

**CODE OF THE TOWN OF LITTLETON,  
MASSACHUSETTS**

**CHAPTER 249  
SUBDIVISION OF LAND REGULATIONS**

**TOWN OF LITTLETON**

**Town Offices**

37 Shattuck Street  
Littleton, Massachusetts 01460  
Telephone: (978) 540-2425

**2012**

**ADOPTED  
MARCH 22, 2012**

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**Town Engineer for Subdivision Regulations Update**

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**Chapter 249 – Subdivision of Land Regulations**

**Town of Littleton**

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## **ARTICLE I, INTRODUCTION**

[HISTORY: Adopted by the Planning Board of the Town of Littleton effective March 22, 2012. Amendments noted where applicable.]

### **§ 249-1. Adoption of Regulations.**

Under the authority vested in the Planning Board of the Town of Littleton by the Subdivision Control Law (MGL Ch. 41, § 81-Q), said Board hereby adopts these rules and regulations governing the subdivision of land in the Town of Littleton in order to guide its orderly development consistent with the purposes of the Subdivision Control Law.

### **§ 249-2. Applicability.**

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

**Sec §§ 249-3 through 249-5. (Reserved)**

## **ARTICLE II, DEFINITIONS**

### **§ 249-6. Terms Defined.**

The definitions of the Subdivision Control Law shall be incorporated herein (MGL, Ch. 41, § 81L).

AASHTO Green Book -- AASHTO's A Policy on Geometric Design of Highways and Streets, latest edition including all supplemental amendments.

ADA -- Americans with Disabilities Act, latest edition including all supplemental amendments.

ANLA -- American Nursery Landscape Association, formerly the American Association of Nurserymen Standards.

BOARD -- The Planning Board of the Town of Littleton.

CADD -- Computer Aided Drafting and Design. When in reference to electronic files, CADD shall mean electronic plans, compatible with the Town's current GIS system. Files shall be compliant with Section 138-1 of the Town Code or as otherwise required by the Board.

CONTRACTOR -- When referring to the MassDOT Standard Specifications, Contractor shall mean the Applicant or the Contractor performing the work on behalf of the Applicant.

CUL-DE-SAC -- Minor Streets or Lanes open at one end only with a special circular turning area provided at the closed end having a minimum radius as specified herein.

DEAD-END STREETS -- Lanes or Minor Streets open at one end only without special provisions for turning around.

**§ 249-6. Terms Defined (continued)**

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

**EMERGENCY ACCESS WAY** -- A public or private way for secondary emergency access that is not generally available for vehicular travel.

**ENGINEER** -- When referring to MassDOT Standard Specifications, Engineer shall mean the Town of Littleton or the Town's designated representative.

**ISO** -- Insurance Services Office.

**ITE** -- Institute of Transportation Engineers

**ITE Handbook** -- ITE Traffic Engineering Handbook, latest edition including all supplemental amendments.

**LOT** -- An area of land, undivided by any street, in one ownership, with definitive boundaries ascertainable from the most recently recorded deed or plan which is 1) a deed recorded in Middlesex County South District Registry of Deeds, or 2) a Certificate of Title issued by the Land Court and registered in the Land Court section of such Registry, or 3) title of record disclosed by any and all pertinent public documents.

**MAAB** -- Massachusetts Architectural Access Board Rules and Regulations (521 CMR), latest edition including all supplemental amendments.

**MAJOR TREE** -- Major trees are defined as trees with breast height diameter of 8 inches or larger.

**MASSACHUSETTS (MASS) STATE PLANE** -- Massachusetts State Plane Coordinate System (North American Datum of 1983), with the units being United States Survey Foot.

**MassDOT Construction Standard Details** -- MassDOT Construction Standard Details, latest edition including all supplemental amendments.

**MassDOT PD&DG** -- MassDOT Project Development and Design Guide, latest edition including all supplemental amendments.

**MassDOT Standard Specifications** -- MassDOT Standard Specifications for Highways and Bridges, latest edition including all supplemental amendments.

**MASSGIS** -- Commonwealth of Massachusetts' Office of Geographic Information.

**MUNICIPAL SERVICES** -- Public utilities furnished by the Town of Littleton in which a subdivision is located, such as water mains, stormwater drains, sanitary sewers, gas pipes, electrical lines, telephone lines, cable television and fire alarm systems.

**MUTCD** -- Manual on Uniform Traffic Control Devices, latest edition including all supplemental amendments.

**NAVD 88** -- North American Vertical Datum of 1988.

**NFPA** -- National Fire Protection Association.

**OSHA** -- Occupational Safety and Health Administration.

**§ 249-6. Terms Defined (continued)**

**PRELIMINARY PLAN** -- A plan of a proposed subdivision or resubdivision of land drawn on tracing paper, or a print thereof, showing (a) the subdivision name, boundaries, north point, date, scale, legend and title "Preliminary Plan"; (b) the names of the record owner and the Applicant and the name of the designer, engineer or surveyor; (c) the name of all abutters, as determined 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, in a general manner; (f) the approximate boundary lines of proposed lots, with approximate areas and dimensions; (g) the names, approximate location and widths of adjacent streets; (h) and the topography of the land in a general manner.

**PROFESSIONAL ENGINEER** -- An engineer registered in good standing as a Professional Engineer with the Massachusetts Board of Registration of Professional Engineers and Professional Land Surveyors.

**PROFESSIONAL LAND SURVEYOR** -- A land surveyor registered in good standing as a Professional Land Surveyor with the Massachusetts Board of Registration of Professional Engineers and Professional Land Surveyors.

**PROWAG** -- Latest Proposed Right-of-Way Accessibility Guidelines whether in Draft or Adopted form as published by the United States Access Board.

**REGISTERED MAIL** -- Registered or certified mail.

**ROADSIDE DESIGN GUIDE** -- AASHTO Roadside Design Guide, latest edition including all supplemental amendments.

**RULES** -- Chapter 249, Code of the Town of Littleton, Massachusetts Subdivision of Land Regulations as set forth herein.

**STREETS:**

**LANE** -- A subcategory of a Local Road as defined by the MassDOT PD&DG which is used to provide access to ten (10) or fewer residential units and which is not intended for use by through traffic. A Lane is expected to have design speeds of 25 mph or less and an Average Daily Traffic volume of 500 or fewer vehicle trips per day. For proposed streets, the estimated Average Daily Traffic volume shall be based on maximum potential build-out of all lots being accessed by said street.

**MINOR STREET** -- A subcategory of a Local Road as defined by the MassDOT PD&DG which is used to provide access to Lanes and abutting residential lots and which is not intended for use by through traffic. A Minor Street is expected to have design speeds of 30 mph or less and have an Average Daily Traffic volume of greater than 500 and up to and including 2,000 vehicle trips per day. For proposed streets, the projected Average Daily Traffic volume shall be based on maximum potential build-out of all lots being accessed by said street, plus projected future volumes of all connected Lanes as deemed reasonable and realistic by the Board.

**COLLECTOR STREET** -- A street intercepting several Minor Streets or Lanes and which may carry traffic from such Minor Streets or Lanes to an Arterial Street or community facility, including the principal access/circulation streets of a residential subdivision. A Collector Street is also any street of a business or industrial subdivision. A Collector Street is expected to have design speeds of 25

**§ 249-6. Terms Defined (continued)**

mph to 35 mph and to have an Average Daily Traffic volume of greater than 1,000 and up to and including 8,000 vehicle trips per day. For proposed streets, the estimated Average Daily Traffic volume shall be based on maximum potential build-out of all lots being accessed by said street, plus projected future through traffic volumes as deemed reasonable and realistic by the Board.

ARTERIAL STREET -- Arterial Streets provide the highest level of mobility at the greatest vehicular speed for the longest uninterrupted distances and are not intended to provide access to specific locations. An Arterial Street has an expected Average Daily Traffic volume of greater than 8,000 vehicle trips per day. For proposed streets and improvements to existing Arterial Streets, the estimated Average Daily Traffic volume shall be based on maximum potential build-out of all lots being accessed by said street, plus projected future through traffic volumes as deemed reasonable and realistic by the Board. The design of proposed Arterial Streets shall be guided by Chapter 3 - Basic Design Controls of the MassDOT PD&DG.

SUBDIVISION -- "Subdivision" shall mean the division of a tract of land into two (2) or more lots as defined by MGL Ch. 41, § 81L.

SUBDIVISION CONTROL LAW -- The statutory law enabling provisions so designated by the General Court, being MGL Ch. 41, §§ 81-K through 81-GG, at the time of adoption of these regulations or as subsequently amended.

THROUGH STREET -- A street having, by itself or by means of other streets, a connection at both ends to the overall road system of the Town of Littleton or of neighboring towns, so that each location on such street can be accessed through at least two alternative streets or combination of streets.

WAY, PATH -- A general term denoting a public or private way for purposes of public non-vehicular travel, including the entire area within the right-of-way. Such ways or paths do not provide frontage.

**§§ 249-7 through 249-9. (Reserved)**

## ARTICLE III, PLAN PROCEDURES

### § 249-10. General Provisions.

- A. Only those plans which constitute "subdivisions", as that term is defined in the Subdivision Control Law, require the approval of the Planning Board. However, all plans requesting or seeking Planning Board approval, whether subdivisions within the meaning of the law or not, must have either approval as a subdivision or endorsement that they do not require approval before they will be accepted for recording at the Registry of Deeds or registration at the Land Court.
- B. A plan shall be deemed submitted when delivered at a meeting of the Planning Board or when sent by registered mail to the Planning Board. If so mailed, the date of receipt shall be the date of submission of the plan. Plans intended for review at a forthcoming meeting of the Planning Board shall be submitted not later than 12:00 p.m. noon according to the schedule below.
- (1) ANR – at least two working days prior to the Planning Board meeting.
  - (2) Preliminary Subdivision – at least 5 working days prior to the Planning Board meeting.
  - (3) Definitive Subdivision – at least 15 working days prior to the Planning Board meeting, to provide additional review time by the Board members, Town staff, and/or review consultant, and to meet both Open Meeting Law and Subdivision Control Law requirements.
- C. All filings for any action under these regulations must be accompanied by both paper copies and electronic copies. Electronic copies must be in two forms: scalable Adobe Acrobat PDF and CADD formats and shall be prepared in accordance with the current version of the "MassGIS Standard for Digital Plan Submission to Municipalities." Electronic copies must be submitted on a CD-ROM and must be accompanied by the completed checklist required in the MassGIS standard. The MassGIS standards and checklist can be obtained from <http://www.mass.gov/mgis/standards.htm>.
- D. Per the Subdivision Control Law (MGL Ch. 41, § 81-Q), all plans submitted shall be designed so as to be in compliance with all Zoning Bylaws or have all appropriate variances issued by the Zoning Board of Appeals in effect at the time of submission.
- E. All costs associated with filing for subdivision approval shall be borne by the applicant. All filing fees are non-refundable.
- F. These rules contain for the reader's convenience, either verbatim or in slightly modified form relevant statutory provisions of MGL Ch. 41, the Subdivision Control Law. These rules are intended to comply with the Subdivision Control Law. However, many aspects of the subdivision of land are not completely covered by the Subdivision Control Law and these rules contain definitions, procedural requirements, and design standards that are intended to be specific to the Town of Littleton.
- G. No person shall make a subdivision within the meaning of the Subdivision Control Law of any land within the Town of Littleton, or proceed with the improvement or sale of lots in a subdivision, or the construction of streets and ways, or the installation of municipal services therein, unless and until a Definitive Plan submitted and approved as required under § 249-32 of such subdivision has been submitted to and approved by the Board as hereinafter provided.

**§§ 249-11 through 249-13. (Reserved)**

**§ 249-14. Plan Believed Not To Require Subdivision Approval.**

- A. General. Anyone may submit a plan seeking endorsement that the plan does not require approval under the Subdivision Control Law. (Approval Not Required, ANR).
- B. Submission Requirements. Submittals shall include the following:
- (1) The original plan plus three (3) copies in dark line on white background;
  - (2) Properly completed Form A. Blank forms are available at the Town Offices. Form A is attached to these rules as an appendix for information purposes only (see Form A: Application for Endorsement of Plan Believed Not to Require Approval under the Subdivision Control Law (Ch. 41)), but is not part of these rules. Official copies shall be obtained at the Planning Department office or online at the Planning Department's website. The Applicant shall be responsible for confirming that the form obtained online is current;
  - (3) Signature of all affected landowners;
  - (4) Fee for Approval Not Required (ANR) plan as specified in current Planning Board fee schedule. The Fee Schedule is attached to these rules as an appendix for information purposes (see Fee Schedule), but is not part of these rules;
  - (5) On disc or via another commonly used electronic media storage or transmission device in a scalable Adobe Acrobat PDF and CADD formats and registered to the Massachusetts State Plane coordinate system;
  - (6) File completed Form A with the Planning Board with three (3) copies of the plans, plus original Mylar. File a copy of Form A and plan with the Town Clerk in accordance with the requirements of MGL Ch. 41, § 81-P. Filing shall be made by delivery or by registered or certified mail to the Board in care of the Littleton Planning Department. If so mailed, the date of receipt shall be the date of submission of the plan;
- C. Required information. Such plans shall show the following:
- (1) All existing and proposed property lines and lot boundaries with deed book and page reference of existing lines;
  - (2) Adjacent ways in existence;
  - (3) Remaining frontage and area of any adjoining land in the same ownership;
  - (4) Frontage of land adjacent to any reduced frontage lot created;
  - (5) Any existing structures and dimensions of setbacks;
  - (6) Any existing structures on any remaining adjoining land owned by the Applicant and dimensions of setbacks;
  - (7) The present owner of the land shown on the plan and all abutting owners and assessor's map and parcel numbers;
  - (8) The location of any easement or way, public or private, across the land, with a designation as to the use of the same;

**§ 249-14. Plan Believed Not To Require Subdivision Approval (continued)**

- (9) Seal and signature of a Professional Land Surveyor, North arrow, legend, scale, date and drawing number;
  - (10) Suitable space to record the action of the Board and the Town Clerk's certification, as defined in the Subdivision Control Law;
  - (11) The lot must be able to be accessed from the frontage road;
  - (12) A locus plan of the locus, showing its relation to the surrounding area, at a scale of one (1) inch equals six hundred (600) feet, extending at least one thousand (1000) feet from the boundaries of the locus or to the next way intersecting the way on which it is located, whichever is greater;
  - (13) Zoning classifications, including overlay districts;
  - (14) A note stating that endorsement of the plan does not signify compliance with Zoning Bylaw;
  - (15) The entirety of any lot having its boundaries changed must be shown;
  - (16) Location of all existing and proposed monuments marking lot lines;
- D. Time limit. If the Planning Board takes no action within the time period specified by the Subdivision Control Law, the plan is automatically deemed not to require approval under the subdivision control law and the Town Clerk may so certify.
- E. Board Action. If the Board determines that the plan does not require Planning Board approval under the subdivision control law, it shall endorse the plan "Approval under the Subdivision Control Law Not Required" without a public hearing and within 21 days of submission. This endorsement does not imply that the plan complies with Zoning Bylaw. The Board will return the original of the plan to the Applicant, notifying both the Applicant and the Town Clerk of its action.

**§§ 249-15 through 249-20. (Reserved)**

**§ 249-21. Presubmission Review of a Subdivision.**

- A. Many development impacts can be avoided or mitigated if recognized early in the development process. Therefore, it is recommended that the Applicant prepare a conceptual subdivision plan and draft Development Impact Statements for a preliminary, non-binding Board review as early as possible.
- B. Prior to the filing of a Preliminary Plan, the Applicant should informally consult with the Planning Department staff to review a conceptual plan of a subdivision proposal and to discuss any issues raised in the preparation of the draft Development Impact Statements. Staff will answer questions; offer suggestions related to the general concept presented; and discuss possibilities to minimize development impacts.
- C. The purpose of this consultation is to provide the developer an opportunity to present the proposed subdivision in the earliest stages of the development process, before a significant amount of money is spent on engineering details.

**§§ 249-22 through 249-24. (Reserved)**

**§ 249-25. Preliminary Plan of a Subdivision.**

A. General. It is strongly recommended that a Preliminary Plan be filed. In accordance with MGL Ch. 41, § 81S, submission of a Preliminary Plan for a residential subdivision is optional but submission of a Preliminary Plan is mandatory for a nonresidential plan. 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 problems of such subdivision before costly engineering drawings for a Definitive Plan are prepared. Prior to the discussion of the Preliminary Plan with the Board, it is recommended that the subdivider discuss the Applicant's plans with the Fire Department, the Water Department, the Board of Health, the Highway Department, the Conservation Commission and the Zoning Board of Appeals.

During the discussion of the Preliminary Plan, the complete information required for the Definitive Plan and the performance guaranty will be developed.

B. Application procedure.

- (1) An Applicant submitting a Preliminary Plan shall file a copy of Form B (see Form B: Application for Approval of Preliminary Plan of a Subdivision), three (3) full size copies of the Preliminary Plan and six (6) copies reduced to fit legibly on 11"x17" sheets, with the Planning Board accompanied by the appropriate fee according to the fee schedule. Form B is attached to these rules as an appendix, but is not part of these rules;
- (2) Signatures of affected landowners proposed to be subdivided;
- (3) An Applicant submitting a Preliminary Plan shall file one (1) print with the Board of Health; and
- (4) File completed Form B with the Planning Board with six (6) copies of the plans, plus original Mylar. File a copy of Form B and plan with the Town Clerk; and 1 copy with the Board of Health in accordance with the requirements of Chapter 249. Filing shall be made by delivery or by registered or certified mail to the Board in care of the Littleton Planning Department. If so mailed, the date of receipt shall be the date of submission of the plan. The Planning Board will forward copies of the plan to the Highway Department, Water Department, Fire Department and other departments as deemed needed.

C. Contents. The Preliminary Plan shall be drawn at a scale of one (1) inch equals forty (40) feet for plans of (10) ten lots or fewer and one (1) inch equals eighty (80) feet for plans of more than ten (10) lots, or other scale approved by the Planning Board to accept to show details clearly and adequately and shall be identified as a Preliminary Plan. A Preliminary Plan shall have contents as defined in the Subdivision Control Law. In addition, it is requested that the following be submitted:

- (1) A locus plan of the subdivision, showing its relation to the surrounding area, at a scale of one (1) inch equals six hundred (600) feet, extending at least one thousand (1000) feet from the boundaries of the subdivision or to the next way intersecting the way on which the subdivision is located, whichever is greater;
- (2) Adjacent and proposed ways;
- (3) Preliminary drainage plan;

**§ 249-25. Preliminary Plan of a Subdivision (continued)**

- (4) Existing and proposed watercourses, ponds and wetlands;
- (5) Preliminary findings of the Development Impact Statement required by § 249-32E; and
- (6) In the case of a subdivision site where all the land owned in the parcel is not to be subdivided, a plan showing (in a general manner) the proposed future development of the balance of the land.

**§§ 249-26 through 249-31. (Reserved)**

**§ 249-32. Definitive Plan.**

**A. Application procedure.**

- (1) Any person who submits a Definitive Plan of a subdivision to the Planning Board for approval shall file with the Board the following:
  - (a) Original drawings of the Definitive Plan and other required drawings, plus twelve (12) contact prints thereof, dark line on white background. The original drawings will be returned after approval or disapproval. List of Minimum Drawings Required;
    - i. Title Sheet: with Project Locus, Index of Sheets, Development Name, Development Address, Applicant Name, and Contacts;
    - ii. Existing Conditions Plan: showing entire site to be subdivided, with existing lot lines, rights-of-way, easements, stone walls, major trees, tree lines, contours at no more than 2' between minor contours and 10' between major contours. Preferred 1' between minor contours and 5' between major contours when this will not affect plan readability;
    - iii. Plan of Lots or Lotting Plan: showing lots lines, sizes, bearings and distances, etc.;
    - iv. Easement Plan: if required for clarity;
    - v. Site Plan;
    - vi. Roadway Profile;
    - vii. Typical Sections;
    - viii. Construction Details;
    - ix. Roadway Cross-Sections.
  - (b) Three (3) copies of properly completed application Form C. (Application for Approval of Definitive Plan);
  - (c) Fee for Application for Approval of Subdivision Plan as specified in current Planning Board fee schedule;
  - (d) A statement of deed restrictions, if any, including a description of each;
  - (e) List of name and address of abutters certified by Board of Assessors;

**§ 249-32. Definitive Plan (continued)**

- (f) A narrative describing the proposed project, sequencing, construction phasing and prior approvals by the Board, Conservation Commission (if any) and, Zoning Board of Appeals (if any); and
  - (g) A complete detailed list of all waivers being requested.
- (2) File three (3) copies of the completed Form C with the Planning Board with twelve (12) copies of the plans, plus original Mylar. File a copy of Form C and plan with the Town Clerk in accordance with the requirements of Chapter 249. Filing shall be made by delivery or by registered mail to the Board in care of the Littleton Planning Department. If so mailed, the date of receipt shall be the date of submission of the plan. The Planning Board will forward copies of the plan to the Highway Department, Water Department, Fire Department and other departments as deemed needed.
- (3) The developer shall submit electronic copies, both in scalable Adobe Acrobat PDF and CADD formats, of the plans at the time of the Definitive Plan submittal, of the Definitive Plan as approved, and of the final as-built Plan.
- B. Standard Definitive Plan contents.** The plan shall be drawn in ink using standards and media acceptable in the application and to the Registry of Deeds requirements. The plan shall be at the scale of one (1) inch equals twenty (20) feet or other scale approved by the Planning Board to accept to show details clearly and adequately and shall be identified as a Definitive Plan. If multiple sheets are used, they shall be accompanied by an index sheet showing the entire subdivision, and all sheets shall be the same size.
- C. Required information.** Such plans shall show the following:
- (1) The subdivision name, date, boundaries, North arrow, legend, scale, and drawing number;
  - (2) The name and address of the owner of record, subdivider, engineer and other professionals engaged in the design;
  - (3) All sheets showing proposed roadway, drainage, etc. shall be sealed and signed by a Professional Engineer. Lotting sheets shall be sealed and signed by a Professional Land Surveyor;
  - (4) The location, names and present widths of ways bounding within two hundred (200) feet of the subdivision;
  - (5) A locus plan of the subdivision, showing its relation to the surrounding area, at a scale of one (1) inch equals six hundred (600) feet, extending at least one thousand (1000) feet of the boundaries of the subdivision or to the next way intersecting the way of which the subdivision is located, whichever is greater;
  - (6) The location and names of all abutters as they appear in the most recent local tax list;
  - (7) Assessor's map and parcel numbers;
  - (8) Designation of zoning districts, including all applicable overlay districts;
  - (9) Existing and proposed lines of streets, ways, paths, lots, easements and public or common areas within the subdivision;

**§ 249-32. Definitive Plan (continued)**

- (10) Sufficient data to determine readily the location, direction and length of every street or way, easement, lot line and boundary line and to establish those lines on the ground. The subdivision shall be tied to the Massachusetts State Plane Coordinate System and NAVD 88;
  - (11) Road center line stationing, to which the street plans and profiles shall be referenced. Stationing shall be provided every 100 feet and tick marks every 50 feet. Points of Curvature and Tangency stations, curve data, alignment tie information station equations shall be provided where applicable. All alignment information shall be shown on all Lotting Plans and Site Plans;
  - (12) Proposed street names and lot numbers;
  - (13) The location of all permanent monuments, properly identified as to whether existing or proposed;
  - (14) Location of existing and proposed watercourses, wetlands, perennial and intermittent streams, certified vernal pools, potential vernal pools (as identified on maps prepared by MassGIS), certified and potential vernal pool upland habitat areas, rare and endangered species, waterways and water bodies on and within 100 feet of the proposed subdivision, including any buffer zones and riverfront areas as defined by the Massachusetts Wetlands Protection Act (MGL Ch. 131, § 40) and Littleton Wetland Bylaw;
  - (15) The location and types of major trees and tree groupings, existing and proposed, within fifty (50) feet of proposed center line of the right-of-way;
  - (16) Suitable space to record the action of the Board and for the date and five signatures, and the Town Clerk's certification, as defined in the Subdivision Control Law;
  - (17) Major site features, such as existing stone walls, fences, buildings, rock ridges and ledge, swamps, flood plains as identified on the Federal Insurance Rate Maps and other flood plains identified by a Professional Engineer and historic features on and within 100 feet of the proposed subdivision. The plan shall identify which of the above shall remain undisturbed.
- D. Site Plans and Profiles. For every street, there shall be a separate plan at 1"=20' and profiles at 1"=4' (Vertical), which is preferred, or plans at 1"=40' and profiles at 1"=8' (Vertical), showing the following data:
- (1) Exterior lines of the way, with sufficient data to determine their location, direction and length;
  - (2) Existing center line profile, shown as a fine black solid line. Existing center line profile for intersecting streets shall be shown for at least one hundred (100) feet each side of the intersection of street center lines, except for those streets for which a separate profile is included in the plan submittal. Cross-sections cut at 50-foot or closer station intervals and at all critical locations shall be provided with the Site Plans. Cross-sections shall be prepared at fifty (50) foot intervals, showing the existing ground and proposed finished ground and shall depict prominent features in section. They shall be shown at a scale of 1"=4' and if approved by the Board in no case shall be smaller than 1"=8'. The right-of-way lines shall be shown in the cross-sections. Additional cross-sections may be required at critical sections, in the opinion of the Board. Elevations shall be based on NAVD 88 bench marks. Plans shall be developed in accordance with Chapter 18 - Plans, Specifications, and Estimates of the MassDOT PD&DG. Sheet size shall be a maximum of 30" x 42";

**§ 249-32. Definitive Plan (continued)**

- (3) Finished, designed profile, shown in bold solid line, with the elevations of the end point and the slope shown for all constant slopes, and with sufficient data shown to completely define all vertical curves;
  - (4) Existing and proposed watercourses, ponds and wetlands;
  - (5) All drainage facilities, including stormwater mitigation practices, on plan and on profiles showing sizes, invert elevations and slopes;
  - (6) The location and size of all water mains, along with hydrants and main gate valves. Water line locations shall be shown on profile sheets where they cross drainage facilities;
  - (7) The location of gas and cable utilities and their appurtenances;
  - (8) The location of the following, unless waived by the Board: street paving, sidewalks, street lighting standards, curbs, gutters, electrical transformers, sub-surface utilities and fire-alarm boxes.
- E. Development Impact Statements. The developer shall submit an analysis of the impact of the proposed development, as outlined below. The analysis will assist the Planning Board in assessing the cumulative impact of development:

The following shall accompany submission of a Definitive Plan:

- (1) Environmental analysis. All subdivisions creating frontage shall be based on an environmental analysis, which shall be prepared by an interdisciplinary team to include a land surveyor, civil engineer and architect or landscape architect, unless otherwise agreed to by the Planning Board, and shall consist of the following graphic and narrative items. The following documentation is required for each analysis:
  - (a) Site analysis and proposal drawings, at uniform scale on sheets not larger than forty-two by sixty (42x60) inches, showing the following:
    - (i) All information required under Section 4.2 of the regulations adopted under MGL Ch. 131, § 40, unless certain requirements are waived by the Board as not being germane or feasible;
    - (ii) Vegetative cover analysis, including identification of general cover type (wooded, thicket, fresh wetland, etc.), location of all major tree groupings, plus other outstanding trees or other botanical features and important wildlife habitats;
    - (iii) Visual analysis of scenic vistas and locations of visual prominence.
  - (b) A narrative statement, documenting the following, with references to the above maps as germane:
    - (i) Impact upon surface water quality and level;
    - (ii) Impact upon groundwater quality and level;
    - (iii) Material effects upon priority and estimated habitat for rare and endangered species, outstanding botanical features and scenic or historic environs;

**§ 249-32. Definitive Plan (continued)**

- (iv) Capability of soils, vegetative cover and proposed erosion-control efforts to support proposed development without danger of erosion, silting or other instability;
  - (v) Relationship to the requirements of the Wetlands Protection Act (MGL Ch. 131, §§ 40 and 40A).
- (2) **Traffic Study:** As defined below, the Applicant is required to submit a traffic study for any type of new land development or redevelopment regardless of its size or whether or not the State agency is the access granting authority. The traffic study should follow guidelines published by the ITE “Transportation Impact Analysis for Site Development: An ITE Recommended Practice”, the guidelines issued by the Massachusetts Department of Transportation and various references noted below as appropriate. The analysis should be documented in the report and shall be completed by or under the supervision of an ITE Member registered as a Professional Engineer in the State of Massachusetts.

Different levels of traffic analysis shall be required depending on the size of the project as described below. The definition of project size is as follows:

- Minor Projects - less than 10 peak hour vehicle trips
- Moderate Projects - between 10 and 50 peak hour vehicle trips
- Large Projects - greater than 50 peak hour vehicle trips

The scope of analysis shall include consideration of:

- Proximity to an existing safety concern (i.e. high crash location),
- General conditions of the current operating conditions of the abutting road(s),
- The anticipated special characteristics of the project’s traffic generating temporal conditions.

It is highly recommended that the Applicant’s traffic consultant meet with the Town planning staff at the outset to review the traffic analysis scope and identify any unique issues that need to be addressed by the Applicant.

**(a) For Minor Projects:**

The following shall be completed for the projects classified as “minor”: 1) the estimate of the project’s daily and peak hour trips; 2) expected operating condition of its site access drive intersection with the major street; 3) sight distance analysis for the points of access/egress following the direction described below under ‘Moderate/Large Projects’; and 4) the evaluation of the proposed site drive intersection geometric design with the major intersecting street.

**(b) Moderate/Large Projects:**

In addition to the matters listed in subsection (a), above, the specific items to be addressed in traffic impact studies for moderate to large projects are listed below:

- (i) **Study Area:** The determination of the study area shall be made by the Applicant based on Table 2-3 from the 2010 or later edition of the ITE “Transportation Impact Analysis for Site Development: An ITE Recommended Practice” and shall incorporate the roadways that the site access will be connected to; provided, however, that the

**(ii) § 249-32. Definitive Plan (continued)**

study area shall extend not less than ¼ mile from the property lines and shall include all major intersections and access drives within the study area for Moderate Projects, and shall extend not less than 1 mile from the property lines and shall include all major intersections and access drives within the study area for Large Projects, unless these minimum distances are waived by the Board.

- (iii) Traffic volumes: The current daily volumes on the roadways abutting the project should be obtained. Peak hour volumes need to be collected during the peak periods that would typically be the 7-9AM and 4-6PM periods during the weekday for most land uses. For retail and certain types of restaurants would need to consider the midday peak hour (i.e. 11AM -2PM). Data that exists for study locations and is no more than two (2) years old may be used in the new study; use of older data or analysis periods must be reviewed and approved by the Planning Board.
- (iv) Safety data: The traffic study must include research of recent crash experience at all study locations. At minimum, the crash records maintained and available through the Massachusetts Department of Transportation (MassDOT) and the Town of Littleton Police Department for the latest available 3 years are to be researched and summarized to indicate the characteristics including but not limited to frequency, type, severity and weather or road surface conditions. Crash rates will be calculated and compared to the appropriate average rates found in the MassDOT District area. Any notable trends or potential safety issues should be identified.
- (v) Future traffic volumes: The traffic study must estimate future traffic volumes for conditions with and without the proposed development project. The future year for moderate and large projects should be 5 years from when occupancy begins. A No Build condition must be considered and must take into account nearby developments or redevelopments that are planned, expected and underway within the study period.

The traffic for the proposed development must include daily and peak hour flows. If appropriate, Saturday conditions must be estimated. Unless otherwise supported, the traffic estimates for proposed developments should be based on the models in the latest Trip Generation Report published by the ITE. Estimates of site traffic distribution should be documented and clearly shown in the traffic report.

For all non-residential land use types, provide an estimate of truck traffic.

- (vi) Traffic analysis: An analysis of the proposed project's impact on the study area intersections and roadways will involve examining the change in traffic volumes at the study locations and completing a level of service analysis consistent with the methods described in the Highway Capacity Manual published by the Transportation Research Board. The results must be summarized in tabular form and include comparisons of the existing, no-build and build conditions. Information that is required for each approach, lane group and overall include the volume to capacity ratio, average vehicle control delay, level of service (LOS) and the 95<sup>th</sup> percentile vehicle queues. Locations that currently experience or will experience in the future a peak hour LOS 'D' or lower may at the discretion of the Board need to be mitigated.

## § 249-32. Definitive Plan (continued)

- (vii) Sight distance analysis: The sight distances for all proposed site drives must be reviewed for adequacy. This includes determining the appropriate speeds for which to conduct the analysis including collecting off-peak travel speeds sufficient to determine average and 85<sup>th</sup> percentile speeds. The anticipated available sight distances related to stopping sight distances (by approach) and intersection (or corner) sight distances (by direction of oncoming traffic) must be determined in the field consistent with the methods described in the AASHTO Green Book. A summary table and/or diagram should be provided in the traffic report that indicates the measured distances, the required distances given the appropriate speed and a determination if the distance criterion is satisfied or not for each type and direction.
- (viii) Pedestrian/Bicycle flow: A review/assessment of the impact of the project's access points in relation to impacting the pedestrian and bicycle travel on the abutting street must be completed and a statement of impact and/or adequacy should be included in the traffic report.
- (ix) Internal circulation plan: The internal traffic and pedestrian circulation plan should be reviewed and assessed as part of the traffic study. Potential conflicts, safety issues, goods delivery routes should be included.
- (x) Mitigation: The town is committed to reducing traffic impacts, encouraging alternative modes, reducing the amount of site trips while promoting a positive economic development environment. To this end, the Applicant will be required to evaluate potential mitigation and improvements as outlined below at a minimum unless it can be fully demonstrated that mitigation should not be required for a specific project.
  - a. Minimize the number of driveways serving the project.
  - b. Locate and design proposed non-residential access drives to minimize unnecessary traffic intrusion into existing residential neighborhoods.
  - c. Clearing, grading, signage or other improvements to ensure adequate sight distances are provided and can be maintained.
  - d. Encourage shared vehicular access with adjoining developments.
  - e. Maximize distances between proposed drive and the driveways to adjacent properties.
  - f. Provide to the extent feasible pedestrian connections with adjacent properties and developments.
  - g. Traffic signage and other guidance required for safe and efficient traffic movement.
  - h. Proposed engineering and in certain situations construction of roadway and intersections to improve the level of service to pre-development levels of higher than LOS 'D'. This may include but not be limited to additional travel or turn lanes, signalization, upgraded signalization and signal timing, channelization, and other physical improvements.
  - i. Accommodate transit within or adjacent to the project site.
  - j. Provide for or contribute towards demand management techniques including but not limited to sidewalks, bicycle lanes, carpooling, transit service, on-site services, and

**§ 249-32. Definitive Plan (continued)**

mixed but complimentary uses on the site.

- k. Provide in-lieu-of payments the Town can put towards future transportation improvements including studies to determine the improvements.

If the project is to be phased over time, then the mitigation actions must be detailed in terms of implementation schedule.

- (3) Sanitary Sewer Study. The Applicant shall submit calculations showing (a) that any proposed sanitary sewer system has been designed according to the standards set forth in these rules; and (b) any impact of said sanitary system would have on existing sanitary systems downstream from the proposed point of discharge. Sewage estimates shall be based on the Massachusetts Department of Environmental Protection's Title 5;
- (4) Water Study. The Applicant shall submit a study certified by a Professional Engineer with demonstrated qualifications as a water consultant, showing that the proposed water system would provide the development with adequate fire flows and demonstrate that each service connection shall have a minimum residual water pressure at street level of 20 PSI under all design conditions of flow. Standards for fire flows are based on Insurance Services Office standards. Any waivers and all testing for residual water pressure and impacts within 2,000 feet of the proposed subdivision must be consistent with the recommendations of the Insurance Services Office ([www.ISO.com](http://www.ISO.com)), and the National Fire Protection Association ([www.nfpa.org](http://www.nfpa.org)). Conclusions of the study shall demonstrate how to mitigate the impacts of the development on the water pressures in the surrounding area. Impacts on public and private water facilities shall be described;
- (5) Public Works costs: Additional costs for future plowing, sanding, and sweeping per lane mile (using current costs per lane mile, including disposal) plus catch basin cleaning (using current costs per catch basin, including disposal) and maintenance of the storm sewer system;
- (6) Municipal service costs: Estimates of costs based on existing average cost per resident for police, fire, libraries, recreation, and schools, including school enrollment projections.

**F. Other submittals. The following shall also accompany submission of a Definitive Plan:**

- (1) Typical street cross section for each class of street within the subdivision, drawn at one (1) inch equals four (4) feet, showing the location of all elements within the street right-of-way, and typical cross sections of any altered drainage courses or off-street paths. Refer to the Town of Littleton Typical Sections included in the appendices which are provided as minimum requirements and for information only. Official copies shall be obtained at the Planning Department Office;
- (2) A locus plan of the subdivision, showing its relation to the surrounding area, at a scale of (1) inch equals six hundred (600) feet, extending at least one thousand (1000) feet of the boundaries of the subdivision or to the next way intersecting the way on which the subdivision is located, whichever is greater;
- (3) 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

## § 249-32. Definitive Plan (continued)

drainage outside of the subdivision and a description of erosion-control methods to be employed;

- (4) An erosion and sedimentation control plan designed to ensure, mitigate and prevent erosion/sedimentation of disturbed areas during and after construction activities. The plan shall show, in detail, what and when such measures will be implemented, on both a temporary and permanent basis, including land disturbances for house construction;
- (5) A separate plan showing where a storm drainage line or any type of drainage structure discharges within 200 feet of a brook, stream, or drainage area;
- (6) Construction Management Plans designed in accordance with Section § 249-59.G.
- (7) Cost Estimate. The Applicant shall submit a detailed cost estimate for all construction within the proposed roadway layout and any public utility easements, certified by the project's Registered Professional Engineer. Said estimate shall be based on current edition of Massachusetts Highway Department's "Standard Specifications for Highways and Bridges", and shall include:
  - (a) Quantity, unit price and total amount for each construction item using MassDOT Weighted Average Unit Bid Prices, RS Means for Special Items and current prevailing wage rates;
  - (b) Total amount for cost of completion of project;
  - (c) Costs adjusted to account for municipal prevailing wages rates;
  - (d) Costs adjusted to add a 25% inflation/safety factor;
  - (e) Engineering inspection, materials testing, legal and other soft costs.

### G. Plan Processing.

- (1) Board of Health review. At the time of filing of the Definitive Plan, the Applicant shall also file a copy with the Board of Health for its review and action as provided by the Subdivision Control Law;
- (2) Public hearing. Before approval, modification and approval, or disapproval of the Definitive Plan is given, a public hearing shall be held by the Planning Board, as required by the Subdivision Control Law;
- (3) The Planning Board may determine that independent review of the plans and/or construction is required. The Board will obtain a quotation for the work required from an engineer of its choice, and the developer shall deposit funds equal to the amount of the quotation with the Treasurer of the Town of Littleton to pay for this work, in accordance with applicable General Laws, prior to the start of the review;
- (4) Performance guaranty. Before the Planning Board endorses its approval of a Definitive Plan, the developer shall agree to complete, within two (2) years and without cost to the Town, all improvements required by this regulation and shall provide security that he will do so, in accordance with provisions of the Subdivision Control Law. The Board may grant partial release from such security for partial completion of improvements, provided that the completed portion provides a reasonable system for circulation and utilities. Construction of the road shall not be deemed complete until:

**§ 249-32. Definitive Plan (continued)**

- (a) All work has been inspected by a Town approved inspector(s) or an authorized agent of the Town;
  - (b) A Certificate of Conformity, prepared and signed by a Professional Engineer as to conformance to the design standards, under Article IV of this chapter, has been submitted;
  - (c) The integrity of road pavement and Definitive Plan drainage has been verified by the Town following a full winter and spring of use (see MGL Ch. 41, § 81-U);
  - (d) Trees and other vegetation have been established and have survived one (1) year after planting prior to the release of warranty performance guaranties
  - (e) Fee to the streets has been conveyed to the Town (§ 249-20F) or other provisions for their continued maintenance have been accepted by the Board;
  - (f) The record plans have been received; and
  - (g) Copy of Certificate of Compliance from the Conservation Commission is provided, if applicable.
- (5) Approval, modification or disapproval.
- (a) Within the time period specified by the Subdivision Control Law, the Planning Board or its agent shall approve, modify and approve, or disapprove such plan;
  - (b) Criteria for action by the Board in approving or disapproving plans shall be the following:
    - [1] Completeness and technical adequacy of all submissions;
    - [2] Determination that development at this location does not entail unwarranted hazard to safety or health of future residents of the development or to others because of potential natural disasters, traffic hazard, environmental degradation or other causes;
    - [3] Conformity with the design standards of Article IV and Article V of this chapter;
    - [4] Determination, based upon the Development Impact Statement, when submitted, that the subdivision, as designed, will not cause unacceptable or substantial damage to the environment, which damage could be avoided or ameliorated through an alternative development plan;
    - [5] Consideration whether the possible benefits of open space development as provided for in the Zoning Chapter of this code has been adequately considered;
    - [6] Certification that the required approvals (if any are needed) by the Conservation Commission and/or the Zoning Board of Appeals have been obtained.
    - [7] For projects that exceed the MEPA Review Thresholds in accordance with 301 CMR 11.03: Review Thresholds the Applicant must provide proof of compliance with 301 CMR 11.00: MEPA REGULATIONS in the form of a written certificate from the Secretary of Energy & Environmental Affairs that demonstrates that the MEPA review process has been completed prior to the Board taking action on the Definitive Plan Application. For projects which do not exceed the MEPA Review Thresholds in accordance 301 CMR 11.03: Review Thresholds the Applicant or Applicant's duly

**§ 249-32. Definitive Plan (continued)**

authorized representative must submit a written certification that the project as proposed does not require MEPA Review in accordance with 301 CMR 11.03: Review Thresholds prior to the Board taking action on the Definitive Plan Application.

(c) Following endorsement of the plan by the Board, the Applicant shall provide the Board with the reproducible copy on Mylar and three (3) contact prints of the plan and a copy of final covenants and restrictions for its files, and the Board shall supply the Applicant with a completed Form D (Certificate of Approval of a Definitive Subdivision Plan). In addition, the Applicant shall provide electronic files of the submittal materials in Adobe Acrobat PDF format and CADD formats;

(d) Approval of the Definitive Plan or release of security does not constitute the laying out or acceptance by the Town of streets within a subdivision.

H. Rescission. Failure of the developer to record the plan within six (6) months of its endorsement or to comply with the construction schedule of the performance agreement shall constitute sufficient reason for the rescission of such approval, in accordance with the requirements of the Subdivision Control Law.

**§§ 249-33 through 249-38. (Reserved)**

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## **ARTICLE IV, DESIGN STANDARDS**

### **§ 249-39. General Provisions.**

The subdivision shall be designed in accordance with these standards and subdivision regulations. The subdivision shall conform to any elements in a Town development policy which the Planning Board may adopt, provided that such elements are given public hearing in the same manner as prescribed for amendments to Subdivision Regulations and made available along with copies of the Subdivision Regulations.

Streets, sidewalks, traffic signal systems, water systems, sanitary sewers, storm drain systems, public and private utilities and other infrastructure shall be designed and constructed in accordance with these subdivision regulations and the latest edition of the following: MassDOT PD&DG, MassDOT Standard Specifications, MassDOT Construction Standard Details, MUTCD, ITE, AASHTO Green Book, AASHTO Roadside Design Guide, MUTCD, ADA, MAAB, MassDOT Approved Producers & Fabricators and Standard Manufactured Materials and PROWAG, including but not limited to material specifications, workmanship, care of work, testing and certifications.

All materials proposed shall meet the minimum material specifications of the Standard Specifications and shall be listed on the "QUALIFIED CONSTRUCTION MATERIALS LIST" of products acceptable for use on MassDOT Highway Division construction contracts which can be downloaded from the MassDOT Highway Division website unless the Applicant submits a waiver request for an alternate material for approval by the Board and Town of Littleton Highway Department.

### **§§ 249-40 through 249-42. (Reserved)**

### **§ 249-43. Streets and Paths.**

#### **A. Basic design controls.**

- (1) The traveled way width, exclusive of curbing, shall be as specified in Figures 1, 2 & 3 and as follows:
  - (a) Lane, twenty-two (22) feet;
  - (b) Minor street, twenty-four (24) feet;
  - (c) Collector street, thirty (30) feet;
  - (d) Arterial street, pursuant to MassDOT PD&DG for applicable traffic volumes and design speed.
- (2) Dead-end streets (a street, extension of a street or system of streets connected to other streets only at a single point) shall not be allowed, except for lanes, unless, in the opinion of the Board, they are necessitated by topography or other local conditions and in no event shall be more than seven hundred fifty (750) feet, measured from the end of the turnaround to the side line of the first intersecting street not a part of the dead-end street system;
- (3) Dead-end streets shall be provided at the closed end with a turnaround having dimensions conforming to AASHTO Exhibit 5-8D. Only circular offset type is allowed. A "T" style hammerhead designed in accordance with the AASHTO Green Book may be permitted by the

### **§ 249-43. Streets and Paths (continued)**

Board in unusual circumstances, including topography, resources areas, existing or proposed buildings, etc. Either configuration shall be designed to accommodate the turning movements of the fire truck wheelbase dimensions specified by the Littleton Fire Department. Additional consideration shall be given for driveways and snow storage, both of which shall be included on the plans.

- (4) The traveled way shall be located as specified in Figures 1, 2 & 3;
- (5) The minimum width of street rights-of-way shall be as indicated in Figures 1, 2 & 3. Greater width shall be required by the Board when deemed necessary for present and future utilities or their appurtenances;
- (6) The minimum width of rights-of-way for off-street paths or easements shall be ten (10) feet. Greater width shall be required by the Board when deemed necessary for access or maintenance.

#### **B. Horizontal and vertical alignments.**

- (1) Horizontal alignment shall be designed in accordance with Section 4.2 of the MassDOT PD&DG. Minimum centerline alignment radii based on design speed using MassDOT PD&DG for non-superelevated roadways in Exhibit 4-9. If roads are proposed to be superelevated and a written waiver is granted by the Board allowing superelevation then the horizontal alignment shall be designed in accordance with the AASHTO Green Book using an allowable eMax of 6.0%. Roadway superelevation shall only be allowed by the Board in special circumstances when the use of non-superelevated curves is not feasible;
- (2) Profile grades of streets shall be not less than one percent (1%). Grades shall be not more than five percent (5%) for collector streets, eight percent (8%) for minor streets and ten percent (10%) for lanes;
- (3) Vertical curves are required when there is a profile grade change of more than 1.0% between two adjacent tangents. Vertical curves shall be determined considering the existing topography, safety, and the abutting properties. The evaluation shall establish the critical abutting locations such as buildings, driveways, existing roadways and steps. Horizontal and vertical curves shall be designed concurrently to obtain safety, uniform speed, pleasing appearance and efficient traffic operations. Vertical curves shall be designed in accordance with Section 4.3.3 Vertical Curves and 4.4 Combination of Horizontal and Vertical Alignments of the MassDOT PD&DG and with the AASHTO Green Book;

§ 249-43. Streets and Paths (continued)

**\*Table § 249-43.1  
Design Controls for Crest Vertical Curves Based on Stopping Sight Distance**

Design Speed (MPH)	Stopping Sight Distance, Req'd (ft)	Rate of Vertical Curvature, K <sup>a</sup>	
		Calculated	Design
15	80	3.0	3
20	115	6.1	7
25	155	11.1	12
30	200	18.5	19
35	250	29.0	29
40	305	43.1	44

<sup>a</sup>Rate of vertical curvature, K, is the length of curve, per percent algebraic difference in intersecting grades (A),  $K=L/A$

\* This table is excerpted from the 2011 AASHTO Green Book and has been provided for informational purposes only. Use the latest edition of the AASHTO Green Book for all design.

**\*Table § 249-43.2  
Design Controls for Sag Vertical Curves**

Design Speed (MPH)	Stopping Sight Distance, Req'd (ft)	Rate of Vertical Curvature, K <sup>a</sup>	
		Calculated	Design
15	80	9.4	10
20	115	16.5	17
25	155	25.5	26
30	200	36.4	37
35	250	49.0	49
40	305	63.4	64

<sup>a</sup>Rate of vertical curvature, K, is the length of curve, per percent algebraic difference in intersecting grades (A),  $K=L/A$

\* This table is excerpted from the 2011 AASHTO Green Book and has been provided for informational purposes only. Use the latest edition of the AASHTO Green Book for all design.

- (4) Minimum stopping sight distance and intersection sight distance shall be provided in accordance with the MassDOT PD&DG and the AASHTO Green book;
- (5) All horizontal curves shall be designed to accommodate the minimum sight distances required by the AASHTO Green Book "Sight Distance on Horizontal Curves" section.

## § 249-43. Streets and Paths (continued)

### C. Cross section and roadside elements.

- (1) Street cross sections shall be designed in accordance with the minimum design requirements of the Typical Sections provided in the appendices for the respective street classification. See Figures 1, 2 & 3 in the appendices. Additional considerations shall be made to site specific uses and conditions, context sensitive design (see the MassDOT PD&DG) as well as Chapter 5 - Cross Sections and Roadside Elements of the MassDOT PD&DG, AASHTO Roadside Design Guide and AASHTO Green Book;
- (2) All subdivisions with ten (10) or more lots located in an area where school busing is provided or is likely to be provided in the future must provide at least one bituminous or cement concrete paved bus waiting area for school children located at the entrances to the subdivision or in the area where the schools determine buses will stop to pick up children who live in the subdivision.

### D. Access control and intersections.

- (1) Intersection design shall be guided by Chapter 6 - Intersection Design of the MassDOT PD&DG and pertinent AASHTO and ITE guidelines;
- (2) All streets and paths in the subdivision shall be designed so that, in the opinion of the Board, they will provide safe pedestrian and vehicular travel. Due consideration shall also be given to the consequences of the street layout upon the livability, amenity and environmental impact of the subdivision;
- (3) Provision satisfactory to the Board shall be made for the proper projection of streets or paths or for access to adjoining property which is not yet subdivided;
- (4) Reserve strips prohibiting access to streets or adjoining property shall not be permitted, except where, in the opinion of the Board, such strips are in the public interest;
- (5) New street intersections shall be at least three hundred (300) feet apart;
- (6) Street configuration shall be designed, together with reserved open space, to minimize the number of lots having frontage exclusively on collector streets;
- (7) Streets shall be laid out so as to intersect as nearly as possible at right angles. No street shall intersect any other street at less than sixty (60°) degrees;
- (8) Any group of twenty (20) or more lots shall be provided with two (2) means of egress;
- (9) Property lines at street intersections shall be rounded or cut back to provide for a radius at the edge of the traveled way of not less than thirty (30) feet at intersections with a collector street and twenty (20) feet for intersections involving only minor streets or lanes;
- (10) Street intersections on all Collector and Arterial Streets, including but not limited to Great Road, King Street, Newtown Road, Shaker Lane, Goldsmith Street, Tahattawan Road, Harvard Road, Harwood Avenue, Foster Street, Taylor Street, and Whitcomb Avenue, shall be spaced not less than four hundred (400) feet apart. Refer to the MassDOT Road Inventory for the most current classification of roadways within the Town;

**§ 249-43. Streets and Paths (continued)**

- (11) Pathways connecting existing trails and paths should be preserved or created wherever reasonable, not necessarily following the streets, and should be developed in other locations where indicated by traffic, access to public or recreational facilities or other reasons;
- (12) The nearest line of any driveway shall not be closer than fifty (50) feet from the intersection of any two (2) streets;
- (13) All intersections shall be designed with the minimum sight distances as defined by the AASHTO Green Book for Stopping Sight Distance and Intersection Sight Distance;
- (14) The vertical alignment of all intersection approaches shall be designed in accordance with Table 43.3 and the associated Figure below.

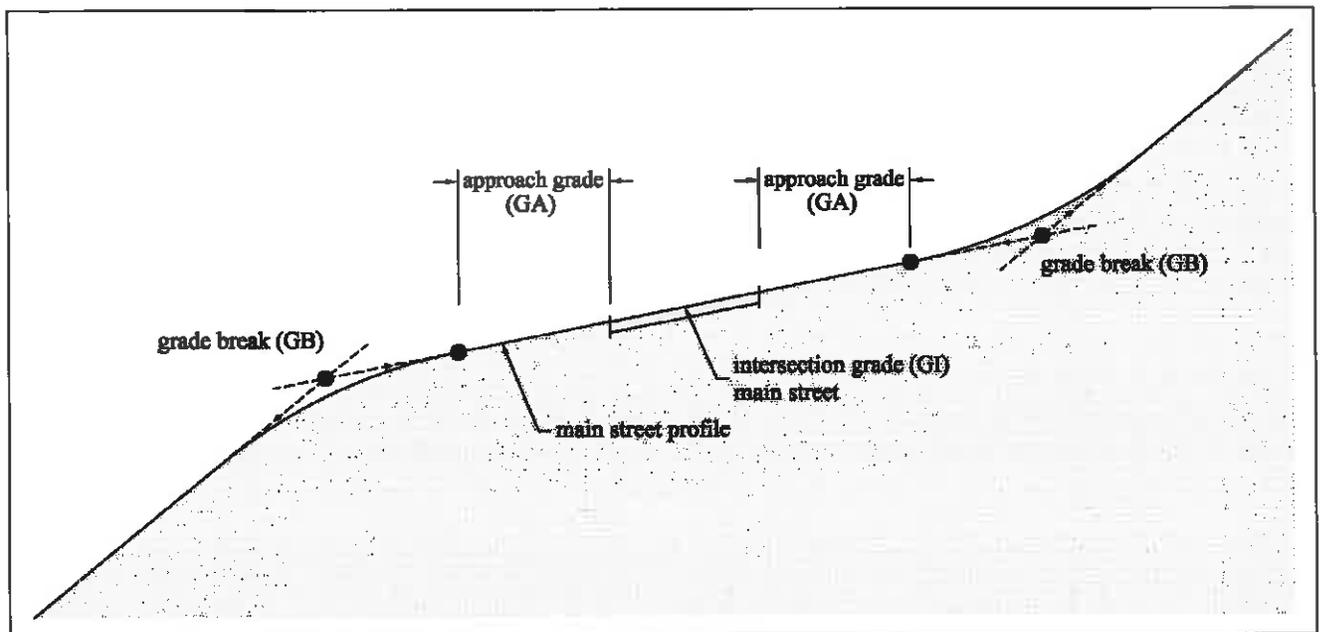
**\*Table § 249-43.3  
Vertical Alignment Design Controls at Intersections**

Design Speed (mph)	Maximum Intersection Grade (GI,%)	Maximum Grade Break (GB,%)	Minimum Length of Approach Grade (GA, feet)
15	5	6	20
20	5	5	40
25	5	4	40
30	5	3	60
35	5	2	60
40	4	2	70

\* This table has been excerpted from the 2006 MassDOT Project Development & Design Guide and has been provided for information purposes only. Use the latest edition of the MassDOT PD&DG for all design.

§ 249-43. Streets and Paths (continued)

Figure § 249-43.1  
Vertical Alignment Design Controls at Intersections



E. Landscaping and aesthetics.

- (1) Cul-de-sac center islands shall be landscaped. Eight (8) feet width of gravel is required on the perimeter of the cul-de-sac, inside the curb. Low-maintenance groundcover (juniper or similar) shall be planted with topsoil and bark mulch, with trees screening any transformers or electrical equipment. Do not obstruct access;
- (2) Maintenance of cul-de-sac inner island shall be the responsibility of the developer, its successors and assigns or a homeowners association;
- (3) Street trees shall be required to be planted, at the Applicant's expense, on all streets within the tract to be subdivided. Trees shall be planted on both sides of the street and shall be spaced at intervals of forty (40) feet on center, unless waived by the Board;
- (4) Street trees shall not be permitted within twenty-five (25) feet of the curb line of the intersection of two streets;
- (5) Street tree locations shall be coordinated with all existing and proposed below grade and above grade utilities to avoid current or future conflicts and shall address tree growth and canopy sizes;
- (6) The center of trees shall be a minimum of four (4) feet from edge of pavement and curbs;
- (7) Mature existing trees shall be retained and protected whenever possible. The Applicant may be required to plant trees just where necessary, in view of existing vegetation. Before the trees are planted, a plan showing their proposed location and species shall be submitted to the Planning Board for approval. Adequate sight distances shall be provided and considered when selecting

### **§ 249-43. Streets and Paths (continued)**

and planting trees and other landscaping. Adequate clearance shall be provided from sidewalks, utilities, overhead wires, etc.;

- (8) Street trees shall be single-stemmed with a single, straight leader. All tree species must meet American Nursery and Landscape Association (ANLA, formerly American Association of Nurserymen Standards) for the types and sizes specified. These standards shall be included on the detail sheets. The species of street trees selected shall be of Zone 6 hardiness and shall be of licensed nursery stock. Existing trees may be preserved as street trees if inspected and approved by the Tree Warden. The Applicant shall seek the advice of the Shade Tree Committee for location and species of tree. Street trees shall be deciduous shade trees. No more than 35% of any one species shall be used throughout the subdivision;
- (9) The minimum size of street trees shall be three (3) inches in caliper, measured four (4) feet from the ground level, and 10 feet in height, in place. Trees to be retained shall not have grade changed over their root areas more than six (6) inches. Street trees shall be clear of stems or branches to a minimum height of six (6) feet;
- (10) The top six (6) inches of tree belt shall consist of good quality loam extending to the right-of-way, screened, raked, and rolled with lawn grass seed applied in sufficient quantity to assure adequate coverage, rolled when the loam is moist;
- (11) Street shade trees shall be on both sides of subdivision streets in the tree belt or within five (5) feet of the right-of way;
- (12) Clumping or clustering is permitted, using both sides of the sidewalk for tree planting, in order to frame or enhance a view;
- (13) All maintenance of trees outside the right-of-way shall be the responsibility of the property owner;
- (14) The developer shall install the street trees specified on the approved plans prior to the issuance of the final Certificate of Occupancy. Trees shall be guaranteed for two (2) years after acceptance of the road as a public way or, in the case of private ways, after release from subdivision control;
- (15) Planting operations and requirements for street trees shall be shown on the subdivision plans and be in accordance with the ANLA Standards for Planting;
- (16) All unpaved areas within the street layout shall be stabilized with retained vegetation, topsoil and grass, well-rooted low-growing plantings or other organic materials acceptable to the Board.

### **§§ 249-44 through 249-46. (Reserved)**

### **§ 249-47. Easements.**

- A. Utility easements for utilities across lots or centered on rear or side lot lines shall be provided where necessary and shall be at least twenty (20) feet wide.

**§ 249-47. Easements (continued)**

- B. Where a subdivision is traversed by a watercourse, drainageway, channel or stream, the Board may require that there be provided a stormwater or drainage easement with a width of twenty (20) feet or the width of the watercourse plus ten (10) feet whichever is greater, to conform substantially to the lines of such watercourse, drainageway, channel or stream and provisions for construction or other necessary purposes.
- C. When in the design of a surface water drainage system, the outlet discharges water that has been collected within the confines of the subdivision in a concentrated stream onto land of others, and this land being located beyond the external boundaries of the subdivision to within reasonable proximity of the subdivision, the Applicant shall be required to obtain an easement, suitable for recording, which would legally allow such surface drainage to flow onto or over such land of others. Proof of such easement shall be provided to the Board. The easement shall be obtained at the Applicant's expense.
- D. Slope easements shall be provided where cut or fill slopes cannot be contained within the street right-of-way.

**§§ 249-48 through 249-50. (Reserved)**

**§ 249-51. Stormwater Management.**

- A. Stormwater management shall be designed and implemented in conformance with the Stormwater Management Handbook as established by the latest Massachusetts Department of Environmental Protection, as amended except as noted otherwise below. Storm drainage, culverts and related facilities shall be designed to permit the unimpeded flow of all natural watercourses, to ensure adequate drainage of all low points along streets, to control erosion and to intercept stormwater runoff along streets at intervals reasonably related to the extent and grade of the area drained.
- B. It is the intent of these regulations that stormwater shall be recharged wherever recharge is environmentally preferable to discharging to surface water and feasible from an engineering standpoint. If discharge to surface water is used, the developer will be required to demonstrate that one of these conditions is not met. It is recommended that the developer consult with the Planning Board and with the Littleton Water Department before designing a surface discharge system.
- C. All detention or retention structures shall be designed on the basis of the 100-year frequency storm as defined by SCS TR55. Culverts shall be designed on the basis of the 50-year frequency storm as defined by SCS TR55. Storm sewers shall be designed on the basis of the 10-year frequency storm as defined by SCS TR55.
- D. A catch-basin-to-manhole system of drainage is required with catch basins located on both sides of the roadway at all low points, sags and near the upstream corners of the roadway at intersecting streets. Additional manholes shall be installed at all changes in pipe slope and alignment. Stormwater runoff in street gutters shall not be permitted to flow upon the surface for a distance longer than 300 feet before it enters the underground catch-basin-to-manhole system. In no instances shall catch basins be located along a driveway or sidewalk ramp cut. Catch basins shall not be directly connected to one another but shall rather be manifolded into drain manholes. Roads shall be graded so that surface water does not cross the roadway. An inlet analysis shall be provided

## **§ 249-51. Stormwater Management (continued)**

demonstrating that gutterline spreads at all inlets meet the requirements of the MassDOT PD&DG. In no case shall the gutterline spread exceed half of the travel lane.

- E. Grading and drainage system design shall protect adjacent properties, drainage facilities and public ways from adverse effects, or, where that is infeasible, the subdivider shall obtain necessary easements and rights, prior to submittal of the Definitive Plan, and the plan shall show necessary off-site improvements.
- F. Runoff calculations shall be performed in accordance with SCS TR55 or TR20, using SCS Type III rainfall distribution, unless prior approval for deviations from these procedures has been obtained from the Planning Board. Such approval will be granted if the engineer satisfies the Board that the nature of the subdivision makes the SCS methods impractical and that the alternate method is of equal or greater reliability. Peak runoff rates shall be estimated for every subcatchment, reach and detention pond provided for the 2-year, 10-year, 25-year, 50-year and 100-year frequency storms. The drainage system shall be designed such that there is no increase in the peak rates and total volume of runoff from any of the watershed areas at the discharge point(s) from the site for any of the modeled storms. At drainage discharge points, provision shall be made for velocity reduction using appropriate technologies so as to prevent erosion at the point of discharge and down gradient.
- G. All drainage calculations shall be performed in accordance with Chapter 8 - Drainage and Erosion Control of the MassDOT PD&DG. Drain pipes shall have a minimum inside diameter of twelve (12) inches and shall be constructed of reinforced concrete pipe or ductile iron pipe. In general, pipes shall be designed to flow full with the hydraulic gradient at the crown and minimum pipe velocities of 2 ft/s and maximum velocities of 9 ft/s. A hydraulic grade line analysis shall be performed and provided to the board for review. The analysis shall include a plan of the watershed drainage areas with each area labeled to include number, area, runoff curve number (CN) and time of concentration. In addition, discharge points, topography, existing streams, water bodies and detention basins shall be identified on the plan.
- H. At detention basins and retention basins, the maintenance berm shall be designed in accordance with the Massachusetts Stormwater Handbook, latest edition. The maintenance berm shall be flat and at least fifteen (15) feet in width. Detention basins and retention basins shall be designed to control the 100-year frequency storm event and shall comply with the requirements established by the Massachusetts Department of Environmental Protection, as amended. The pipe inlets discharging into the basin shall be at or above the 25-year storm event ponding elevation. Detention basins constructed by berming shall be designed and constructed as a dam. Banks shall be stabilized to prevent seepage. Detention basins shall be designed so that the maximum depth, including freeboard shall not exceed eight (8) feet. A minimum thirty (30) foot setback as measured from the top of the inside slope to all property lines shall be required.
- I. In situations where development interrupts existing stormwater runoff of a drainage course, the site drainage shall be designed to accommodate the flows and volumes from these sources. In the case of interrupted streams, the site design shall incorporate provisions to reroute flow around the development and back to the existing stream bed prior to flows leaving the property.
- J. Street drainage shall not be channeled into a wetland or water body without first being treated by one or more treatment Best Management Practices (BMPs).

**§ 249-52. Erosion and Sediment Control.**

- A. In order to reduce erosion accompanying the installation of ways, utilities and drainage systems, a sediment control plan shall be prepared and implemented. The plan shall comply with the requirements of Chapter 8 - Drainage and Erosion Control of the MassDOT PD&DG and the National Pollution Discharge Elimination System (NPDES) Construction General Permit.
- B. Land shall be developed in increments of workable size which can be completed during a single construction season. Erosion and sediment control measures shall be coordinated with the sequence of grading, development and construction operations. Control measures such as hydroseeding, berms, interceptor ditches, mulching, temporary sodding, terraces, and sediment traps shall be put into effect prior to the commencement of each increment of the development/construction process.
- C. Vegetative cover and runoff characteristics shall be maintained as close as possible to conditions before development by reducing cut and fill and other considerations.
- D. Water resources shall be protected, including but not limited to floodplains, wetlands, aquifer recharge areas, and Town well fields.
- E. Sediment basins (debris basins, desilting basins, or silt traps) shall be installed in conjunction with the initial grading operations and maintained through the development process to remove sediment from runoff waters draining from land undergoing development.
- F. A note on the Erosion Prevention and Sedimentation Control Plan shall state that the Applicant is required to clean up any sand, dirt, or debris which erodes from the subdivision onto any public street or private property, and to remove silt or debris that enters any existing drainage system including catch basin sumps, pipelines, manholes and ditches within 24-hours of being noted by the Town.
- G. Hay bales or Board approved equivalent must be used around the catch basins on the proposed streets to protect them from the eroding soils and provide a check dam to slow runoff during construction.

**§§ 249-53 through 249-54. (Reserved)**

**§ 249-55. Water Supply and Sewage Disposal.**

- A. Provisions shall be made for water supply for domestic use and sewage disposal for each lot and for fire protection. Whenever feasible, the water supply shall be from a public water system, in which event the system design shall be satisfactory to the Water Department, evidenced by certification from the Water Department that they approve the design and will permit connection.
- B. Where connection to the public water supply system is not feasible, a subdivision plan shall be approved only upon presentation of evidence satisfactory to the Board, that adequate and suitable groundwater is available and that satisfactory provisions for firefighting acceptable to the Fire Department have been provided.

**§§ 249-56 through 249-58. (Reserved)**

## **§ 249-59. Other Requirements.**

- A. **Underground wiring.** All wiring, appurtenances of electric power, telephone, cable and fire alarm systems, and other utilities shall be placed underground within the limits of the street right-of-way, except where such underground installation would, in the judgment of the Planning Board, cause undue hardship by reason of topography, subsoil conditions or other site peculiarities or by reason of the existing development pattern.
- B. **Other provisions.** The developer shall make provisions for the installation of their cables or pipes, during the construction of the roadway by all public utilities (including but not limited to gas, telephone and cable television) serving the Town, unless he has received from the utility a signed statement that it does not wish to serve the subdivision and furnished a copy of same to the Board. Notwithstanding such a statement, the developer shall install conduit for future use for cable television.
- C. **Written approvals.** No Definitive Plan will be approved unless the developer submits written certification of approval of the design by all utilities which are to provide services within the subdivision.
- D. **Open spaces.** Before approval of a plan, the Planning Board may require that an area be reserved for a possible park or parks and, by appropriate endorsement on the plan, require that no building be erected upon such reserved area without the Board's approval for a period of three (3) years. Such reservation shall be made where particular natural features, abutting public land or the potential neighborhood need for recreation space make later public acquisition appear desirable.
- E. **Protection of natural features.** Due regard shall be shown for all natural features, such as large trees, watercourses, scenic points, historic spots, existing trails, and similar community assets, which, if preserved, will add attractiveness and value to the subdivision.
- F. **Emergency access roads.** Emergency access roads shall have a minimum twenty (20) foot right-of-way, a minimum ten (10) foot wide paved surface, three (3) foot soft/gravel shoulders, and posts or gates installed at all entrances. Gates must be secured with a Fire Department approved locking system. Emergency access ways do not provide frontage.
- G. **Construction Management Plans.** Construction management plans shall ensure and protect the safety of both the public and workers throughout construction. The construction management plans shall include traffic management plans, proposed truck routes and proposed hours of construction operations.
  - (1) **Traffic Management Plans** shall be designed in accordance with MUTCD. The plans shall show all construction entrances, advanced construction signage, typical details for proposed lane shifts/closures in accordance with MUTCD and state and local regulation. A more detailed plan showing lane shifts or closures may be required if deemed necessary by the board. If detours are required, all detour routes and associated signage shall be shown in accordance with MUTCD and are subject to approval by the Fire Department and Police Department.
  - (2) The truck route provided shall show the proposed truck route from the nearest freeway access to all proposed construction entrances. Truck routes shall minimize impacts to local roads, schools, parks, residents and abutters.

**§ 249-59. Other Requirements (continued)**

- (3) Proposed hours of construction operations must be submitted to the board for approval. All hours of construction operations must be in accordance with all state and local regulations.

**§§ 249-60 through 249-65. (Reserved)**

## **ARTICLE V, REQUIRED IMPROVEMENTS**

Improvements listed in Article V shall be constructed in accordance with these regulations, MassDOT Standard Specifications, MassDOT Construction Details, OSHA, MUTCD, AASHTO Roadside Design Guide, AASHTO Green Book and shall be consistent with all applicable local codes and ordinances, standards of practice and shall be made by the Applicant without cost to the Town.

### **§ 249-66. Preparation and Surfacing of Roadway.**

- A. Stumps, brush, roots, boulders, trees and like material shall be removed as necessary to provide for paving and utilities, but, wherever feasible, existing vegetation shall be protected.
- B. All materials shall be removed from an area ten (10) feet wider (five (5) feet on each side) than the final width, for shoulders, and to at least the bottom of subgrade. Peat, silt, loam or similar yielding materials shall be removed to a firm foundation for the full width of the right-of-way and replaced with gravel borrow meeting MassDOT Standard Specification M1.03.0.
- C. No loam suitable for reuse shall be removed from the subdivision unless adequate loam will remain or is otherwise assured to provide all disturbed areas within the subdivision with a loam depth of at least six (6) inches and unless there is also assurance that all streets from which loam is being removed will be brought to subgrade with approved foundation materials within six (6) months.
- D. Traveled ways and shoulders shall be provided with a foundation consisting of four (4) inches compacted thickness of dense graded crushed stone over at least eight (8) inches compacted thickness of gravel borrow meeting MassDOT Standard Specification M1.03.0, as specified in Figures 1, 2 & 3. The material shall be thoroughly watered and rolled true to line and grade to conform to the Typical Street Cross Section and the street profiles. Any depressions that occur, either during or after rolling, must be filled with additional gravel and rolled until the surface is true and even. Binder course shall be placed immediately upon acceptance of the sub-base to minimize erosion.
- E. No slopes resulting from grading of streets shall exceed one (1) foot vertical to three (3) feet horizontal in fill, one (1) foot vertical to four (4) feet horizontal in cut, or one (1) foot to three-fourths (3/4) foot in ledge. Slope easements or retaining walls shall be employed where slopes cannot be contained within street side lines. Land between the outside of the layout and the street pavement, and driveway entrances, shall be so graded as to prevent surface water on the street from draining onto private land, except at designated locations in accordance with the approved drainage system. Retaining walls shall be located completely outside of the Town Right-of-Way.
- F. The pavement of roadways shall be as specified in Figures 1, 2 & 3. The depths indicated shall be as measured after compaction. The surface course shall not be applied until the roadway has been subjected to construction or vehicular traffic for a duration of time specified by the Planning Board. The Board may waive the requirement for pavement on lanes where fee to the street is to remain private (see § 249-20F) and an alternative all-weather surface is provided (layered oil surface or selected graded gravel aggregate) and provided the developer executes a covenant stating that the Town will not be petitioned to accept the road as a Town way until it has first been constructed in accordance with the approved plan and these regulations. The Board may require pavement design be performed in accordance with Chapter 9 - Pavement Design of the MassDOT PD&DG.

**§ 249-66. Preparation and Surfacing of Roadway (continued)**

- G. When existing pavement and/or sub-base material is proposed to be left in place as proposed pavement and/or sub-base, the applicant shall perform pavement cores and/or soil borings on the existing materials to remain. Materials from pavement cores shall be tested to confirm that the existing pavement material to remain in place meets the requirements as specified in these regulations for depth, type and quality. Materials from soil borings shall be tested to confirm the sub-base material to remain conforms to the MassDOT Standard Specification M1.03.0 for Gravel Borrow to the depth required in these regulations. All pavement cores, soiling borings and testing shall be in accordance with MassDOT Standard Specification Section 190. Certified test results must be provided to the Board. Final approval to reuse existing pavement and/or sub-base material must be obtained by the applicant from the board.
- H. If all of the houses in the subdivision are not completed within two years from the time that the base course of pavement is installed, the developer shall reclaim and reinstall the 2 inches of base course prior to installing the top course of pavement if the Planning Board deems that is necessary.
- I. Construction Staking: Developers shall employ, at their own expense, a Professional Engineer or a Professional Land Surveyor to set all lines and grades in a manner satisfactory to the Highway Department, Town or the Town's representative and in accordance with the provisions of the MassDOT Standard Specifications.
- J. All materials, workmanship, testing and construction methods used for roadway excavation and embankments shall conform to the MassDOT Standard Specifications.
- K. All driveway openings in all areas where granite curb has been used, i.e., around all cul-de-sacs, shall be completed during the subdivision construction. Granite curb corners Type A shall be used at all driveway openings.
- L. The water and sanitary sewer systems shall be tested and approved by the department or agency having jurisdiction prior to installation of base course(s) and pavement.
- M. All utility connections shall be installed to the right-of-way line, and marked with an iron pin or surveyed so as to be easily located in the future.

**§§ 249-67 through 249-72. (Reserved)**

**§ 249-73. Curbs.**

All curbing shall be MassDOT Granite Curb Type VA-4 or as approved by the Board and shall be installed on both sides of the street and for the total length of the street and on other streets for the full radius plus at least three (3) feet on each end of all street intersections. MassDOT Sloped Granite Edging Type SA shall be used for the inner and outer circle of cul-de-sacs and for median islands when median islands have been approved by the Board.

**§§ 249-74 through 249-76. (Reserved)**

**§ 249-77. Paths.**

- A. Where provided, footpaths shall meet American Disabilities Act (ADA) and Massachusetts Architectural Access Board (MAAB) requirements. Footpaths outside street rights-of-way shall be five (5) feet in width exclusive of the curb clear width requirements and shall have a maximum cross slope of 1.5% and a longitudinal slope of 4.5% to reflect construction tolerances. Bicycle trails and bridle paths shall be six (6) feet in width.
- B. Surfacing shall continue the material of connecting paths or, where such do not exist or are unsatisfactory to the Board, shall be either a two-course pavement surface consisting of a one-and-one-half-inch hot-mix asphalt surface course (Type B) over a one-and-one-half-inch hot-mix asphalt binder course (Type A), a one-inch peastone or washed stone surface or other material specifically approved by the Board.

**§§ 249-78 through 249-80. (Reserved)**

**§ 249-81. Sidewalks.**

- A. There shall be sidewalks five (5) feet in width on both sides of all collector streets and on one (1) side of all minor streets. As indicated in Figures 1, 2 & 3, cement concrete is required for all sidewalks unless a written waiver is obtained by the Applicant. The sidewalk shall slope toward the street with a slope no greater than 1.5%. Concrete shall be placed to a depth of at least four (4) inches. At driveways, concrete shall be placed to a depth of at least six (6) inches. All work and materials shall conform to the MassDOT Standard Specification Section 701.
- B. Preparation of the base shall be accompanied by removing material to a depth of twelve (12) inches below finished, designed grade. Any soft spots of undesirable material shall be removed and replaced by gravel borrow Type B. The excavated area shall be filled with eight (8) inches of gravel, which shall be rolled.
- C. Surfacing shall continue the material of connecting sidewalks or, where they do not exist, shall be either a four-inch (six-inch at driveway entrances) of cement concrete or other material specifically approved by the Board.
- D. Where provided, sidewalks shall meet American Disabilities Act (ADA) and Massachusetts Architectural Access Board (MAAB) requirements. Sidewalks shall be five (5) feet in width exclusive of the curb clear width requirements and shall have a maximum cross slope of 1.5% and a longitudinal slope of 4.5% to reflect construction tolerances. In addition, ramps shall have a maximum cross slope of 1.5% and a longitudinal slope of 7.5% to reflect construction tolerances.

**§§ 249-82 through 249-84. (Reserved)**

**§ 249-85. Utilities.**

- A. Water system.
  - (1) A complete water system shall be installed, including mains, gates, valves and hydrants, consistent with the specifications and pipe size requirements of the Littleton Water Department,

**§ 249-85. Utilities (continued)**

as shown on the street plans and as approved by the Planning Board. Hydrants shall be provided and placed at intervals of not more than 500 feet along each street and painted with luminous paint as specified by the Littleton Fire Department. All locations must be shown on the Definitive Plan and must be approved by the Fire Department.

- (2) Before making connection to the municipal water system, the developer shall agree to comply with all appropriate regulations of the Water Department.

B. Storm drainage system. A complete storm drainage system shall be installed as shown on the street plans and profiles and as follows:

- (1) Piping shall be Class III, Class IV, or Class V reinforced concrete pipe, per MassDOT PD&DG Exhibit 8-48, except in locations with less than 18" of cover. All piping with less than 18" of cover shall be ductile iron Class 52 or thicker at these locations;

**Table § 249-85  
Recommended Cover (Reinforced Concrete Pipe)**

Diameter Inches	III Modified Min-Max	Extra Strength Min-Max	Class III Min-Max	Class IV Min-Max	Class V Min-Max
6		24 in. to 23 ft			
8		24 in. to 17 ft			
10		24 in. to 13 ft			
12	36 in. to 12 ft	24 in. to 13 ft	18 in. to 12 ft	12 in to 20 ft	6 in. to 35 ft
15	37 in. to 12 ft	24 in. to 13 ft	18 in. to 12 ft	12 in to 20 ft	6 in. to 35 ft
18	38 in. to 12 ft	24 in. to 13 ft	18 in. to 12 ft	12 in to 20 ft	6 in. to 35 ft
21			18 in. to 12 ft	12 in to 20 ft	6 in. to 35 ft
24			18 in. to 12 ft	12 in to 20 ft	6 in. to 35 ft
27			18 in. to 12 ft	12 in to 20 ft	6 in. to 35 ft
30			18 in. to 12 ft	12 in to 20 ft	6 in. to 35 ft
36			18 in. to 12 ft	12 in to 20 ft	6 in. to 35 ft
42			18 in. to 12 ft	12 in to 20 ft	6 in. to 35 ft
48			18 in. to 12 ft	12 in to 20 ft	6 in. to 35 ft
60			18 in. to 12 ft	12 in to 20 ft	6 in. to 35 ft
72			18 in. to 12 ft	12 in to 20 ft	6 in. to 35 ft

- 1. *Maximum* cover shown is measured from *finish grade*.
- 2. *Minimum* cover shown is measured from subgrade for construction traffic.
- 3. Heavy weight cast iron pipe is required for subgrade cover less than 6 inches for laterals. For trunk line, use Class V reinforced concrete pipe.

Source: *Hydraulics Manual*, Oregon Department of Transportation

- (2) Manholes 9' or less in depth shall meet MassDOT Standard Construction Detail E 202.4.0 Precast Concrete Manholes 9' or Less in Depth. All catch basins shall meet MassDOT Standard Construction Detail E 201.4.0 Precast Concrete Catch Basin;

**§ 249-85. Utilities (continued)**

- (3) Open brooks or tributary ditches which are to be altered shall be shaped to a cross section and gradient and provided with stream bottom hardening, all acceptable to the Board;
  - (4) Sub-drains shall be provided in areas of cut or where deemed necessary to control the flow of groundwater beneath the proposed roadway and shall be constructed in accordance with the Typical Details provided in the appendices.
- C. Underground installation. All utilities shall be installed underground. Depth of cover shall be as indicated in Figure 4.
- D. Streetlights shall not be required in new residential subdivisions as a general rule; however, the Board reserves the right to require developers to install streetlights at intersections and/or other locations which in the opinion of the Board, with the advice of the Traffic Safety Officer, pose a danger to the public. Privately-owned, pole-mounted residential-style light fixtures, however, shall be required to be installed within ten (10) feet of the property line, and adjacent to the driveway, for each lot within the development. Streetlights shall also be manufactured and installed in conformance with electric utility standards and shall contain full cutoffs (hoods covering the sides of the lamps) to avoid any direct lighting off of streets and sidewalks.
- E. Separation of water mains. All water mains shall be separated from all sanitary sewers, storm drainage systems and other sources of contamination. The water main separation shall meet the following requirements:
- (1) The following factors shall be considered in providing adequate separation:
    - (a) materials and type of joints for water and sewer pipes;
    - (b) soil conditions;
    - (c) service and branch connections into the water main and sewer line;
    - (d) compensating variations in the horizontal and vertical separations;
    - (e) space for repair and alterations of water and sewer pipes; and
    - (f) off-setting of pipes around manholes.
  - (2) Parallel Installation. Water mains shall be laid at least 10 feet horizontally from any existing or proposed manhole or sanitary sewer. This distance can be reduced to 5 feet for storm drain. All parallel installations shall meet this requirement unless the Applicant submits a waiver request for an alternate layout for approval by the Board and Town of Littleton Water Department. Any approved alternate layout shall provide a concrete encasement of the sanitary sewer or storm drain per Figure 4, Typical Concrete Encasement of Sanitary Sewers or Storm Drains.
  - (3) Crossings. Water mains crossing sewers shall be laid to provide a minimum vertical distance of 18 inches between the outside of the water main and the outside of the sanitary sewer or storm drain. This shall be the case whether the water main is either above or below the sanitary sewer or storm drain. At crossings, one full length of water pipe shall be located so both joints will be as far from the sanitary sewer or storm drain as possible. If the sanitary sewer or storm drain is over the water main, the sanitary sewer or storm drain pipe shall be encased in concrete per Figure 4, Typical Concrete Encasement of Sanitary Sewers or Storm Drains.

**§ 249-85. Utilities (continued)**

- (4) Force Mains. Force mains shall meet the requirements above for all Parallel Installations and Crossings. Any concrete encasements shall meet the requirements of Figure 4, Typical Concrete Encasement of Sanitary Sewers or Storm Drains.
- (5) Septic Tanks and Leaching Fields. Water mains shall be placed no closer than 10 feet horizontal distance from any septic tank or leaching field.
- (6) Other Underground Storage Tanks. Distribution lines shall be placed no closer than 50 feet horizontal distance from any underground storage tank.

**§§ 249-86 through § 249-88. (Reserved)**

**§ 249-89. Other Requirements.**

**A. Monuments.**

- (1) Permanent monuments shall be installed at all street intersections, at all points of change in direction or curvature of streets, at the center point of cul-de-sac streets, at all lot and easement corners along the right-of-way and at other points where, in the opinion of the Board, permanent monuments are necessary, but in any event not spaced further than five hundred (500) feet apart. Permanent monuments shall be of granite, not less than forty-eight (48) inches long and six (6) inches square, with dressed top and a one-half-inch drill hole in the center and shall be set to finished grade. Semi-permanent monuments shall be set at all other lot and easement corners within the subdivision. Monuments shall be set under the supervision of a Professional Land Surveyor;
- (2) No permanent monuments shall be installed until all construction which would destroy or disturb their location is completed.

**B. Signage.** Street signs of a design and material acceptable to the Board shall be installed for each street at each intersection. All applicable street, warning and regulatory signs shall be furnished and installed in accordance with the latest edition of MUTCD and as required by the Board. All signs shall be installed prior to the release of any lots. Street signs shall be erected at all intersections and shall identify the names of all intersecting streets. These signs shall be of the same type now existing in the Town and shall meet the specifications of the Littleton Highway Department. Street sign posts shall be seated in concrete per MassDOT Standard Specification Section 840. Street signs at intersections shall be erected prior to the construction of the building structure on the street.

**C. Retaining walls** shall be constructed in accordance with MassDOT Construction Standard E 302.2.0 when approved by the Board or designed in accordance to specific site conditions and stamped by a Professional Engineer. All exposed retaining wall finishes shall be approved by the Board. Fall prevention measures shall be incorporated into the retaining wall design per applicable regulations.

**D. Development Signage.** The Applicant shall erect a sign at all entrances of the subdivision containing following:

- (1) Development Name;
- (2) Applicant Name;

**§ 249-89. Other Requirements (continued)**

- (3) Applicant Address;
  - (4) Emergency contact Information (including name and current phone number).
- E. Fee to streets. It is the preference of the Town that the new subdivision roads become public ways, except where the public interest is served by retention of private ways and means of adequately providing for such retention have been agreed upon.
- F. As-built plans.
- (1) Upon completion of construction and before release of the performance guaranty, the subdivider shall have prepared and submit record plans at a scale of 1"=20', which is preferred, or 1"=40'. The plans shall indicate the actual location of the following:
    - (a) Street lines;
    - (b) The edge of the traveled way and path locations;
    - (c) All permanent monuments;
    - (d) The location and inverts of utilities and drainage installed by the developer or at existing tie-ins.
  - (2) The accuracy of such record plan shall be certified by a Professional Engineer, who shall also certify that all construction was executed in conformance with the Subdivision Regulations and with all requirements agreed upon as a condition to plan approval. The certification shall indicate that the constructed project meets the requirements of the design and construction standards of the regulations for complete release and acceptance;
  - (3) Applicant shall submit certification by a Professional Land Surveyor that all lot corners have been marked on the ground with permanent monuments as required herein;
  - (4) If proposed streets are intended for acceptance as public ways, a boundary description and a plan suitable for recording at the registry of deeds showing the location of the street layout lines, monuments and any easements to be conveyed, or already conveyed, to the town shall be provided to the Board.
- G. The Planning Board may determine that independent review of the plans and/or construction is required. The Board will obtain a quotation for the work required from an engineer of its choice, and the developer shall deposit funds equal to the amount of the quotation with the Treasurer of the Town of Littleton to pay for this work, in accordance with applicable General Laws, prior to the start of the review.

**§ 249-89. Other Requirements (continued)**

H. **Monitoring and Inspections.** The Planning Board may choose to require (1) independent inspections of the ongoing work, (2) the Applicant to provide written certification to the Board that the work has been completed in accordance with these regulations or, at the discretion of the board (3) a combination of (1) and (2).

(1) **Inspections**

Inspection shall be made and the project shall be certified in writing to the Planning Board by the Highway Department or their authorized designee or by a Professional Engineer chosen by the Planning Board and the developer shall pay the fee in effect for such inspection services. The Applicant shall deposit funds equal to the amount of the inspection services with the Treasurer of the Town of Littleton to pay for this work, in accordance with applicable General Laws, prior to the start of the work. Municipal inspections in no way relieve the developer, contractor or project engineer of responsibility in insuring that all materials and all construction meet all standards as stated in these Rules and Regulations.

The contractor must ensure that the municipality's inspector is provided adequate notice to ensure inspection at the following points with at least a two business day notice. No further work shall be done on a project until each phase has been inspected and approved.

Inspection points shall include, at a minimum:

- (a) Underground utilities and services before the backfilling of trenches or other covering of structures;
- (b) Curbing prior to the placement of the top course of bituminous concrete surface;
- (c) Roadway upon completion of the sub-grade dense graded crushed stone and gravel borrow base course, asphalt binder course (Type A) and asphalt surface course (Type B) prior to each required construction step;
- (d) Sidewalk upon completion of the sub-grade dense graded crushed stone or gravel borrow base course and concrete sidewalk surface prior to each required construction step;
- (e) At the completion of all the improvements.

(2) **Written Certification**

Inspection shall be made and the project shall be certified in writing to the Planning Board by a Professional Engineer chosen by the Applicant, who shall certify that all work was done in accordance with the approved subdivision plans, except as noted, and shall provide a detailed list and plan of changes between the approved plan and what was built. An engineer or engineer's agent shall be on-site during the entire construction process to ensure compliance with the design and provide written certification to the Board that the engineer or engineer's agent was on-site during the entire construction process.

I. **Cleaning up.** Before sale of a lot the subdivider shall clean up any debris caused by street construction and installation of utilities.

## **§ 249-90. Additional Construction Requirements**

- A. Snow and Ice Removal - The Applicant shall be responsible for snow removal after the start of a snow and/or ice event to maintain continuous safe passage up to the time the Town accepts the road as a public way.
- B. Safe Travelway During Construction – The Applicant shall be responsible for maintaining a safe roadway during both roadway construction and lot build-out. Traffic Management Plans shall be provided by the Applicant when work will impact existing roadways or roadways open to traffic. All work performed on the new roadway and at the intersections of new and existing roadways shall be done in accordance with MUTCD.
- C. Street Trees – When trees and other plantings are proposed by the Applicant or are required by the Board, it shall be required that the Applicant complete planting before the lots are developed. If left to the end of the lot build-out, irrigation or other items may be in place, impacting the final location of the trees.
- D. Tracked Vehicles – Tracked vehicles shall not be allowed on paved surfaces at any time during construction. Damaged pavement shall be replaced before the Town accepts the roadway.
- E. Placement of Pavement - Under no circumstances shall pavement be placed between November 15th and April 15th, unless approved by the Town of Littleton Highway Department. All surface and binder courses shall be placed in accordance with MassDOT Standard Specification Section 460. All base courses shall be placed in accordance with MassDOT Standard Specification Section 420. For all pavement courses, the bituminous concrete material temperature shall be as specified in the table in Section 460.61. The present surface, including but not limited to the sub-base and all pavement courses, shall be dry and free of frost before any pavement course or tack coat is applied.
- F. Moratorium on Excavation – No excavation, trenching or other significant construction activities related to excavation or paving shall be allowed within the proposed right-of-way as indicated in the Town’s Street Opening Permit during the following times:
  - (1) November 15th to April 15<sup>th</sup>;
  - (2) Period of inclement weather, including but not limited to rain, snow and ice;
  - (3) When the temperature is below 40° Fahrenheit;
  - (4) As directed by the Highway Operations Manager.

Any violations of this requirement shall result in the contractor being required to fully bond all work in the roadway until street acceptance and for a period of no less than five years after acceptance in a maintenance agreement with the town. The bonding period shall be determined by the Board.

## **§§ 249-91 through 249-95. (Reserved)**

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## **ARTICLE VI, ADMINISTRATION**

### **§ 249-96. Schedule of Work.**

- A. The work connected with the items mentioned in Article V shall proceed in accordance with the construction and workmanship requirements of the MassDOT Standard Specifications. In general, construction shall proceed in the following order, each item to be accomplished so as not to interfere with previous work:
- (1) The roadway shall be brought to subgrade;
  - (2) Water, gas lines, cable utilities and drains shall be placed with related equipment. All service connections shall be installed to the lot lines, unless jacking across the street is feasible without breaking or weakening road pavement;
  - (3) Base gravel shall be placed;
  - (4) Surfacing shall be placed with sidewalks and curbs;
  - (5) Monuments and street signs shall be placed.
- B. The work shall proceed as above, with exceptions only by order of the Planning Board.
- C. Inspections shall be arranged for as required by the Planning Board. Relevant local officials shall be given at least forty-eight (48) hours' notice before such inspection is required. Inspection reports shall be submitted to the Planning Board on approved forms, and no inspection shall be considered complete until such report has been received and approved by the Planning Board.

### **§§ 249-97 through 249-99. (Reserved)**

### **§ 249-100. Waivers.**

- A. A subdivision approved and endorsed by the Planning Board must comply with all the rules and regulations for the subdivision of land unless a specific written waiver is granted.
- B. The Planning Board may, in special and appropriate cases, waive strict compliance with such portions of these Rules and Regulations, as provided for in MGL Chapter 41, § 81-R, where such action is in the public interest and not inconsistent with the purpose and intent of the Subdivision Control Law. Waivers are only granted for projects which provide, in the sole opinion of the Planning Board, clear and significant improvements to the quality of a project compared with a project which meets the minimum of the subdivision regulations.
- C. Limited waivers may be granted when appropriate to encourage development which is in keeping with the character of the Town of Littleton, Zoning requirements, traditional neighborhood development design, similar to that of existing historic town and village centers and outlined in the "Traditional Neighborhood Development" publication by Institute for Traffic Engineers (ITE), to encourage a permanent pool of affordable housing, or to create significantly more permanently protected open space than required by zoning.

**§ 249-100. Waivers (continued)**

- D. A request for a waiver of a requirement, rule, or regulation shall be made in writing by the Applicant, and submitted, whenever feasible, with the submission of the Preliminary Plan. If the Planning Board approves the request for a waiver, it shall endorse conditions of such waiver (if any) on the plan or set them forth in a separate instrument attached to and referenced to the plan, which shall be deemed a part of the plan. The Planning Board shall notify the Applicant in writing of its approval, disapproval, or approval with conditions.
- E. A subdivision approved and endorsed by the Planning Board must still comply with all rules and regulations for the subdivision of land, unless a specific written waiver is granted, regardless of what is shown on the endorsed plan.

**§§ 249-101 through 249-103. (Reserved)**

**§249-104. One dwelling Per Lot.**

Not more than one (1) building designed or available for dwelling purposes shall be erected or placed or converted to use as such on any lot in a subdivision or elsewhere within the Town without the consent of the Planning Board, which shall be granted only for structures in compliance with zoning restrictions and only upon the Board's finding that adequate ways and utilities servicing such site for such building have been provided in the same manner as otherwise required for lots within a subdivision.

**§§ 249-105 through 249-1072. (Reserved)**

**§ 249-108. Matters Covered by Statute.**

For matters not covered by these rules and regulations, reference is made to the Subdivision Control Law.

## **Appendix A – Figures**

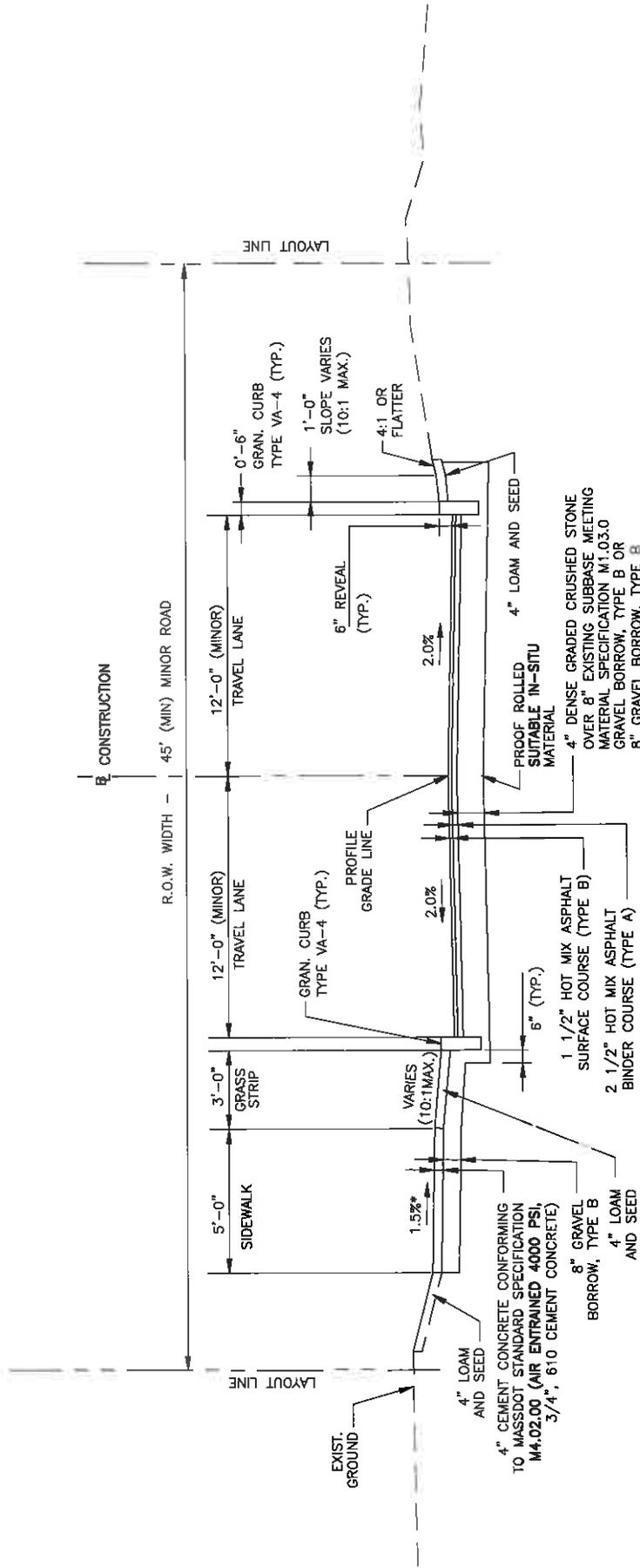




TOWN OF LITTLETON  
SUBDIVISION OF LAND REGULATIONS ARTICLE IV

FIGURE 2  
TYPICAL SECTION -  
MINOR ROADS

DATE ISSUED	NO.	DATE
REVISED		



NOTE: ALL MATERIALS SHALL MEET THE MINIMUM REQUIREMENTS OF THE LATEST MASSDOT STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES AS AMENDED.

NOT TO SCALE

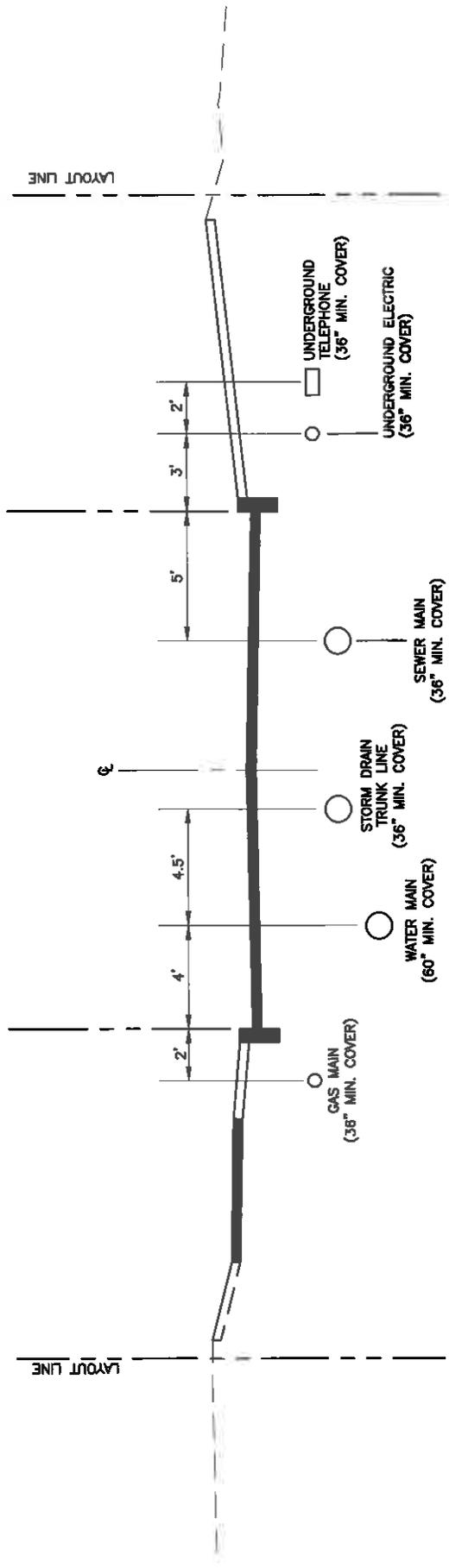




TOWN OF LITTLETON  
SUBDIVISION OF LAND REGULATIONS ARTICLE IV

**FIGURE 4**  
TYPICAL SECTION -  
ROADWAY UTILITIES

DATE ISSUED	NO.	DATE



NOTE: ALL MATERIALS SHALL MEET THE MINIMUM REQUIREMENTS OF THE LATEST MASSDOT STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES AS AMENDED.

NOT TO SCALE

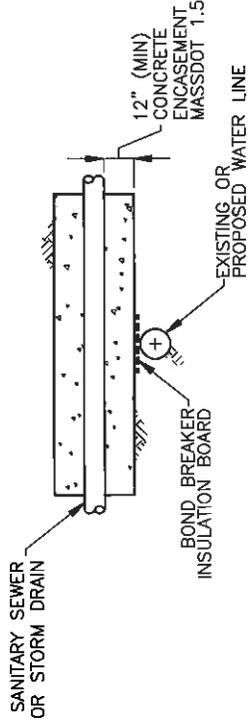


**TOWN OF LITTLETON**  
**SUBDIVISION OF LAND REGULATIONS ARTICLE IV**

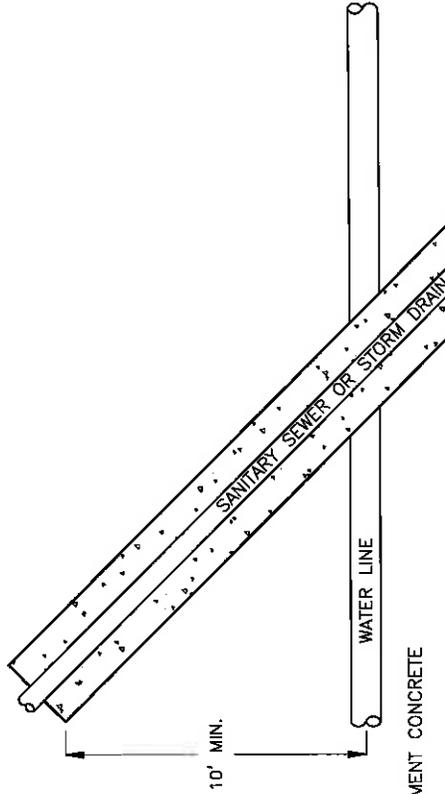
**FIGURE 5**  
**TYPICAL CONCRETE ENCASEMENT OF**  
**SANITARY SEWERS OR STORM DRAINS**

DATE RECORDED:	NO.	DATE
REVISED		

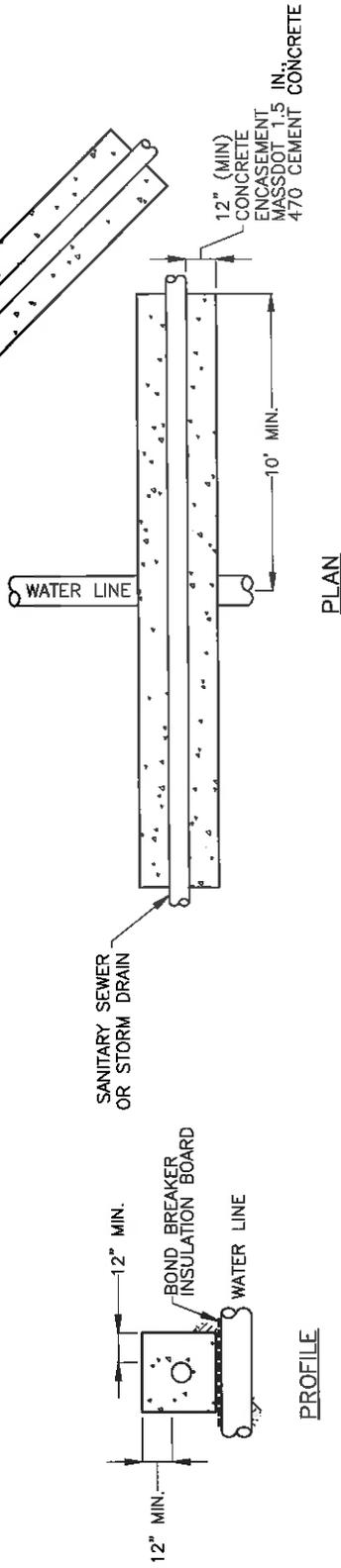
NOTE: REFER TO TOWN OF LITTLETON SUBDIVISION OF LAND REGULATIONS ARTICLE IV, SECTION §249-85.E FOR ADDITIONAL REQUIREMENTS.



PROFILE



PLAN



PROFILE

PLAN

NOT TO SCALE



## **Appendix B – Forms**

**TOWN OF LITTLETON, MA**



**FORM A: APPLICATION FOR ENDORSEMENT OF PLAN  
BELIEVED NOT TO REQUIRE APPROVAL UNDER THE  
SUBDIVISION CONTROL LAW (Ch. 41)**

Date: \_\_\_\_\_, 20\_\_

*File completed form with the Planning Board with 3 copies of the plans, plus original Mylar. File a copy of form and plan with the Town Clerk in accordance with the requirements of Section 81P*

**To the Planning Board:**

The undersigned Applicant, believing that the accompanying plan of property located in the Town of Littleton does not constitute a subdivision within the meaning of the Subdivision Control Law, herewith submits such plan for a determination and endorsement that Planning Board approval under the Subdivision Control Law is not required.

1. Location of Property:

\_\_\_\_\_  
\_\_\_\_\_

2. Name(s) and Address(es) of Applicant:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

3. Name(s) and Address(es) of Record Owner(s):

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

4. Name and Address of Engineer or Surveyor:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5. Title of Plan: \_\_\_\_\_

6. Date of Plan: \_\_\_\_\_

7. Owner's Title Reference: Deed of \_\_\_\_\_ dated \_\_\_\_\_,  
[recorded at Middlesex South Registry of Deeds in Book \_\_\_\_\_, Page \_\_\_\_\_], [filed  
at the Middlesex South Registry District of the Land Court as Document No. \_\_\_\_\_]  
and noted on Certificate of Title no. \_\_\_\_\_, in Registration Book \_\_\_\_\_,  
Page \_\_\_\_\_.

8. Zoning District: \_\_\_\_\_

**TOWN OF LITTLETON, MA**

9. Assessor's Map and Parcel Number: \_\_\_\_\_

10. The Applicant believes that the division of land shown on this plan is not a subdivision for the following reason(s):

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Signature of Applicant Date

\_\_\_\_\_  
Signature of Applicant Date

\_\_\_\_\_  
Signature of Record Owner Date  
(if other than Applicant)

\_\_\_\_\_  
Signature of Record Owner Date  
(if other than Applicant)

*All evidence to show that the plan does not require approval under the Subdivision Control Law must be filed with this application.*

Filing Fee: (\$100 plus \$100 per lot or parcel created or revised) \_\_\_\_\_.  
(For all revisions to lots and parcels as well as new ones created.)

**THE PLANNING BOARD'S ENDORSEMENT ON THIS PLAN, THAT APPROVAL UNDER THE SUBDIVISION CONTROL LAW IS NOT REQUIRED, SHALL NOT BE CONSTRUED AS THE PLANNING BOARD FINDING THAT THE LOTS CREATED BY THIS PLAN CONFORM TO THE REQUIREMENTS OF THE LITTLETON ZONING BYLAWS EXCEPT AS TO AREA AND FRONTAGE.**

Received by Town Clerk: \_\_\_\_\_ Date/Time: \_\_\_\_\_

\_\_\_\_\_

**TOWN OF LITTLETON, MA**



**FORM B:**

**APPLICATION FOR APPROVAL OF PRELIMINARY PLAN  
OF A SUBDIVISION**

Date: \_\_\_\_\_, 20\_\_

*File completed form with the Planning Board with 6 copies of the plans, plus original Mylar. File a copy of form and plan with the Town Clerk; and 1 copy with the Board of Health in accordance with the requirements of Chapter 249.*

**To the Planning Board:**

The undersigned Applicant herewith submits the accompanying Preliminary Plan of property located in the Town of Littleton for approval as a Preliminary Subdivision as allowed under the Subdivision Control Law and the Rules and Regulations governing the Subdivision of Land of the Planning Board of the Town of Littleton.

**1. Location of Property:**

---

---

**2. Name(s) and Address(es) of Applicant:**

---

---

---

**3. Name(s) and Address(es) of Record Owner(s):**

---

---

---

**4. Name and Address of Engineer or Surveyor:**

---

---

---

**5. Title of Plan:** \_\_\_\_\_

**6. Date of Plan:** \_\_\_\_\_

**7. Owner's Title Reference:** Deed of \_\_\_\_\_ dated \_\_\_\_\_,  
[recorded at Middlesex South Registry of Deeds in Book \_\_\_\_\_, Page \_\_\_\_\_], [filed  
at the Middlesex South Registry District of the Land Court as Document No. \_\_\_\_\_]  
and noted on Certificate of Title no. \_\_\_\_\_, in Registration Book \_\_\_\_\_,  
Page \_\_\_\_\_.

**TOWN OF LITTLETON, MA**

8. Zoning District: \_\_\_\_\_

9. Assessor's Map and Parcel Number: \_\_\_\_\_

10. Number of Lots on the Plan: \_\_\_\_\_

\_\_\_\_\_  
Signature of Applicant Date

\_\_\_\_\_  
Signature of Applicant Date

\_\_\_\_\_  
Signature of Record Owner Date  
(if other than Applicant)

\_\_\_\_\_  
Signature of Record Owner Date  
(if other than Applicant)

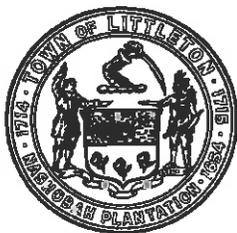
Filing Fee: (\$1,000 plus \$1.00 per linear foot of road.) \_\_\_\_\_

Received by Town Clerk: Date/Time: \_\_\_\_\_

\_\_\_\_\_

Form Updated October 2011

**TOWN OF LITTLETON, MA**



**FORM C:**

**APPLICATION FOR APPROVAL OF DEFINITIVE PLAN**

Date: \_\_\_\_\_, 20\_\_

*File 3 completed forms with the Planning Board with 12 copies of the plans, plus original Mylar. File a copy of form and plan with the Town Clerk in accordance with the requirements of Chapter 249.*

**To the Planning Board:**

The undersigned Applicant herewith submits the accompanying Definitive Plan of property located in the Town of Littleton for approval as a Subdivision as under the Subdivision Control Law and the Subdivision of Land Regulations of the Planning Board of the Town of Littleton.

**1. Location of Property:**

\_\_\_\_\_

**2. Name(s) and Address(es) of Applicant:**

\_\_\_\_\_  
\_\_\_\_\_

**3. Name(s) and Address(es) of Record Owner(s):**

\_\_\_\_\_  
\_\_\_\_\_

**4. Name and Address of Engineer or Surveyor:**

\_\_\_\_\_  
\_\_\_\_\_

**5. Title of Plan:** \_\_\_\_\_

**6. Date of Plan:** \_\_\_\_\_

**7. Owner's Title Reference:** Deed of \_\_\_\_\_ dated \_\_\_\_\_,  
[recorded at Middlesex South Registry of Deeds in Book \_\_\_\_\_, Page \_\_\_\_\_], [filed  
at the Middlesex South Registry District of the Land Court as Document No. \_\_\_\_\_]  
and noted on Certificate of Title no. \_\_\_\_\_, in Registration Book \_\_\_\_\_,  
Page \_\_\_\_\_.

**8. Zoning District:** \_\_\_\_\_

**TOWN OF LITTLETON, MA**

9. Assessor's Map and Parcel Number: \_\_\_\_\_

10. Number of Lots on the Plan: \_\_\_\_\_

11. Said plan  has or  has not evolved from a preliminary plan submitted to the Board on \_\_\_\_\_

\_\_\_\_\_  
Signature of Applicant Date

\_\_\_\_\_  
Signature of Applicant Date

\_\_\_\_\_  
Signature of Record Owner Date  
(if other than Applicant)

\_\_\_\_\_  
Signature of Record Owner Date  
(if other than Applicant)

Filing Fee: (\$2,000 plus \$5.00 per linear foot of road.) \_\_\_\_\_.

Received by Town Clerk: Date/Time: \_\_\_\_\_

\_\_\_\_\_

Form Updated October 2011

## **Appendix C – Miscellaneous**



**PLANNING BOARD**  
P.O. BOX 1305  
Littleton Massachusetts 01460

**SUBDIVISIONS - PROCEDURES & TIME-LINE**

**I. PRELIMINARY PLANS (optional for residential, req'd for non-residential)**

1. Date of Submission to Board ..... \_\_\_\_\_  
Field trip to site - ?

1a. Planning Board sends copies to Board of Health & Conservation Commission **within 45 days**

2. Decision of Planning Board due by..... \_\_\_\_\_  
(with written notice to applicant and Town Clerk)

\*\*\*\*\*

**II. DEFINITIVE PLANS**

1. Date of Submission to Board (1)..... \_\_\_\_\_

2. Date Applicant Submits copies to Board of Health..... \_\_\_\_\_  
**within 45 days**

3. Bd of Health MUST report to Planning Board by ..... \_\_\_\_\_

4. Date of: First Publication, Posting in Municipal Bldg & Post Office Mailing Notices to Parties in Interest..... \_\_\_\_\_  
**2 Successive weeks**

5. Date of Second Publication..... \_\_\_\_\_  
**not less than 14 days**

6. **PUBLIC HEARING**..... \_\_\_\_\_  
**Within 90 Days**

7. VOTE By Planning Board ..... \_\_\_\_\_  
and Notice to Town Clerk & Applicant  
**After 21 Days**

8. Endorsement by Planning Board..... \_\_\_\_\_

**II. DEFINITIVE PLANS**

1. Date of Submission to Board (1)..... \_\_\_\_\_

2. Date Applicant Submits  
copies to Board of Health..... \_\_\_\_\_

within 45 days

3. Bd of Health MUST report to  
Planning Board by ..... \_\_\_\_\_

4. Date of: First Publication,  
Posting in Municipal Bldg &  
Post Office  
Mailing Notices to Parties  
in Interest..... \_\_\_\_\_

2 Successive  
weeks

5. Date of Second Publication..... \_\_\_\_\_

not less  
than  
14 days

6. PUBLIC HEARING..... \_\_\_\_\_

Within 90 Days

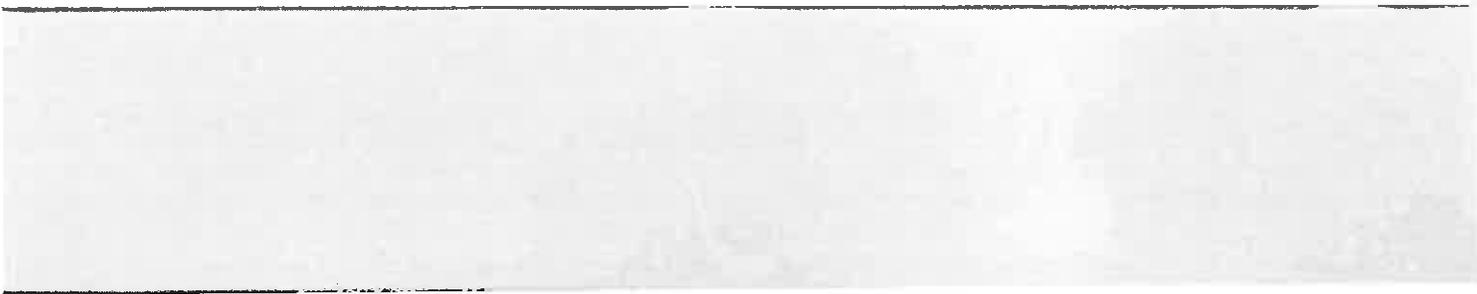
7. VOTE By Planning Board ..... \_\_\_\_\_  
and Notice to Town Clerk &  
and Applicant

After 21 Days

8. Endorsement by Planning Board..... \_\_\_\_\_

Within 30 Days

9. Applicant records plan and Covenants,  
if any, in Registry of Deeds & sends  
copies of recorded plan & documents to  
Planning Board. \_\_\_\_\_





PLANNING BOARD  
P.O. BOX 1305  
Littleton Massachusetts 01460

SUBDIVISION PLAN REVIEW CHECKLIST

Drawing # \_\_\_\_\_

Drawing date \_\_\_\_\_

SUBDIVISION PLAN ENTITLED: \_\_\_\_\_

NAME OF ROADWAY \_\_\_\_\_

APPLICANT \_\_\_\_\_

ADDRESS: \_\_\_\_\_

PHONE: \_\_\_\_\_

Date of Preliminary Plan \_\_\_\_\_

Date of Preliminary Plan Submtted \_\_\_\_\_

Preliminary Plan Approval Date \_\_\_\_\_

Date of Definitive Plan \_\_\_\_\_

Submittal Date \_\_\_\_\_

Check: Rec'd \_\_\_ Forms Rec'd \_\_\_ Plans Rec'd \_\_\_

Date of Definitive Plan Submission to B.O.H. \_\_\_\_\_

Date of Plan Submission to other Boards/depts. \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Date Received Comments from other Boards:

_____	_____
_____	_____
_____	_____
_____	_____

B.O.H. Approval Deadline (45 days from receipt of plans by them.

\_\_\_\_\_

PB approval date

\_\_\_\_\_

Hearing Dates:

\_\_\_\_\_

\_\_\_\_\_

Dates of Notice of Hearing to Abutters  
State Agencies, etc.

\_\_\_\_\_

Dates of Publishing of Legal Notices

\_\_\_\_\_

Appeal Deadline Date

\_\_\_\_\_

Date of Performance Guarantee Agreement

\_\_\_\_\_

Date plans endorsed

\_\_\_\_\_

Date filed with Town Clerk

\_\_\_\_\_

Date of Amendments, Modifications etc.

\_\_\_\_\_

Extension Dates

\_\_\_\_\_

Other

\_\_\_\_\_

Release:

Lot Numbers	Date of Releases
-------------	------------------

Lot Numbers	Date of Releases
-------------	------------------

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Covenant Dates:

\_\_\_\_\_

\_\_\_\_\_

## Town of Littleton As-Built Plan

### AutoCAD requirements

1. Coordinate system – NAD83 Massachusetts Mainland State Plane Coordinates
2. Drawing format – AutoCAD Map 2008 compatible (.dwg)
3. Both hard copy and CD
4. Electric Department requirements (its own layer)
  - a. Utility-pole, street-light pole, flood-light, parking-lot-light locations
  - b. Underground and overhead line locations
  - c. Underground and overhead house service locations
  - d. Manhole locations (where applicable)
  - e. Underground and overhead transformers, secondary pedestals, and all other relevant electric utilities
5. Water Department Requirements (its own layer)
  - a. Water main, main size and appurtenances' w/ gate locations and measurements (including material type)
  - b. Fire Hydrant locations with fittings and gate detail
  - c. Service boxes w/measurements to structures;
  - d. Service line locations, service size and measurements of service line at any points of deflection.
6. Highway/Drainage Requirements (its own layer)
  - a. Drainage pipe size, type of pipe material, length of each run, pitch of each run, invert inlet and invert outlets
  - b. Catch basin inverts, frame and grate elevations and catch basin locations
  - c. Drain manholes inverts, frame and cover elevations and drain manhole locations
  - d. Box culverts size, inlet and outlet inverts, type of material and length

- e. Pipe cross culvert size, type of material, length of run, inlet and outlet inverts and locations
- f. Headwall elevations and locations
- g. Drainage easements
- h. Fill easements
- i. Drainage outfall locations with elevations
- j. Drainage detention/retention basin locations

7. General requirements:

- a. Edge of pavement (roads, driveways, sidewalks, parking lots)
- b. Topography (where applicable)
- c. Building footprints and house numbers
- d. Lot lines and bound marker locations (where installed)
- e. Street signs, guard rails and anything installed within the right of way
- f. Public shade trees

**BOARD OF SELECTMEN  
ROAD ACCEPTANCE POLICY AND PROCEDURE**

**PreSubmission Requirements**

**No road will be accepted by the Board of Selectmen until the Planning Board has approved an 'As-Built' plan that has been reviewed by the Highway Superintendent and the Water Department.**

1. Petition requesting acceptance of a road by a vote of Town Meeting is received from property owners or developer ("Owner/Developer") of subdivision by the Board of Selectmen's Office. (Five copies of the approved as-built plan or information from Registry of Deeds regarding road, if not a new subdivision road, must accompany the request prior to proceeding with acceptance procedure.
2. The Owner/Developer must deposit a cash bond in the amount of five hundred dollars for each private way to be deposited in a revolving fund to reimburse the town for any legal costs associated with the road layout and road taking.
3. Notice of the request for acceptance is sent to the Planning Board, Highway Superintendent, and Water Department for their recommendations. Pursuant to M.G.L. C. 41, §81I no public way shall be laid out, altered, relocated or discontinued, unless the proposed layout has been referred to them and they have reported thereon, or have allowed forty-five days to elapse after such reference without submitting a report.
4. Board of Selectmen's office sets public hearing date to consider accepting layout.
5. Notice of hearing, copy of the plan, and draft of warrant article is forwarded to Town Counsel for review.
6. Request for abutters list is forwarded to Assessors Office.
7. Notice of hearing and a copy of the plan is forwarded to the Town Clerk.
8. Notice of the hearing is sent to the Conservation Commission requesting their comments and recommendation on acceptance.
9. Legal Notice published one time two weeks prior to the hearing date.
10. Notice of public hearing sent to abutter two weeks prior to the hearing date.
11. Comments received from Planning Board, Conservation and Highway Dept.

12. Public hearing held and vote is made to accept the layout of the road.
13. Town meeting votes to accept the road layout. If takings are involved Board of Selectmen must adopt an Order to Taking within 120 days of the Town Meeting vote to accept the layout. This is filed with the Registry of Deeds.
14. Close revolving fund account.



## PLANNING BOARD

P.O. Box 1305  
Littleton, Massachusetts 01460

### FEE SCHEDULE ANR/SUBDIVISION FEES APPROVED 2003

- 1. ANR (Approval Not Required)                      \$ 100.00 plus  
\$ 100.00 per each lot or parcel created or  
revised**

**Note:** For all revisions to lots and parcels as well as new ones created.

- 2. Preliminary Subdivision Plan                      \$ 1,000.00 plus  
\$ 1.00 per linear foot of road**

**Note:** For Residential Subdivision only, Preliminary Subdivision Plan Fees paid apply toward Definitive Subdivision Plan fees.

- 3. Definitive Plan    \$ 2,000.00 plus  
\$ 5.00 per linear foot of road**

**Note:** If the subdivision Plan is in accordance with the Open Space Special Permit Plans, then that fee will apply to the Subdivision fee.

If the shape of the property or adjacent terrain is such that 30% or more of the road cannot be used to provide lot frontage, the fee for that portion shall be \$1.25 per linear foot of road.

- 4. Modification to Approved Plans                      \$ 500.00 plus  
\$ 1.00 per linear foot of modified road  
plus  
\$ 5.00 per linear foot of additional road**

**Note:** May be waived or reduced by the Planning Board if in the opinion of the Board, the modification is in the interest of the Town.

- 5. Modification to Covenant, Approval,              \$ 250.00  
or other Subdivision Documents**

**6. Fees may be waived or reduced for government agencies or qualified non-profit organizations at the discretion of the Planning Board.**

**REAFFIRMED 2012**