particulars set forth in Section 81M; also, to give a subdivider information which may assist him in planning a subdivision.

**ARTICLE II. AUTHORITY**

These rules and regulations are promulgated under the authority granted in Section 81Q.

**ARTICLE III. GENERAL**

3.1 DEFINITIONS

“Applicant”, “Developer”, “Subdivider” shall include all owners of land shown on a plan, or his agent or representative or assigns. Agents of owners and applicants shall provide documentation of authority.

"Board" shall mean the Planning Board of the Town of Holliston.

"Certified by (or endorsed by) the Board" as applied to a plan or other instrument required or authorized by the Subdivision Control Law or by those Rules and Regulations to be recorded, shall mean, bearing a certification or endorsement signed by a majority of the members of the Board, or by any other person authorized by it to certify or endorse its approval or other action and names in written statement at the Registrar of Deeds and Recorder of the Land Court, signed by a majority of the Board.

"Definitive Plan" shall mean a plan of a subdivision or re-subdivision of land showing the details as finally determined by the applicant and shall be drawn and contain such information as is hereinafter provided.

“Length of Dead-End Street” shall be measured from the intersection of the through street edge of right-of-way (i.e. Sta. 0+00) to the end of the new right-of-way.

"Lot" shall mean an area of land, with definite boundaries, used, or available for use, as the site of one or more buildings.

"Preliminary Plan" shall mean a plan of a proposed subdivision or re-subdivision of land the contents of which shall be as hereinafter provided.

"Recorded" shall mean recorded in the Middlesex South District Registry of Deeds; except as to registered land, it shall mean filed with the Recorder of the Land Court.

3.1 DEFINITIONS (CONTINUED)

"Standard Spec" shall mean the Massachusetts Highway Department Standard Specifications for Highways and Bridges, latest edition, as amended and the Supplemental Specifications to the Standard Specifications for Highways and Bridges, latest edition, as amended.

"Scenic Road" shall mean a road designated as a Scenic Road by the Town of Holliston under Mass. General Laws, Chapter 40, Section 15C. A current list of Scenic Roads is available in the Town Clerk's Office, and is provided in the Planning Board's Scenic Road Regulations.

"Subdivision" shall mean the division of a tract of land into two or more lots and shall include re-subdivision, and, when appropriate to the context, shall relate to the process of subdivision or to the land or territory subdivided; provided, however, that the division of a tract of land into two or more lots shall not be deemed to constitute a subdivision within the meaning of the subdivision control law if, at the time when it is made, every lot within the tract so divided has frontage on one of the following: (a) a public way or a way which the Town Clerk certifies is maintained and used as a public way, (b) a way shown on a plan theretofore approved and endorsed in accordance with the subdivision control law; (c) a way in existence when the subdivision control law became effective in Holliston, having, in the opinion of the Board, sufficient width, suitable grades, and adequate construction to provide for the needs of vehicular traffic in relation to the proposed use of the land abutting thereon or served thereby, and for the installation of municipal services to serve such land and the buildings erected or to be erected thereon. Such frontage shall be at least such distance as is then required by zoning or other bylaws of Holliston for erection of a building on such lot, and if no distance is so required shall be at least twenty feet. Conveyance or other instruments adding to, taking away from, or changing the size or shape of, lots in such a manner as not to leave any lot so affected without the frontage above set forth, or the division of a tract of land on which two or more buildings were standing when the subdivision control law went into effect in Holliston into separate lots on each of which one of such building remains standing, shall not constitute a subdivision.

"Town Horizontal Datum" shall mean the current Massachusetts Coordinate System North American Datum (NAD), 1983 (Mainland Zone) as prescribed by MGL, c. 97 Surveying of Land.

"Town Vertical Datum" shall mean the North American Vertical Datum of 1988 as defined by the National Ocean Services/National Geodetic Survey or its successors.

"Utilities" shall mean water, drainage, telephone, electricity, gas, and similar services.

3.2 SUBMITTALS

A Plan shall be submitted when delivered at a meeting of the Planning Board, hand-delivered to the Town Clerk's Office or sent by registered mail to the Planning Board. If so mailed, the date of receipt shall be considered the date of submission.

3.3 PLAN BELIEVED NOT TO REQUIRE APPROVAL (MGL, c. 41, s. 81-P)

3.3.1 General. Any person wishing to cause to be recorded in the Registry of Deeds a plan of land situated in Holliston, who believes that his plan does not require approval under the Subdivision Control Law shall submit 1. a plan (1 mylar and 3 paper copies) registered to the Town Horizontal Datum and conforming to the requirements of 250 CMR 6.00 to the Board and 2. one digital file of the plan in conformance with MASSGIS “Standard for Digital Plan Submittals to Municipalities” with 3. Application Form A (See Appendix D: Forms.) and 4. the required fees (See Appendix B: Fees.) accompanied by evidence that demonstrates that the plan does not require approval. A digitized version of the application and plans in an acceptable electronic media shall also be provided (e.g. PDF). Please consult with the Town Planner prior to submission.

Said person shall file, by delivery or by registered or certified mail, a notice with the Town Clerk stating the date on which such plan was submitted to the Board accompanied by a copy of said application. Such notice shall also describe the land to which the plan relates sufficiently for identification and the name and address of the owner of the land. If the application conforms to this requirement, it need not be duplicated.

In order to be considered by the Board, such plans shall show all of the following:

- (a) Any existing structures on the land shown on the plan and dimensions of yards relating to such structures;
- (b) Any existing structures on any remaining adjoining land owned by the applicant and dimensions of yards relating to such structures;
- (c) Remaining frontage of any adjoining land in the same ownership;
- (d) Present owner of the land shown on the plan, and all abutting owners;
- (e) Location of any easement or way, public or private, across the land, with a designation as to the use of the same;
- (f) The zoning district(s) in which the parcels are located, and the minimum lot size and frontage requirements for the district(s); and
- (g) The statement: “Endorsement of this plan does not assure compliance with the Town of Holliston Zoning By-Laws.”

The Board shall, within twenty-one (21) days after its submission, either determine that said plan does require approval or shall, without a public hearing, determine that it does not require approval under the Subdivision Control Law and if such approval is not required, the Board shall thereupon endorse the words "Planning Board Approval Under Subdivision Control Law Not Required". Such endorsement may, if the Board so desires, include a statement of the reason approval is not required. Such endorsement shall be signed by a majority of the Board or by a member of the Board so authorized in accordance with Section 81-P of Chapter 41. Said plan shall thereupon be returned to the applicant and the Board shall notify the Town Clerk of its action. Judicial review of the endorsement can be claimed pursuant to MGL, c. 249, s. 4 within 60 days of the filing of the endorsement with the Town Clerk.

**3.3 PLAN BELIEVED NOT TO REQUIRE APPROVAL (CONTINUED)**

If the Board determines that the plan requires approval under the Subdivision Control Law, it shall so inform the applicant and return the plan along with a completed Form A-2 (See Appendix C.). The Board shall also notify the Town Clerk of its determination. The applicant thereupon may submit the plan for approval by the Board as a Preliminary Plan or as a Definitive Plan in accordance with the Subdivision Control Law and the Rules and Regulations of the Board, or, the applicant may, within twenty (20) days after the giving of notice of the Board's determination, appeal such determination as provided in General Laws, Chapter 41, Section 81-BB.

If the Board fails to act upon a plan so submitted 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, and it shall forthwith make such endorsement on said plan, and on its failure to do so forthwith the Town Clerk shall issue a certificate to the same effect. Appeals are to be filed within twenty (20) days after the decision is filed with the Town Clerk or twenty (20) days after the date when final action is required.

**3.4 SUBDIVISION**

No person shall make a subdivision of any land within the town, or proceed with the improvement or sale of lots in a subdivision, or the construction of ways, or the installation of municipal services therein, unless a Definitive Plan of such subdivision shall have been submitted to and approved by the Board as hereinafter provided (See Section 81-O of Chapter 41, MGL). After an application has been submitted, no tree removal, no utility installation, no ditching, grading or construction of roads, no grading of lots or land, no excavation except for purposes of soil testing, no dredging or filling, and no construction of buildings or structures shall commence on any part of the development site until the application has been reviewed and approved in accordance with these regulations.

## ARTICLE IV. PROCEDURE FOR THE SUBMISSION AND APPROVAL OF PLANS

### 4.1 PRE-SUBMISSION REVIEW

Prior to investing in extensive professional design efforts for subdivision plans, it will often prove useful to review the proposed development of a parcel of land with the Planning Board, in order that general approaches and potential problems can be explored. Pencil sketches, which need not be professionally prepared, will assist the discussion and might show some but not all of the information shown on a Preliminary Plan.

### 4.2 PRELIMINARY PLAN OF A SUBDIVISION

4.2.1 General. A Preliminary Plan of a subdivision may be submitted by the applicant to the Planning Board and to the Board of Health for discussion and approval, modification, or disapproval by each Board. The submission of such a Preliminary Plan will enable the subdivider, the Planning Board, the Board of Health, other municipal agencies, and owners of property abutting the subdivision to discuss and clarify the alternatives for, and problems of, such subdivision before costly engineering drawings for a Definitive Plan are prepared. Therefore, it is strongly recommended that a Preliminary Plan be filed in each case except those where pre-submission review has adequately clarified all issues.

4.2.2 Application Procedure. An applicant submitting a Preliminary Plan shall file with the Planning Board, one copy of Form B (See Appendix D), eight full size and six 11" x 17" reduced copies of the plan set, and the Application and Review fees (See Appendix E). A digitized version of the application and plans shall also be provided in an acceptable electronic media (e.g. PDF). Please consult with the Town Planner prior to submission. In addition, the applicant shall file a Notice of Submittal with the Town Clerk and an application with the Board of Health, in accordance with that Board's regulations.

4.2.3 Submittal of Preliminary Subdivision Plan (Also see Section 7.4 Open Space Residential Development Plans)

4.2.3.1 Preliminary Subdivision Plan. The Preliminary Plan shall be drawn at a scale of forty feet to one inch (1" = 40') for plans of ten (10) lots or fewer, and one hundred feet to one inch (1" = 100') for plans of more than ten (10) lots, or other scale approved by the Planning Board, and shall be identified as a Preliminary Plan. Such plan shall be registered to the Town Horizontal and Vertical Datums, shall conform to the requirements of 250 CMR 6.00 "Procedural and Technical Standards for the Practice of Land Surveying" (current version) and shall contain the following information:

- a) The subdivision name, boundaries, north point, date, scale, legend, and title "Preliminary Plan";
- b) The names of the record owner(s) and the applicant and the name, seal, and signature of the engineer, surveyor, and landscape architect;

**4.2.3.1 Preliminary Subdivision Plan (Continued)**

- c) The names of all abutters, as certified by the Board of Assessors from the most recent local tax list;
- d) The existing and proposed lines of streets, ways, easements, and any public areas within the subdivision in a general manner;
- e) The proposed system of drainage, including adjacent existing natural waterways;
- f) The approximate boundary lines of proposed lots, with approximate areas and dimensions;
- g) The names, approximate location, and widths of adjacent streets;
- h) The topography of the land and major features including existing and proposed contour lines at two-foot contour intervals;
- i) Approximate location of existing buildings, if any;
- j) Approximate location of major site features such as rock ridges, ledge outcroppings, and wetlands as defined in Chapter 131 Massachusetts General Laws, Section 40 and 310 CMR 10.00 and bodies of water;
- k) Approximate location of existing utilities;
- l) Approximate location of tree line, and the approximate location of isolated trees over twenty-four inches (24") trunk diameter at three feet (3') above grade;
- m) Identification of zoning districts, including wetlands, overlay district delineation, aquifer protection districts, and classifications of area under the National Flood Insurance Rate Maps;
- n) A locus plan of the subdivision, showing the outline of the parcel being subdivided, the pattern of streets within it, streets in the surrounding area, zoning district and overlay district boundaries, drainage, utilities, wetlands and scenic roads within one thousand feet (1000') of the proposed subdivision shall be drawn at a scale of three hundred feet to one inch (1" = 300); and
- o) In the case of a subdivision covering less than all of the land owned by the subdivider in the area of the subdivision, a plan showing in a general manner the proposed overall development of all of said land.

4.2.4 Preliminary Subdivision Plan (Continued)

4.2.4 Approval. The Planning Board will not approve a Preliminary Plan that has been disapproved by the Board of Health within its designated statutory review period.

Within 45 days of submission of a Preliminary Plan, the Planning Board shall approve a Preliminary Plan with or without modifications or shall disapprove such a Preliminary Plan. When a Preliminary Plan is disapproved, the Board shall state its reasons for such disapproval. The Planning Board shall notify the Applicant, by certified mail, and the Town Clerk of its approval or disapproval of a Preliminary Plan (See MGL, c. 41, s. 81-S.).

Approval of a Preliminary Plan does not constitute approval of a subdivision. When a Preliminary Plan has been submitted to the Board and written notice of such submittal has been given to the Town Clerk, such Preliminary Plan and the Definitive Plan evolved therefrom shall be governed by the Planning Board's Rules and Regulations in effect at the time of such submission. As dictated by MGL, Chapter 41, a Definitive Plan must be submitted within seven months following the submittal of a Preliminary Plan, in order for the Definitive Plan to be exempt from zoning bylaws or rules or regulations enacted since submittal of the Preliminary Plan.

4.2.5 Additional Requirements. Criteria for action by the Board in approving, modifying, or disapproving preliminary plans shall be the following:

- a) Completeness and technical accuracy of all submittals;
- b) Determination that development at this location does not create hazards to the safety or health of future residents of the development or to others, because of potential structural hazards, traffic hazards, environmental impact or other causes;
- c) Conformity with these Rules and Regulations; and
- d) Determination that the subdivision as designed will not cause environmental impact, which could be avoided or ameliorated through an alternative development plan.

These requirements are stated to stress that preliminary plans must be complete and technically accurate.



**4.3 DEFINITIVE PLAN OF A SUBDIVISION**

4.3.1 Application Contents. An applicant submitting a Definitive Plan shall file with the Planning Board, one copy of Form B (See Appendix D), eight full size and six 11" x 17" reduced copies of the plan set, and the Application and Review fees stated in Appendix E. A digitized version of the application and plans shall also be provided in an acceptable electronic media (e.g. PDF). Please consult with the Town Planner prior to submission. In addition, the applicant shall file a Notice of Submittal with the Town Clerk and an application with the Board of Health, in accordance with that Board's regulations.

The Definitive Plan shall be prepared and stamped by an engineer and surveyor. The plan shall be registered to the Town Horizontal and Vertical Datum and prepared at a scale of forty feet to one-inch (1" = 40') or such other scale as the Board may accept to show details clearly and adequately. Sheet sizes shall be 24" x 36". If multiple sheets are used, they shall be accompanied by an Index sheet showing the entire subdivision.

Lots shall comply with the requirements of the Zoning By-Laws of the Town of Holliston in effect on the date of submission of the plan. The requirement for compliance with said By-Laws and amendments thereto shall be as specified in Section 6 of Chapter 40A of the General Laws of the Commonwealth of Massachusetts. Failure of the lots to so comply shall be adequate grounds for disapproval of the plans.

The Definitive Plan shall contain the following information:

- a) Subdivision name, boundaries, magnetic north on each plan, initial plan date, a square reserved for plan revision dates and revision descriptions, and scale;
- b) Name and address of record owner(s), name and address of the applicant(s), the stamp and signature of a Massachusetts Professional engineer, the stamp and signature of a Massachusetts Registered Land Surveyor;
- c) Names of all abutters as they appear in the most recent tax list;
- d) Existing conditions plan containing the lot size, property line bearing and distances, topography at five-foot intervals, existing natural features including all surface waters, and existing man-made features including structures and walls. The existing conditions plan may be prepared at a suitable scale on one (1) plan sheet;
- e) Existing and proposed lines of streets, right of ways, easements, and public or common areas within the subdivision along with proposed limits of clearing of natural vegetation. The purpose of all easements shall be indicated;
- f) The proposed names of all streets;
- g) Location, names and present widths of right of way and pavement of all existing streets, bounding, approaching or within 200 feet of the subdivision;
- h) In the case of multiple sheets, an overlap of 50 feet, at the above scales, shall be required on each matching sheet;
- i) Location of all permanent monuments properly identified as to whether existing or proposed.
- j) Water courses, wetlands, floodplains, 100-year floodplain elevation, ledge outcrops, walls, fences and other significant natural features. Sufficient detail shall be provided on watercourses such as high-water elevation, stream depths, widths and slopes in order to evaluate flow capacities;

## Definitive Plan Contents (Continued)

- k) The locations of all existing trees, within all proposed right of ways, that are at least fourteen inches in (14") diameter at breast height;
- l) Lengths, radii, and bearings to determine the location, direction, and length of every existing and proposed building lot line;
- m) Property line survey of the entire project site;
- n) Building set-back lines for all lots;
- o) Suitable space to record the action of the Planning Board and the signatures of the members of the Board and for the certificate of the Town Clerk required to General Laws, Chapter 41, Section 81-X, as amended and a three and one-half inch (3 1/2") square reserved for Registry of Deed use. The space provided for Planning Board action will be in the same location on each plan sheet;
- p) Profiles of the exterior lines and centerline of proposed streets on the same sheet as the plan at a horizontal scale of one inch equals forty feet and vertical scale of one inch equals four feet (1" = 4');
- q) Existing centerline profile for existing streets to be shown for at least one hundred feet (100') each side of the intersection of street centerlines;
- r) Existing and proposed topography of the entire site at two-foot (2') intervals (In areas along property lines where significant alterations are proposed, the applicant will provide existing topography of the adjacent property.);
- s) Identification of zoning districts, including wetlands, overlay district delineation, aquifer protection districts, and classifications of area under the National Flood Insurance Rate Maps;
- t) Proposed layout of storm drainage and water supply systems;
- u) A locus plan of the subdivision, showing the outline of the parcel being subdivided, the pattern of streets within it, streets in the surrounding area, and zoning district and overlay district boundaries, at the same scale as the Assessor's map which includes that parcel (i.e. 1" = 300' or 1" = 600');
- v) Detail drawings of proposed construction features including roadway cross sections, utility and drainage details, bridges, culverts, and spillways;
- w) The location of proposed landscaping, along with planting details;
- x) The proposed schedule of construction of ways, utilities and drainage structures, demonstrating that adequate stormwater management facilities shall be operational during all phases of construction; and
- y) In the case of a subdivision covering less than all of the land owned by the subdivider in the area of the subdivision, a plan showing in a general manner the proposed overall development of all of said land.

4.3.2 Subsurface Soil Data

4.3.2.1 Subsurface soil data for road construction is required to evaluate the adequacy of the roadway design. Such information shall include test pits, boring, or probings along each proposed street, primarily at locations such as cut sections, areas of questionable foundation material, and areas of potentially high groundwater elevations. Test pits shall be provided no less than every 200 feet or a minimum of two test pits. The design engineer shall document proposed roadway and site constraints to the Board's satisfaction.

4.3.2.2 Borings and test pits shall be to a depth at least four (4) feet below finished grade and the logs submitted to the Board shall indicate their location and ground elevation, a classification of the soil strata by depth, depth at which groundwater or rock is encountered if any, and the date of the test.

4.3.2.3 Probings shall be used to determine the depth of unsuitable material. The data shall be submitted to the Board showing the roadway centerline (with stations) and sidelines, and test locations with existing ground elevations and the depths of unsuitable materials.

4.3.2.4 All soil logs to be submitted to the Board shall be stamped by a Registered Professional Engineer.

4.3.2.5 Based upon the above outlined investigations, the Board may require the installation of a roadway sub-drain system to protect the base and sub-base from water infiltration.

### 4.3.3 Traffic Impact Assessment

4.3.3.1 A traffic impact assessment report prepared by a Massachusetts professional engineer shall be submitted for any non-residential subdivision or any residential subdivision proposing fifteen (15) or more homes, or if for good cause the Planning Board requests an assessment to be completed. At a minimum, the following information shall be included in the report:

- a) Project Description – Provide a brief description of the proposed project and the limits of the traffic study. The limits of the study area subject to revision by the Planning Board. Plot the site centrally on a Town of Holliston Street Map. The total build-out of the project anticipated by the proponent should be clearly stated.
- b) Existing Conditions – Provide physical characteristics of each roadway within the study area. Traffic volumes shall be examined for the study area. Average weekday volumes shall be shown for twenty-four (24) hours and the AM and PM peak hours in all cases. Accident data for the study area shall be provided for the three (3) previous years. Accident diagrams summarizing local police reports may be needed for problem locations. An existing conditions capacity and level of service analysis shall be provided in accordance with the Transportation Research Board’s Highway Capacity Manual Report 209 (latest edition). The analysis shall include delay and queue length information. Weave, merge, diverge, and road segment analyses should be included where applicable.
- c) Project Site Traffic Projection – Provide estimated peak hour and daily traffic generated by the project on roadways within the study area. Include an analysis on the distribution of off-site generated traffic as it relates to the existing street system. All traffic impact assessments should include traffic generated by other developments within the study area that have received approval to commence construction. Saturday peak hour conditions should be included for retail projects. Any adjustment factors or growth rates used should be cited.
- d) Future Conditions – Future conditions capacity analysis (five-year horizon) shall be computed for the no-build and build, with and without mitigation measures. This analysis shall include projected delays at all intersections, projected queues, and projected levels of service. All new intersections shall be reviewed relative to AASHTO standards, including sight distances for entering and merging traffic within the project area. A list should be provided of all other study area projects which could be completed within five years of the submittal date of the proponent’s project and which could have impacts that would be relevant to the proponent’s traffic impact assessment. Public as well as private projects should be included; projects awaiting approval should be included, as well as those which are already approved or do not require approval. Signal warrant analysis should be performed using the Manual on Uniform Traffic Control Devices (FHWA, latest edition), if applicable.

Section 4.3.3 Traffic Impact Assessment (Continued)

- e) Roadway Mitigative Measures – Describe all proposed mitigation measures for the adverse impacts identified in the traffic impact assessment. Identify specific and expected benefits to be derived by these proposed mitigative measures. The individual costs of the proposed mitigative measures should be given, and the party responsible for the implementation of each measure clearly identified. A schedule of when, in relation to any project phasing, particular measures need to be implemented should be outlined. In addition to a schedule of construction, a description should be provided of any capacity constraints on the existing network that will occur, and of measures that will be taken to mitigate noise and dust pollution.

If a connection of two or more existing roads is being proposed, the traffic report shall contain a detailed assessment of the traffic impacts on roadways in adjacent neighborhoods. Traffic impacts including projected splits in traffic, changes in levels of service, increases in daily and peak hour traffic and conflicts with pedestrian and bicycles.

4.3.4 Other Submittals. The following shall also accompany submission of a Definitive Plan:

4.3.4.1 Typical street cross-section for each class of street within the subdivision, drawn at four feet to one inch (1" = 4'), showing location of all elements within the street right-of-way, and typical cross-sections of any altered drainage courses or off-street paths.

4.3.4.2 Drainage calculations, evidence of ownership, language of any easements, covenants, or restrictions applying or proposed to apply to the area being subdivided, rights and easements obtained for utilities or drainage outside of the subdivision, description of erosion control methods to be employed.

4.3.4.3 Waivers from strict compliance with the Rules and Regulations shall be requested in writing for each station(s) impacted. All requests should be substantiated by an analysis of design alternatives. A narrative should be provided, including reasons for request, impact of denial on project, and reasons the applicant feels the request is in the best interest of the Town of Holliston.

**Section 4.3.5 Definitive Subdivision Plan Filing**

4.3.5 Filing. Every person who submits a Definitive Plan to the Board for approval shall give written notice to the Town Clerk by delivery or by registered or certified mail that he has submitted such a plan. Such notice shall describe the land to which the plan relates sufficiently for identification, and shall state the date when such plan was submitted to the Board and the name and address of the owner of such land. If the foregoing information is sufficiently complete in the application hereinafter referred to, it need not be duplicated.

The person so submitting such plan to the Board for approval shall file twelve (12) contact prints, dark lines on white background.

The plan so submitted shall be accompanied by a properly executed application Form C (see Appendix C) and a copy of such application shall be filed with the notice given the Town Clerk as aforesaid.

The plan shall also be accompanied by the Filing Fee and Review Fee Deposit (See Appendix B: Fees).

The applicant shall also file a list of abutters and their addresses certified by the Board of Assessors along with self-adhesive labels, suitable for use in mailing, each containing the name and address of an abutter.

The submittal shall include a Municipal Lien Certificate, or other proof that no outstanding taxes or assessments are due for the properties included in the submittal.

The submittal shall include Internal Revenue Service Form W-9 "Taxpayer Identification Form", properly identifying the Applicant for the purposes of processing review fee deposit and surety transactions.

All applicants must provide the Board with a letter, on the applicant's letterhead designating all persons and companies authorized to represent them in the subdivision process.

A statement shall be included within this application indicating the time period within which the ways in the subdivision will be completed and the utilities installed, which time period shall not be greater than two years from the date of approval of the Definitive Plan unless the Board, at the time of approval, allows additional time with respect to all or a specified portion of such ways. Nothing herein shall prevent the Board, at its direction, from subsequently extending the time of such completion and installation.

**4.3.5 Definitive Subdivision Plan Filing (Continued)**

When a Definitive Plan is submitted to the Board for approval as aforesaid, an application consistent with the Board of Health regulations shall also be filed with the Board of Health. The Board of Health is required by General Laws, Chapter 41, Section 81-U, as amended, to report to the Board in writing their approval or disapproval of said plan, and in the event of disapproval shall make specific findings as to which, if any, of the lots shown on such plan cannot be used for building sites without injury to the public health, and include such specific findings and the reasons therefore in such report, and, where possible, shall make recommendations for the adjustment thereof.

**4.3.6 Field Trip.** After plan submission and after the public hearing has opened, the Board may schedule a field trip to the site of the proposed subdivision. Such field trip will be posted in accordance with the Open Meeting Law. In order to facilitate field inspection and review of the site of the proposed subdivision, temporary staking of centerlines of roads must be completed at fifty-foot (50') intervals along with detention basins.

**4.3.7 Public Hearing.** Before approval, modification and approval, or disapproval of the Definitive Plan, the Board shall hold a public hearing. Notice of such hearing shall be published in a newspaper or newspapers of general circulation in the Town as specified by Chapter 41, Section 81-T, of the General Laws. Such advertisement shall be mailed by the Board to each owner of land within 300 feet of the subject parcel(s) consistent with "Parties of Interest" defined by Section 11 of MGL, c. 40a. The applicant will be responsible for providing the Board with an up-to-date list of abutters certified by the Board of Assessors.

**4.3.8 Approval, Modification or Disapproval.** After receipt of the report from the Board of Health and within the time period specified by the Subdivision Control Law, the Planning Board shall approve, modify and approve, or disapprove such plan. A decision is required ninety (90) days after submittal of definitive plan if a preliminary plan has been submitted and acted upon; one hundred thirty-five (135) days if no preliminary plan has been submitted or submitted less than forty-five (45) days prior to submittal of definitive. Approval of the Board of Health must be obtained before the Board may approve the plan.

**4.3.8 Approval, Modification or Disapproval of Definitive Subdivision Plan (Continued)**

Criteria for action by the Board in approving, modifying, or disapproving plans shall be the following:

- a) Completeness and technical adequacy of all submissions.
- b) The proposed subdivision shall not increase the level of services required on the existing roads and utilities beyond their capacities. Also, when the Board reviews a proposed subdivision, it shall determine the necessity for impact studies.
- c) Conformity with these Rules and Regulations.
- d) Determination that the subdivision as designed will not cause substantial environmental impact, which could be avoided or ameliorated through an alternative development plan.
- e) Conformity with recommendations of the Board of Health.
- f) Conformity with all applicable zoning requirements.
- g) Determination that any applicable design guidelines of the appendices have been reflected in the design.
- h) Consistency with the purposes and intent of the Subdivision Control Law.

The Board shall file a certificate of its action with the Town Clerk, a copy of which shall be recorded by him in a book kept for the purpose and the Board shall send a notice of its action by registered or certified mail to the applicant at his address stated on the application.

If the Board modifies or disapproves such plan, it shall state in its vote the reason for its action. Final approval, if granted, shall be endorsed in the original drawing of the Definitive Plan by the signatures of a majority of the Board, but not until the expiration of twenty (20) days from the date on which the decision of the Board was recorded in the office of the Town Clerk and said Clerk has notified the Board that no appeal has been filed.

Before a Definitive Plan which has received final approval of the Board can be recorded in the Registry of Deeds or the Land Court, as the case may be, the Town Clerk is required by General Laws, Chapter 41, Section 81-X, as amended, to endorse on the plan a certificate that no notice of appeal was received during the twenty (20) days next after receipt and recording of notice from the Board of the approval of the plan. Such certificate may be on a separate document and separately recorded but in that event, reference to it must be made on the plan.



**4.3.9 Performance Guarantee.**

**4.3.9.1 Security.** Before endorsement of approval of a Definitive Plan by the Board, it shall require provision for the construction of ways and the installation of municipal services in accordance with these Rules and Regulations, such construction to be secured by one, or in part by one and in part by the other, of the methods described in the following paragraphs numbered (1) and (2), which method may be selected and from time to time varied by the applicant.

(1) By a surety company bond issued by a company authorized to do business in the Commonwealth or an executed agreement by the applicant and lender of funds (after the recording of a first mortgage covering the premises shown on the plan), either or both to be in a penal sum as required by the Board to secure performance as herein provided; or by a deposit of money or negotiable securities sufficient, in the opinion of the Board, to secure performance of the construction of ways and the installation of municipal services required for lots in the subdivision shown on the Definitive Plan. The Board shall require that the time be specified within which such construction and installation shall be completed, normally to be two years.

Three-party agreement for lender retention of funds, surety bonds and other financial performance guarantees must be drafted so that the only requirement that must be met for the Planning Board to draw on the letter is to notify the financial institution (grantor) that “We have incurred liability by reason of the failure of the applicant/developer/owner, within ninety days of the expiration of this agreement, to complete the construction of their roadways and required improvements within “.....” subdivision in accordance with the definitive subdivision plans and submittal, the subdivision approval, the Zoning, Subdivision Rules and Regulations. The amount drawn, which may be more than required to complete the project, will be held in a segregated bank account until the work can be bid competitively and the bid awarded and paid for or until the contract for the work is otherwise let and the work paid for. Any excess over the cost of completing the work will be returned to the grantor.

Such bond, deposit of money or negotiable securities, shall be approved as to form, the surety or financial institution, and the manner of execution by the Planning Board. Prior to submittal to the Planning Board, all proposed financial instruments to be used as a performance guaranty shall be reviewed by the Town Treasurer to determine if they are financially sound. The Planning Board reserves the right to limit its approval of security to types of financial instruments and financial institutions that the Town Treasurer believes are financially sound.

For any surety bond: 1. The surety must agree that any litigation stemming out of the bond will take place in Massachusetts, 2. The bond must include the name and address of the person to be served for any legal action, 3. The bond must specifically include the terms above and 4. No expiration date may be allowed in the bond (the bond must be valid until the work is complete).

4.3.9.1 Security (Continued)

Such bond shall be sufficient to cover:

- a) The full cost of constructing the ways and installing the municipal services, as estimated by the Board, and
- b) An amount equal to fifteen percent (15%) of the construction cost to provide for increases in cost during the term of the bond or surety.

To assist the Board in determining the surety amount, a completed Construction Cost Estimate shall be provided for 100% cost of the entire subdivision (See Appendix D: Form E). Before consideration will be given for granting an extension of time for completing a road, an up-dated Form E must be submitted to the Board.

However, if an extension of time for construction beyond that time established by definitive plan approval is requested, the Board may, with respect to subdivisions on which there has been no construction performed within the last one year prior to application for an extension, require as part of granting an extension, that the definitive plan be revised to reflect any changes required by current rules and regulations. The applicant must demonstrate to the Board that an attempt to complete the project has been ongoing since the original approval.

Before granting an extension, the Board shall review the security to assure that it is sufficient to complete construction or to cover repair costs and may require an increase in the security as a condition of granting the extension. Any extension is subject to annual prices updates based on annual RS Means Site Work and Landscape Cost Data. The sum shall be available for use by the Town of Holliston to make any and all repairs to the roadway(s) and infrastructure until such time as they are offered for acceptance.

The penal sum of any bond or the amount of any deposit held under paragraph (1) above, may, from time to time, be reduced by the Board and the obligations of the parties thereto released by the board, but said sum shall not fall below 10% of the total construction cost estimate, until the Board determines that the secured improvements have been satisfactorily completed and the integrity of the roadway and utilities has been verified following at least one winter in place. Surety reductions for systems (e.g. water, drainage, utilities) shall not be granted until the system is complete, tested and fully operational by the Town. Partial releases shall not be granted unless the Board is compelled by phased project construction.

(2) By a covenant running with the land, executed and duly recorded in the Middlesex South District Registry of Deeds or in case of registered land, with the Recorder of the Land Court by the owner of record, whereby it shall be provided that such ways and services shall be provided, and that no lot in said subdivision shall be sold, contracted for sale, or offered for sale, and no building erected or placed upon any lot until the ways and municipal services serving such lots shall have been constructed and/or installed, all in accordance with the requirements of the Board as set forth in these Rules and Regulations, or otherwise communicated to the Subdivider; provided that a mortgagee

**4.3.9.1 Security (Continued)**

who acquires title to the mortgaged premises by foreclosure or otherwise and any succeeding owner of such premises or part thereof may sell such lot, subject to the 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 contained shall be deemed to prohibit a conveyance by single deed, subject to such covenant, of either the entire parcel of land shown on the Definitive Plan or of all lots not previously released by the Board.

Any covenant given under preceding paragraph (2) shall be contained in a separate document and referred to on sheet one on the plan.

**4.3.9.2 Compliance.** Following approval of the definitive plan and before construction begins on the roadway or utilities, the subdivider is required to schedule a pre-construction meeting with Town staff and the Board's consulting engineer. The developer is urged to bring his engineer and roadway contractor to the meeting to discuss construction schedule, procedures and contact persons. It is the responsibility of the developer to ensure that the approved construction plans and these regulations are implemented. Use of qualified persons to furnish adequate and timely engineering supervision during construction is required. Inspection and site visits by town officials shall not be construed as relieving this responsibility.

The developer's engineer shall be responsible for conducting tests and submitting a report to the Board on each inspection phase identified on Form D. Each written report shall be completed and submitted to the Planning Board within one (1) week of the date of inspection.

Surety reductions for systems (e.g. water, drainage, utilities) shall not be granted until the system is complete, tested and fully operational. Partial releases shall not be granted.

Prior to any release of security, a certificate by a Registered Professional Engineer (Civil) and a Registered Land Surveyor acceptable to the Board must be obtained by the Developer and filed, indicating that all improvements for which security is being released have been completed consistent with the approved plans and with these regulations. (See Form C and Form D in Appendix C.). The developer's engineer and the Board's Agent shall maintain duplicate original copies of Form D, and shall sign each other's copy at the completion of each inspection item on the checklist.

**4.3.9.3 As-Built Plans.** Upon completion of construction, and before release of the performance guarantee, the subdivider shall have prepared and submitted As-Built Plans (both on paper and in digital file\* format,) at the same scale as the Definitive Plan, which shall indicate the actual location of all of the following:

- a) Street layout lines and centerline elevations;
- b) Pavement edges;

4.3.9.3 As-Built Plans (Continued)

- c) Sidewalks;
- d) Permanent monuments;
- e) Location and inverts of the required utilities and drainage systems, including public water installations and drainage structures within easements;
- f) Locations of any other underground utilities, such as electricity, telephone lines, cable lines, and street lighting; and
- g) Finish grading as required by the Board or its agent.

\*The digital file shall be in conformance with MASSGIS “Standard for Digital Plan Submittals to Municipalities” (current version).

4.3.9.4 Release of Bond and Covenant. Upon the completion of ways and the installation of municipal services in accordance with the Rules and Regulations of the Board (including the provisions of 4.3.9.3 above), security for performance of which was given as aforesaid, the applicant may send by registered or certified mail to the Town Clerk a written statement in duplicate that the said construction or installation in connection with such performance security has been given, has been completed in accordance with said Rules and Regulations and that all other conditions of the approval have been met as well as a completed Form F. Such statement shall contain the address of the applicant. The Town Clerk shall forthwith furnish a copy of such statement to the Board.

If the Board determines that said construction or installation has been completed, it shall release the interest of the Town in up to ninety percent (90%) of such bond or deposit and return the bond or deposit to the person who furnished the same. If performance was secured in whole or in part by a covenant as aforesaid, the Board shall release the covenant by appropriate instrument, duly acknowledged, which may be recorded by the applicant. Any remaining funds shall be returned to the Developer upon execution of all required deeds, easements and acceptance plans and a one-year warranty period has passed. The required subdivision improvements shall not be considered complete, in accordance with the subdivision control law, until this warranty period is complete and it has been documented that the improvements are of acceptable quality.

If the Board determines that said construction or installation has not been completed, it shall, within forty-five (45) days after the receipt by the Town Clerk of said statement, specify to the applicant in writing the details wherein said construction and installation fails to comply with its Rules and Regulations. If the Board fails to so specify within forty-five (45) days as aforesaid, all obligations under such bond shall cease and terminate by operation of law, any deposit shall be returned and any such covenant shall become void. In the event of failure of the Board to release and return the bond or return the deposit or release the covenant as required in the next preceding sentence, the Town

4.3.9.4 Release of Bond and Covenant (Continued)

Clerk shall issue a certificate to such effect, duly acknowledged, which may be recorded by the applicant.

4.3.9.5 Executed Copies. Prior to the release or sale of any lot, the developer shall provide the Board with executed copies of all plans, deeds, easements, covenants, lot releases, homeowners agreements that are required by the Board, and other instruments pertaining to the lot. Deeds to said lots shall reserve unto the developer the fee in the roadway.

4.3.10 Modification and Amendment of Approved Plan. After approval of a Definitive Plan by the Board, the location and width of ways shown thereon shall not be changed unless the plan is amended as hereinafter provided; but the number, shape, and size of lots shown on such plan may be changed without action of the Board, provided every lot so changed still has frontage of at least such distance as is then required by bylaw of the Town for erection of a building on such lot.

The Board on its own motion or on petition of any person interested, may modify, amend, or rescind its approval of a plan of a subdivision, or require a change in such plan as a condition of its retaining its status on an approved plan. All of the provisions of the Subdivision Control Law and of these Rules and Regulations relating to the submission and approval of a plan of a subdivision shall so far as apt, be applicable to the approval of the modification, amendment or rescission. Any party, other than the Board, requesting a change with such magnitude that a hearing is required, must pay the fee stated in the appendices at the time the hearing is requested.

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

So far as unregistered land is affected, no modification, amendment or rescission of the approval of a plan or change in a plan hereunder shall take effect until the following: 1) the plan as originally approved, or a copy thereof, and a certified copy of the vote of the Board making such modification, amendment, rescission or change, and any additional plan referred to in such vote, have been recorded, 2) an endorsement has been made on the plan originally approved as recorded referring to such vote and where it is recorded, and 3) such vote is indexed in the grant or indexed under the name of the owners of record of the land affected.

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

**ARTICLE V. REQUIREMENTS**

5.1 GENERAL

5.1.1 Design Guides. All subdivisions shall be designed and improvements made by the developer consistent with the requirements of ARTICLE V and the Typical Cross-Section (See Appendix A.). Design and construction shall:

5.1.1.1 Reduce, to the extent reasonably possible, the following:

- (a) Volume of cut and fill;
- (b) Area over which existing vegetation will be disturbed; especially on land within 200 feet of a wetland, river, pond or stream, having a slope of more than 15%;
- (c) Number of mature trees removed (A mature tree is any tree at least twenty-four inches in diameter at three feet above adjacent grade.);
- (d) Extent of waterways altered or relocated;
- (e) Visual prominence of man-made elements not necessary for safety or orientation;
- (f) Removal of existing stone walls;
- (g) Visibility of building sites from existing streets;
- (h) Number of driveways exiting onto existing streets;
- (i) Alteration of ground water or surface water elevations or chemical constituents;
- (j) Disturbance of important wildlife habitats, outstanding botanical features, and scenic or historic environs; and
- (k) Soil loss or instability during and after construction.

5.1.1.2 Increase, to the extent reasonably possible, the following:

- a) Vehicular use of residential feeder streets to avoid traffic on streets providing house frontages;
- b) Visual prominence of natural features of the landscape;
- c) Legal and physical protection of scenic views from public ways;
- d) Use of curvilinear street patterns; and
- e) Open space for preservation and for recreation.

5.1.2 Responsibility and Inspection. All work done under this Article shall be done under the supervision of and certification by the applicant's Design Engineer (See Appendix C for Forms D, E and F.). Performance security shall not be released by the Planning Board until receipt of interim reports and Form D executed by the Planning Board's Engineer.

5.2 STREETS

5.2.1 Location and Alignment.

(a) All streets in the subdivision shall be designed so that, in the opinion of the Board, they will provide safe vehicular travel. Any proposed street connecting into a second proposed or into an existing street shall maintain a maximum (up or down) slope of two percent (2%) for the last one hundred fifty feet (150') before the intersection. Consideration will be given to the existing infrastructure to provide safe access to and from the proposed subdivision.

(b) The proposed streets shall conform to any Master or Study Plan as adopted in whole or in part by the Board.

(c) Provision satisfactory to the Board shall be made for the proper projection of streets, and for access to adjoining property which is not yet subdivided.

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

(e) Street jogs with centerline offsets of less than one hundred twenty-five feet should be avoided.

(f) Streets shall be laid out so that they intersect, as nearly as possible, at right angles. No street shall intersect any other street at less than seventy-five degrees (75°).

(g) Property lines at street intersections shall be rounded or cut back to provide for a curb radius of not less than fifty feet (50') for industrial streets or thirty feet (30') for others.

(h) Pedestrian ways or bridle paths of not less than fifteen feet (15') in width shall be required where deemed necessary, such as across through blocks of over eight hundred feet (800') or along extensive drainage ways.

(i) Proposed streets shall be designed in compliance with the minimum sight distance requirements indicated in the Transportation and Traffic Engineering Handbook, latest edition published by The Institute of Transportation Engineers, or similarly recognized publication. Stopping, decision, passing, and intersection sight distances shall be satisfied, keeping in mind factors affecting these design requirements, such as existing and proposed street grades, vertical and horizontal curves, speed limits, and trees and ledge (and other such obstructions).

Section 5.2.1 Location and Alignment (Continued)

(j) Adequate Access From Public Way:

- (1) Where the street system within a subdivision does not connect with or have, in the opinion of the Board, adequate access from a Town, County or State (public) way, the Board may require, as a condition of approval of a plan, that such adequate access be provided by the subdivider, and/or that the subdivider make physical improvements to and within such a way of access, in accord with the provisions of Articles V and VI of these regulations, from the boundary of the subdivision to a Town, County or State way.
- (2) Where the physical condition or width of a public way from which a subdivision has its access is considered by the Board to be inadequate to carry the traffic expected to be generated by such subdivision, the Board may require the subdivider to dedicate a strip of land for the purpose of widening the abutting public way to a width at least commensurate with that required within the subdivision, and to make physical improvements to and within such public way to the same standards required within the subdivision. Any such dedication of land for purpose of way and any such work performed within such public way shall be made only with 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.

5.2.2 Street Classification and Dimensional Requirements.

a) The following classification shall apply to the streets in a subdivision:

- 1) Rural Residential Lanes are low intensity drives serving a very low-density area designed to discourage through traffic.
- 2) Local Residential Streets are streets serving a limited number of private residences and are to be designed primarily for passenger vehicles and light trucks.
- 3) Residential Feeder Streets serve general residential areas connecting Local Residential Streets with existing town streets and highways and with other existing or potential Local Streets.
- 4) Industrial Streets are to provide access to and within commercial and industrial areas as they may exist or as they may be zoned. This classification is further divided into "Primary Industrial Streets" and "Secondary Industrial Streets". A Primary Industrial Street serves as a major access into and/or through a commercial or industrial district. All other streets in such districts not qualifying as a Primary Street shall be defined as a Secondary Industrial Street.

b) For the purpose of classification, all streets in a subdivision containing apartments of multifamily dwellings shall be considered as Residential Feeder Streets.



5.2.2 Street Classification and Dimensional Requirements (Continued)

- c) Streets shown on a residential subdivision plan submitted for approval, which may qualify as a Local Residential Street based on traffic service for the proposed subdivision, shall be classified as a Residential Feeder Street if the street may serve as a major access route upon future development of adjacent land areas.
- d) The Planning Board shall determine the classification of the various streets in a subdivision, using as a guide the above and the Master Plan of the Town as such plan provides at the time of submission.
- e) Dimensional requirements shall be as shown in Table 1 of Appendix A.
- f) In all cases, the centerline of the paved surface shall be coincidental with the centerline of the right-of-way.
- g) Driveways into the proposed roads shall meet the requirements indicated in the Town of Holliston Regulations for Street Excavation. As-built plans for roads shall include the details of all driveways within the proposed right-of-way connecting to the roads. The nearest line of any driveway shall not be closer than 50 feet from intersection of any two streets. Driveway curb cuts for all lots shall be shown on the same plans, and shall be constructed to the right-of-way line at the same time as the road. All new driveways shall be located to provide adequate stopping sight distance along all approaches to the road it intersects. The plans must demonstrate that driveways with grades of 15% or less can be developed to serve all newly created lots. The Planning Board may require the developer to construct certain driveway approach areas during construction of the subdivision in order to ensure that certain physical characteristics such as swales and steep slopes do not get disturbed after the end of construction. If sidewalks are damaged during any work to a driveway, then the sidewalk shall be replaced to Town standards at the expense of the contractor. The plans and calculations shall account for stormwater runoff from all proposed driveways and demonstrate that the street drain system has been designed to avoid future problems. Granite curb corners (Type A) shall be used at all driveway openings.

5.2.3 Grade. Maximum and minimum profile grades shall be as shown in Table 1 of Appendix A.

5.2.4 Dead-End Streets.

- a) Permanent dead-end streets (a street, extension of a street, or system of streets connected to other streets only at a single point) shall be allowed only on rural residential lanes and local streets and shall not extend for less than one hundred fifty feet (150') or more than five hundred feet (500') unless, in the opinion of the Board, such dead-end streets are necessitated by topography or other local conditions. The Board may grant a waiver from the maximum length of dead-end street if the Board makes a determination that there is reasonable expectation that the street will become an additional means of access or egress to a future road connection on adjacent, undeveloped land.

**5.2.4 Dead-End Streets (Continued)**

b) Dead-end streets shall be provided at the closed end with a turn-around having an outside roadway diameter of at least one hundred feet (100'), and a property line diameter of at least one hundred twenty-six feet (126') to continue the five-foot (5') sidewalk and eight-foot (8') planting strip throughout the turnaround. The inside radius of the cul-de-sac pavement shall be constructed with granite-edging type SA as specified in the Standard Spec.

c) Through streets indicated on the plan that are not constructed to provide for through traffic shall provide for temporary turn-arounds to be approved by the Planning Board, before any houses on such streets shall be occupied. Temporary turn-arounds shall be constructed to the same standards as permanent turn-arounds, unless an approved definitive plan for subsequent extension of the street exists.

d) Any easement in a turn-around other than an easement appurtenant to a lot abutting the turn-around shall terminate upon the approval and recording of a plan showing extension of said way, except in such portion of said turn-around as is included in said extension, and upon the recording of a certificate by the Planning Board of the construction of such extension. The extension of said way shall provide for the complete removal, re-grading and reconstruction of the temporary turn-around area with regard to drainage, road surface and road shoulders. The paved surface of the turnaround shall be removed so as to create a roadway of uniform width.

**5.2.5 Construction.** Prior to any construction, the developer, their project engineer and their contractor must meet with the Town Planner, Highway Superintendent, Board's inspector and other appropriate town parties to review the subdivision decision and conditions. The developer must provide evidence that all required documents have been recorded and adequate copies of all documents have been provided to the Planning Board. After the pre-construction conference, the developer shall notify the Planning Board at least two business days in advance of the date of commencement of construction and subsequent phases of construction. The contractor must ensure that the municipality is provided with adequate notice to ensure inspection at each required stage. No further work shall be done on a project until each phase has been inspected and approved. It is the responsibility of the developer to arrange for the appropriate inspections with the Board's engineer or appropriate Town agent. The developer shall not continue with construction until each required inspection has been satisfied. A minimum eleven inspections are outlined in this section. These should be documented using Form D (Appendix).

**5.2.5.1 Clearing and Grubbing.** The entire area of each way shall be cleared of all material which might interfere with road construction or constitute a traffic hazard such as stumps, brush, roots, boulders and like material. All loam and topsoil within the excavation area shall be removed and stockpiled for use. Stockpiles shall have adequate erosion control measures for the project's duration. Prior to any clearing and grubbing operations, the Developer shall construct a stone apron at the entrance, and install catch basin sediment bags in the existing catch basins closest to the development.

**5.2.5 Construction (Continued)**

5.2.5.2 Sub-Grade. Inspection #1 will include the preliminary roadway sub-grade and Inspection #4 will include the final sub-grade plane.

- a) All existing material shall be removed to the sub-grade plane as defined by the Typical Cross Section (See Appendix A.), for the entire width of the finished roadway plus one-foot (1') each side.
- b) Ledge and large boulders shall be removed to a depth of at least one-foot (1') below sub-grade plane for the entire width of the finished roadway.
- c) Clay, muck or other unstable material shall be removed to a greater depth as directed by the Planning Board's engineer.
- d) Back-fill of approved, stable material in six to twelve inch (6 – 12”) layers, thoroughly compacted, shall be used to bring the sub-grade to the plane.
- e) The entire width of the sub-grade plane shall be thoroughly compacted before gravelling is started.

5.2.5.3 Gravel Base.

- a) Approved gravel shall be placed over the sub-grade plane in two six-inch layers the entire width of the finished roadway plus one (1) foot each side. Certification of gravel gradation and source shall be provided at the time of installation.
- b) Each six-inch layer shall be gravel conforming to Section M1.03.0, Type C of the Standard Specs. The surface shall be thoroughly compacted and brought to a true and even grade at the gravel base plane. Total depth of gravel at all points after complete compaction shall be not less than twelve (12) inches.
- c) Surface grades of the completed gravel base taken at the centerline and gutter line at 50' intervals shall be submitted to the Board for approval prior to installation of the bituminous concrete binder course.
- d) Additional depths of gravel base, placed as above specified, may be required to replace poor sub-grade materials or variations in gradient or cross-slope as the Board, or its consultant engineer, shall determine.
- e) All streets other than local streets shall substitute Dense-graded Crushed Stone Base conforming to Section M2.01.7 for the top six-inch lift of Gravel Base.
- f) Soil compaction tests shall be completed for every course of sub-base installed. A minimum of one density test shall be completed for every 150 linear feet of roadway, centerline and shoulder. The required lab tests (Proctor density, sieve analysis, etc.) shall also be completed.

**5.2.5 Construction (Continued)**

Inspection #5 will include the gravel base plane. Inspections will be made after the first six inch (6") layer is placed and compacted, and following the final placement and compaction of the six inch (6") layer.

**5.2.5.4 Pavement.**

a) Class I dense bituminous concrete, type ST for binder, and Class I type I-1 for finish, conforming to the materials and construction methods specified in the Standard Specs shall be laid in two courses, namely a dense grade binder course and a standard top (finish) course, in the depths specified in Table 1, Appendix A.

b) The base course of pavement shall be in place for at least one winter prior to placing the surface course in order to ensure the roadway has been adequately constructed to withstand cycles of freezing and thawing. All utility castings shall be no higher than the level of the base course to facilitate snow plowing. The castings shall then be raised to the grade of the finished top coat just prior to the placement of the top coat.

c) Both the binder course and the finish course shall be separately rolled with a tandem roller of at least 10 tons. Such depths of pavement as required in Table 1, Appendix A shall be measured after each rolling.

d) Tack coat shall be required between the binder and top course where more than one week elapses between courses or where the binder course becomes dusty before construction of the top course.

Inspection #8 will include the Final Surface.

e) All such construction shall conform to the final lines and grades shown on the approved plan, and to the typical cross sections herein.

f) Asphalt compaction tests shall be completed for every course of hot mix asphalt installed. A minimum of one density test shall be completed for every 100 linear feet of roadway, centerline and shoulder. The required lab tests (Marshall density, sieve analysis, extraction, etc.) shall also be completed.

g) Hot mix asphalt paving cannot be placed between November 15 and April 1 without permission from the Planning Board. Weather conditions shall be approved by the Highway Superintendent.

h) Prior to placing the hot mix asphalt finish course, an inspection of the binder course will be completed by the Planning Board. Any sub-standard areas (e.g. rutting, settlement, potholes, etc.) shall be repaired, reclaimed or replaced prior to placing the finish course.

5.2.5 Construction (Continued)

5.2.5.5 Curbs.

Vertical granite curbing shall be provided:

1. Where, in the opinion of the Board, a continuous roadway curve or proposed roadway profile warrants. In or adjacent to the urbanized village center.
2. At all intersection radii and cul-de-sac roundings. [Curved sections as needed.]
3. At all catch basins.
4. To delineate traffic islands or where otherwise needed to improve traffic control.
5. Along the side of the traveled way to protect sidewalks where there is less than a four foot (4') grass strip separating the traveled way from the sidewalk.
6. Where adjacent streets have granite curbing and the Planning Board determines that the granite curbing shall be extended into the subdivision.
7. In industrial subdivisions where the Planning Board determines they are necessary to adequately channelize traffic.

Granite curbing shall extend along the entire circumference of curves plus ten feet (10') at intersections. Subdivision roadways shall be connected to town roadways with granite transition pieces. Vertical inlet curbing shall be used for all catch basins with transition curbing to meet adjacent curbing, if different.

Type VA-3 curbs shall be set at six-inch (6") finish reveal.

The interior dimension between curbs shall be the width of the finished roadway as shown on the approved plan.

The cross section of all curbing shall be subject to the Standard Specifications and shall be approved by the Planning Board.

The installation of curbing shall be accomplished subject to the specifications of the Planning Board. The granite curbing shall be installed with cement concrete placed on both front and back side, and in particular, at the joints.

The use of Cape Cod bituminous berm shall require a waiver by the Planning Board. It shall be constructed monolithically with the bituminous binder and top courses. Berms shall be one foot in width. The berm shall be even with gutter on the road side and three (3) inches higher than the gutter on the shoulder side of the berm.

Inspection #7 will include the installation of curbing.

**5.2.5 Construction (Continued)**

**5.2.5.6 Responsibility for Maintenance of Roadways.** If released from restrictions with regard to sale of lots or buildings on lots by the posting of acceptable surety, the Subdivider shall maintain the roads for the vehicular travel in a manner satisfactory to the Planning Board. Further, the Subdivider shall guarantee the maintenance of the roads in a subdivision in a condition which meets all the requirements of these Rules and Regulations to the satisfaction of the Planning Board, by posting with one or more sureties approved by the Board or by a surety company bond issued by a company authorized to do business in the Commonwealth, either or both to be in a penal sum as required by the Board to secure the maintenance as herein provided, or by a deposit of money or negotiable securities sufficient in amount, in the opinion of the Board, to secure the aforesaid maintenance. Such surety shall be held until the streets are accepted by the Town.

The bond shall be subject to forfeiture as liquidated damages in an amount equal to the estimated cost of contracting for performance of the maintenance upon failure of the developer to perform following notice to do so within a stipulated period, which shall be reasonable in relation to the extent of work to be done and any seasonal limitations upon maintenance activity.

**5.3 STORM WATER MANAGEMENT**

**5.3.1 General Approach.** A complete stormwater management system shall be designed for each street of the subdivision and, to the satisfaction of the board, shall be so laid out to provide adequate drainage of all portions of the street system, to intercept run-off from the adjacent lots and to eliminate undesirable or unnatural accumulation of water on any portion of the subdivision or surrounding property. The subdivision shall be designed so that all drainage shall be contained and disposed of within the subdivision; no drainage shall be discharged to adjoining property or onto the public right-of-way at a rate greater than existed prior to the construction of the subdivision. Drainage systems shall be designed and installed so as to prevent stormwater runoff from becoming a hazard or nuisance to the subdivision residents or public at large. Should the system not adequately achieve this goal, the applicant shall make whatever modifications are needed to ensure that the drainage system performs adequately in the opinion of the Planning Board. Storm drains, culverts, and related facilities shall be designed to permit the unimpeded flow of all natural water courses, to ensure adequate drainage at all low points along streets, to control erosion, and to intercept storm water run-off along streets at intervals reasonably related to the extent and grade of the area being drained. To the maximum extent feasible, storm water shall be recharged rather than piped to surface water.

The Applicant shall be responsible for maintaining the stormwater control structures in the subdivision in conformance with the Board's regulations and DEP Guidelines until the street is accepted by the Town. Regular cleaning and maintenance of the catch basins is critical to proper functioning of the detention basin and other BMP's, especially during construction when siltation is likely to occur. When, in the opinion of the Board, the stormwater management system is composed of numerous, complex or new technologies, the systems shall be subject to an enforceable covenant requiring perpetual homeowner maintenance and ownership.

## Section 5.3 Stormwater Continued

The following design criteria shall apply:

- Peak stream flows of run-off at the boundaries of the development in a two (2), ten (10), twenty-five (25) and one-hundred (100) year frequency storm, shall be no higher following development than prior to development.
- Best management practices (BMPs) shall be utilized to treat the first one inch of rainfall or one-half inch of run-off, whichever is greater. All drainage facilities proposed shall utilize Best Management Practices as outlined in the current stormwater management policy and the stormwater policy handbooks promulgated by the Commonwealth of Massachusetts regardless of the number of proposed lots. Low impact development techniques mean innovative stormwater management systems that are modeled after natural hydrologic features. Low impact development techniques manage rainfall at the source using uniformly distributed decentralized micro-scale controls. Low impact development techniques use small cost-effective landscape features located at the lot level.
- BMPs shall be distributed throughout a subdivision and not concentrated in any one location to better dilute the effects of any pollutants left untreated.
- All BMPs and their overflow areas shall be located in drainage easements or the road right-of-way. Separate drainage lots shall not be permitted without permission from the Board.

Appendix B includes some additional performance standards that are variations from the DEP “Structural Pretreatment BMPs” publication.

5.3.2 Design Basis. All drainage systems within the subdivision shall be designed in accordance with the Soil Conservation Service Modified Soil Complex Method, USDA SCS unless alternative methods are approved by the Planning Board. Breakout calculations shall be provided for any infiltration system. Water velocities in pipes and gutters shall be between two (2’) and ten feet (10’) per second, and not more than five feet (5’) per second on ground surfaces. All undeveloped tributary areas shall be assumed to be fully developed in accordance with the Zoning Bylaw.

5.3.3 Storm Sewers. A catch basin to manhole drain configuration shall be used where warranted by proposed grades. All drain pipes shall be at least twelve inches (12”) inside diameter, made of reinforced concrete and shall be laid on a slope of not less than one-half of one percent (.5%). Depth of cover shall be not less than thirty-six inches (36”).

5.3.4 Structures. Generally, catch basins will be required on both sides of the roadway on continuous grade at intervals of not more than three hundred feet (300’). Manholes shall be located at all changes of direction, either horizontally or vertically, of a drain line or at the intersection of two or more drain lines, or so located that no drain line greater than three hundred feet (300’) would exist without either a catch basin or manhole. Any catch basins and manholes used shall be at least six feet (6’) deep and four feet (4’) diameter (inside measurements), with a four-foot (4’) or greater sump below pipe invert and shall be constructed of concrete blocks or pre-cast concrete units. Stone headers with storm inlets shall be provided at each catch basin. A catch basin shall be installed at the PC and PT or the curb returns of all intersecting streets.

## Section 5.3 Stormwater (Continued)

Manhole frames and covers shall be manufactured by East Jordan Iron Works (formerly LeBaron Foundry Co. Catalog No. LK124) with the word "DRAIN" on the cover, or an approved equal. Standard catch basin frames and grates shall be manufactured by East Jordan Iron Works (formerly LeBaron Foundry Co. Catalog No. LF 248-2) or an equal approved by the Planning Board prior to installation but in all cases the frames and covers must be manufactured in the United States. Cement concrete collars shall be placed around the castings after the final setting and as directed. Bricks for adjusting frames shall conform to ASTM C32. Said bricks shall mean "Boston Bricks" (Red Tops).

Drainage manholes shall be precast, reinforced concrete conforming to ASTM C478, minimum 4 foot inside diameter, and coated outside with bitumastic in accordance with the manufacturer's recommendations. Joints and lifting holes are to be mastic gasket. Manholes to service pipes larger than 30 inches in diameter shall require a special manhole in accordance with the Standard Specs. Manholes will be required at every change in direction, slope or diameter in the drainpipes and at intervals not to exceed 400 feet. Manhole steps shall be steel-reinforced polypropylene plastic and formed invert shall be brick for storm drains. When inverts in manholes differ more than 2.75 feet, drop manholes shall be installed. All pipe-to-manhole connections shall be by a resilient connector conforming to ASTM C923, latest edition. Storm drain manholes shall be provided with a weep hole where warranted by high ground water.

5.3.5 Waterways. Open brooks or tributary ditches that are to be altered shall be shaped to a cross-section and gradient, and provided with stream bottom hardening, all acceptable to the Planning Board. Safety fencing may be required where important because of slope, bank instability, stream depth or flow rate, or other reasons.

5.3.6 Connections. Proper connections shall be made with any existing drains in adjacent streets or easements that prove adequate to accommodate the drainage flow from the subdivision. In the absence of such facilities, or the inadequacy of the same, it shall be the responsibility of the developer to extend drains from the subdivision as required to properly dispose of all drainage from said subdivision in a manner determined to be proper by the Board, and to secure for the Town any necessary drainage rights.

5.3.7 Excavations. No excavations for storm sewers, catch basins, manholes, or other related facilities shall be backfilled until inspected.

Inspection #2 will include the Installation of Drains and Catch Basins. Inspection #6 will include the Grade of Catch Basin Inlets.

5.3.8 Construction Materials and Methods. All construction materials and methods shall comply with the Standard Specs.



Section 5.3 Stormwater (Continued)

5.3.9 Requirements in the Flood Plain District. All subdivision proposals shall be reviewed to determine whether such proposals will be reasonably safe from flooding. If any part of a subdivision proposal is located within the Flood Plain District established under the Zoning Bylaw, it shall be reviewed to assure compliance with the following:

- a) The proposal is designed consistent with the need to minimize flood damage;
- b) All public utilities and facilities, such as sewer, gas, electrical and water systems shall be located and constructed to minimize or eliminate flood damage;
- c) Adequate drainage systems shall be provided to reduce exposure to flood hazards;
- d) Base flood elevation (the level of the 100-year flood) data shall be provided for proposals greater than 50 lots or 5 acres, whichever is the lesser, for that portion within the Flood Plain District; and
- e) All applicable requirements under 780 CMR 7.44.0 (State Building Code), 310 CMR 10.00 (Wetlands Protection), 302 CMR 6.00 (Inland Wetlands Restriction), and 310 CMR 15 (Title 5).

5.4 UTILITIES

5.4.1 General Requirements.

- a) In all cases, the responsibility for connection to existing Town utilities shall rest with the developer.
- b) In all cases, the required utilities shall be installed, and sufficient stubs shall be provided the full width of the right-of-way to serve each of the lots abutting the right-of-way prior to any surfacing of the roadway.
- c) The developer shall notify the Board prior to all trench work so that an inspector may observe trenching, pipe bedding, pipe placement and backfilling work in progress at stages determined by the inspector. Such observations do not release the developer from the obligation for all work to be done in accordance with the approved plans and the Board’s Regulations.

5.4.2 Water.

- a) Water pipes and related equipment, such as hydrants and main shut-off valves, shall be constructed to serve all lots on each street in the subdivision in conformity with the most recent published requirements of the Water Department. Hydrants will be located on the right hand side of the road, as determined by vehicular flow originating from the Central Fire Station.
- b) Connection to existing Town water facilities to assure adequate supply to the subdivision, shall be the responsibility of the developer.
- c) No installation of water pipes or related equipment shall be back-filled until inspected.

## Section 5.4 Utilities (Continued)

- d) All new water mains shall be pressure tested by an independent contractor in full conformance to the American Water Works (AWWA) Standards.
- e) All new water mains shall be flushed, chlorinated and tested in full conformance to AWWA standards. Two consecutive passing bacteria results (min. 24 hours apart) are required for the water mains to be accepted. All testing shall be completed by an independent contractor and at a MassDEP-certified laboratory.

Inspection #3 shall include the Installation of Water Service and shall be certified by the Holliston Water Department.

5.4.3 Exterior Lighting. The developer shall provide and install street lighting, bases, poles, wiring and fixtures, as shown on the Plan. Adequate exterior lighting shall be provided for the safe use of the subdivision in nighttime hours in accordance with the standards set forth in the latest applicable edition of the Illuminating Engineering Society “Lighting Handbook”.

- a. Lighting shall be provided at a minimum for street intersections, pedestrian walkways and crossings and recreation areas.
- b. Spacing of standards shall be equal to approximately eight to ten times the height of the standard, unless otherwise directed by the Planning Board, on the advice of the Board of Selectmen. Such standards shall be located on the projections of lot sidelines, where possible, terminating with a standard at the end of a cul-de-sac, where applicable.
- c. The maximum height of standards shall not exceed 25 feet.
- d. The height and shielding of lights shall provide proper lighting without hazard to drivers or nuisance to residents.

The design of lighting standards shall be of a type consistent with the character of the development and the Town, as directed by the Planning Board.

5.4.4 Underground Utilities. Utility poles, above-ground wires and guy wires will not be permitted in subdivisions. All fire alarm, electricity, gas and telephone shall be installed underground with service to the individual dwellings also underground. Placement of utilities in streets and roadways to be shown on the typical street cross-section. Trenching and back-filling shall be by the developer. Transformers, switches and other similar equipment to be placed above ground are subject to prior Board approval for location.

Electrical primary and secondary lines shall run on the same side of the road. All road crossings shall be in conduit and shall be perpendicular to the road centerline at that point. All road crossings for services shall be installed for each lot before any surface treatments are applied to the roadways. Location of telephone cables and primary and secondary power lines must be approved by the Wiring Inspector and a copy of the Definitive Plan so endorsed returned to the

## Section 5.4 Utilities (Continued)

Board. Where dwellings are served by gas, pressure reducers and meters are to be installed outside the dwelling. Outside of the dwelling, but within six feet (6') of it, a dresser type connection must be placed in the gas line. Gas service lines shall run to the property line of each lot before any surface treatment is applied to the roadway. Minimum standards shall be those prescribed by nationally recognized authorities such as National Electric Corporation (N.E.C.), American Water Works Association (A.W.W.A.) and American Gas Association (A.G.A.). Requirements of local cognizant inspectors, if more strict than aforementioned sources, shall prevail.

**5.5 OTHER IMPROVEMENTS****5.5.1 Sidewalks and Shoulders**

a) Sidewalks with handicap ramps shall be constructed on each side of the street, either at the extreme outer edge of the layout or meandering, but never leaving less than two feet (2') of grass shoulder between street and sidewalk. Construction methods and materials shall comply with Standard Specifications. Handicap ramps must be properly presented in accordance with the latest requirements of the Architectural Access Regulations (512 CMR).

b) Sidewalks shall be at least five feet (5') wide and shall be pitched toward the gutter one quarter inch to one foot ( $1/4" = 1'$ ). The centerline of the sidewalk shall not be less than eight inches (8") above the center grade of the street. The base shall be a minimum of eight inches (8") of gravel compacted with a tandem riding roller. A binder course of dense bituminous concrete rolled to one inch (1") shall be laid, and topped with a finish course of Class I Bituminous Concrete rolled to one and one-half ( $1 \frac{1}{2}"$ ) inches.

c) A loam and grass shoulder shall be constructed between the sidewalk and the traveled way. At least six inches (6") of topsoil shall be used.

Inspection #9 will include the installation of Sidewalks and Shoulders.

5.5.2 Monuments. Granite bounds 6" x 6" x 4' with a 3/8 inch drill hole in the center are to be furnished and set on both sidelines of all points of change of direction or curvature of streets, and points of tangency, and at the intersection of the sidelines and sidelines of existing streets. In addition, all lot corners shall be delineated with three (3) foot high headed iron pins or iron pins of no. 8 re-bar set flush to the ground. Iron pins shall be capped with protective plastic caps. All granite bounds and iron pins along the right-of-way sidelines shall be set to the satisfaction of the Planning Board.

Granite bounds shall be accurately set in the ground with the top flush with the finish grade of the surface of the ground adjacent to the location in which they are to be placed, unless otherwise specified. The developer shall excavate a hole sufficiently large to properly place these stones and thoroughly tamp around them sufficient excavated material to hold them securely in position. If the excavated material is not satisfactory for backfill, in the opinion of the Planning Board, then said holes shall be filled with gravel. No permanent monuments shall be installed until all construction, which would destroy or disturb the monuments, is completed.

Section 5.5 Other Improvements (Continued)

5.5.3 Street Signs. All street name signs shall meet the specifications required by the Manual on Uniform Traffic Control Devices. All signs shall be blue and 9” tall with 6” white lettering and they shall be retroreflective to show the same shape and similar color day and night [Federal Highway Admin. Manual on Uniform Traffic Devices for Streets and Highways, 2003 edition as revised – Section 2D.38 Street Name Sign (D-3-1)]. Street signs shall be furnished, erected, and maintained at all street intersections prior to the issuance of any building permit on that street. Signs shall be installed at each proposed street required to be traveled in order to access the lot for which the building permit is requested.

All streets not accepted by the Town shall be so indicated by a 12”x18” private road sign mounted to the bottom of the street sign until acceptance.

Inspection #10 will include the installation of Street Signs.

5.5.4 Final Clean-Up. Upon completion of the work, the developer shall remove from the roadway right-of-way and adjoining property, all temporary structures, surplus material and rubbish which may have accumulated during the prosecution of the work, and shall leave the subdivision in a neat and orderly condition. The developer shall clean catch basins and remove any sediment from all other components of the drainage system.

Inspection #11 shall include Final Clean-Up.

5.5.5 Open Space and Planting.

5.5.5.1 Reservation of Open Space. Where it believes proper and subject to governing statutes, the Board may require the plan to provide open areas suitably located for parks, for playground or recreational purposes, or for other required public facilities. Such areas shall not be unreasonable in area in relation to the land being subdivided and to the prospective public use of such land. For subdivisions in excess of five lots, a minimum of ten percent (10%) of the land will be set aside for up to three (3) years. This open land is subject to approval of the Board and should be comprised of contiguous parcels. The Board by appropriate endorsement on the plan, may restrict the erection of a building or buildings upon such reserved areas for a period of three years without its written approval.

5.5.5.2 Preservation of Trees. Prior to removal of any trees over fourteen inches (14”) in diameter at breast height, and prior to grading, the developer shall mark all trees within the proposed right of ways proposed for removal. The Board may require that the proposed roadway be re-aligned to allow said trees to be preserved. If the street is a scenic roadway, the developer must request the Board to conduct a public hearing on the application to remove trees along a scenic roadway.

Section 5.5 Other Improvements (Continued)

5.5.5.3 Shade Trees. The Developer shall plant trees, having a height of at least eight feet (8') and a diameter of at least four inches (4"), and of more than one variety, within the planting space of the right of way or in another location approved by the Board. The variety and location of the trees is subject to the approval of the Board during the subdivision approval process. Such planted trees shall usually be spaced not more than fifty feet (50') apart, in one-half cubic yard (1/2 cy) of topsoil satisfactory to the Board. See Appendix B Shade Trees.

5.5.5.4 Planting Space. There shall be a planting space between the curb line of the roadway and the sidewalk. Said area shall be surfaced with not less than six inches (6") of topsoil which shall be seeded and rolled or otherwise vegetated to the satisfaction of the Board.

5.5.6 Environmental Precautions. Care shall be taken during construction to avoid damage to natural features, such as trees (discussed above), other valuable plants, water courses, scenic points, historic spots and similar community assets.

5.6 EASEMENTS

- a) Easements for utilities across lots or centered on rear or side lot lines are often a practical necessity. Such easements shall be at least twenty feet (20') wide, centered on the installed utility.
- b) Easements shall be established where necessary to allow the construction and maintenance of sloped embankments, terraces and retaining walls.

**ARTICLE VI. PERFORMANCE REQUIREMENTS**

6.1 FEE TO STREETS

The subdivider shall retain title to the fee of each street, road, way or walkway in the subdivision, and will convey to the Town said fee without encumbrance and for the nominal consideration upon layout of the street by the Selectmen. The subdivider shall also convey to the Town any easement rights within or appurtenant to the subdivision for a nominal consideration upon request by the Selectmen.

6.2 STREET LAYOUT

Engineers Certificate of Completion (Form F) and Inspection Checklist (Form D) shall be filed with the Board before application for layout of streets by the Selectmen.

**Appendix A  
Design Standards**

**TABLE 1 ROADWAY DIMENSIONAL REQUIREMENTS**

	<u>Rural Residential Lane</u>	<u>Local Residential</u>	<u>Residential Feeder</u>	<u>Industrial Primary</u>	<u>Industrial Secondary</u>
Right-of-Way Width	40'	50'	60'	60'	60'
Pavement Width	18'	20'	24'	36'	30'
Sidewalk Width	none	5' *	5'	5'*	5'*
Green Strip Width	10'	8'	10'	7' & 12'	10' & 15'
Minimum Centerline Radius	100'	100'	300'	500'	100'
Minimum Profile Grade	1.0%	1.0%	1.0%	1.0%	1.0%
Maximum Profile Grade	10%	8.0%	6.0%	5.0%	8.0%
Design Speed** (mph)	25	35	45	50	45
Depth of Gravel Base ***	12"	12"	12"	12"	12"
Depth of Bituminous Concrete Base ****	2 1/2"	2 1/2"	2 1/2"	3 1/2"	3 1/2"
Depth of Bituminous Concrete Surface*****	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"

Key

- \* One side only.
- \*\* Stopping sight distance and Intersection sight distance to be as indicated in the Transportation and Traffic Engineering Handbook, latest edition, published by the Institute of Transportation Engineering, or similarly recognized publication.
- \*\*\* Two lifts, top lift to be dense graded crushed stone, except for Local.
- \*\*\*\* To be placed in one lift.

**Appendix B****BMP Design Guidelines (Note: These are variations from DEP's "Massachusetts Stormwater Handbook" and "Structural Pretreatment BMPs")****EXTENDED DETENTION BASINS:**

- Pretreatment via forebay or Water Quality Inlet (WQI) is required if runoff is from paved surfaces.
- Shallow Marshes not allowed.
- Outlet Structures with safety grates are to be as shown on the Town Standard.
- Maximum sideslope = 3:1.
- Minimum separation to Seasonal High Water Table = 6".
- Slopes to be seeded with native wild grass.
- Emergency Spillway required, with route of overflow water shown, and potential impacts to abutting property described.
- Shall not be formed with an embankment greater than 6 ft. high (Note: Greater heights come under MA dam regulations).
- Access to the outlet structure to be 10' min. wide, 15% max. grade, gravel base with 3" loam and seed surface. Access shall not cross the emergency spillway.
- Maximum depth 12'.
- 2% minimum bottom slope.
- 40 hour max. detention time for the 25-yr. Storm. 72 hour max. detention time for the 100-yr. Storm. Infiltration shall not be included in these calculations.
- 4:1 maximum length to width ratio.
- Outlet to be opposite inlet.
- Low flow underdrain required.
- Setbacks listed in the DEP Handbook are to be measured from the outside edge of the top of slope.

WET RETENTION PONDS – Not allowed.

**INFILTRATION TRENCH:**

- Perforated distribution pipe required. Inspection port at end of each trench required.

**INFILTRATION BASINS:**

- Same requirements as Extended Detention Basins, except 1 ft. separation to SHWT required.

**DRY WELLS:**

- Must include perforated structure, not just stone.

SAND FILTERS / ORGANIC FILTERS – No changes.

SEDIMENT FOREBAYS – No changes.

**Appendix B Continued**

DRAINAGE CHANNELS – No changes to DEP handbook design.

**UNDERGROUND DETENTION BEDS:**

- Pretreatment with a WQI required for runoff from paved surfaces.
- Inspection ports to grade required over inlet end and opposite end.
- Emergency overflow provision must be included
- Design using chamber system, similar to as required for a Title V system, with specific changes to make favorable for stormwater.
- Setbacks same as for extended detention basins.



## Appendix C Shade Trees

The species of street trees selected shall be of Zone 5 hardiness and shall be of licensed nursery stock with good root development and branching characteristics, and with a one-year warranty. Native species are preferred. Species sensitive to air pollution, are sensitive to highway salt, are sensitive to drought, or decline quickly after mechanical damage to the stem should not be used as tree species (e.g. Sugar Maple, Flowering Dogwood and White Pine). Existing trees may be preserved as street trees if inspected and approved by the Tree Warden and the Planning Board. The developer shall be liable for all trees so planted as to their development and good health after planting and until the release of all guarantees.

### Selected Recommended Street Trees

*Acer rubrum* (Red Maple)  
*Celtis occidentalis* (Hackberry)  
*Crataegus laevigata* (Crimson Cloud Hawthorn)  
*Fraxinus ornus* (Flowering Ash)  
*Fraxinus pennsylvanica* (Summit Ash)  
*Malus cultivars* (Flowering Crabapples)  
*Nyssa sylvatica* (Sour Gum)  
*Picea abies* (Norway Spruce)  
*Platanus x acerifolia* (London Plane Tree)  
*Pyrus calleryana* (Bradford Pear)  
*Prunus sargentii* (Sargent Cherry)  
*Quercus rubra* (Red Oak)  
*Tilia cordata* (Littleleaf Linden)  
*Ulmus* (Urban Elm)  
*Zelkova serrata* (Zelcova)

**Appendix D  
Subdivision Fee Schedule**

Plan or action	Filing fee*	Review Fee Deposit*
Planning Board Approval Not Required (81-P)	\$250.00 + \$150/new lot or parcel	NONE
Preliminary Subdivision**	\$1,500.00	\$1000 + \$200/lot
Definitive Subdivision**	\$3,000.00	\$1,000 + \$250/lot (review& inspection)
Change to Approved Definitive which requires a Public Hearing**	\$3,000.00	\$1,250
Covenant Review	\$100	Actual legal costs assessed
Lot Releases	\$100/lot	
Duplicate of Lot release	\$50	
Road name change	\$100	
Modification of Subdivision Plan	\$500	
Extension of Completion Deadline	\$3,000	
Form E, initial or adjustment	\$500	
Street Acceptance	\$500	
Planning Board Regulations	\$10	

\*Payable at time of filing. A W-9 Form is required for each application in order to establish an escrow account.

\*\* The applicant shall be responsible for the cost of abutter notification (mailing) and legal advertising. This shall include the cost to notify our 6 abutting towns as well as any certified mailings as required under the MGL.

**Project Review Fees**

Deposit funds received pursuant to this section shall be deposited with the municipal treasurer who shall establish a special account for this purpose. This fee is to be deposited into a special account as enabled by G.L. Chapter 44, Section 53G, referred to herein as the “593 Account”. This fee shall be imposed on those applications which, as designated by the Planning Board, require the services of outside consultants for the review process due to the size, scale or complexity of a proposed project, because of a project’s potential impacts, or because the Town lacks the necessary expertise to perform the review work related to the permit or approval. In hiring outside consultants, the Board may engage engineers, planners, lawyers, designers or other appropriate professionals who can assist the Board in analyzing a project to ensure compliance with all relevant laws, ordinances, bylaws and regulations. Such assistance may include, but not be limited to, analyzing an application, monitoring or inspecting a project or site for compliance with the Board’s decisions or regulations, or inspecting a project during construction or implementation. Expenditures from this special account may be made at the

direction of the Board without further appropriation and shall be made only in connection with the review of the specific project for which this review fee has been collected. An additional fee may be collected from the applicant, if during the review, the above deposit is found insufficient to cover the actual cost of the review. The additional review fee shall be based upon a cost estimate, from the consultant(s) performing the review, to complete the review. Reimbursement of these expenses is a requirement of approval, and failure to reimburse shall be cause for denial.

Once the review process has been started, there shall be no refunding of Administrative Fees, including the case of withdrawal of the application by the applicant. For this reason, it is important that the applicants consult with the Planning Board office prior to formal application to insure that the appropriate permits and review are being sought.

At the completion of the Board's review of a project, any excess in the account, including interest, shall be repaid to the applicant or the applicant's successor in interest. A final report of said account shall be made available to the applicant or the applicant's successor in interest. For the purpose of this section, any person or entity claiming to be the applicant's successor in interest shall provide the Board with documentation establishing such succession in interest.

Any applicant may take an administrative appeal from the selection of the outside consultant(s) to the Board of Selectmen providing such appeal is initiated within two weeks of the initial selection. The Selectmen shall convene a formal hearing within twenty days of receiving a written appeal filed by an applicant. The grounds for such an appeal shall be limited to the claims that the consultant(s) selected has (have) 1. a conflict of interest; a consultant may not have a financial interest in a project under review, or be in a position to financially benefit in some way from the outcome of the pending review process. Consultants must be in compliance with the Massachusetts Conflict of Interest Law (Chapter 268A) or 2. does (do) not possess the minimum required qualifications. The minimum qualification shall consist either of an educational degree in, or related to, the field at issue or three or more years of practice in the field at issue. The required time limit for action upon an application by the Board shall be extended by the duration of the administrative appeal. In the event that no decision is made by the Board of Selectmen within 30 days following the filing of the appeal, the selection made by the Board shall stand. This administrative appeal shall not preclude further judicial review, if otherwise permitted by law, on the grounds provided for in this section.

**Appendix E  
Subdivision Application Forms**

**FORM A APPLICATION FOR ENDORSEMENT OF A PLAN BELIEVED  
NOT TO REQUIRE APPROVAL**

**FORM A-2 DETERMINATION THAT SUBDIVISION APPROVAL IS  
NEEDED**

**FORM B APPLICATION FOR APPROVAL OF A PRELIMINARY  
PLAN**

**FORM C APPLICATION FOR APPROVAL OF A DEFINITIVE  
SUBDIVISION PLAN**

**FORM D SUBDIVISION INSPECTION CHECKLIST**

**FORM F ENGINEER'S CERTIFICATE OF COMPLETION**

**Note:**

**FORM E CONSTRUCTION COST ESTIMATE FOR  
PERFORMANCE GUARANTEE is a spreadsheet and is  
available as a separate document. The form prices are updated  
annually. Residential and industrial projects are treated  
separately.**