# Rules and Regulations Governing the Subdivision of Land in the

# Town of Winchester, Massachusetts



# Winchester Planning Board

Adopted by the Winchester Planning Board on October 20, 2011 and November 3, 2011 Certified by the Town Clerk on November 17, 2011

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## **FOREWORD**

Since the Town of Winchester adopted the Subdivision Control Law on August 31, 1953, Winchester's landscape has changed. Winchester's adoption of rules and regulations governing subdivision of land in the early 1950s substantially addressed the post World War II housing development boom on the western side of town. At that time, market gardens and farms were being subdivided for house lots. New infrastructure improvements were installed, and the town's subdivision regulations provided a framework of standards for their design and installation.

Simultaneously, Winchester's town center and those neighborhoods closer to town experienced development pressure as oversized lots with older houses were divided. Two Boston-bound train stations were reconstructed in the late 1950s and a strong school system contributed to the demand for housing in Winchester.

Winchester today is substantially built out. There is a rich variety of houses within the community – many of them built in the Victorian era. While "infill" housing and "redevelopment" (commonly known as "teardowns") continue in the town center and in outlying neighborhoods, there is little opportunity to create the larger subdivisions that were constructed in the 1950s. Few parcels remain that do not provide development challenges, such as steep slopes, which limit access and contribute to drainage issues, and ledge, which requires blasting – often in congested residential neighborhoods. With these "redevelopments," new small subdivision roadways, with three to five lots configured around a dead-end, are becoming the norm. Today, the Board is looking for a balance of growth while retaining desirable historic structures and limiting infrastructure and development impacts.

In addition to the physical alterations that have taken place in Winchester over the past 50 years, the laws providing for the oversight of utilities and infrastructure have changed. The responsibilities of local boards have increased. Likewise, with the introduction of new construction methods and materials, technical specifications for construction have changed both for the community as well as for utility companies that provide infrastructure services.

The goal of this revision to the Rules and Regulations Governing the Subdivision of Land in the Town of Winchester, Massachusetts is to address the changes in Massachusetts General Laws, to adjust the design provisions, to address newer construction materials, processes and methods of analysis, and to tailor the regulations to the present-day development scenarios. Winchester is a mature suburban community with a rich history and identity as a beautiful town with an excellent quality of life. The Board, by adoption of these regulations, wishes to guide Winchester's redevelopment and growth to preserve and protect the assets that contribute to the town's character.

## RULES AND REGULATIONS GOVERNING THE SUBDIVISION OF LAND IN WINCHESTER, MASSACHUSETTS

This document is adopted under the Subdivision Control Law: Chapter 41 of the Massachusetts General Laws (M.G.L.) Sections 81-K to 81-GG inclusive, and all amendments thereto.

#### SECTION 1. TITLE, AUTHORITY, AND PURPOSE

#### 1.1 TITLE

These Rules and Regulations of the Winchester Planning Board Governing the Subdivision of Land in the Town of Winchester, Massachusetts, may be cited as the *Rules and Regulations*.

#### 1.2 **AUTHORITY**

The Rules and Regulations of the Winchester Planning Board Governing the Subdivision of Land in the Town of Winchester, Massachusetts, are hereby adopted pursuant to the authority granted by M.G.L. Chapter 41 §81K to 81GG, the "Subdivision Control Law."

#### 1.3 EFFECTIVE DATE

The *Rules and Regulations* were adopted following a duly constituted public hearing by majority vote of the Board on and are fully effective as of November 17, 2011. Copies of the *Rules and Regulations* certified by the Town Clerk and copies of the Board's vote to adopt the rules and regulations are on file with the Register of Deeds and with the Recorder of Land Court. The current *Rules and Regulations*, in their entirety, replace the prior version that was adopted on June 27, 1988 and last amended on May 25, 2006.

#### 1.4 PURPOSE

The Winchester Planning Board is authorized under the General Laws of Massachusetts to regulate the laying out and construction of ways in subdivisions to insure the safety, convenience, and welfare of the present and future inhabitants of Winchester. The Board shall exercise its authority with due regard for provision of adequate access to all of the lots in the subdivision by ways that will be safe and convenient for travel; for lessening congestion in such ways and in the adjacent public ways; for reducing danger to life and limb in the operation of motor vehicles; for securing safety in the case of fire, flood, panic emergencies; for securing adequate provisions for water, sewerage, drainage, underground utility service, police and fire protection, and other requirements where necessary in a subdivision. Additionally, the Board will be responsible for coordinating the ways in a subdivision with each other and with the public ways in neighboring subdivisions; for insuring compliance with applicable provisions of the Town of Winchester Zoning Bylaw and the Wetlands Protection Act and for preserving the special natural and historical features of Winchester. With recent efforts by the government to encourage sustainable "green communities," the Board also will work, as applicable; to follow the policies of the

Commonwealth with respect to the encouragement of Winchester residents use alternative energy systems.

In considering a proposed subdivision, the Board shall solicit the opinions of other Town Boards, Committees, Commissions, and Officials (specifically, the Board of Health, Historical Commission and the Conservation Commission) as the application pertains to their respective authorities. The Board also may solicit the opinion of technical experts employed by the Board for the purposes of providing specialized technical review to the Board, as provided for under M.G.L. Chapter 44, Section 53G.

#### 1.5 REGULATION OF NEW SUBDIVISIONS

No person shall make a subdivision of any land in the Town of Winchester unless said person has first submitted to the Board for its approval a plan of such proposed subdivision showing the lots into which such land is to be divided and the ways already existing or which are to be provided for furnishing access to such lots, and the Board has approved such plan in the manner herein provided.

#### **SECTION 2. DEFINITIONS**

In constructing these Regulations, the definitions set forth in M.G.L. Chapter. 41 Section 81L shall apply. In addition, the following terms and words are defined:

- **2.1 AASHTO:** The American Association of State Highway and Transportation Officials.
- **Agent:** An engineer or other person appointed by the Board and acting as the agent for it.
- **Applicant:** Either the owner of the land stated in the application for subdivision or ANR approval, the owner in equity or all the owners where title is held jointly, in common, or in tenancy by the entirety, including corporations. The owner in equity, an agent, representative, or his assigns may act for an owner, provided written evidence of such fact is submitted using the form provided. In the instance of a corporate owner, agent, representative or assigns, a corporate resolution granting signature authority is required.
- **2.4 Architectural Access Board:** The Massachusetts Architectural Access Board (AAB).
- **2.5 Board's Professional Engineer:** A Massachusetts Civil Professional Engineer engaged by the Winchester Board to provide professional services during review of subdivision plans and construction of subdivision improvements.
- **Base Flood:** Flood having a one percent chance of being equaled or exceeded in a given year.
- **2.7 Base Flood Elevation:** The computed elevation to which flood water is anticipated to rise during the base flood.
- **2.8 Bench Mark:** A permanent physical mark of known elevation. All elevations shall be referenced to the North American Vertical Datum (NAVD) 1988.
- **2.9 Best Management Practices (BMP):** Structural, nonstructural, and managerial techniques that are recognized to be the most effective and practical means to prevent and/or reduce nonpoint source pollution. Best Management Practices are activities or equipment whose purpose is the management and maintenance of storm water quantity, storm water quality, and the protection of the environment.
- **2.10 Board:** The Winchester Planning Board.

2.11 Cornell Precipitation Data: All drainage analyses shall use the following 24-hour rainfall data, adopted from the web tool "Extreme Precipitation in New York and New England" developed jointly by the Northeast Regional Climate Center (NRCC) at Cornell University and the Natural Resources Conservation Services (NRCS), as available at

24-Hour Precipitation (Inches)
3.2
4.9
6.2
8.9

http://precip.eas.cornell.edu/ for the Town of Winchester centered at Town Hall, 71 Mount Vernon Street, as accessed on September 26, 2011 and summarized in the table below:"

- **Designer:** A (Civil) Professional Engineer, Landscape Architect, or Professional Land Surveyor maintaining a current registration to practice in Massachusetts. All work defined as professional engineering shall be completed by or under the supervision of a registered professional engineer (PE), all work defined as landscape architecture shall be completed by or under the direct supervision of a registered Landscape Architect (LA) and all work defined as professional land surveying shall be completed by or under the direct supervision of a Professional Land Surveyor (PLS).
- **2.13 Developer:** The Applicant as defined herein.
- **2.14 Director of Public Works:** The Director of the Winchester Department of Public Works.
- **2.15 Drainage:** The control of surface or subsurface water within the tract of land to be subdivided; surface water or stormwater runoff; or the removal of surface water or groundwater from a site by artificial or natural means.
- **Easement:** A right in land acquired by the Town, other public authority or other party to use or control property for access, drainage, utilities, or other purpose.
- **Engineer:** A registered Professional Engineer (PE) licensed to practice professional engineering in the Commonwealth of Massachusetts.
- **2.18 M.G.L.:** The General Laws of the Commonwealth of Massachusetts, as amended.
- **2.19 Property Owners' Association:** An association or organization which operates under or pursuant to recorded covenants or deed restrictions, through which each owner of a portion of a subdivision is automatically a member as a condition of ownership and each such member is subject to an assessment for a prorated share of expense of the association, which may become a lien against the lot, condominium, or other interest of the member. The Property Owners' Association is responsible for maintenance of common land and shared facilities, as set forth in the covenants, and may not be dissolved.
- **2.20 Landscape Architect:** A registered Landscape Architect (LA) licensed to practice landscape architecture in the Commonwealth of Massachusetts.

- **Lot:** An area of land in single ownership with definite boundaries used or available for use, as the site of one or more buildings. The term "single ownership" means an undivided ownership by one person or by several persons whether the tenure is joint, in common or by the entirety.
- **2.22 Low Impact Development:** A systematic application of site design and use of small-scale, distributed stormwater management practices designed to replicate predevelopment hydrologic function and to help offset the impacts of new impervious cover.
- 2.23 Massachusetts Water Resources Authority (MWRA): A public entity that provides wholesale drinking water and sewerage disposal services to the Town of Winchester The Town is responsible for maintaining all municipal water and sewer infrastructure. Varying portions of the Town are also supplied by drinking water from the Town's reservoir system depending on the time of year.
- **Municipal Services:** Public utilities furnished by the Town in which a subdivision is located, such as water and sewerage.
- **2.25** National Pollutant Discharge Elimination System: The National Pollutant Discharge Elimination System (NPDES) administered by the United States Environmental Protection Agency.
- **Owner:** As applied to real estate, the owner of record as shown by the records in the Middlesex South District Registry of Deeds or the Middlesex South Land Registry District.
- 2.27 Operation and Maintenance Plan: An operation and maintenance plan (O&M plan) for a subdivision that runs with the land and conforms to MADEP and EPA requirements, the Winchester Subdivision Rules and Regulations and any other pertinent or applicable requirements adopted by the Town of Winchester that employs Best Management Practices to ensure that the subdivision's stormwater management system functions properly during construction and in the longer term by providing scheduled maintenance and inspection.
- **2.28 Private Drive:** A privately owned facility that provides motor vehicle access to one or more lots but does not provide frontage to abutting properties.
- **2.29 Private Way:** A way which is owned and maintained by the property owners who abut and reside on the way and which is not maintained by the Town of Winchester.
- **2.30 Public Way:** A street which has been accepted as a public way in accordance with the provisions of M.G.L. Chapter 82, or any way established by court decree to be a public way by dedication, prescription, or other legal means.
- **Recorded:** Recorded in the Middlesex South District Registry of Deeds; if registered land is affected, filed with the recorder of the Land Court of Massachusetts.

- **Register of Deeds:** The register of deeds of the county or district in which the land in question, or the Town or town in question, is situated, and, when appropriate, shall include the recorder of the Land Court.
- **2.33 Right-of-Way:** The entire parcel of land intended or designed to provide access and rights of passage extending from the boundary of one parcel to the boundary of another parcel.
- **Roadway:** That portion of a street intended for vehicular use.
- **Rules and Regulations:** The Rules and Regulations of the Winchester Planning Board Governing the Subdivision of Land in the Town of Winchester, Massachusetts.
- **2.36 Stormwater Management Standards:** The most recent edition promulgated by the Massachusetts Department of Environmental Protection, or its successor, of the Stormwater Management Standards. An overview of the Standards may be found in Chapter 1 of the Massachusetts Stormwater Management Handbook, available on-line at www.mass.gov/dep/water/laws/policies.htm#storm.
- **2.37 Stormwater Management System:** All structures, pipes, swales, culverts, and surfaces that collect and convey stormwater runoff, all structures and practices that improve the quality of runoff, all structures that store or recharge runoff and all practices set forth in an Operations and Maintenance Plan.
- **2.38 Street or Way:** A public way or a way having, in the opinion of the Board, sufficient width, suitable grades and adequate construction to provide for the proposed use of the land abutting thereon or served thereby.
- **2.39 Street or Way: Dead End:** A minor street intersecting another street at one end and terminating at the other by either no turnaround or a permanent vehicular turnaround.
- **2.40 Structure:** A combination of materials requiring a permit to erect, place, or construct to form a configuration and includes, but is not limited to, walls, platforms, radio towers, sheds, storage bins, signs, swimming pools, and fences.
- **2.41 Subdivision:** The division of a tract of land into two (2) or more lots, including resubdivision, and as further defined in M.G.L. Chapter 41, Section 81L.
- **Subdivision Control Law:** The power of regulating the subdivision of land granted by the M.G.L. c. 41, §§81K to 81GG, inclusive, as amended.
- **2.43 Surveyor:** A Professional Land Surveyor (PLS) licensed to practice land surveying in the Commonwealth of Massachusetts.
- **Town Planner:** The Town Planner of Winchester, Massachusetts.
- **2.45 Utilities:** Private or municipal services to be furnished within the subdivision, including, without limitation, telecommunications, community access television, electric

light and power, gas lines, sanitary sewers, storm drains, water mains, and appurtenances.

**Zoning By-law:** The Zoning By-law of the Town of Winchester adopted by the Town Meeting on November 4, 2010, and approved by the Attorney General on January 7, 2011, and any and all duly adopted and approved amendments thereto.

#### **SECTION 3. GENERAL PROVISIONS AND FEES**

#### 3.1 GENERAL

- **3.1.1 Meetings:** The Board will hold meetings that are duly posted for location and time and on such dates as may be designated by notice filed with the Town Clerk.
- 3.1.2 Submission Completeness: No plan for review, whether for approval or for endorsement of approval not required, shall be accepted as a submittal unless and until all information necessary for such review, as described herein under the applicable provisions for submission requirements, is fully provided, unless waived in writing by the Board. Submissions found to be incomplete in any respect shall be deemed by the Board not to be complete. The Board shall notify the applicant of the incomplete nature of the submission and shall allow the applicant two weeks from date of notification to correct the nature of the deficiency in the submission. As required, the Board may hold a public hearing as required by law and deny the project based on the incomplete nature of the submission.
- **3.1.3 Purposes:** The purposes for these requirements are to promote public safety, including reasonable precautions against possible natural disasters; traffic safety and convenience; adequate water supply; storm water management; and sewage disposal, and is designed with due regard to the right, health, and welfare of Winchester's inhabitants and the future residents of such subdivision. Proposed subdivisions shall be consistent with the guiding principles and development policies as set forth in the Winchester Master Plan as adopted by the Board and shall adhere to the principles of correct land use, sound planning, and good engineering.
- **3.1.4 Applicant's Responsibility:** The approval of a subdivision by the Board does not affect any rights that others may have in or over the land to be subdivided, nor does it give the applicant the right to perform work on land owned by others. The Board will require submission of documentation confirming that plans submitted for approval or consideration are correct. The acquisition of necessary rights and the presentation of complete and accurate information to the Board are the sole responsibility of the applicant. Failure to do so, including the failure or inability to obtain all necessary permits, licenses, releases, or rights, constitutes solely sufficient reason for the disapproval or rescission of the subdivision plan.
- **3.1.5 Decision**: Three members of the Board present and voting constitute a quorum. Three members of the Board present and voting constitute a majority vote of the Board, and the vote of a majority of the Board is required to take action as set forth in Section 6.7 hereof. As indicated in 6.7, the Board has the ability to approve the project, deny the project or approve the project with conditions.

#### 3.2 FEES

**3.2.1 Application Fees:** All applications shall be accompanied by a fee to cover administrative costs, including but not limited to, legal notice advertising and abutter

notification, and such fees shall be in accordance with the Town of Winchester Planning Board Fee Schedule, as amended, as set forth in the Appendix. No fees are refundable in whole or in part under any circumstances. All fees shall be paid by certified or bank check.

The failure of the applicant to pay the required review fee shall be grounds for refusing to endorse an ANR plan, or for the disapproval of a preliminary or definitive subdivision plan. The costs associated with the recording and filing of plans and documents with the Registry of Deeds are the sole responsibility of the Applicant and are not included in the application fee.

3.2.2 Consultant Fees: All consultant fees shall be in accordance with MGL Chapter 44, Section 53G and the "Winchester Planning Board Rules and Regulations for Hiring Consultants Under MGL Chapter 44, Section 53G," dated August 17, 2006, as amended, attached hereto and incorporated herein by reference. The fees shall be held by the Town Comptroller in a special revenue account until the project review has been completed. Upon request of the applicant, a summary of the expenditures shall be provided to the developer, and any remaining funds within the account shall be returned, with interest, to the developer.

#### 3.3 LIMITATION OF ONE DWELLING ON ANY LOT

Unless otherwise provided for in the Town of Winchester Zoning Bylaw, no more than one building designed or available for use for dwelling purposes shall be erected or placed or converted to use as such on any lot in a subdivision, or elsewhere in the Town, without the consent of the Board. Such consent may be conditioned upon the providing of adequate ways, furnishing access to each site for each such building, in the same manner as otherwise required for lots within a subdivision.

#### 3.4 MINIMUM STANDARDS

The Board standards for subdivisions are minimums. A developer should not consider these minimums as a substitute for best engineering practices, and for giving full consideration to the many aspects of a development. In all cases, construction shall be in full conformity with approved plans and specifications.

#### 3.5 COMPLIANCE WITH ZONING BYLAWS

No plan of a subdivision shall be approved unless all of the lots shown on the plan comply with the provisions of the Zoning By-law with regard to size, shape, width and frontage, and no lot or lots shall be altered during development of the subdivision without formal action of the Board unless such changes are in accordance with M.G.L. Chapter 41, Section 81-O

#### 3.6 COMPLIANCE WITH OTHER LAWS, RULES, AND REGULATIONS

Approval and endorsement of a plan by the Board should not be interpreted to represent compliance with any Bylaw, law, rule, regulation, or permitting process of any agency other than the Winchester Planning Board. It is the responsibility of the applicant to secure all other applicable permits and approvals.

## 3.7 STANDARDS OF ADEQUACY - ACCESS

- (A). To ANR Lots. Ways providing access to lots developed pursuant to M.G.L. Chapter. 41, Section 81P shall normally be considered adequate for access if said way provides access for fire, police and emergency vehicles at all times.
- (b) Within a Subdivision. Streets within a subdivision shall be considered to provide adequate access if complying with the standards established in these Rules and Regulations.
- (c) To a Subdivision. Existing ways providing access to streets within a subdivision shall be considered to provide adequate access if such existing way meets the standards set forth herein for width of right of way, pavement width, sight distance, and maximum grade.
- **3.7.1 Obligations.** The Board may require, as a condition of its approval of a subdivision plan, that the applicant dedicate or acquire and dedicate a strip of land for the purpose of widening access ways to a width as required in these regulations, above, and that applicant make physical improvements within such way or compensate the Town for the cost of such improvements in order to meet the standards specified above.
- **3.7.2 Waiver of Access Rules.** The Board may waive strict compliance with these access regulations only upon its determination, following consultation with the Selectmen, Director of Public Works, Police Chief, and Fire Chief, that the way in fact will be otherwise sufficient to serve the needs for access to serve potential uses of land abutting on or served by the way in question.

#### 3.8 EFFECT OF PRIOR RECORDING

The recording of a plan of subdivision within the Town at the Registry of Deeds or the Land Court prior to the effective date of the Subdivision Control Law in the Town (August 31, 1953) shall not exempt the land within such subdivision from the application and operation of these Rules and Regulations except as specifically exempted by M.G.L.Chapter 41, Section 81FF.

#### 3.9 WAIVERS

In accordance with M.G.L. Chapter 41, Section 81R, the Board may waive strict compliance with any of these regulations in any particular case, where the Board determines that such waiver is in the public interest, and not inconsistent with these Rules and Regulations or the Subdivision Control Law. In approving waivers, the Board may require such conditions as will, in its judgment, secure substantially the objectives of the standard(s) or requirement(s) waived.

If an applicant desires certain requirements waived for a plan submitted pursuant to these Regulations, the request for waiver shall be submitted as part of the application as set forth in Section 2.1.2. The request shall cite the particular provision of these Regulations for which the waiver is requested and give justification therefore.

- **3.9.1 Waiver of a Submission Requirement:** If an applicant has, in the application, requested a waiver of a submission requirement, and if the Board makes a finding that the waiver would not violate State Law or the Zoning Bylaws, or would not impair the ability of the Board or other Town Boards or officials to understand the nature and impacts of the proposed plan or to process the application, then the Board may grant the waiver. If such a finding is not made, then the Board shall not grant the waiver, and the application may be determined not to be proper or complete and may be denied on that basis.
- **3.9.2 Waiver of a Development Standard:** An applicant may, in the original application or in writing subsequent thereto, request a waiver of a development standard contained in these Regulations. The Board may, in its sole discretion, grant the waiver upon a finding that the waiver would be in the public interest and not inconsistent with the intent and purpose of the Subdivision Control Law and these Regulations. If such a finding is not made, then the Board shall not grant the waiver, and the application may be determined not to be proper and may be denied on that basis.

#### 3.10 INTERPRETATION, CONFLICT, AND SEPARABILITY

- **3.10.1 Minimum Requirements:** The provisions of these regulations shall be held to be the minimum requirements for the promotion of the public health, safety, and general welfare.
- **3.10.2 Severability:** If any part or provision of these regulations, or if application of any part or provision of these regulations to any particular circumstances, is adjudged to be invalid by any court of competent jurisdiction, such judgment shall not affect or impair the validity of the remainder of these regulations or the application of the remainder of these regulations as a whole to other circumstances.

#### 3.11 RESERVATIONS AND APPEALS

Upon adoption of these regulations in their entirety, the Rules and Regulations Governing the Subdivision of Land in Winchester, Massachusetts, adopted on June 27, 1988, as amended, are hereby repealed (except such section(s) expressly described in M.G.L. Chapter 41, Section 81Q).

#### 3.12 AMENDMENTS

The Board may from time to time amend these regulations. Public hearings on all proposed amendments shall be held by the Board in the manner described in M.G.L. Chapter 41, Section 81Q.

# SECTION 4. PLANS BELIEVED NOT TO REQUIRE APPROVAL UNDER SUBDIVISION CONTROL LAW (ANR PLANS)

Pursuant to M.G.L. Chapter 41, Section 81T, any person who wishes to cause to be recorded in the Registry of Deeds or to be filed with the Land Court, a plan of land that the Applicant believes does not depict a subdivision under the Subdivision Control Law (commonly known as an ANR plan) may apply to the Board for a determination and endorsement of the plan to that effect. The Applicant shall submit such plan with a fully completed and executed Form A, including a statement, supported by accompanying documentation, of the basis upon which the applicant claims that approval of the plan under the Subdivision Control Law is not required as follows.

#### 4.1 APPLICATION

An Applicant seeking an endorsement for an Approval Not Required (ANR) Plan shall submit:

- (a) One original application for Approval Not Required in a form approved by the Board (Form A) signed by all property owners. The Applicant shall state in his application the particular provisions of law under which he believes that his plan does not require approval, and shall submit satisfactory evidence to the Board to show that the plan does not require approval.
- (b) Registered Land Surveyor's certificate in a form approved by the Board (Form D).
- (c) One original full-sized plan, printed on mylar sized 24" x 36," prepared and stamped by a Registered Land Surveyor, clearly and legibly drawn, and three (3) copies thereof. The contents of the plans shall conform to the requirements of Section 3.3 of these Rules and Regulations.
- (d) Fee payable to the Town of Winchester, in the amount described in the Fee Schedule.

#### 4.2 SUBMISSION

The plan shall be submitted by delivery at a meeting of the Board or by registered or certified mail to the Board. If so mailed, the date of receipt shall be the date of submission of the plan. One original copy of the application shall be filed with the Town Clerk by hand delivery or by registered or certified mail, stating the date of submission to the Board.

#### 4.3 PLAN CONTENTS

The plan shall be legibly drawn in accordance with the rules and regulations of the Register of Deeds or Land Court Manual of Instructions, as amended, and shall bear the original seal and signature of the professional engineer and/or professional land surveyor preparing the plan. The plan shall be prepared in accordance with the provisions of 250 CMR 6.00: Procedural and Technical Standards for the Practice of Land Surveying, and shall contain the following information:

- (a) A title block, preferably in the lower right corner, identifying the location of the land shown, the name of the owner of record and address, date and scale of the plan, and the name and address of the firm or individual preparing the plan. The plan shall be drawn at an appropriate scale, but no smaller than one inch equals one-hundred feet (1" = 100").
- (b) The statement "Approval under the Subdivision Control Law Not Required" and sufficient space for the date and signatures of all members of the Board together with a notation that "The Board's endorsement of the plan as not requiring approval under the Subdivision Control Law does not give lots or parcels any standing under the Town of Winchester Zoning Bylaw."

(c)	All sheets shall be provided with designer's certificate that states as follows:			
	I hereby certify that the accompanying plan, entitled and dated, is true and correct to the accuracy required by			
	the Rules and Regulations of the Winchester Planning Board and that all pertinent data are shown.			
	Registered Land Surveyor			
	(Seal)			
	Registration Number			

- (d) Zoning classifications and location of any zoning district boundary lines that may lie within the locus of the plan, including overlay districts.
- (e) A locus map drawn at a scale of 1'' = 1,000'', or such other scale acceptable to the Board, and preferably located in the upper right corner of the plan.
- (f) Location and names of all abutters as they appear on the most recent tax list(s), including those in adjoining communities, with the Assessor's map, block, and lot numbers shown for all lots.
- (g) Location, names, status (private or public), and widths of pavement and right-of-way of all streets and ways shown on the plan.
- (h) Bearings and distances or curve data of all street lines, ways, easements, and lot lines and location of all permanent bounds identified as existing or proposed. Bearings and distances to a minimum of two (2) existing permanent bounds also shall be known.
- (i) The lot number and area of each lot and easement in square feet and in acres, if over one acre. The units of acres shall be rounded to a minimum of three (3) decimal places.

- (j) The total frontage of each lot and the total lot width, per the definition in the Zoning Bylaw.
- (k) The entire land area in which the division takes place shall be shown, including all parcels affected by an increase or decrease in frontage, lot width, and area, which also includes the remaining land, if any, owned by the applicant.
- (l) Any lot(s) or parcels not meeting the minimum frontage, lot width, or lot area in accordance with the requirements for the zoning district in which the lot(s) or parcels is situated, shall be designated as "Not a Buildable Lot."
- (m) References to all deeds and plans of record used to establish the property lines of the lot(s) or parcels and of the streets, ways, and easements shown on the plan, including deed references to abutting lots.
- (n) A magnetic north point.
- (o) Major features of the land, including existing structures, wells, septic systems, walls, fences, monuments, wooded areas, trees 6" in caliper in size, outcroppings, ditches, swamps, water bodies, and wetlands. All historic resources in excess of fifty (50) years in age, including existing buildings, outbuildings, walls and landscape features and garden features, shall be noted on the plans. Notation shall be made if said property and/or elements are in the State inventory and/or National Register of Historic Places.

#### 4.4 CRITERIA FOR ENDORSEMENT

A plan showing the subdivision of land shall not require approval if the application submitted meets all requirements of these Rules and Regulations and the following criteria as determined by the Board:

- 4.4.1 The Board shall first determine whether the plan shows a subdivision of land as defined by M.G.L. Chapter 41, Section 81L. An endorsement will not be withheld if the plan of land shows a division of property into two or more lots with the requisite feet of continuous frontage required by the most recent edition of the Winchester Zoning Bylaw, along:
  - (a) A public way. (Frontage on a limited access highway does not comply with the meaning of frontage and access on a public way.); or
  - (b) A private way shown on a definitive plan approved and endorsed in accordance with the Subdivision Control Law built to specification or subject to an adequate performance guarantee; or
  - (c) A way in existence and having practical vehicular access when the Subdivision Control Law became effective in Winchester and having, in the opinion of the Board, sufficient width, suitable grades, and adequate construction to provide for the needs of vehicular traffic in relation to the proposed use of the land abutting therein and requiring no upgrades.

- 4.4.2 The plan shows a division of a tract of land, on which two or more buildings were standing when the subdivision control law went into effect, into separate lots, on each of which at least one of such buildings remains standing pursuant to M.G.L. Chapter 41, Section 81L.
- 4.4.3 The plan depicts an existing parcel with no new lot division. If the lot is not being subdivided and does not contain frontage on a way, as specified above, the lot shall be clearly marked on the plan that it is "Not a Buildable Lot."
- **4.4.4 Access:** The Board will not endorse any plan unless each and every lot shown on the plan has adequate access from the abutting way to the buildable portion of each lot in accordance with Section 3.7 hereof.

#### 4.5 BOARD ACTION

4.5.1 If the majority of the Board determines that the plan does not require approval, it shall forthwith, but in any case within twenty-one (21) days after the plan is submitted to the Board and without a public hearing, endorse the plan "Approval under the subdivision control law not required." Such approval shall not be withheld unless the plan shows a subdivision.

The Applicant shall record the endorsed plan at the Middlesex South Registry of Deeds or register it in the Land Court and return one copy of the recorded plan to the Department of Engineering and Planning for the project file.

- 4.5.2 If the Board determines that the plan requires approval, it shall within twenty-one (21) days after the plan is submitted to the Board, vote that subdivision approval is required and return the plan. The Board also shall notify the Town Clerk of its determination.
- 4.5.3 If the Board fails to either act upon the plan or notify the Town Clerk and the person submitting the plan of its action within the twenty-one (21)-day time limit, it shall be deemed that the plan does not require approval under the subdivision control law. In case of such default, the following process shall be used to enable recording of the plan:
  - (a) The Board shall forthwith endorse the plan "Approval under the subdivision control law not required." or
  - (b) If the Board fails to make such endorsement, the Town Clerk shall issue a certificate stating:
    - (i) Date the plan was submitted to the Board;
    - (ii) Date on which the Board was required to take final action; and
    - (iii) Fact that Board failed to take final action or notify the clerk of such action within the prescribed time and that it is deemed that "approval is not required," as result of such failure under M.G.L. Chapter 41, Section 81P.

The Applicant shall record the plan with the certificate, at the Middlesex South Registry of Deeds or register it in the Land Court and return one copy of the recorded plan to the Department of Engineering and Planning for the project file.

# SECTION 5. PROCEDURE FOR SUBMISSION AND APPROVAL OF A PRELIMINARY SUBDIVISION PLAN

#### 5.1 PURPOSE

A Preliminary Subdivision Plan may be submitted by an applicant to the Board for discussion and approval, modification, or disapproval by the Board. The submission of such a Preliminary Plan enables the applicant, the Board, other municipal agencies and officials and the owners of property abutting the subdivision to discuss and clarify any problems the proposed subdivision may present before a Definitive Plan is prepared.

It is suggested that the applicant first read these Rules and Regulations and then meet informally with the Board with a plan of the area of the proposed subdivision to obtain information about the subdivision requirements of the area. Any uncertainties about the rules and regulations or the requirements in the Appendices should be raised during this initial consultation. Informal discussions with other Town officials, staff, and agencies also may prove helpful at this phase of the development.

It is strongly recommended that a Preliminary Plan be filed in every case. In accordance with M.G.L. Chapter 41, Section 81S, a preliminary plan shall be required in the case of a nonresidential subdivision. However, a preliminary plan may be filed for subdivision showing lots in a residential zone.

#### 5.2 WETLANDS BOUNDARY DELINEATION

The Board strongly recommends that the Applicant secure an Abbreviated Notice of Wetlands Area Delineation (ANRAD) from the Winchester Conservation Commission before preparing and submitting a Preliminary Subdivision Plan.

#### 5.3 SUBMISSION PROCEDURE

5.3.1 Any person who desires approval of a preliminary plan for the subdivision of land shall submit the following information to the Board at a meeting, by hand delivery to the Board office or by registered mail in care of the Town Clerk. If the submittal is hand delivered, the Applicant shall first file a copy of the application and plan with the Town Clerk and shall provide evidence of such filing to the Board office or Board at the time of submittal.

#### **5.3.2** Application Contents

- (a) One original application (Form B) for approval of a preliminary subdivision plan.
- (b) One original plan/plan set, and 15 prints thereof, prepared and stamped by a Registered Land Surveyor and/or Professional Engineering licensed in the Commonwealth of Massachusetts. The plan content and form shall be in accordance with Section 4.3.
- (d) Fee payable to the Town of Winchester, in the amount described in the Fee Schedule.

#### **5.3.3** Preliminary Plan Contents

The Preliminary Plan shall contain the following information:

- (a) Subdivision name, boundaries, magnetic north arrow, date, zoning district(s), including overlay districts, legend, scale, title block (preferably in the right hand corner) and title "Preliminary Plan."
- (b) Name(s) and address(es) of record owner(s), applicant(s), engineer, and land surveyor. The preliminary plan shall be stamped by both a Registered Land Surveyor and Professional Engineer licensed in the Commonwealth of Massachusetts.
- (c) All sheets shall be provided with a designer's certification that states as follows:

and dated	, is true and correct to
the accuracy required by t	the Rules and Regulations of the Winchester
Planning Board, and that	all pertinent data are shown.
	<u>-</u>
	Registered Land Surveyor
(Seal)	
	Registration Number
	Registered Professional
	Engineer
(Seal)	
	Registration Number

- (d) Names of all abutters and abutters to abutters within 300 feet of the lot and across the street, as determined from the most recent tax list.
- (e) Location, names, and present exterior pavement and right-of-way widths of existing and proposed streets and ways within the plan and in the immediate vicinity. Indication of whether the existing street is a public or private way and the location and identification of all existing aboveground and underground utilities, including but not limited to water, sewer, drain, gas, electric, and telecommunication, within the plan and immediate vicinity.
- (f) Boundary lines, areas in square feet, and dimensions of all proposed lots, with all lots designated numerically and in sequence.
- (g) Identification of public areas abutting or within the subdivision.

- (h) Existing and proposed topography sufficient to establish drainage patterns and profiles and water bodies. Contours shall be at minimum of two (2)-foot intervals. All topography shall be referenced to the NAVD 1988 datum.
- (i) Major features of the land, including existing structures, wells, septic systems, walls, fences, monuments, wooded areas, outcroppings, ditches, swamps, water bodies, and wetlands. All historic resources in excess of fifty (50) years in age, including existing buildings, outbuildings, walls, and landscape structures and garden features, shall be noted on the plans. Notation shall be made if said property and/or elements are in the state inventory and/or the National Register of Historic Places.
- (j) A statement with respect to cut and fill operations, including a general assessment of the net import or export of fill from the subdivision. Land contours, at two (2)-foot intervals, shall extend at least one hundred and fifty (150) feet into the adjacent land.
- (k) Areas of the plan falling within the Floodplain Overlay District, with the corresponding base flood elevation published on the effective Flood Insurance Rate Maps for the Town of Winchester.
- (l) Existing and proposed centerline profile of all proposed streets and ways.
- (m) Proposed system of utilities, including the preliminary layout of all required utility systems and appurtenances thereto, including, but not limited to, water, sewer, drain, gas, electric, and telecommunication.
- (n) Existing and proposed easements and right-of-way applicable to the area shown on the Plan.
- (o) A locus map, at a scale of 1 inch = 800 feet, of the subdivision showing its street configuration in relation to the surrounding area within 1,600 feet of the perimeter of the subdivision.
- **5.3.4** Concurrent with the Board filing, the Applicant shall submit one copy of the Form B application and two (2) prints of the preliminary subdivision plan/plan set to the Board of Health.
- 5.3.5 The Board, the Board of Health and the Historical Commission shall review the plan in consideration of both Board's rules and regulations and the provisions of the Subdivision Control Law. A public hearing on the preliminary plan is not required by statute.
- 5.4 DRAFT ENVIRONMENTAL AND COMMUNITY IMPACT ANALYSIS
  If applicable as part of a Preliminary Subdivision Plan submitted in accordance with the requirements of this section, the Applicant shall provide a draft Environmental and Community Impact Analysis. The draft shall address all pertinent aspects as described in Section 6.5.2 of these Rules and Regulations. The Board, upon review of the draft Environmental and Community Impact Analysis, shall specify which topics shall be evaluated in detail, within the Definitive Plan submittal.

#### 5.5 REVIEW OF PRELIMINARY SUBDIVISION PLAN

The Board shall forward one print each of the Preliminary Plan to the Town Engineer, Department of Public Works, Fire Chief, Police Chief, Design Review Committee, Historical Commission, Conservation Commission, and any other applicable Town board and/or commission, as determined by the Board, for their information and review. Within twenty (20) days of forwarding the Preliminary Plan, each Town department, commission, board, or agency shall report its findings and recommendations to the Board.

#### 5.6 BOARD OF HEALTH APPROVAL OF PRELIMINARY PLAN

Within twenty (20) days after the submission of the Preliminary Plan to the Board and the Board of Health, the Board of Health shall provide a written recommendation to the Board on whether to approve the plan; approve the plan with modifications and/or conditions; or to disapprove the plan. Reasons for the Board of Health's recommendation shall be provided to the Board.

#### 5.7 BOARD ACTION ON PRELIMINARY SUBDIVISION

- **5.7.1** In accordance with M.G.L. Chapter 41, Section 81S, within forty-five (45) days after the submission of the Preliminary Plan, the Board shall vote to:
  - (a) Approve the plan; or
  - (b) Approve the plan with modifications suggested by either Board or agreed upon by the person submitting the plan; or
  - (c) Disapprove the plan, stating in detail the reasons for such disapproval.
- 5.7.2 The Board must give notice of its action to the Town Clerk within forty-five (45) days of submission of the preliminary plan, and shall notify the applicant of such action by certified mail.

#### **SECTION 6. DEFINITIVE SUBDIVISION PLANS**

#### 6.1 PRE-APPLICATION CONSULTATION

The Board strongly recommends that Applicants schedule a pre-application hearing with the Town's professional staff prior to filing a Definitive Subdivision Plan. The following rules shall apply to such pre-application consultants:

- **6.1.1** All correspondence and communications shall be sent through the Town Planner to the Planning Board.
- deficiencies in the application and to promote efficiency in the formal review and hearing process. Staff also may be requested to review an application for its thoroughness and completeness; however, staff will not be responsible for assuring the accuracy, completeness, or thoroughness of any application submitted for review. It is the responsibility of the Applicant to assure that the application submitted to the Board is thorough, accurate, and complete.
- 6.1.3 Prior to filing a definitive plan with the Board, the Applicant shall submit a list of potential names to be used as street names within the subdivision for review by the Engineering Department, Police Department and Fire Department. Street's name shall be approved in accordance with Town and/or emergency 911 standards and protocol.

#### 6.2 APPLICATION PROCEDURE

- Any person who wishes to submit a Definitive Plan of a subdivision of land to the Board for approval shall file the plan, along with the appropriate and properly executed submittal forms, with the Board at a meeting, by hand delivery to the Board office, or by registered mail in care of the Town Clerk. If so mailed, the date of receipt shall be the date of submission of the plan. If the submittal is hand-delivered, the Applicant shall first file a copy of the application and a complete package of application documents with the Town Clerk and shall provide evidence of such filing to the Board office or Board at the time of submittal.
  - (a) One original application for approval of a definitive subdivision plan in a form approved by the Board (Form C).
  - (b) One original plan set, and 15 sets of prints thereof, prepared and stamped by a Registered Land Surveyor and/or Professional Engineer licensed in the Commonwealth of Massachusetts.
  - (c) A certified list of the names and mailing addresses of all abutting property owners as they appear in the most recent tax list(s). This list shall include property owners on the opposite side of any street abutting the proposed subdivision and abutters to abutting property owners within three (300) hundred feet of the property line.
  - (d) A copy of the recorded deed for the parcel for verification of ownership.

- (e) If applicable, a complete list of all waivers of the regulations being requested with explanations for each such waiver.
- (f) A sample quitclaim deed, including the description for all streets and ways to be dedicated if the street is to become a public way.
- (g) A construction schedule setting forth the approximate scheduled time within which the ways in the subdivision will be completed and the public utilities and other improvements required by the Board will be installed.
- (h) Fee payable to the Town of Winchester, in the amount described in the Fee Schedule.
- 6.2.2 Concurrent with the Board filing, the Applicant shall submit one copy of the Form C application and two (2) prints of the definitive subdivision plans to the Board of Health.
- 6.2.3 Separate fees shall be submitted to cover the costs of legal notices and technical review by outside consultants, as deemed necessary by the Board. Estimates and procedures for additional fees shall be in accordance with M.G.L. Chapter 44, Section 53 A-G and the Board's "Rules and Regulations for Hiring Consultants under MGL Chapter 44, Section 53G."

Any modification of an approved definitive subdivision shall be subject to a filing fee in accordance with the Fee Schedule adopted by the Board and as amended.

#### 6.3 FORM OF THE DEFINITIVE PLAN

- **6.3.1** The Definitive Plan shall be prepared by a professional engineer and by a professional land surveyor registered in the Commonwealth of Massachusetts. The set of definitive subdivision plans shall contain the following sheets, unless otherwise approved by the Board:
  - (1) Cover Sheet;
  - (2) Existing Conditions Plan;
  - (3) Lot Layout Plan;
  - (4) Grading, Drainage, and Utility Plan;
  - (5) Street Plan and Profile;
  - (6) Sedimentation and Erosion Control Plan;
  - (7) Landscaping Plan;

(8) Typical Sections, Details, and Notes; and

follows:

(9) Other information as may be reasonably required by the Board, such as plans indicating areas of earth removal, soil contamination to be removed, etc.

For large subdivisions requiring the use of multiple sheets, a Drawing Index Sheet, showing the entire subdivision at a scale of one inch equals 200 feet (1" = 200'), shall be included after the cover sheet.

**6.3.2** All plans shall be prepared in accordance with the Rules and Regulations of the Register of Deeds or the Land Court Manual of Instructions. Plan sheets shall be 24" by 36" with a minimum of three-quarter (3/4)-inch borders. All plans shall be clearly and legibly prepared with black ink on white background. The original plans shall be provided on Mylar or other media acceptable to the Registry of Deeds and Land Court. All plans shall be provided at a horizontal scale of one inch equals 40 feet (1'' = 40') and a vertical scale of one inch equals four feet (1" = 4"), or other scale as may be required by the Board to show information clearly and adequately.

All sheets shall be provided with a designer's certification that states as follows: I hereby certify that the accompanying plan, entitled and dated is true and correct to the accuracy required by the Rules and Regulations of the Winchester Planning Board, and that all pertinent data are shown. Registered Land Surveyor (Seal) Registration Number Registered Professional Engineer (Seal) Registration Number **6.3.2.1** All sheets shall be provided with a signature block for the endorsement by the Board, as "Being a majority of the Winchester Planning Board Approved under the Subdivision Control Law Approved (date): Endorsed (date):

,,

Space also shall be provided on each sheet for endorsement by the Town Clerk, as follows:

Town Clerk, Winchester, MA	Date
"I hereby certify that notice of approval of Planning Board was received and recorded no appeal was received during the twenty (and recording of said notice."	<u>(date)</u> at this office, and

Where the Applicant elects to secure the construction of ways and the installation of municipal services by covenant, the following notation shall be included on the plans:

"Approved <u>(date)</u> subject to the provisions set forth in a covenant executed (date) , to be recorded herewith."

- **6.3.4** Each sheet shall contain a title block, preferably in the lower right corner, identifying the name of the subdivision, the number and title of the sheet, the name and address of the record owner and Applicant, the original date of the plans, a list of plan revisions and date (as appropriate), scale of the plan, and the name and address, and contact information for the firm or individual preparing the plan.
- 6.3.5 Each sheet of the original mylar plans and the Form C application shall bear the original seal and signature of the professional(s) responsible for the preparation of the plan. A copy of the stamp and signature shall be provided on all contact prints submitted to the Board. All surveys shall conform to the Massachusetts Board of Registration or Professional Engineers and Land Surveyors' "Procedural and Technical Standards for the Practice of Land Surveying."

#### 6.4 CONTENT OF THE DEFINITIVE PLANS

The definitive subdivision plans shall include the following information:

#### 6.4.1 Cover Sheet:

- (a) The title "Definitive Plan" and the subdivision name, including the way or ways on which it is situated:
- (b) Name and address of the record owner;
- (c) Name and address of the Applicant;
- (d) The book and page number of the recording of deed or the Land Court certificate;

- (e) A locus plan showing the location of the subdivision and surrounding roads at a scale not smaller than 1'' = 1,000';
- (f) Identification of the zoning district(s);
- (g) Index to all the plan sheets, with sheet title and number;
- (h) Legend explaining all symbols and line types used in the plan set;
- (i) Project bench mark data, including reference and identification of the starting bench mark;
- (i) Date of submission and latest revision date; and
- (k) Names and addresses of the professional(s) engaged in the preparation of the plans and a description of the area of responsibility of each professional.

#### **6.4.2** Existing Conditions Plan:

- (a) Name, seal, and signature of the registered professional land surveyor who performed the survey.
- (b) Date(s) of the survey.
- (c) Reference to all deeds, plans of record, and other information used to establish the existing property lines, the layout of all streets and ways, and easements, including deed references to the abutting lots.
- (d) Existing property lines, easements, and road layouts with bearings and distances.
- (e) Existing monuments.
- (f) Location and name of all abutters as they appear on the most recent tax list, including owners of the property on the opposite side of all streets abutting the subdivision.
- (g) Location, names, status (i.e., public or private), and present widths of streets and sidewalks bounding, approaching, or within reasonable proximity of the subdivision, showing both roadway widths and right-of-way width.
- (h) Location and description of a minimum of two permanent benchmarks within 200 feet of the site shown on the plans.
- (i) Location of all test pits, borings, percolation tests, or similar, in or adjacent to the subdivision. Logs of observed groundwater elevations and other test data shall be shown on the definitive subdivision plans (use an additional sheet if necessary).
- (j) Location of all existing buildings and structures within the subdivision and within 100 feet of the perimeter of the subdivision, including all structures over 50 years in

- age, and identifying all structures listed on the National Register of Historic Places and/or on the state inventory.
- (k) Location of all existing wells and septic systems that can be observed and/or are on file with the Health Department, in the subdivision and within 100 feet of the perimeter of the subdivision.
- (1) Site features within and abutting the subdivision, including but not limited to, waterways, water bodies, drainage ditches, streams, brooks, stone walls, fences, curbing, walkways and other paths (paved or unpaved), zoning district boundaries (including overlay districts), utility and light poles, buildings and other structures, ledge outcrops, wooded areas, trees greater than six inches in caliper, and historic sites.
- (m) Location and identification of resource areas regulated under the Massachusetts Wetlands Protection Act and the Conservation Wetlands Ordinance (Town of Winchester General Bylaw), as amended, including areas located within the subdivision and outside of the subdivision with buffer zones or offsets that may intersect the subdivided property. This shall include wetlands and associated offsets and buffer zones, isolated lands subject to flooding (ILSF), bordering land subject to flooding (BLSF), and riverfront protection areas. Wetland boundaries shall be delineated in the field with numbered flags by a qualified wetlands specialist, surveyed, and shown on the plan(s) with reference to the flag numbers. The date of any Resource Area Delineation, Determination of Applicability, Order of Conditions, or other applicable decision from the Winchester Conservation Commission shall be indicated on the plans. The 100-year floodplain shall be delineated as shown on the effective Flood Insurance Rate Map (FIRM) for the Town of Winchester, or other suitable evidence as may be accepted under the Wetlands Protection Act.
- (n) Location of all existing above and below-ground utilities and all associated appurtenances within and abutting the subdivision, including but not limited to water, sewer, drainage, electric, gas, and telecommunication. All utility pipe types, sizes, lengths, and slopes shall be provided, as well as utility structure information, including rim and invert elevations.
- (o) Existing topography within the subdivision and extending two hundred (200) feet beyond the perimeter of the subdivision. Topography shall be provided at a minimum two (2)-foot contour interval; one (1)-foot contours and/or additional spot grades shall be provided in areas where the existing grades are one-percent or less. The plan survey datum shall be the National American Vertical Datum 1988 (NAVD88) and this reference shall be identified on the plans.

#### 6.4.3 Lot Layout Plan:

(a) All applicable information from the Existing Conditions Plan, overlain by the proposed subdivision information in a darker line weight.

- (b) Bearings, distances, and curve data to readily determine the location, direction, and length of every existing and proposed lot line, street line, way, easement, and boundary line in and abutting the subdivision, whether straight or curved, sufficient to reproduce the same on the ground.
- (c) Location of all permanent monuments, identified as to whether existing or proposed. Monuments shall be provided at all changes in direction of the proposed street right-of-way, including points of curvature.
- (d) The area of each proposed lot and any proposed easements, in square feet and in acres. The units of acres shall be rounded to a minimum of three (3) decimal places.
- (e) The total frontage of each proposed lot and the total lot width, measured in accordance with the definition in the Zoning Bylaw.
- (f) Identification of any lot(s) not meeting the minimum frontage, lot width, or lot area in accordance with the requirements for the zoning district in which it is situated. Such lots shall be designated as "Not a buildable lot."
- (g) Identification of lots or parcels designated numerically or alphabetically in sequence. The Town Engineer and Assessor shall assign house numbers and map and block numbers after a building permit has been issued.
- (h) Identification of the zoning district(s) classification(s) of the land (including overlay districts) in the subdivision and the precise location of the boundaries of these district(s) if the site is located in more than one district.
- (i) Table comparing the zoning requirements for each lot in the subdivision (i.e., lot size, frontage, lot width, etc.) versus the proposed information.
- (j) Reference(s) to any existing or proposed covenants and/or restrictions, including any variances, and/or special permits, either granted or required by the Board, or the Zoning Board of Appeals, and/or any decisions by the Winchester Conservation Commission. Recorded copies of said covenants, restrictions, orders of conditions, and/or zoning relief shall be provided to the Board.
- (k) A clearly marked north arrow, which shall be identified as to whether it is magnetic or true north or shall be referenced to a record plan and so stated.
- (l) A calculations package prepared by the professional land surveyor, which indicates the perimeter, lot, and right-of-way closure. Calculations shall be provided separate from the definitive subdivision plan set.

#### 6.4.4 Grading, Drainage, and Utility Plan:

(a) All applicable information from the Existing Conditions Plan and Lot Layout Plan. The proposed subdivision information shall be overlaid on the existing conditions and shown in a darker line weight.

- (b) Proposed boundaries of all lots, streets, ways, and easements within and adjacent to the subdivision, showing both roadway and right-of-way widths.
- (c) Proposed contours indicating the finished grades of all proposed construction in the subdivision. The plan shall show how the proposed grades will tie in to the existing grades within and outside of the subdivision. The grades should be provided at a minimum two-foot contour interval; one-foot contours and/or spot elevations shall be shown in areas where the finished grades are one percent or less and in proposed detention/retention basins and drainage swales.
- (d) All proposed site improvements, including but not limited to structures, buildings, sidewalks, handicap ramps, parking areas, curb type and limits, signs, pavement markings, street lights, walls, fences, and landscape areas. Critical dimensions shall be provided, including sidewalk, roadway, and driveway widths; parking stall dimensions; curb radius; and the like.
- (e) Proposed alterations to resource areas and associated buffer zones governed under the Massachusetts Wetlands Protection Act and Winchester Wetlands Bylaw, including but not limited to, Bordering Land Subject to Flooding (BLSF), Isolated Land Subject to Flooding (ILSF), and wetlands boundaries.
- (f) Roadway centerline of all proposed streets with stationing labeled at 50-foot intervals.
- (g) Location of all proposed structures, wells, and septic systems in the subdivision, including all required setback dimensions to lot lines, buildings, wells, septic systems, and wetlands boundaries.
- (h) Location and type of all existing and proposed above- and belowground utilities and appurtenances, including but not limited to:
  - (i) Existing and proposed drainage facilities with pipe sizes, lengths, slopes, and materials including catch basins, manholes, culverts, headwalls, detention and/or retention basins, infiltration systems, and outlet pipes/structures. Rim and invert elevations shall be provided for all structures.
  - (ii) Existing and proposed water mains with sizes, length, and materials, including hydrants, water services, gates, shutoffs, tees, etc.
  - (iii) Existing and proposed sewer mains and sizes, lengths, slopes, and materials, including manholes with rim and invert elevations.
  - (iv) Existing and proposed gas mains.
  - (v) All other existing and proposed above-and below-ground utilities, including electric, telecommunications, cable TV, poles, conduits, transformers, and appurtenances.

- (i) Location of proposed area(s) for disposal of surplus "earth" materials. The finished grades of these areas shall be indicated by contours and/or spot elevations with the volume of "fill" indicated.
- (j) Location of area(s) to be utilized for backfill materials. The finished grades of these areas shall be indicated by contours and/or spot elevations with the volume of materials indicated.
- (k) If excess "earth" materials are proposed to be disposed of off-site, then a notation shall state the volume of "earth" to be removed, as defined in the Winchester Board of Health regulations on earth removal. This volume shall include all amounts of "earth" as proposed to be removed for the construction of streets, sidewalks, driveways, structures, and all other improvements related to the subdivision. If no "earth" is to be removed, a statement to such effect shall be included on the plan(s).
- (l) A notation stating the volume of "fill" material proposed to be obtained off-site, including backfill, gravel, and other materials necessary for the construction of the streets, sidewalks, driveways, structures, and all other improvements related to the subdivision.
- (m) A note stating that "No building or structure shall be built or placed on any lot without a permit from the Health Department, if such a permit is required."

## 6.4.5 Street Plan and Profile:

- (a) This sheet shall show the plan of the proposed street drawn to a scale of 1" = 40" with the existing and proposed profiles, drawn directly below the plan at a horizontal scale of 1" = 40" and a vertical scale of 1" = 4", unless otherwise required by the Board:
- (b) The street plan shall show the following information:
  - (i) All applicable information from the Existing Conditions Plan, Lot Layout Plan, and Grading, Drainage and Utility Plan. The proposed subdivision information shall be shown in a darker line weight.
  - (ii) Bearings and distances of all tangents along the proposed roadway centerline and the right-of-way.
  - (iii) Radii, length and central angle of all curves along the proposed roadway centerline and right-of-way.
  - (iv) Points of intersection of all tangents, with tangent lengths, of all centerline curves.
  - (v) Stations shall be clearly marked at 50-foot intervals along the street centerline and at points of curvature and tangency of all curves. Stations shall be provided at 25-foot intervals in vertical curves. Where the centerline intersects itself or other proposed streets, the point of intersection shall be clearly marked with a station equation.

- (vi) Existing and proposed lot lines intersecting the right-of-way with the frontage and lot numbers shown.
- (vii) Location of all existing and proposed easements.
- (viii) Limit of existing and proposed pavements, including dimensions of all streets, sidewalks, handicapped ramps, driveways, and parking areas.
- (ix) Location of all existing and proposed curbs and berms and identification of the materials; location of all existing and proposed above- and belowground utilities, including but not limited to water, sewer, drainage, electric, gas, and telecommunication. All utility pipe type, sizes, lengths, and slopes shall be provided, as well as all utility structure information, including rim and invert elevations.
- (x) Existing and proposed street trees.
- (c) The street profile shall show the following information:
  - (i) Profile of existing grades along the proposed subdivision roadway centerline; elevations shall be labeled at 50-foot intervals.
  - (ii) Profile of existing and proposed grades along the left and right right-of-way lines for the proposed subdivision roadway.
  - (iii) Profile of the proposed grades along the roadway centerline, with stations and elevations labeled at 50-foot intervals and at points of vertical curvature, gradient intersection, and tangency. Stations shall be provided at 25-foot intervals in vertical curves. Where the centerline intersects itself or other proposed streets, the point of intersection shall be clearly marked with the existing and proposed elevation and station equation.
  - (iv) Roadway gradient lines shall be labeled with the rate of grade expressed as a percent.
  - (v) Lengths of all vertical curves shall be labeled, including applicable sight distances.
  - (vi) Profile of all existing and proposed drainage facilities, including drainage lines, catch basins, manholes, culverts, headwalls, outlet pipes/structures shall be drawn in solid lines showing pipe sizes, lengths, slopes, and rim and invert elevations at all structures. Infiltration or detention/retention systems located partially or fully within the right-of-way shall be shown. Stations and offsets shall be indicated for all catch basins, manholes and culverts, headwalls and outlet pipes/structures.
  - (vii) Profile of all existing and proposed water mains and appurtenances, including pipe sizes, depths of cover, laterals to hydrants and station and offset(s) to hydrants.
  - (viii) Profile of all existing and proposed sewer mains and manholes showing pipe sizes, pipe slopes, rim and invert elevations, and station and offsets to manholes.

- (ix) Profile of all other existing and proposed below ground utilities, including gas, electric, telecommunications, cable TV, poles, conduits, transformers and appurtenances.
- (x) Profiles of all utilities shall be provided in the proposed subdivision roadway and any easements. The profiles for all proposed utilities shall extend to the point where the proposed system ties into the existing utility or otherwise terminates.
- (xi) Vertical clearances shall be labeled between all crossing utilities.

#### **6.4.6** Sedimentation and Erosion Control Plan

- (a) All applicable information from the Existing Conditions Plan, Lot Layout Plan, and Grading, Drainage, and Utility Plan. The proposed subdivision information shall be shown in a darker line weight.
- (b) Location of the proposed limit of work, lined by a row of hay bales and silt fencing in down gradient areas and along all resource areas.
- (c) Location of anti-tracking area at all construction entrances.
- (d) Hay bale and silt fence protection and/or silt sacks at all existing and proposed drainage structures.
- (e) Seeding, sodding, or revegetation plans and specifications for all unprotected or unvegetated areas.
- (f) Location and design of all structural sediment and erosion control measures, such as grade stabilization structures, temporary drainage swales, and temporary sedimentation basins.
- (g) Location of all proposed stockpiling areas with appropriate erosion control measures.
- (h) Notes detailing the proposed operation, maintenance, and inspection schedule for all erosion and sedimentation control measures, including proposed schedule for street sweeping of adjacent roadways and paved areas.

# 6.4.7 Landscaping Plan

- (a) All applicable information from the Existing Conditions Plan, Lot Layout Plan, and Grading, Drainage, and Utility Plan. The proposed subdivision information shall be shown in a darker line weight.
- (b) Limits of existing vegetation to remain, including existing single trees greater than six (6) inches caliper. Trees shall be staked out to the drip line with snow fencing to prevent damage to the root system.
- (c) Proposed street trees and other proposed landscaping within the right-of-way.

(d) Plant and tree legend; the plant types shall be reviewed by the Winchester Street Tree Committee and the Winchester Conservation Commission where subject to their review. A recommendation shall be made to the Planning Board from the Street Tree Committee regarding the tree type and size.

# 6.4.8 Typical Sections, Details, and Notes

- (a) Typical cross-section of each street (if more than one type) showing width of the right-of-way, width of pavement, curbs, cross slope, sidewalk(s), grass strips, utility locations and depths of cover, thicknesses and types of pavement for the street and sidewalk, thicknesses of street and sidewalk base courses, thicknesses of loam, location of guardrail, existing and proposed grades, and the maximum grade of return to existing grade. One side of the section shall indicate a typical "fill" and the other a typical "cut."
- (b) Typical cross-section(s) and details of all proposed retention and/or detention basins showing existing and proposed grades, details of inlet pipes with inverts and full flow capacity, outlet control structures and pipes with inverts and full flow capacity, estimated high groundwater elevations, two (2), ten (10), twenty-five (25) and one hundred (100)-year storm water elevations, details and elevations of emergency spillway structure(s), embankment construction and slope treatment, top of dam elevation, and volume of storage capacity.
- (c) Typical cross-section(s) and detail of all proposed infiltration systems showing existing and proposed grades, details of inlet and outlet pipes/structures with invert elevations, details of all proposed clean-out structures, estimated high groundwater elevations, and extent of all surrounding crushed stone and filter fabric. Separate cross-sections should be provided for systems located under paved and unpaved surfaces, as appropriate.
- (d) Profiles of all cross-country utilities, drainage swales, or ditches with typical cross sections of each.
- (e) Detail for all retaining walls, fences, or similar.
- (f) Details of drainage structures, including catch basins, manholes, headwalls, flaredend sections, outlet and velocity control structures, rip-rap slopes and channels.
- (g) Details of sewer manholes and drop inlet structures.
- (h) Details of hydrants, blow-off valves, and thrust blocks.
- (i) Utility trench details.
- (j) Details of curb installation(s).
- (k) Details of handicap ramp(s).

- (l) Detail of guardrail(s).
- (m) Details of all erosion/sedimentation control devices.
- (n) Typical street sign detail.
- (o) Typical street light detail.
- (p) Tree/shrub planting detail.
- (q) Plans, details, sections, and profiles of any other utility, structure of facility proposed in the subdivision.
- (r) All plans and profiles shall be drawn at horizontal scale of not less than 1" = 40' and a vertical exaggeration not greater than 1" = 4"; details and sections shall be drawn at a scale of not less than 1" = 4" or approximately one-quarter (1/4) scale if drawn "not to scale," unless otherwise approved by the Board.
- (s) Specific and general notes identifying the standards for materials and construction methods of all the elements in the subdivision. Accepted standards and specifications include the following:
  - (i) American Society for Testing and Materials (ASTM);
  - (ii) American Water Works Association (AWWA);
  - (iii) State Environmental Code Title V; and
  - (iv) Massachusetts Stormwater Handbook, dated February 2008, as amended.

# 6.5 ADDITIONAL DOCUMENTS, REPORTS, AND STUDIES REQUIRED

# **6.5.1** Stormwater Management Report

Three (3) copies of a separate stormwater management report shall be submitted together with the definitive subdivision plans. It shall be prepared and stamped by a Massachusetts licensed professional engineer and shall contain the following information:

- Narrative describing existing and proposed soil conditions (including Hydrologic Soils Group [HSG] classification published by the National Resources Conservation Service [NRCS]), land use, surface cover, estimated high groundwater elevations, drainage patterns, and proposed stormwater management practices.
- Description of any soil testing conducted in the study area, including percolation tests, tests for saturated hydraulic conductivity, test pits or soil borings. Soils information shall be based on field investigations by a Massachusetts certified Soil Evaluator, or a Massachusetts Licensed Professional Engineer. Testing shall be performed in accordance with Volume 3 of the Massachusetts Stormwater

- Handbook (dated February 2008, as amended) and Section 7.15.10 of these Regulations. Raw test data shall be provided in an appendix to the report.
- Narrative describing the methodology used to conduct the hydrologic and hydraulic analyses of the site, estimate the existing and proposed stormwater runoff rates and volumes, and design the proposed stormwater management system(s).
- Table comparing existing and proposed impervious area peak runoff rates and runoff volumes. Common design point(s) shall be used for comparison between existing and proposed conditions. If the analysis shows increases in the off-site peak rate or volume of runoff, additional analysis of downstream drainage systems and/or water bodies may be required. The Board may require off-site improvements to mitigate for the project's impact.
- Long-term operations and maintenance plan for the drainage system, including any
  drainage structures, such as dry wells, servicing buildings within the subdivision.
  The plan shall contain easy to use inspection forms to be submitted to the Planning
  Board on an annual basis after completion of the work. The plan shall identify who
  is responsible for maintaining the system and provide a mechanism for funding the
  program.
- A completed copy of the LID Site Planning and Design Checklist (see Appendix I)
   Description of proposed water quality controls and low impact development
   techniques used in the subdivision, including an estimate of Total Suspended Soils
   (TSS) Removal in accordance with the Massachusetts Stormwater Handbook, dated
   February 2008, as amended.
- Description of any impacts to the 100-year floodplain and regulatory floodway and a summary of compensatory flood storage calculations, if appropriate.
- Description of existing and proposed groundwater recharge on the site, including quantitative summary of existing and proposed recharge volumes, and summary of groundwater mounding analysis, if applicable. At a minimum, Existing Estimated Seasonal High Groundwater (ESHGW) elevation shall be documented at each location where an infiltration-type stormwater management practice is proposed.
- Map(s) showing pre- and post-development watershed areas, including any off-site contributions, and time of concentration travel flow-paths. Study design points should be indicated on the plan.
- Map showing the location of site on the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (FIRM) for the Town of Winchester, or other appropriate information pertaining to location of the 100-year floodplain boundary in relation to the site.
- Map showing any wetland resource areas within 200 feet of the proposed limit of work, and the associated buffer zones;

- Appendix containing all drainage calculations for existing and proposed conditions, including hydrologic analysis of the site, hydraulic analysis of the proposed drainage system, and calculations supporting the design of all structures that will control peak discharge rates and volumes. Drainage calculations shall be provided for the 2-, 10-, 25-, and 100-year storm event using the 24-hour precipitation estimates published by the Northeast Regional Climate Center at Cornell University (<a href="http://precip.eas.cornell.edu">http://precip.eas.cornell.edu</a>), see Section 2.11 of these Regulations. Proposed condition calculations must be based on the full build-out conditions for the subdivision.
- Groundwater recharge calculations comparing pre- and post-development conditions and groundwater mounding study, if appropriate.
- Proposed schedule of construction operations and phasing plans, including land clearing and grading, installation of sediment and erosion control measures, utility installation, sidewalk and roadway installation and paving, and building plans.

# 6.5.2 Environmental and Community Impact Analysis

**6.5.2.1 Applicability:** All subdivision applications that create frontage for three (3) or more lots and all nonresidential subdivisions shall include fifteen (15) copies of an Environmental and Community Impact Analysis. The Board may require portions of this Analysis be carried out for smaller residential subdivisions if, in their opinion, the sensitivity of the land, neighborhood, or infrastructure warrants the investigation.

The Environmental and Community Impact Analysis shall clearly and methodically assess the relationship of the proposed development to the natural and man-made environment of Winchester. This report shall be prepared by professionals qualified, experienced, and, as applicable, licensed, in their fields. Such professionals may include registered professional (civil) engineers, traffic engineers, architects, landscape architects, economists, land-use planners, preservation planners, hydrogeologists, hydrologists, biologists, public safety officials and other environmental professionals. The Applicant shall bear the cost of this analysis.

- **6.5.2.2 Purpose:** This analysis shall be used to inform the Board in its deliberations and will build into the Board's decision-making process consideration of the environmental and community impacts of the proposed development.
- **6.5.2.3** For each of the components of the Environmental and Community Impact Analysis listed under Section 6.5.2.3 below, each of the following concerns must be separately addressed:
  - (a) The Environmental and Community Impacts of the Proposed Development. The report shall describe the primary and secondary environmental and community impacts, both beneficial and adverse, anticipated as a result of the proposed development; this section shall include all impacts resulting from the construction phase as well as those resulting from the project's completion.

- (b) Alternatives to the proposed development. The report shall develop, describe, and objectively weigh alternatives to the proposed development that are allowed under the Zoning Bylaw either by right or by special permit.
- (c) Adverse impacts that cannot be avoided should the proposed development be implemented. The report shall describe the kinds and magnitudes of the adverse impacts which cannot be reduced in severity or which can be reduced in severity but not eliminated.
- (d) Measures to be used to minimize adverse environmental and community impacts. Corrective and protective measures that will be taken as part of the project to minimize adverse impacts shall be described in detail.
- **6.5.2.4 Topics to be Evaluated and Level of Detail Required:** The report shall address all pertinent aspects of Section 6.5.2.3 as specified in the Board's review of the draft Environmental and Community Impact Analysis included in the Preliminary Subdivision Submission. If no preliminary subdivision plan is submitted, the Environmental and Community Impact Analysis shall evaluate all of the following topics.

#### **6.5.2.5** Natural Environment:

- (a) **Air and Noise Pollution:** The impact of local air quality and noise from the proposed development (including traffic generated from the development), both during and after construction, shall be evaluated; for larger developments (over 10 dwelling units) the Board may require detailed technical reports for such impacts.
- (b) **Stormwater Runoff Quantity and Quality:** The impact of stormwater runoff on adjacent and downstream surface water bodies and subsurface groundwater shall be evaluated in terms of both runoff quantity and quality. Dangers of flooding as a result of increased runoff, especially peak runoff; dangers of increasing icy street conditions in winter; and the impact of the proposed project on water table levels also shall be evaluated.
- (c) **Land:** Compatibility of the proposed development with existing soils; the impact of any soils or other such materials to be removed from or added to the site; and the potential dangers and impacts of erosion and sedimentation caused by the proposed development.

The Town of Winchester has two zoning provisions within the Winchester Zoning Bylaw that allow for the preservation and conservation of open space. Prior to generating definitive subdivision plans, the Winchester Planning Board encourages Applicants to review these bylaws and determine if these zoning bylaws can meet the needs of the Applicant while retaining the ability of the Applicant to develop the land for housing, commercial or industrial purposes. The Winchester Planning Board encourages the Applicant to take measures to conserve land and place a conservation restriction on the land to allow for responsible development, particularly in light of the fact that most remaining parcels available for development

- have challenges in the form of steep slopes, poor soils, inadequate drainage or other limitations.
- (d) **Plants and Wildlife:** The impact that the proposed project may have on wildlife habitat and on any rare or endangered plant or animal species known to exist in the area.
- (e) Water Supply and Fire Protection: The average and peak daily demand and the impact of such demands on the existing water supply and fire protection systems. Flow tests or other testing of the existing system may be required to evaluate the existing capacity and project impacts.
- (f) **Sewage Disposal:** The average and peak daily disposal and the impact of each disposal on the existing system. Flow monitoring of the impacted sewer system or other field tests may be required to evaluate the existing capacity and impact of the proposed project.
- (g) **Subdivision in a Floodplain Overlay District:** All subdivision proposals shall be reviewed to determine whether such proposals will be reasonably safe from flooding. If any part of a subdivision proposal is located within the Floodplain Overlay District, established under the Winchester Zoning Bylaw, it shall be reviewed to assure compliance with the following:
  - (i) The proposal is designed consistent with the need to minimize flood damage;
  - (ii) All public utilities and facilities, such as sewer and water systems, are located and constructed to minimize or eliminate flood damage; and
  - (iii) Adequate drainage systems are provided to reduce exposure to flood hazards.

#### **6.5.2.6** Man-Made Environment:

- (a) **Existing Neighborhood Land Use:** Compatibility with adjacent or nearby existing land uses, or approved private development plans, if known, for adjacent or nearby land use changes to occur during the life of the proposed development; if not compatible, reasons therefore shall be detailed;
- (b) **Existing Design Context:** Compatibility with nearby buildings that have distinctive siting, massing, materials, or other features reflecting a certain historic period or periods; and
- (c) **Zoning:** Compatibility of the proposed development with the purposes of the Zoning Bylaw and the zoning district(s) in which the site is located.

#### **6.5.2.7** Public Services:

- (a) **Schools:** The expected impact on the school system, both elementary and secondary levels, including the number of students; projected school bus routing changes; and projections of future school building needs resulting from the proposed project.
- (b) **Police:** The expected impact on police services, time, and manpower needed to protect the proposed development and service improvements necessitated by the proposed development.
- (c) **Fire:** Expected fire protection needs; on-site fire fighting capabilities; on-site alarm or other warning devices; fire-flow water needs, source and delivery system and other needs shall be presented. Fire department service improvements necessitated as a result of the proposed project also shall be discussed.
- (d) **Recreation:** On-site recreation provisions shall be detailed and off-site recreation demands shall be estimated; provision for public open space, either dedicated to the Town or available to its residents or employees also shall be described.
- (e) **Solid Waste Disposal:** Analysis of the projected volume and type of solid waste to be generated by the proposed development and methods of removal.

#### 6.5.2.8 Aesthetics:

- (a) **Lighting:** The type, design, location, function, and intensity of all exterior lighting facilities shall be described; attention given to safety, privacy, security, and daytime and nighttime appearance shall be detailed. All lighting fixtures and their operations are encouraged to be the most energy-efficient while being sympathetic in design to abutting properties and neighborhoods in Winchester.
  - The Board's goal is to minimize light trespass from project sites, reduce sky-glow to increase night sky access, improve nighttime visibility through glare reduction, and reduce adverse impacts on wildlife environments.
- (b) **Landscaping:** Provisions for landscaping shall be described, including type, location, and function of all street trees and other plantings and materials.
- (c) **Visual:** Attention given to views into the site and from the site shall be described, including long-distance views as well as views to and from adjacent properties.
- (d) **Road Design:** Alternatives to roadway design and materials may be considered, such as cobblestone or fieldstone gutters set in a pervious material, such as stone dust.

# **6.5.2.9** Planning:

(a) Analyze the compatibility of the proposed development and its alternatives with the goals and objectives of the Master Plan and the Open Space Plan.

- **6.5.2.10 Traffic Study:** The Applicant shall provide an analysis of the development's traffic impacts, which, at a minimum, includes the following:
  - (a) The existing level of service (LOS see definition below) of relevant road systems in the vicinity of the proposed subdivision, including quantitative and qualitative measurements of operational factors, including speed, travel delay, freedom to maneuver, and safety;
  - (b) The expected change in the LOS of relevant road systems as a result of the proposed development;
  - (c) The comparison on a per-acre basis of the total vehicular traffic generation from the proposed development with:
    - (i) Existing and potential vehicular traffic generation from all other developments accessing relevant road systems; and
    - (ii) The vehicular traffic generation which would be expected to produce a LOS below "C."
  - (d) In determining the impact of vehicular traffic generation from a development, the following standards and definitions shall be used (unless the Applicant demonstrates to the Board that, given the nature of the proposed project or applicable road systems, other standards are appropriate):
    - (i) Trip generation rates for land uses as listed in the most recent *Trip Generation, Institute of Transportation Engineers*, Washington, D.C.; and
    - (ii) Levels of Service: Level of service (LOS) is a term that traffic engineers use to define the various operating conditions that occur on a roadway or intersection when accommodating various traffic volumes. LOS is a qualitative measure of traffic flow that considers a number of factors, including roadway geometry, speed, travel delay, freedom to maneuver. It is an acceptable measurement for determining overall impact of development on roadway networks and provides as index to the operational qualities of a roadway segment or an intersection. Level of service designations range from A to F, with LOS A representing the best operating conditions and LOS F representing the worst.
- **6.5.3 Proof of Access:** In cases where access to a proposed subdivision is over a private way or an unaccepted street, the applicant shall provide proof of entitlement to such access. A way in an unaccepted or unapproved subdivision shall not be used or considered as access to a proposed Definitive Subdivision unless such way is improved so that it would qualify for acceptance as a public way.

#### 6.6 REVIEW PROCEDURES

**Application Review:** Within twenty-one (21) days after the filing of the Definitive Plan Application (Form C) with the Board, the Town Planner and the Town Engineer shall review the application for completeness, and shall notify the Board of any missing

or incomplete information in the application. Upon such notification, the Board shall notify the Applicant in writing of said missing or incomplete information in the application. At that time, the Applicant may withdraw an incomplete application by notifying the Board and the Town Clerk, in writing, of the decision to withdraw the application from consideration. If the Applicant withdraws the application, the filing fee shall be forfeited unless waived by the Board.

If the Applicant does not withdraw an incomplete application within fourteen (14) days of notification of incompleteness, the Board shall proceed to advertise and hold a public hearing on the application as submitted.

- **Public Hearing:** Upon determination by the Board that the application for approval of the Definitive Plan is complete, or that it is incomplete and the Applicant has failed to withdraw or seek to formally amend the application, the Board shall schedule a public hearing in accordance with M.G.L. c. 41, §81T, and so notify the Applicant.
- **Report of the Board of Health:** The Board of Health shall, within forty-five (45) days after the plan is so filed, report to the Board in writing, its approval or disapproval of said plan, and, in the event of disapproval, shall make specific findings as to which, if any, areas shown on such plan cannot be used for building sites without injury to the public health, and include such specific findings and the reasons therefore in such report, and where possible, shall make recommendations for the adjustments thereof. Failure of the Board of Health to file such report shall be deemed approval by the board. The Board of Health shall send a copy of such report, if any, to the person who submitted said plan.
- **Plan Review by Other Town Officials and Agencies:** During its review of the Definitive Plan, the Board may receive and consider the reports of the Engineering and Planning Departments, the Director of Public Works (who oversees the water, sewer and drainage systems), the Fire Chief, the Police Chief, the Board of Health, the Conservation Commission, the Historical Commission, the Design Review Committee, and any outside technical experts hired by the Board.

If applicable, concurrent review by the Conservation Commission and the Board is recommended.

**6.6.5 Time Extensions:** Further time, as may be agreed upon by the Board and the Applicant, may be allowed for the Board's decision. Time extensions shall be at the written request of the Applicant and the notice(s) of time extension shall be filed forthwith by the Board with the Town Clerk. A request for extension of time must be made in writing at a public hearing or regularly scheduled meeting of the Board.

## 6.7 BOARD DECISION ON THE DEFINITIVE PLAN

The action of the Board on a definitive plan shall be after the public hearing, following receipt of the Board of Health report or the lapse of forty-five (45) days without such report, and within ninety (90) days of the submission of the definitive plan to the Board with a preliminary plan, or one hundred thirty-five (135) days of filing with no preliminary plan.

Where structures over 50 years of age are involved, the Historical Commission shall report within forty-five (45) days. If no report is issued, the Historical Commission shall be deemed to have no comment on the project.

- **6.7.1 Decision:** The Board shall vote to take one of the following actions:
  - (a) Approve the plan if it complies with the Subdivision Control Law, the Rules and Regulations of the Board, and the recommendations of the Board of Health; or
  - (b) Approve the plan with specified modifications and/or stated conditions; or
  - (c) Disapprove the plan, stating in detail wherein the plan does not conform to the Rules and Regulations of the Board or the recommendations of the Board of Health.

Any actions, approvals, or other votes taken under the Subdivision Control Law shall be by a majority of the members of the Board. Such majority shall be considered the quorum of the Board, and a concurring vote of such quorum shall be necessary to affect a favorable action.

- **6.7.2 Criteria for Decision:** Criteria for action by the Board shall be the following:
  - (a) Completeness and technical adequacy of the plans and supporting material;
  - (b) Payment of all required fees, including fees incurred by outside technical reviewers hired by the Board;
  - (c) Due regard for the provision of adequate access to all of the lots in a subdivision by ways that will be safe and convenient for travel;
  - (d) Consistency with the purposes of the Subdivision Control Law;
  - (e) Conformity with all applicable provisions of the Zoning Bylaws;
  - (f) Securing adequate provisions for water, sewerage, drainage, underground utility services, fire, police, and other similar municipal equipment, and street lighting and other requirements where necessary in a subdivision;
  - (g) Coordinating the ways in neighboring subdivisions; and
  - (h) Conformity with the Town's design and construction standards described in these Rules and Regulations and other Town rules, regulations, and standards.
- 6.7.3 If the report of the Board of Health shall so require, any approval by the Board shall be on condition that no building or structure shall be built or placed upon the areas designated without consent by such Board of Health. In the event that the approval by the Board of Health is by failure to make a report, the Board shall note on the plan the Board of Health approval is by failure to make a report.

The Board shall not approve a plan that does not comply with the recommendations of the Board of Health. The Board's options in such a case are limited to disapproving the plan or modifying and approving the plan to bring it into conformity with the recommendations of the Board of Health.

- **6.7.4 Conditions of Approval:** The following conditions shall apply to every definitive subdivision plan approved by the Board:
- **6.7.4.1** Final approval shall be subject to the requirements, design criteria, and design standards and construction specifications of these Rules and Regulations, and such special conditions as may be specified by the Board in its approval.
- **6.7.4.2** Approval by the Board of a definitive subdivision plan shall not constitute acceptance by the Town of Winchester of any street, sidewalk, or other municipal services within the subdivision.
- 6.7.4.3 The Applicant shall retain title to the fee of each street, path, or easement or appurtenant to, in the subdivision until conveyed to the Town (in the case of streets that will become public ways) and shall maintain and repair streets and improvements in a manner satisfactory to the Town, acting by and through its Board, during this period. In the case of roads that will remain private ways, the Applicant shall retain title fee and maintenance responsibilities until the project is released from subdivision control, at which time the responsibilities will be turned over to the Property Owners' Association of the lots within the subdivision. A notation shall be made on the plans, which indicates the Applicant's ownership of said street(s) pending acceptance by the Town.
- **6.7.4.4** If the Town must maintain a portion of, or enter the subdivision for the purpose of public safety, emergency purposes, or otherwise, the Town reserves the right to charge the Applicant for services rendered.
- **6.7.4.5** The Applicant shall be responsible for maintaining in good repair all streets in the subdivision after release of the security, as required in Section 8.2.5 until the streets are turned over to a Property Owners' Association or accepted by Town Meeting as a public way.
- 6.7.4.6 To assure such responsibility, the Applicant shall guarantee the maintenance of the streets in the subdivision to meet all the requirements of these rules and regulations to the satisfaction of the Board, by posting with the Board a maintenance security in an amount sufficient in the determination of the Board to secure the future maintenance. The security shall be kept in place by the Board until the roadway is accepted by the Town or turned over to a Property Owners' Association.
- **6.7.4.7** The Applicant shall be responsible for maintenance of all improvements within the street, from edge to edge of the right-of-way.
- **6.7.4.8** Where common facilities within the subdivision will remain under private control, the Board shall require, as a condition of approval of a plan, that the applicant provide adequate provisions for the long-term maintenance of such facilities. A Property

Owners' Association must be established for the purpose of the perpetual maintenance of common facilities, including but not limited to, detention basins, sewage pumping stations, common open space, and private ways that will serve the subdivision. A draft of said Property Owners' Association documents shall be reviewed and approved by the Board, as per the recommendation of Town Counsel, prior to the approval of the subdivision.

- **6.7.4.9** The applicant shall submit for the Board's review all documents, including but not limited to, master deeds, restrictive covenants, deed restrictions and easements.
- **6.7.4.10** Covenants must include the requirement that the Property Owners' Association accept all responsibility for maintenance of roads and infrastructure to the standards outlined in these rules and regulations, and any conditions attached to the Definitive Plan, as approved by the Board. This requirement shall apply even if omitted from said covenant.
- **6.7.4.11** The construction of all ways and installation of all of municipal services shall be completed in accordance with all applicable rules and regulations of the Board, unless explicitly waived in the decision, within a period of two (2) years from the date of endorsement of the plan. Failure to do so may cause the plan to be subject to rescission.
- 6.7.4.12 An applicant may request an extension of the above two (2)-year period by submitting a request, in writing, to the Board prior to the expiration of said two (2)-year period. No such request shall be for an extension of more than one (1) year. The request shall include the reasons for the extension, and provide an acceptable schedule for completion of each of the remaining work activities. The Board may, by majority vote of its membership, grant such request or grant modification upon demonstration of good cause. More than one extension may be granted. As a condition of permitting any such extension, the Board shall have the right to revise the amount of any surety to ensure that sufficient funds are retained to secure the completion of required improvements, and if applicable, shall have the right to revise the Covenant accordingly.
- **6.7.4.13** Failure of the developer to complete the improvements within said two (2)-year period, or any extension thereof, shall not relieve the developer from the obligation to pay for increased costs for completing the improvements in excess of the performance guarantee and shall be grounds for rescission of the approval of the plan.
- **6.7.4.14** The Board, its officers and agents, may, as far as they deem necessary in carrying out the subdivision control law, enter upon any lands and there make examinations and surveys or to place and maintain monuments and marks.
- **Notice of Decision:** Within ninety (90) days of receipt of the Definitive Plan, or one hundred thirty-five (135) days if a Preliminary Plan has not been filed, the Board shall file a certificate of its action with the Town Clerk and send notices of its action by certified mail to the Applicant.

- **6.7.6 Failure to Make Decision:** If the Board fails to take final action upon the plan or to notify the Town Clerk and the person submitting the plan of its action within the required time limit, or such further time as is mutually agreed upon by the Board and Applicant, the plan shall be deemed approved.
- **Expiration of Appeal Period:** After the expiration of the twenty (20)-day appeal period, or if an appeal is taken, the Town Clerk shall endorse on the approved plan or set forth in a separate certificate, which shall be recorded at the Registry of Deeds, and shall be referred to on the approved plan, the following statement:
  - (a) The above plan was submitted for approval on (date).
  - (b) The Clerk also shall include one of the following statements:
    - (i) "I hereby certify that notice of approval of this plan by the Winchester Board was received and recorded \_\_\_(date)\_\_\_ at this office, and no appeal was received during the twenty (20) days next after such receipt and recording of said notice." (No appeal taken approval by final action of Board);
    - (ii) "I hereby certify that no notice of appeal was received during the twenty (20) days next after the expiration of the required time for final action by the Board and the approval has become final." (No appeal taken approval by failure of Board to take final action within required time); or
    - (iii) "I hereby certify that a final decree has been entered by the Superior or Land Court of Middlesex County, Case No. \_\_\_\_\_ sustaining the approval of the plan." (Appeal taken disposition of court upholds approval of plan).
- **Revocation of Denial:** In the event of a disapproval, or denial, of a Definitive Subdivision Plan, the applicant may submit an amended plan to the Board. If the Board finds, through public hearing duly noticed in accordance with Subdivision Control Law, that the amended plan:
  - (a) Is substantially similar to the disapproved plan;
  - (b) Fully addresses the reasons for such disapproval; and
  - (c) Is in conformity with these Rules and Regulations, and
  - (d) Fully satisfies all criteria specified elsewhere herein, then the Board may revoke said disapproval and grant an approval of the amended plan, with or without conditions.

The applicant shall submit such amended plan and applicable fee in accordance with Sections (6.7.9, 6.7.10, and 6.7.11 inclusive), hereof, providing replacement drawings and, to the extent that information filed with the original application has been modified, revised accompanying documents and information relative to the proposed modifications or amendments. If the plan is not substantially similar, in the judgment of

the Town Planner and subject to appeal to the Board, then it shall be considered to be a new application.

# **6.7.9** Modifications to an Approved Definitive Plan:

- 6.7.9.1 After approval of any definitive plan, the plan shall not be changed unless the plan is amended in accordance with the provisions set forth in M.G.L. c. 41, §81W, and approved by the Board. The Board may consider modifications to an approved Definitive Subdivision Plan, upon written request (in 10 copies) of an Applicant accompanied by 10 copies of plans and other information sufficient to explain such modification clearly. The Board shall determine, in its sole judgment, whether such modification is minor or major.
- **6.7.9.2** If minor, the Board shall consider the substance of the request at a public meeting at its earliest convenience, and if it finds any or all modifications requested to be acceptable according to the standards set forth in these Regulations, the Board may grant, with or without conditions, approval to any such modification; if it finds any modification so to be unacceptable, it shall deny such modification; in either case it shall notify the Town Clerk of such decision within seven days thereafter.
- 6.7.9.3 If major, the procedures specified in Sections 5.2, 5.3, 5.4, and 5.5, as applicable shall be followed, with the exception that no inspection fee shall be payable for a modification; however, an application fee as set forth in the Fee Schedule shall be payable. If a major modification is approved, the applicant shall, within thirty (30) days of the decision thereon, supply to the Board ten (10) copies of revised plans fully reflecting such modification and bearing a reference to the original subdivision plan.

#### **6.7.10** Modification or Rescission:

- **6.7.10.1** Modification or Rescission by Other than the Applicant: The Board on its own motion or on the petition of any aggrieved person shall have the power to modify, amend, or rescind any approved Definitive Subdivision Plan for good cause, or to require a change in a plan as a condition of its retaining the status of an approved plan, in accordance with M.G.L. c. 41, §81W. In addition to the above, the Board may consider rescinding approval of a Definitive Subdivision Plan on the following grounds:
  - (a) If no guarantee for required improvements is provided and the plan is not recorded within six months following the expiration of the 20-day appeal period or the settlement of any appeal, whichever occurs later; or
  - (b) If work on the required subdivision improvements is not completed within two years of the recordation of the Definitive Subdivision Plan, or by the end of any extension period requested in writing by the applicant prior to the end of such two-year period and granted by the Board.

6.7.11 Rescission for Noncompliance with Plans, Conditions, or Other Requirements:

The Board shall consider any variation from the approved Definitive Subdivision Plans or any other noncompliance to be sufficient cause for the applicant to be found in breach of the Definitive Subdivision Plans. Should the Board find an applicant so to be in breach, it may rescind its approval and require the immediate cessation of all work on the property or, at Board's discretion, it may utilize the bond or other form of surety held in connection with such subdivision to remedy such breach.

# 6.8 ENDORSEMENT

- be made on the plans. The twenty (20)-day appeal period must have expired or a final decree must have been entered on an appeal before endorsement. A performance guarantee acceptable to the Board also shall have been provided by the Applicant before approval is endorsed. Endorsement shall be obtained not more than 180 days after the approval of the definitive plan, or said approval shall be automatically rescinded. Prior to endorsement, the Applicant also shall make necessary corrections to the plan if conditional approval was given, or modification required, to the satisfaction of the Board. If the Applicant fails to submit the required guarantees and plan revisions within six (6) months of the date of the Board's vote, the Board, on its own motion, may exercise its power to modify, amend, or rescind its approval of the subdivision plan or require a change in the plan as a condition of said plan retaining the status of an approved plan.
  - (a) Approval is endorsed in one of the following ways:
    - (i) If approval was by action of the Board, the Board endorses its approval on the plan; or
    - (ii) If approval was by failure of the Board to act within the required time the Town Clerk shall issue a certificate stating the following:
      - (1) Date the plan was submitted to the Board for approval;
      - (2) Date on which the Board was required to take final action; and
      - (3) Fact that Board failed to take final action within the prescribed time, and that the approval resulting from such failure has become final.
  - (b) The following information shall be set forth on the plan:
    - (i) Endorsement of approval signed by a majority of the members of the Board; or endorsement of the Board's approval signed by any person authorized in accordance with Subdivision Control Law to endorse the Board's approval on a plan; or Referral to the book and page number where the certificate of the Town Clerk is recorded in cases where the Board failed to take final action within the required time.
    - (ii) Date the plan was approved (must be at least twenty (20) days before the date of endorsement).

- (iii) Date of the endorsement of approval on the plan (must be at least twenty [20] days after the date of approval).
- (iv) Appropriate endorsement by the Board if park or parks are required to be shown on the plan. Such endorsement may require that no building may be erected on a park or parks for a period of not more than three (3) years without Board's consent.
- (c) The following shall be set forth on the plan or set forth in a separate document referred to on the plan:
  - (i) Certification by the Town Clerk regarding expiration of appeal period or favorable disposition of appeal by Superior Court or Land Court;
  - (ii) Establishment of a Property Owners' Association (or similar) to provide for long-term maintenance of the roadway and associated infrastructure, as required by the Board decision;
  - (iii) Covenant, if this is the type of performance security selected to guarantee construction and installation;
  - (iv) Conditions required by the Board of Health; and
  - (v) Waiver of rules and regulations, frontage or access requirements, and conditions of approval required by the Board.
- **6.8.2** The Board shall deliver the endorsed plan or, in the case of a certificate, the Town Clerk shall deliver the plan and certificate to the person who submitted the plan.
- **Recording of Decision, Plans, and Covenants:** Within five (5) business days of endorsement, the Applicant shall record the full plan set, together with approval conditions, the covenant (if applicable), any easements or rights-of-way and any restrictive covenants at the Registry of Deeds or file it with the Land Court, in the case of registered land.

If the endorsement on the plan is not dated within six (6) months of the date of recording, the Applicant shall apply to the Board or Town Clerk for a certificate which shall be endorsed on the plan or referred to on the plan or referred to on the plan and recorded with the plan. The certificate must be dated within thirty (30) days of the recording. The certificate shall state:

"that the approval has not been modified, amended, or rescinded, nor the plan changed."

Such certificate shall be made unless the records of the Board or Town Clerk receiving the application show that there has been such modification, amendment, rescission, or change.

The preceding section of MGL c. 41 §81-X relating to endorsement of approval dated within six months of recording or a certificate dated within days of the recording does

not apply to plans which have been constructively approved due to failure of the Board to take final action within the required period.

**6.8.4 Copies of Recorded Information:** Within five business days of recording, the Applicant shall provide the Board with one complete set of the recorded plans on mylar, one contact set of prints of the recorded plans, four copies of the recorded conditions of approval, and one copy of the recorded covenants and restrictions or other required documents. The Board shall transmit one set of plans and one written decision to the Town Clerk.

In the case of a subdivision secured by a surety, and only after receipt of evidence of the proper recording of all appropriate documents referenced above, the Town Planner shall notify the Building Inspector in writing that the Building Permits may be issued for lots in the subdivision.

- 6.8.5 If the Applicant fails to perform the construction of ways or installation of municipal services in accordance with these Rules and Regulations or conditions of approval, the Board may:
  - (a) Enforce any bond or apply any deposit of money or securities for the benefit of the Town to the extent of the reasonable cost to such Town of completing such construction and installation. The Board shall delegate any money received from enforcement by making the necessary administrative arrangements with the Town Engineer and/or the Department of Public Works, who will complete the work for which the security was held; or
  - (b) Amend, modify, or rescind its approval of a plan or require a change in a plan as a condition of its retaining the status of an approved plan.
- 6.9 Failure of an Applicant to record the Definitive Plan within six (6) months of its endorsement by the Board at the Middlesex South District Registry of Deeds or at the Land Court; or to comply with the construction schedule incorporated into the performance agreement; or to complete construction of improvements within two (2) years of the approval of the Definitive Plan; or to comply with all applicable Town of Winchester Zoning Bylaws; or to comply with the approved plans and any conditions of approval; shall constitute grounds for rescission of approval in accordance with the requirements and procedures set forth in M.G.L. c. 41, §81W.

# SECTION 7. DESIGN STANDARDS, REQUIRED IMPROVEMENTS, AND CONSTRUCTION SPECIFICATIONS

#### 7.1 GENERAL

Design of the development shall be based upon a site analysis of the existing conditions and major site features, as shown on the plans, to ensure that the development will not create a nuisance or be dangerous or harmful to the general health, welfare, and safety of the public. To the maximum extent practicable and feasible, consistent with the reasonable utilization of land, and in accordance with applicable federal, state or local regulations, development shall be located to preserve the natural features and environmental resources of the site, to avoid areas of environmental sensitivity, and to minimize negative impacts that alter or degrade natural features. Features to be preserved and which add attractiveness and value to the property and the Town include watercourses and waterbodies, unique and/or fragile areas, including wetlands and endangered wildlife habitat areas, significant trees or stands of trees, as well as species of trees that are rare to the area or of particular horticultural or landscape value, historic structures and landmarks, scenic views, vistas and viewsheds, and similar community assets.

It is not intended that these design standards will be applicable to all possible situations which may arise in the design of a particular subdivision. In situations not covered herein, and particularly in the case of subdivisions for business or industrial purposes, planned unit development, multifamily development, and similar large-scale developments, the subdivision shall be designed to the satisfaction of the Board in accordance with such design standards as will satisfy the purpose of the Subdivision Control Law. In such cases, due consideration will be given to the prospective character of the subdivision, the anticipated amount of travel upon the ways and the relevant factors of the particular situation.

- **7.1.1** The design and construction of the subdivision shall minimize, to the extent reasonably practicable, the following:
  - Volume of cut and fill, including blasting;
  - Area over which existing vegetation will be disturbed, especially on land within 200 feet of a water body or wetland, on land having a slope greater than 15 percent, or overlying easily eroded soils;
  - Number of mature trees removed;
  - Visual prominence of man-made elements that are not necessary for safety or orientation;
  - Loss of historic resources, including historic buildings and landscape features;
  - Blockage of vistas through new developments;
  - Removal of existing stone walls;

- Traffic congestion during and after construction, particularly on residential streets;
- Soil instability or erosion during and after construction;
- Directly connected impervious surfaces;
- Alteration of drainage patterns, surface water elevations, or groundwater elevations; and
- Disturbance of wildlife habitats, botanical features, and scenic or historic qualities or features.

The subdivision design and construction shall increase, to the extent reasonably practicable, the following:

- Visual prominence of natural and historic features;
- Use of low impact development techniques;
- Public open space;
- Pedestrian, bicycle, and public transportation amenities and linkages;
- Preservation of mature trees, natural vegetative cover, and existing topography; and
- Preservation and enhancement of neighborhood character that fosters a sense of place.
- **7.1.2 Consistency with Town Plans:** The design and layout of a proposed subdivision shall be guided by the goals and objectives of any existing Master Plan, Strategic Plan, or other statement of goals and objectives set forth for the Town of Winchester.

# 7.2 CHARACTER OF THE LAND

- **7.2.1 Protection of Natural Features:** In laying out of a subdivision, the Applicant shall comply with these rules and regulations with due regard to all natural features such as trees greater than six inches in diameter, watercourses, wetlands, scenic or historic elements, aquifers, floodplains, and habitats of rare or endangered species. These features shall be left undisturbed wherever practical and the Board may waive design requirements in order to protect important natural features.
- **7.2.2 Unsuitable Land:** Land which the Board finds to be unsuitable for development due to flooding, improper drainage or adverse drainage, adverse topography, poor soils, bedrock, location of utility easements, or other features which the Board has reason to believe would be detrimental to the health, safety, and general welfare of the present or future inhabitants of the subdivision and/or its surrounding area, shall not be subdivided or developed unless adequate measures are formulated by the Applicant and are

approved by the Board to eliminate or minimize any short- or long-term impacts created by development of the unsuitable land.

**7.2.3 Self-Imposed Restrictions:** If, as part of a subdivision application, the Applicant or Owner places voluntary restrictions on any of the land contained in the subdivision which are greater than the requirements of these Regulations or of the Town of Winchester Zoning Bylaw, such restrictions or references thereto shall be indicated and located on the Definitive Plan and shall be recorded in the Middlesex County Registry of Deeds or the Land Court.

#### **7.3 LOTS**

- **7.3.1 Lot Arrangement:** Lots shall be arranged so there will be no foreseeable difficulties due to topography, soils, wetlands, bedrock, improper drainage, or other conditions in securing permits to build upon all lots in compliance with the Zoning Bylaw, nor in providing practical, feasible driveway access to a building on each such lot. The land subdivided into lots shall be of such general character that it can be used for building purposes without danger to public health.
- **7.3.2 Lot Dimensions, Width, Area, and Frontage:** The lot dimensions, width, area, and frontage shall comply with the minimum standards of the Winchester Zoning Bylaw.
- 7.3.3 Lot Drainage: Lots shall be laid out so as to provide positive drainage away from all proposed buildings. Runoff from all rooftop areas shall be infiltrated on each lot for up to and including the 100-year storm event (based on the Cornell precipitation data), where soil conditions and subsurface geology allows. Priority should be given to the use of low impact development techniques on each lot, such as rain gardens, to reduce the amount of stormwater leaving the site. The lot should be designed and graded to prevent stormwater runoff from adversely impacting adjacent properties or structures, either existing or proposed.

# 7.4 STREETS – BASIC REQUIREMENTS

**7.4.1 Street Classifications:** Residential streets or ways are categorized by characteristic.

Residential	Neighborhood	Town*	Industrial
Low traffic volumes.	Low traffic volumes.	Higher traffic volumes than Neighborhood streets. Town streets connect one part of town to another.	Low traffic volumes, with potentially large vehicle traffic accessing business and industrial lots.
Undesignated space for bicyclists, pedestrians and vehicles. Pedestrians often walk in the street and children play there.	Vehicles have higher priority than on Residential streets. Undesignated space for bicyclists and vehicles, with some sharrows for separation of bicycles and vehicles.	Vehicles have high priority on street. Designated parking lanes and bicycle lanes or sharrows for separation of bicycles and vehicles. Speeds limited to promote and protect public safety.	Vehicles have high priority on street.

<sup>\*</sup> Town Street designation does not imply town compliance or acceptance of the street.

- **7.4.2** Access Off a Public or Private Way: The streets in the subdivision shall connect to and be accessible from a public way or an existing private way open to the public and in which the applicant has rights for purposes for which ways are intended and commonly used. If the private way to be used for access is substandard, the Board may require that it be improved or constructed by the applicant to meet the minimum design and construction requirements of these Regulations. Said improvements shall be subject to the approval by the abutters who have ownership of the roadway.
- **7.4.3 Means of Access:** There shall be provided at least two (2) recognized means of access for each subdivision. In the case of an approved definitive subdivision plan under development, the Board will not release a surety bond, tripartite agreement, or deposit, or in the case of a covenant, issue a release of covenant for a portion or section of the subdivision under development unless there is provided and constructed first two (2) means of access to said portion or section.
- **7.4.4 Subdivision Straddling Municipal Boundaries:** Whenever access to the subdivision is required across land in another Town, the Board shall require documentation from the Applicant that access has been legally established in that Town as a public street or as part of an approved subdivision, and that access is adequate for expected traffic. In general, lot lines should be laid out so as not to cross municipal boundaries.
- **7.4.5 Future Extension:** If adjoining property is not subdivided but is, in the opinion of the Board, suitable for ultimate development, provision shall be made for proper projection of streets into such property by continuing appropriate streets with the subdivision to the exterior boundary thereof. In the alternative, the Planning Board may condition its approval by prohibiting such extension in the appropriate circumstances.
- **7.4.6 Improving Existing Streets and Utilities:** When the existing roadway and utility service to a new subdivision is deemed inadequate to handle the impact of the development, the Applicant may be required to complete those improvements outside the development to minimize congestion, to insure adequate access to the proposed subdivision, to insure safe and adequate vehicular and pedestrian travel, and provide adequate provisions for water, sewerage, drainage, and other requirements, as may be necessary. The Applicant may be required to provide the land necessary for future improvements for that portion bordering the subdivision. Land used for or reserved for future street improvements may not be counted in satisfying the setback and area requirements of the Zoning Bylaw.
- **7.4.7 Topography and Location:** Streets shall be designed and located to conform as closely as possible to the original topography of the site. There shall be a minimum amount of cut and fill in the design and construction of the streets. The overriding concern is public safety; therefore, the overall topography of the site shall be taken in consideration, resulting in an avoidance of steep grades and curves.

- **7.4.8 Street Names:** Proposed street names shall be included on the plans and shall be sufficiently different in sound and in spelling from other street names in the Town so as not to cause confusion. A street which is planned as a continuation of an existing street shall bear the same name. The proposed street name shall be included in the application submitted to the Board. The Town Engineer, the Fire Chief, and the Police Chief shall review the proposed street name for conflicts with existing street names and may recommend changes as appropriate.
- **7.4.9 Street Numbers:** Street numbers shall be assigned by the Town Engineer, in consultant with the Town Assessor, Fire Chief, and Police Chief upon application for a building permit.

# 7.5 REQUIRED IMPROVEMENTS AND CONSTRUCTION STANDARDS

- 7.5.1 Unless otherwise specified herein, all subdivision improvements shall be constructed in accordance with the standards and specifications set forth in the current "Special Provisions for the Construction of Roadways, Including the Installation of Water, Sewer, and Drains in the Town of Winchester." The Planning Board may grant exceptions on a case by case basis. In case of any conflict or inconsistency between a provision or requirement of these Subdivision Regulations and the Roadways Provisions, the provision or requirement of these Subdivision Regulations shall supersede, control, and govern over the conflicting or inconsistent provision or requirement of the Roadways Provisions.
- **7.5.2 Pre-Construction Meeting:** Following approval of the definitive subdivision plan and before actual construction begins, the Applicant is required to schedule a meeting with the Town Engineer or the Board's Consulting Engineer, the Town Planner, the Department of Public Works Director, and the Conservation Agent (as appropriate). The Applicant is strongly encouraged to bring an engineer and roadway/utility contractor to this meeting. The Applicant or a representative shall provide at least 72-hour written notice to the Town Engineer or the Board's consultant prior to the start of any construction-related activities. The Applicant shall supply contact information for all parties associated with the construction and shall supply at least one emergency contact that is available 24 hours a day, seven days a week.
- **7.5.3 Notification:** Once construction has been initiated, the Applicant shall notify the Town Engineer or the Board's Consulting Engineer at least 48 hours in advance of the start of the respective construction phases.

The Town's Engineering Department shall act on the Board's behalf to ensure that the construction of roadways and all utilities depicted on the Definitive Subdivision Plans are carried out in accordance with these Rules and Regulations and Town standards. All elements of work are to be at all times subject to inspection. The Engineering Department and the Board may order tests and interim as-built plans to be prepared by the developer, at the developer's expense, as may be needed to demonstrate that these Rules and Regulations and the construction standards contained herein have been met. Field reports shall be provided to the Planning Board on a regular basis, and as

requested by the Board, shall update the Board on the status of the physical construction of the project.

# 7.5.4 Inspections:

- (a) The Board may retain independent consultants, at the applicant's expense, to perform inspections or to ascertain whether these regulations and construction specifications have been met.
- (b) Each phase of the subdivision construction shall be inspected to ensure compliance with the Subdivision Rules and Regulations and the approved definitive subdivision plan. The Applicant or a designee shall be responsible for notifying the Town Engineer or the Board's consultant when the respective work items are started and when they are ready for inspection.
- (c) The developer shall provide safe and convenient access to all parts of work for observation by the Town Engineer or the Board's Consulting Engineer, Department of Public Works, Water and Sewer Department, and by the Board's members or agents. No work shall be approved that has been undertaken and covered before the required inspection/observation.
- (d) When underground infrastructure is installed, such as but not limited to, sewer, drainage, and water, the improvements shall be inspected by the Town Engineer or Board's Consulting Engineer or the respective Town department before the excavation is backfilled.
- (e) The subgrade must be approved by the Town Engineer or the Board's Consulting Engineer before the application of the gravel base course.
- (f) The gravel base course must be approved by the Town Engineer or the Board's Consulting Engineer before the application of hot mix asphalt (street or sidewalk) pavement.
- (g) Each application of hot mix asphalt on the street and sidewalk and placement of curbing must be approved by the Town Engineer or the Board's Consulting Engineer.
- (h) The Town Engineer or the Board's Consulting Engineer may require independent tests and interim as-built plans to be completed at the Applicant's expense to demonstrate that the regulations and construction specifications have been met.
- (i) Failure to comply with the inspection procedure may result in the Board requiring any work not inspected to be exposed or removed, at the Applicant's expense, to ensure that the proper inspection may be made. In all such cases, it will be the Applicant's responsibility to prove the quality of work through testing and/or certification.

- (j) The Board shall require that the applicant employ at his own expense a Registered Professional Engineer and Land Surveyor to set grades for all appropriate work, to conduct field inspections of the work, to prepare as-built plans, and to issue to the Board a certificate in accordance with Section 5.18 indicating that subdivision construction has been completed in accordance with the approved definitive subdivision plan and these rules and regulations. Site inspection performed by the Town Engineer, or by outside consultants retained by the Town, *do not* constitute acceptance of such utilities by the Town of Winchester nor shall it replace or supersede as-built approval or certification by the Applicant's engineer.
- **7.5.5** All construction observation/inspection reports shall be filed with the Board, with a copy to the developer.
- **7.5.6** After completion of the roadway layout and utility installation, the Applicant shall provide documentation of all tests that have been completed within the subdivision to show that the water and sewer utilities have been properly installed. The Applicant shall also provide an interim "as-built" plan to the level of binder course on the roadway in accordance with the requirements of Section 7.22

## 7.6 STREETS – DESIGN STANDARDS

- 7.6.1 Street Classification: All streets shall be designed to provide safe travel for vehicles, pedestrians, and bicyclists. Due consideration shall be given by the Applicant to the attractiveness of the street layout in order to obtain the maximum livability and amenity of the subdivision and to maintain the character of the abutting neighborhood. The Board shall give due regard to the prospective character of different subdivisions, whether open residence, dense residence, business or industrial, nature of the terrain, potential for development of abutting lands, and the prospective amount and type of travel upon various streets and footpaths therein. Subject to adjustment in light of such factors, streets shown on subdivision plans shall be classified according to the following:
  - Residential;
  - Neighborhood;
  - Town; and
  - Industrial.
- **7.6.2 Horizontal and Vertical Design Standards:** The following horizontal and vertical design standards shall apply to all subdivision roads proposed in the Town of Winchester:

	Street Classification				
Characteristic	Residential	Neighborhood	Town*	Industrial	
Maximum Design Speed	15 mph	20 mph	25 mph	15	
Minimum Stopping Sight Distance (SSD)	See Neighborhood Street Design Guidelines – Recommended Practice of the Institute of Transportation Engineers, published in 2010, or as amended				
Minimum Intersection Sight Distance (ISD)	See Neighborhood Street Design Guidelines – Recommended Practice of the Institute of Transportation Engineers, published in 2010, or as amended.				
Maximum Right-of-Way Width	30 feet	40 feet	60 feet	50 feet	
Maximum Paved Width	18 feet	20 feet	22 feet	36 feet	
Maximum Grade	8% for a distance of not more than 300 6% feet; 7% in all other cases				
Minimum Grade	None	None	1%	1%	
Minimum Centerline Radius	50 feet	90 feet	325 feet	325 feet	
Maximum Curb Return/ Pavement Junction Radius	15 feet	15 feet	25 feet	25 feet	
Bicycle lanes (See 7.6.8)	May be required	May be required	May be required	May be required.	

<sup>\*</sup> Town Street designation does not imply town compliance or acceptance of the street.

The maximum dimensions above may be exceeded if the design details of the street at hand warrant a greater width. Specific factors to be considered are whether on-street parking is allowed; how much off-street parking is provided; the volume of traffic expected; the desirability of the street to pedestrians and bicyclists; and whether the street also is a transit route.

- (a) All reverse curves on Town streets shall be separated by a tangent at least 100 feet long.
- (b) Side slopes within the right-of-way shall not exceed 3:1, unless supported by retaining walls or other structures approved by the Planning Board, who may seek the specific recommendation of the Town Engineer. Retaining walls or other structures shall not be allowed within the right-of-way. The applicant shall locate all roadside elements, such as retaining walls, plantings, and fences, to ensure that proper stopping and intersection sight distances are achieved.
- (c) Town Street lines at intersections shall be rounded with a corner having a radius of not greater than 25 feet. However, when the intersection of two ways varies more than ten (10) degrees from a right angle, the radius of the curve at the acute angle may be less and at the acute angle may be greater than 25 feet, to the extent approved by the Board.
- (d) The design engineer shall submit calculations demonstrating conformance with the minimum stopping and intersection sight distances provided above. Adequate sight

- stopping distance shall be provided at all locations along the proposed subdivision roadway.
- (e) All roadways and access roads, whether public or private, are to be considered fire lanes for the efficient and effective use of fire apparatus. CMR Section 10.03 defines fire lanes as having a minimum width of 18 feet. Pavement widths less than 18 feet shall be prohibited.
- (f) Right-of-way widths in excess of the maximum standards designated in this section may be required whenever, due to anticipated future traffic/loading conditions, additional width is necessary to provide improved alignment.
- (g) All changes in grade exceeding one percent shall be connected by vertical curves. Vertical curves shall be designed to provide sight distance at least equal to the safe stopping distance for the indicated design speed.
- (h) On any street at the approach to an intersection, a leveling area shall be provided having not greater than one percent grade for distance of 25 feet measured from the nearest right-of-way line of the intersecting street.
- (i) In all cases, the centerline of the paved surface shall be coincident with the centerline of the right-of-way, unless specifically approved by the Board upon specific recommendation from the Town Engineer.

#### 7.6.3 Intersections:

- (a) Streets shall be located to intersect as nearly as possible at right angles, and no street shall intersect any other street at less than 60 degrees.
- (b) Streets entering opposite sides of another street shall be laid out either directly opposite each other or with a minimum offset of 125 feet between their centerlines.
- (c) Street lines at intersections shall be rounded with a corner having a radius of not greater than 25 feet. However, when the intersection of two ways varies more than ten (10) degrees from a right angle, the radius of the curve at the acute angle may be less and at the acute angle may be greater than 25 feet, to the extent approved by the Board.
- **7.6.4 On-Street Parking:** At its discretion, the Board may require or allow on-street parking. The Planning Board may consider the following elements: street width; vehicular, bicycle, and pedestrian traffic volumes; nearby land uses; sight lines; vertical and horizontal alignment; and other relevant information. The developer shall show all signage relating to on-street parking requirements on the proposed definitive subdivision plan. If the roadway is narrow, two-way traffic with parking may be allowed if cobblestone gutters have replaced the standard vertical granite curbing.

- **7.6.5** No subdivision shall be approved which contains dead-end streets.
- **7.6.6 Reserve Strips:** Reserve strips prohibiting access to existing or proposed streets or adjoining property shall not be permitted.
- **7.6.7 Bicycle Lanes:** The Board may require Applicants to provide bicycle lanes on the subdivision roadway to facilitate safe travel for bicyclists.

# 7.6.8 Traffic Calming:

The Planning Board may require the installation of traffic-calming measures to decrease vehicle speeds, increase pedestrian and bicyclist safety, increase vehicle operator and pedestrian sight distances and for other safety purposes. Traffic calming measures may include, but not be limited to: speed humps, raised sidewalks, raised crossings, traffic islands, roundabouts, chokers, raised medians, parking bays, changes in paving materials, surface markings, landscaping, signage, etc. The Planning Board may require one or more devices in regular and frequent patterns to minimize traffic speeds, increase public safety and increase driver sight distances, as appropriate. Additionally, traffic calming measures may be required to be installed on one or more existing street(s) and the proposed subdivision street.

The type of device, quantity, and location of any traffic-calming devices shall be determined by the Board, in consultation with their traffic consultant and the Engineering Department. The installation of such devices shall be based on standard transportation engineering practices, traffic warrants and other accepted industry standards and guidelines, with the goal of addressing a specific traffic problem, location, or street type.

## 7.7 CURBING

Vertical granite curbing shall be provided for the entire length of all new streets. On landscaped islands and intersections, sloped granite curbing may be required. The Board may consider the use of other materials, such as cobblestone or fieldstone gutters set in stone dust, in areas where Low Impact Development measures proposed for mitigating stormwater runoff make vertical granite curbing less desirable.

On all curbs having a radius of 85 feet or less at the street line, circular granite curbing shall be cut to fit the curve. On all curbs having a radius of more than 85 feet, straight sections of curbing not more than six feet long shall be used.

Two-foot vertical granite radius corner pieces shall be placed at all driveway openings along vertical granite curbing. Transition pieces shall be placed at all driveway openings along sloped granite curbing. The transition shall be a piece of slant granite curbing (four feet minimum) that starts with proper angle reveal and tilts downward to be flush with the finished grade at the driveway opening.

#### 7.8 DRIVEWAY APRONS AND CURB CUTS

The definitive subdivision plans shall show the location of all driveway aprons and driveway curb cuts. Driveway aprons and road pavement shall be installed at the same

time. Aprons shall be placed with concrete when sidewalks are installed and shall extend from the street to the lot. In considering their decision on the subdivision, the Board may consider requiring aprons built of cobblestone or fieldstone set in stone dust. In the event that the driveway aprons cannot be installed at the same time as the street construction, it shall be the responsibility of the Applicant to ensure that the driveway aprons are installed, in accordance with the Town's standards, prior to the acceptance of the street by Town Meeting in the case of public roads, or prior to release from subdivision control in the case of private roads.

If a lot is undeveloped, the Applicant shall curb the frontage of the lot until such time as the lot owner obtains a street opening permit. The Town shall not be responsible for the installation of driveway aprons after the construction of the subdivision streets.

In the case of residential subdivisions, the Planning Board prefers driveways that do not exceed nine feet in width at the street right-of-way and in the case of commercial or industrial subdivisions, driveways that do not exceed eighteen feet in width at the street right of way. In no instances shall catch basins be located within a driveway curb opening.

# 7.9 SIDEWALKS

- **7.9.1 Requirements:** Sidewalks shall be required on both sides of the street except on Residential streets, where sidewalks are required only on one side. The Board may waive the sidewalk requirement if traffic volumes are expected to be low.
- **7.9.2 Materials:** All sidewalks shall be concrete cement and a minimum of five feet in width. The area between the curbing and the sidewalk shall be loamed and seeded.
- **7.9.3 Design Standards:** All sidewalks and handicapped ramps shall conform to the requirements of the Massachusetts Architectural Access Board (AAB) and the Americans with Disabilities Act (ADA). The Board may require wider sidewalks in business, industrial, or mixed use zoning districts. Along Residential, Neighborhood and Town streets, the Board may require that the sidewalk meander within the right-ofway to follow the existing terrain or preserve existing site features, such as trees or rock outcroppings.

#### 7.10 MONUMENTS

- **7.10.1 Requirements:** Permanent monuments shall be installed on the exterior street lines at all intersections, at all points of change in direction or at curvature of streets, at easements, at two (2) property corners of all new lots, and at any other points where, in the opinion of the Board, permanent monuments are necessary.
- **7.10.2 Materials:** Monuments shall be standard granite markers of not less than four feet deep and not less than six inches square, and shall have a three-eighth (3/8)-inch drill hole in the center. If subsoil conditions prohibit installation of four (4)-foot monuments, monuments meeting alternative specifications can be installed, with advance approval of the Board, upon recommendation from the Town Engineer and/or outside consultant. Monuments shall be set in bank gravel with their tops set flush with the proposed finished

- grade (see Special Provisions for the Construction of Roadways, including the Installation of Water, Sewer, and Drains in the Town of Winchester).
- **7.10.3 Certification:** No permanent monuments shall be installed until all construction which would destroy or disturb the monuments is completed. Placement and location of bounds shall be certified in writing by a registered professional land surveyor after installation of the street and shall be shown on the "as-built" or record plans.

#### 7.11 STREET TREES AND OTHER PLANTINGS

- **7.11.1 Location:** Street trees shall be required to be planted, at the applicant's expense, on all streets within the tract being subdivided. Trees shall be planted on both sides of the street within the right-of-way and shall be spaced at intervals of approximately 35 feet on center, unless waived by the Board.
- 7.11.2 Species: The species of street trees selected shall be of Zone 6 hardiness and shall be of licensed nursery stock with good root development and branching characteristics. A variety of street tree species shall be used to enhance blight and insect resistance. Existing trees may be preserved as street trees if inspected and approved by the Department of Public Works Tree Warden or other person, designated by the Department of Public Works Director. The applicant shall seek the advice of the Permanent Street Tree Committee for location and species of tree.
- **7.11.3 Size:** The minimum size of street trees shall be three (3) inches in caliper, measured four feet from the ground level, and 10 feet in height, in place.
- **7.11.4 Planting:** Street trees shall be planted in holes at least six inches deeper than and one and one-half  $(1\frac{1}{2})$  times as wide as the root ball. Trees shall be planted at their previous depth in good quality topsoil and shall be securely staked.
- **7.11.5 Slopes:** All cut-and-fill slopes within or contiguous to the street right-of-way shall be planted with suitable, well rooted, low growing plant materials or grass as determined by the Board. A wood chip or comparable mulch shall be used with ground cover plants to minimize erosion. Planting of sod may be required.
- **7.11.6 Cleared Areas:** All cleared areas of the street right-of-way not to be planted with groundcover, and all disturbed area within public easements, shall be loamed with not less than six inches compacted depth of good quality loam and shall be seeded with turf grass seed or such mixture as may be approved by the Town Engineer. Seeding shall be completed at appropriate times of the year and in such a manner as to insure an appropriate growth of grass.
- **7.11.7 Guarantee:** Trees shall be guaranteed for at least one year after acceptance of the road as a public way or, in the case of private ways, after release from subdivision control.
- **7.11.8 Preservation of Trees**: In the process of clearing the site for the subdivision development, the Planning Board encourages the preservation of existing healthy trees and any specimen trees at the site. Determination of healthy trees or specimen trees

shall be determined by the Applicant, in consultation with the Winchester Tree Warden or his appointee, and may include the consultation of the Winchester Permanent Street Tree Committee.

## 7.12 STREET SIGNS AND PAVEMENT MARKINGS

- **7.12.1 Street Name Signs:** The applicant shall be responsible for furnishing and erecting street signs at all intersections in conformity with the specifications of the Winchester Department of Public Works. Permanent street signs shall be erected prior to the issuance of the first certificate of occupancy (temporary or permanent).
- **7.12.2 Traffic Control Signage:** The applicant shall be responsible for furnishing and erecting all traffic control and parking signage in accordance with the approved definitive subdivision plans. The design and installation of the signs shall conform to the most recent edition of the "Manual on Uniform Traffic Control Devices."
- **7.12.3 Private Ways:** Until such time as each street is accepted by the Town as a public way, or in the case of streets that are permanently maintained as private ways, the signposts at the intersection of each street with any other street shall have affixed thereto a sign designating such street as a private way.
- **7.12.4** Pavement Markings: Pavement markings such as stop lines, crosswalks, double yellow center lines, and white edge lines shall be applied at the expense of the applicant, as specified by the Board. The markings shall conform in placement and design to the most recent edition of the "Manual on Uniform Traffic Control Devices."
- **7.12.5 Street Acceptance:** Upon application for acceptance of the streets, the costs for advertising for hearing, for data collection in support of the street acceptance, for permanent signs and for any other costs related to the acceptance of the street shall be borne by the applicant.

## 7.13 STREET LIGHTING

The applicant shall be responsible for the installation of all street lighting within the subdivision at locations determined by the Board, after consultation with the Town Engineer and the Department of Public Works and in accordance with the Selectmen's Street Lighting Policy. All installations shall be in accordance with the regulations of said departments. All street lights shall be identified on the definitive subdivision plans as "Town of Winchester Standard Street Light for Underground Utility Service Connections."

# 7.14 UTILITIES – BASIC REQUIREMENTS

7.14.1 Installation: All underground utilities and/or other subsurface facilities within the street right-of-way shall be installed, tested, and approved by the Board and all applicable Town agencies prior to the installation of the street base material. All underground utilities, including existing and future house service connections, shall be installed to the edge of the right-of-way lines. The applicant shall be responsible for making connections to all existing off-site utilities that will service the subdivision. All utilities shall be located within the paved portion of the right-of-way to the extent possible.

- **7.14.2 Future Connections:** Where adjacent property is not subdivided, the applicant may be required to make provisions for proper projection of the system by continuing utility services to the exterior boundaries of the subdivision, at such sizes and grades as will allow for the projections.
- 7.14.3 Horizontal and Vertical Separation: All water and sewer utilities shall be designed with a minimum 10-foot horizontal separation; the distance shall be measured from edge-to-edge. Whenever possible, water mains shall be located above the sewer systems and there shall be a minimum 18-inch separation between the invert of the water main and the crown of the sewer pipe. In cases where the required horizontal and vertical separation is not achievable, the Town Engineer may require additional protective measures, such as concrete encasement of the pipe.
- **7.14.4 Nonmunicipal Utilities:** The Applicant shall coordinate the design and installation of the gas, electric and communication utilities (i.e., telephone, cable, and fire alarm) with the appropriate utility provider. The location of such utilities may be shown in a preliminary nature on the definitive subdivision plan. The applicant shall provide the Engineering Department with a final supplemental plan showing the proposed utility location for review and approval prior to installation.
- **7.14.5 Identification:** The subdivider shall provide and install traceable utility identification tape for underground gas, electric, and communication (i.e., telephone, cable, fire alarm) utilities in accordance with the standards of the respective utility provider.

The following colors shall be used unless otherwise specified by the utility:

- Orange Communications;
- Yellow Gas; and
- Red

   Electric.
- **7.14.6 Testing Requirements:** The Applicant, at his sole expense, shall provide for tests of materials, such as piping, concrete, asphalt, bank run gravel, and other materials used in the construction of the subdivision roadway and appurtenances, by independent laboratories when requested to do so by the Town agencies concerned.
- 7.14.7 Utility Easements: Wherever necessary, the Board shall require perpetual, unobstructed easements outside of the street right-of-way for sewers, storm drains, water mains, gas, electric, telecommunication, or other utilities. Such easements shall be a minimum width of 20 feet, centered on the utility, and shall be indicated on the Definitive Plan by metes and bounds. Wider easements may be required at the Board's discretion. Multiple utilities may be allowed in the same easement provided that there is adequate horizontal and vertical separation. The extent of said easements shall be marked by sufficient monuments to clearly locate said easements within the subdivision.

#### 7.15 DRAINAGE

- **7.15.1 General Requirements:** The drainage system within the subdivision shall be laid out to the satisfaction of the Board, acting on the recommendation of the Town Engineer and, as required, consulting engineers, and shall require provision of such facilities and arrangement thereof as, in its opinion, are necessary to:
  - Permit unimpeded flow of all natural water courses;
  - Insure adequate drainage of all low points along the roadways;
  - Intercept groundwater in the subsoil along the roadway where within three feet of the proposed roadway surface;
  - Intercept stormwater runoff along all roadways at intervals reasonably related to the extent and grade of the area drained;
  - Create no adverse downstream impacts or impacts to abutting properties;
  - Preserve the existing hydrologic regime and drainage patterns to the maximum extent possible through the use of Low Impact Development (LID) techniques and environmentally sensitive site design (See LID Site Planning and Design Checklist in Appendix I); and
  - Comply with the Town's Stormwater Management Plan and insure compliance with the National Pollutant Discharge Elimination System (NPDES) municipal permit, issued by the Environmental Protection Agency (EPA) to the Town of Winchester. NPDES permits are authorized by EPA under the Clean Water Act to regulate point sources that discharge into the waters of the United States.
- 7.15.2 Low Impact Development (LID): The applicant shall employ the use of Low Impact Development (LID) techniques and environmentally sensitive site design in the overall design of the subdivision and the stormwater management system. LID refers to the systematic application of site design and use of small-scale, distributed stormwater management practices designed to replicate pre-development hydrologic function and to help off-set the impacts of the creation of new impervious cover. The applicant shall complete and submit with the Definitive Subdivision filing the LID Site Planning and Design Checklist (see Appendix I).

The primary goal of LID methods is to mimic the pre-development site hydrology by using dispersed stormwater Best Management Practices (BMP) and site design strategies that store, infiltrate, evaporate, and detain stormwater runoff. The use of these techniques helps to reduce off-site runoff and ensure adequate groundwater recharge. Primary objectives include:

• Development of a site design that maintains pre-development hydrologic patterns;

- Minimizing the size of impervious surfaces;
- Localized treatment/storage/infiltration of stormwater runoff in small, decentralized areas;
- Use of natural topography for drainage swales and storage areas;
- Preservation of portions of the site in undisturbed, natural (or existing) conditions;
   and
- Lengthening of runoff flow paths to increase times of concentration and reduce peak rates.
- Where appropriate, the Planning Board, upon advice of the Town Engineer, may allow the Applicant to install pervious pavement and other environmentally sensitive paving and drainage systems within the subdivision.

The use of LID techniques requires a multistep process that begins with site planning and layout. An initial assessment of the site constraints and hydrologic conditions on the site and downstream areas is critical to the success of the LID methods and the development as a whole. The Board strongly recommends that the applicant consult with the Town Engineer and Town Planner early in the process to discuss the proposed site design before a subdivision plan is filed. Comments and information provided by the Town with respect to the site and stormwater design are advisory in nature. The applicant is solely responsible for the successful design of the site and stormwater management system.

- 7.15.3 Compliance with Massachusetts Stormwater Management Handbook: Stormwater management systems shall be designed in accordance with the MADEP's "Massachusetts Stormwater Handbook," dated February 2008 and as amended, (except as stricter regulations outlined herein apply) regardless of the size of the subdivision and whether or not the subdivision falls within the jurisdiction of the Wetlands Protection Act. The applicant shall provide a section in the Drainage Report to address the project in relation to the Stormwater Management Standards (including associated calculations, as appropriate).
- **7.15.4 Stormwater Runoff Peak Rate and Volume Control:** The site shall be designed to ensure that post-development peak discharge <u>rates</u> do not exceed pre-development rates for the 2-, 10-, 25-, and 100-year, 24-hour Type III storm events. Additionally, the site shall be designed to ensure that post-development discharge <u>volumes</u> do not exceed pre-development volumes. The use of infiltration and LID techniques for such purposes is preferred.
- **7.15.5 Design Points:** Off-site areas contributing to the overall site hydrology shall be accounted for in both pre- and post-development analyses. Discrete analysis points (or "design points") shall be selected to determine the off-site impacts. Several different design points may be required depending on the existing and proposed topographic

features of the site. The same analysis points shall be used for both existing and proposed conditions to ensure consistency in the comparison of peak rates and volumes. The overall size of all study areas analyzed shall be identical in the pre- and post-development analysis. A plan indicating the watershed areas, Time of Concentration (TC) flow paths and associated design points for the pre- and post-development conditions shall be submitted with the Drainage Report.

7.15.6 Precipitation Data: All drainage analyses shall use the following 24-hour rainfall data, adopted from the web tool "Extreme Precipitation in New York and New England" developed jointly by the Northeast Regional Climate Center (NRCC) at Cornell University and the Natural Resources Conservation Service (NRCS), as available at <a href="http://precip.eas.cornell.edu/">http://precip.eas.cornell.edu/</a> for the Town of

Storm Event	24-Hour Precipitation (Inches)		
2-year	3.2		
10-year	4.9		
25-year	6.2		
100-year	8.9		

Winchester centered at Town Hall, 71 Mount Vernon Street, as accessed on September 26, 2011 and summarized in the table below:"

- 7.15.7 Design Methodology: Existing and proposed runoff rates and volumes shall be estimated using the methods described in Technical Release No. 20 (TR-20) and Technical Release No. 55 (TR-55), where applicable, published by the National Resources Conservation Service (NRCS), United States Department of Agriculture (USDA). The total length of "sheet flow" in the calculation of Time of Concentration for a subcatchment shall be limited to 100 feet or less for pre-developed conditions, and 50 feet or less for post-developed conditions. The surface of all ponds, rivers, detention/retention ponds, and other waterbodies shall be assumed to be impervious for the purpose of calculating ground cover. For purposes of computing runoff, all pervious lands in the site prior to the development shall be assumed to be in good condition regardless of conditions existing at the time of computation. Stormwater analyses shall be performed using an NRCS (formerly Soil Conservation Service SCS) Type III 24-hour rainfall distribution. The use of computer modeling techniques, such as HydroCAD, is strongly preferred.
- **7.15.8 Design Storms:** The proposed drainage system shall be designed to accommodate a 25-year storm event. Bridges and culverts shall be designed for a 50-year storm event, with consideration being given to avoid damage during a 100-year storm event.

Stormwater BMPs for peak rate and volume control shall be designed for 2-, 10-, 25-, and 100-year storm events, as outlined above. The effects of bypass (i.e., stormwater flow which bypasses a catch basin when the inflow capacity of the catch basin is exceeded) and tail water shall be evaluated in the design of these BMPs.

## 7.15.9 Closed Drainage System:

Low impact practices such as open channel systems are encouraged when feasible. Where closed drainage networks are proposed, calculations shall be provided in accordance with the following requirements:

- (a) *Design Methodology:* The Rational Method shall be used to determine peak flows of runoff for the design of the closed drainage system. The Rational Method cannot be used to determine runoff volumes.
  - The Manning Formula shall be used for the sizing of drain pipe and other drainage conveyance swales. A worksheet similar to that provided in Exhibit 8-49 of the Massachusetts Highway Department (MHD) Project Development and Design Guide (2006 edition) shall be provided for the design of each closed drainage network. The effect of tail water conditions at the end of the drainage system shall be taken into account. Documentation shall be required to show how tail water elevations were obtained for the respective design storms.
- (b) Catch Basins: In general, catch basins shall be required on both sides of the roadway at intervals of not more than 300 feet, at all low-points in the roadway grade, near the corners of the roadway at intersecting streets, within each turnaround, and at all other locations as required by the Board. Catch basins are not allowed in driveway openings. Catch basin to catch basin connections are not allowed (including landscape area drain to catch basin connections). Each catch basin shall be connected to a manhole. All catch basins shall have a minimum four-foot sump and a hood on the outlet pipe. All grate openings shall be of a design and placement that will not trap or divert bicycle wheels. Catch basins shall be designed such that the grate capacity of each is not exceeded; double catch basin grates and curb inlets may be used as needed No catch basin which collects runoff from roadways shall be designed to exfiltrate runoff.
- (c) *Drain Pipe:* All drain pipes shall be laid in a straight line and grade. A manhole shall be provided at every change in pipe size, material, direction, and/or grade. In no case shall drain manholes be spaced at a distance greater than 300 feet. Pipes shall be designed to operate without building up hydraulic pressure head under design flow conditions. The minimum allowable full flow pipe velocity shall be three (3) feet per second (fps) when flowing at a depth of approximately one-third of the pipe diameter. The maximum allowable full flow pipe velocity shall be 10 fps. Drain pipes shall be either reinforced concrete pipe (RCP) or high-density polyethylene pipe (HDPE). Ductile iron pipe shall be used in areas with less than two feet of cover.
- (d) *Outfall Protection:* Pipe inlets or outfalls with a diameter of 15 inches or greater shall be fitted with a protective barrier, suitable in the opinion of the Town Engineer, to prevent access by children. Said barrier shall be removable for maintenance purposes. Masonry headwalls and flared end-sections shall be installed, as approved by the Town Engineer, to prevent erosion. Ground surfaces at all drainage outfalls shall be stabilized with rip-rap or other means to prevent erosion from storm water flows up to the design capacity of the discharging conveyance. Design calculations for rip-rap splash pads or other proposed outfall protection may be required at the discretion of the Board.

(e) Cleaning and Television Inspection: Upon completion of the work, the Applicant shall clean each drain pipe, catch basin, drain manhole and appurtenant structure using either a high velocity jet or mechanically powered equipment. All sludge, dirt, sand, rocks, grease, and other solid or semisolid material resulting from the cleaning operation shall be disposed of in accordance with all applicable regulations.

Acceptance by the Board, through the Town Engineer or its designee, shall not take place until the systems are cleaned to the satisfaction of the Board, upon the recommendation of the Town Engineer or the Board's designee.

In the event that the installation of the drainage system has not been overseen and approved by the design engineer, the Town has not been called to the subdivision to review the drainage system installation during its construction or similar instances that have resulted in the Board and its staff questioning the installation, integrity, or other facets of the drainage system, the Planning Board reserves the right to conduct a television inspection of the drainage system at the developer's expense.

In the event that the Board determines that a television camera inspection is required, a portion or all of the drainage system will be visually inspected by means of closed-circuit television. The television camera used for the inspection shall be one specifically designed and constructed for such inspection. Lighting for the camera shall be suitable to allow a clear picture, with minimal reflective glare, for the entire periphery of the pipe. The camera shall be operative in 100 percent humidity conditions. The camera, television monitor, and other components of the video system shall be capable of producing a picture quality and definition that will allow the Town Engineer or the Board's designee to easily determine the condition of all pipes, connections, and related information relative to the installation of the lines.

The developer is responsible for the scheduling of the inspection, notification to the Board, the Town Engineer and any other applicable staff of the television camera inspection and other actions in relation to this procedure. A video of the inspection shall be provided to the Board upon completion of the television camera inspection. Based on this inspection, the Board may require additional remediation work of the developer in order for the subdivision to comply with the standards as written or referenced herein.

7.15.10 Documentation of Soil Conditions and Seasonal High Groundwater: For all projects considering the use of groundwater recharge, the Applicant shall provide documentation of the soil conditions and seasonal high groundwater conditions at the proposed site of the recharge facility or facilities. At a minimum, the soils on site shall be classified according to the NRCS Hydrologic Soil Groups (HSG). A soil textural analysis consistent with USDA methodologies shall be conducted where the HSG classification is inconclusive. Systems shall be designed using the "static," "simple dynamic," or "dynamic field" methods described in the Massachusetts Stormwater Handbook, as amended. When the "static" or "simple dynamic" methods are used, the infiltration rate for each system shall be estimated based on the rates specified by Rawls,

1982 (see Table 2.3.3 of the Handbook). For the "dynamic field" method, saturated hydraulic conductivity rates shall be determined at the actual location and soil layer (i.e., elevation) where recharge is proposed. A Title 5 percolation test does not provide an acceptable estimate of the infiltration rate on the site using any of the three design methods. The Applicant also shall identify the depth to bedrock or other restrictive layer in the vicinity of proposed infiltration systems. Compaction of soils in designated recharge areas shall be minimized during and after construction.

Seasonal high groundwater shall be estimated based on redoximorphic features in the soil, or ideally, based on monitoring well observations taken in April or May when groundwater is typically at its highest levels. A groundwater mounding analysis may be required, at the discretion of the Board, to ensure that the recharge system will not cause groundwater to break out above land surface, seep into basements of nearby buildings or cause other problems. All infiltration systems shall be designed to drain within 72 hours. Documentation of seasonal high groundwater elevations also shall be provided for detention/retention systems where infiltration is not allowed, to ensure that adequate separation has been provided between the bottom of the basin and the seasonal high groundwater.

- 7.15.11 Infiltration of Rooftop Runoff: "Clean" runoff from all rooftop areas within the subdivision shall be infiltrated for up to and including the 100-year storm event. This requirement shall be met to the maximum extent practicable for lots with poor soil conditions (i.e., Type C or D soils), shallow depth to groundwater and/or areas of exposed bedrock. Hydrologic calculations shall be provided to support the proposed design. The calculations shall conservatively account for any design components, such as building footprint size, which may be altered by subsequent refinements to the design. All points where pipes merge, such as a perimeter drain connected to a roof downspout, shall be equipped with inspection ports/clean-out structures.
- **7.15.12 Detention/Retention Basin:** Detention/retention basins shall be designed to have a minimum of one foot of freeboard during the 100-year storm event. The volume of sediment fore bays (if applicable) shall not be counted towards the storage volume of the detention/retention basin. For design purposes, it shall be assumed that there will be no infiltration of stormwater within the drainage basin unless the basin is designed as an infiltration basin in accordance with the Massachusetts Stormwater Handbook. Detention/retention basins and associated fore bays shall be required to drain with 72 hours. Basins shall be designed with an emergency overflow device, such as a weir, to safely pass the 100-year storm event to prevent overtopping and potential erosion of the berm, assuming the primary outlet is not functioning. The bottom of any sediment forebay shall be constructed of concrete or grass, which may be mowed, for ease of maintenance; a rip-rap base shall not be allowed. Depending on the depth and size of the basin, the Board may require fencing or other effective measures to be installed to prevent unauthorized persons and vehicles from entering the basin. The Board also may require landscaping, consisting of evergreen trees and native shrubs, in the area surrounding the basin as a method of screening. A landscaping plan should be provided with the definitive subdivision plans.

- 7.15.13 Maintenance Access: Adequate access shall be provided to all stormwater storage and infiltration Best Management Practices (BMP). Where such facilities are located on private lands, an access and maintenance easement shall be provided extending from the edge of the right-of-way and encompassing the entire facility. A maintenance access driveway of 10 feet minimum width and 12 percent maximum slope shall be provided from the right-of-way to any outflow control structure. Subsurface detention/retention/infiltration BMPs must be provided with easily accessible clean-outs and inspection ports.
- **7.15.14 Routing of Overflows:** The site shall be designed to ensure that all runoff from the site up to the maximum design storm for the particular structure or BMP will actually enter the control structure. For example, the control structure may be designed for the 100-year storm event, while the closed drainage system connecting to that structure may be designed to convey only the 25-year storm event, with larger events flooding the system and traveling overland. This overland flow, or overflow, must be directed into the peak control structure, or this bypass flow accounted for in the hydrology calculations for the subdivision.
- 7.15.15 Connection to Offsite, Town-Owned Drainage System: Direct connections to the town-owned drainage system downstream of the subdivision shall be avoided to the maximum extent possible. If such a connection is proposed, the Applicant must provide an analysis to demonstrate that the closed drainage system can accept the proposed runoff (both peak rate and volume). If the capacity of the downstream system is not adequate to accommodate the entire proposed amount, then only that portion thereof which can be adequately accommodated shall be connected and/or the Applicant shall be required to improve the downstream system to provide adequate capacity. Connections to the municipal drainage system shall occur at a manhole. If no manhole exists at the point of connection, one shall be installed.
- **7.15.16 Drainage Easements:** It shall be the responsibility of the developer to make any necessary agreements/easements with any abutter(s) where any aspect of the proposed stormwater management system is to be carried to the boundaries of the subdivision. Such agreements/easements shall be presented to the Board, in recordable form, prior to the approval of the definitive subdivision plan.

The recipient of the subdivision approval, and any successor-in-title, shall provide and furnish the Town of Winchester the perpetual right, privilege, and authority, entirely at the option of the Town of Winchester, to enter upon any rights-of-way within the subdivision and upon any lot, or easements pertinent to said stormwater management system, within which said system is located, for repair and maintenance purposes of said system.

- (a) Drainage easements shall be provided by the property owner(s) as necessary for:
  - (i) Access for facility inspection and maintenance;
  - (ii) Preservation of stormwater run-off conveyance, infiltration, and treatment areas and facilities, including flood routes for the 100-year storm event; and

- (iii) Direct maintenance access by heavy equipment to structures requiring regular maintenance.
- (b) Drainage easements shall be a minimum of twenty (20) feet in width and may be larger, as necessary, at the discretion of the Planning Board.
- (c) Drainage easements are required for all areas used for off-site stormwater control, unless a waiver is granted by the Board.
- (d) Drainage easements shall be recorded with the Middlesex County Registry of Deeds.

#### 7.15.17 Stormwater Management System Operation and Maintenance Plan.

An Operation and Maintenance (O&M) Plan, in accordance with MADEP's "Massachusetts Stormwater Handbook," dated February 2008 and as amended, shall be provided. Said O&M Plan shall outline the location and type of all approved BMPs and provide maintenance procedures and schedules to ensure that the stormwater management systems function as designed. The O&M Plan must include an estimate of annual maintenance cost for the stormwater BMPs and identify the party responsible for maintenance. All stormwater storage and infiltration BMPs shall be the responsibility of the developer, and subsequently, the individual property owner or Property Owners' Association, once established, as to its long-term maintenance, and maintenance of the landscaping in perpetuity unless the Town formally accepts maintenance responsibilities for said BMPs. Said BMPs and appurtenances shall be guaranteed from defect in construction and operation by the posting of a performance or defect guarantee for a minimum period of three years in an amount not to exceed twenty (20) percent of the value of said improvements.

The maintenance agreement shall be legally enforceable by the Town of Winchester, and shall be so noted in all of the Property Owners' Association documents and recorded at the Middlesex Registry of Deeds. The Town reserves the right to request written records, including receipts of inspection or cleaning, documenting the maintenance of the system and/or to physically inspect the systems to ensure that the proper maintenance has been carried out. In the event that the responsible party fails to maintain the system in reasonable order and condition, the Town reserves the right to perform the required maintenance and back-charge the association for fees incurred.

#### 7.16 WATER SUPPLY SYSTEM

- **7.16.1 Installation:** The subdivider shall be responsible, at his sole expense, for installing water facilities, including, but not limited to water supply pipes, hydrants, hydrant markers, gates, valves, and all other related appurtenances, in accordance with the state and local standards. Any extension of an existing line and/or creation of a new line shall require approval from the Town Engineer and DPW Director. Connections from the main to the exterior line of the street right-of-way shall be constructed for each lot. Said water facilities shall be shown on the definitive plan.
- **7.16.2 Fire Hydrants:** Fire hydrants with hydrant markers shall be required for all subdivisions. The distances between hydrants may vary between 500 feet maximum

and 300 feet minimum. Locations will be based on roadway layouts, and available water supply. Specific distances and locations shall be subject to approval by the Fire Chief and Town Engineer. Approval of locations shall be submitted in writing by both departments and shall be shown on the definitive plan. A hydrant within 500 feet of a lot shall be in working condition satisfactory to the Fire Chief before a building permit is issued for a structure.

- **7.16.3 House Service Connections:** Individual house service connections from the main shall be provided to each unit in a multiple-family home or in a townhouse development.
- **7.16.4 Hydrant Flow Testing:** The Applicant shall confirm the adequacy of water pressure and quantity of water at the existing municipal water system to accommodate the increase in demand from the proposed development. The Board may require the Applicant to conduct a hydrant flow test, at his sole expense, to assist in the design of the water supply and fire protection system.
- **7.16.5 Water Loop:** All water mains shall be looped between existing municipal water mains, provided that connections to the same water main shall be spaced a minimum of 500 feet apart or as otherwise required by the Town Engineer. There shall be no dead-end water mains in any subdivision, regardless of size, and no water main shall double back on the same street.
- **7.16.6 Extensions:** Reasonable provisions shall be made for extension of the water main to adjoining property, including installation of water gates. Appropriate easements may be required.
- **7.16.7** Additional Alternative System of Water Supply/Fire Protection: If the municipal water supply is available but the minimum required flow is not available, in addition to extending the municipal water system, the Applicant may propose an alternative system for providing water supply for fire protection.
- **7.16.8 Testing:** At the Applicant's sole expense, the water mains shall be pressure and chemically tested, certified by a qualified consultant, and approved by the Planning Board, upon recommendation of the Town Engineer or the Board's Consulting Engineer, before the roadway base course is installed.

#### **7.17 SEWER**

- **7.17.1 Installation:** The Applicant shall be responsible, at his sole expense, for installing all sewer facilities, including, but not limited to sewer pipe, manholes, and other related appurtenances. All sewer lines shall be installed true to line and grade, with no horizontal or vertical curvature allowed.
- **7.17.2 Flow Metering:** The Applicant shall be required to confirm the adequacy of the existing municipal sanitary sewer system to accommodate the proposed development. Where necessary, the Town Engineer may require the Applicant to conduct flow metering, at their sole expense, downstream of the proposed development.

- **7.17.3 Gravity Flow:** All sewer systems shall be designed on a gravity system. However, when not practical, the Board may require the Applicant to install a sewer pumping station (including a standby generator or other appurtenances, as necessary) in accordance with requirements of the Town Engineer and DPW.
- 7.17.4 Connection to MWRA Sewer: If connection to the Town of Winchester's sewer system is not feasible, the Board may consider a proposal from the Applicant to tie into the MWRA-owned sewer system. All such proposals must be reviewed and approved by the Town Engineer and DPW Director. Once approved, the Town will act as the agent for the developer in applying to the MWRA for such connection. The Board shall not close the definitive subdivision hearing until such time as MWRA has rendered a decision on the sewer connection application. The Applicant shall bear the cost of any engineering studies, application fees, or mitigation requirements necessary to obtain the permit. The Board shall not close the definitive subdivision hearing until such time as the MWRA has rendered a decision on the sewer connection application.
- **7.17.5 Design Velocity:** All sewer systems shall be designed with a minimum flow velocity of two feet per second.
- **7.17.6 Sewer Manholes:** Sewer manholes shall be located at every change in grade, change of horizontal alignment, change in pipe size, and where two or more sewer pipes intersect. In no case shall sewer drain manholes be spaced at a distance greater than 300 feet.
- **7.17.7 Testing:** Low-pressure air tests of the installed sewer system shall be conducted by a certified testing company, at the Applicant's sole expense, to test the system for leaks, unless otherwise approved by the Town Engineer.

#### 7.18 OTHER UTILITIES

All electrical, communication, and gas lines shall be installed underground and in accordance with the requirements of the respective utility provider. Communications lines shall include, but not be limited to, telephone and community antenna television cable. The Applicant shall coordinate with the local utility provider prior to the submission of the definitive subdivision plan and shall meet all of the requirements of the local utility providers.

Fire alarm boxes, as well as the required connecting lines, shall be installed in conformance with the specifications of the Winchester Fire Department. All box locations shall be shown on the definitive plan and shall be approved by the Fire Chief.

#### 7.19 SEDIMENTATION AND EROSION CONTROL

**7.19.1 Protective Measures:** Erosion and sedimentation controls shall be required as part of any proposed construction or earthwork activities. An Erosion and Sedimentation Control (ESC) Plan shall be included as part of the definitive subdivision submittal. If the project is to be constructed in phases, then a phased ESC Plan shall be provided. Protective measures may include silt fencing and straw bales; catch basin inlet protection; erosion control matting, mulches, and/or temporary cover vegetation; and

temporary sedimentation basins, diversions, berms, vegetated swales, culverts, or other devices as are necessary to intercept and safely divert surface water runoff during construction. At a minimum, the ESC Plan shall comply with the performance standards of the most recent version of the *Massachusetts Erosion and Sedimentation Control Guidelines for Urban and Suburban Areas: A Guide for Planners, Designers and Municipal Officials* published by the Massachusetts Executive Office of Energy and Environmental Affairs (EEA), as well as the following:

- (a) Locations of the proposed limits of land disturbance on the site. The ESC Plan shall stipulate that prior to commencing any land disturbance activities, the limits of disturbance must be delineated at the site with erosion control measures, flagging, signs, or orange construction fencing and said delineation must be inspected and approved by the Town Engineer, Conservation Agent or their Construction Inspection Designee.
- (b) Location and technical description of appropriate erosion and sediment control measures proposed. Prior to the commencement of any site work, the Applicant or a representative will meet with the Town Engineer or the Board's designee and Conservation Agent, if applicable, to review erosion control barrier installation(s). Said measures shall be installed by the developer and inspected by the Town or its designee prior to soil disturbance. Once installed, erosion control barriers shall be inspected weekly by the Applicant or a representative and immediately after every storm event. An adequate supply of erosion control barriers shall be kept on site at all times to replace failing sections. The Applicant or a representative shall be available 24 hours a day, seven days a week to make repairs as needed. Weekly erosion and sedimentation control inspection logs shall be kept on site at all times and shall be made available to the Town Engineer or the Board's designee upon request.
- (c) Location and means of diversion of off-site runoff from highly erodible soils and steep slopes to more stable areas.
- (d) A Sequence of Construction for all land disturbance activities. Mass clearing and grading for sites greater than one (1) acre in size shall not be permitted without prior written approval from the Planning Board or its Agent.
- (e) Location of soil stockpiles and provision to stabilize exposed soils within five (5) business days of completion of construction of a given area.
- (f) Location and description of vehicle tracking pad(s) to be constructed at all entrance/exit points of the site to reduce the amount of soil carried onto roadways and off the site.
- (g) Location and description of proposed dust controls to be employed on the site, minimizing soil disturbance through applying mulch and establishing vegetation, water spraying, and/or applying polymers, spray on tackifiers, chlorides, and barriers.

- (h) An Erosion and Sedimentation Control Operation and Maintenance (ESC O&M) Plan shall be submitted. The ESC O&M Plan shall: identify the party responsible for maintenance of ESC measures; specify inspection schedules; specify routine and nonroutine maintenance tasks to be performed.
- (i) Provisions to ensure that temporary sediment trapping devices are not removed until permanent stabilization is established in all contributory drainage areas, as well as provisions to ensure that stabilization is established prior to converting sediment traps/basins into permanent (post-construction) stormwater management facilities.
- (j) Provisions to ensure that all facilities used as temporary measures shall be cleaned prior to being put into final operation and are inspected by the Town or its designee, and indicating that areas to be used as post-construction infiltration practices should be protected during construction to prevent compaction.
- (k) A program for vegetative stabilization of exposed soil through the establishment of permanently growing vegetation.
- (l) The Plan must demonstrate that the area of disturbance shall be kept to a minimum and specify that disturbed areas remaining idle for more than 14 days shall be stabilized with hydro seeding or other appropriate stabilization measure(s).
- (m) The Plan must specify that permanent seeding be undertaken in spring (from March through June) or in the late summer and early fall (from August 1 to October 15).
   During the peak summer months and in the fall after October 15, when seeding is found to be impractical, an appropriate temporary mulch or sod shall be applied.
   Permanent seeding may be undertaken during the summer if plans provide for adequate mulching and irrigation.
- (n) The Plan must specify that all slopes steeper than 3:1, as well as perimeter dykes, sediment basins or traps, and embankments must, upon completion, be immediately stabilized with sod, seed, anchored straw mulch, or other approved stabilization measure(s); areas outside of the perimeter sediment control system must not be disturbed.
- (o) The Plan must specify that the cut side of roads and ditches shall be stabilized immediately with rock rip-rap or other non-erodible erosion control liners, or where appropriate, vegetative measures such as sod.
- (p) Inspections shall be performed per the ESC O&M Plan. After each inspection, a written report shall be prepared documenting compliance with the ESC O&M Plan and recommending any repairs or maintenance required. Inspection reports must be retained by the permittee and be made available to the Town for review upon request.
- **7.19.3 NPDES Permit:** Projects disturbing greater than one acre of land may be required to obtain permit coverage under the USEPA's National Pollutant Discharge Elimination System (NPDES) program. The Applicant shall provide documentation to the Town

Engineer or the Board's consultant once this permit has been obtained. Construction shall not begin until should documentation has been obtained.

7.19.4 Site Clean-Up: The Applicant shall be required to clean-up any sediment or other debris that may erode off-site onto surrounding public or private streets or private property. Frequent sweeping of abutting streets may be required at the discretion of the Town Engineer. The Applicant also shall be required to remove sediments or other debris that enters any off-site drainage system. The entire drainage network and stormwater BMPs within the subdivision shall be cleaned, at the Applicant's expense, once the site has been fully stabilized.

#### 7.20 RESERVATION OF LAND FOR PUBLIC PURPOSE

No rule or regulation shall require, and no Board shall impose, as a condition for the approval of a plan of a subdivision that any of the land within said subdivision be dedicated to the public use, or conveyed or released to the Commonwealth or to the county or town in which the subdivision is located, for use as a public way, public park or playground, or for any other public purpose, without just compensation to the owner thereof.

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

#### 7.21 AS-BUILT PLANS

- **7.21.1 As-Built Plan Requirements:** A final as-built plan showing the actual as-built location and profile of all streets, ways, and utilities, including those installed by others, such as the gas, electric, telephone, and cable companies. The final plan must, at a minimum, contain the following information. The Board and/or Town Engineer or the Board's consultant may require the inclusion of additional information not set forth herein when deemed reasonably necessary:
  - (a) Reference to the approved subdivision plan, including information regarding where the plan is on record at the Middlesex South County Registry of Deeds or Land Court.
  - (b) Roadway centerline profile, with elevations at every 50-foot station (25-foot sections in vertical curves) and at high and low points, and profile of the water, sewer and drainage utilities, including the location and change in depth for any vertical bends in the water main and the sump depths or sump elevations for all drainage and sewer structures, as appropriate.
  - (c) Profile of water, sewer, or drainage utilities within any easements.

- (d) Rim elevation, location, size, length, slope type, and inverts for all drainage and sewer structures and pipes, including roof drains.
- (e) Location, size, and type of all underground stormwater retention/detention facilities and infiltration systems, including, where applicable, the number and bottom elevation of infiltration units or stormwater storage chambers; the bottom elevation, depth, length, and width of crushed stone surrounding underground infiltration systems; location of all clean-outs; the actual dimensions of any inlet/outlet control structures, and the invert elevation, size, slope, and type of all orifices, weirs, inlet and outlet pipes, structures, and headwalls.
- (f) Location and topography at one-foot contour intervals for all surface retention/detention basins, drainage swales, or other stormwater management facilities. Additional spot grades should be provided as appropriate to confirm that the systems are constructed as designed. The invert elevation, size, and type of all orifices, weirs, inlet and outlet pipes, headwall structures, and emergency spillways also shall be provided, as well as the actual dimensions for any inlet/outlet control structures.
- (g) Location of all building foundations and lot boundaries for lots fronting on the street(s) created by the subdivision, with the lot number as assigned by the definitive subdivision plan and the building numbers assigned to each lot by the Town Engineer.
- (h) Location, size, type, and elevation of all water mains, including gate valves, tees, lot services, and hydrants.
- (i) Ties to all water gate valves to a minimum of two permanent structures or monuments, preferably at building corners.
- (j) Location and type of all underground electrical, telephone, fire alarm and cable lines, including transformers, utilities, and junction boxes, and services to individual lots.
- (k) Location of all gas lines, including services to individual lots.
- (1) Boundaries of the road layout and all easements, as well as the location of permanent monuments (road bounds) with the traverse and fixed points on the subdivision perimeter used to establish the bound locations, all with bearings, distances, and complete curve data for all street sidelines and/or coordinate values sufficient to reestablish these points.
- (m) Plan view of any utilities, landscaping, subdivision and/or development entry sign or other features installed within an easement.
- (n) A complete description and location of two permanent benchmarks within or adjacent to the subdivision.

- (o) Width and location of all roadways, green strips, sidewalks, handicapped ramps, and driveway curb cuts.
- (p) Curbing type.
- (q) Location of street lights and utility poles.
- (r) Type and location of street and traffic signs.
- (s) Location and type of landscaping within the right-of-way, including street trees and landscaped islands, as appropriate.
- (t) Topography with contour intervals not greater than two feet, except as required above for surface stormwater management facilities.

A draft "as-built" plan shall be provided to the Board for its review and approval. The Board shall forward the draft "as-built" plan to the Town Engineer, Town Planner and other Town departments, as appropriate, for review. The Applicant shall produce the final asbuilt plan, as requested by the Board and based on comments received from Town staff, as noted above. At a minimum, the Applicant shall provide two, 24" by 36" paper copies of the draft as-built plan, one set of final/revised as-built plans printed on 24" by 36" mylar, and one CD containing the final/revised as-builts survey drawing and all external reference files in AutoCAD (.dwg) format in a form compatible with the most recent version available in the Engineering Department. Plans shall be at a scale of 1" = 40' and profiles shall be at a vertical scale of 1" = 4' and horizontal scale of 1" = 40'.

**7.21.2 Professional Certifications:** The draft and final as-built plans shall be prepared and stamped by a Professional Land Survey and Professional Engineer, both registered in the Commonwealth of Massachusetts and employed by the Applicant at their own expense. The Professional Land Surveyor shall certify that:

"I hereby certify that this plan shows the actual as-built locations, profiles, and elevations of the roadways, stormwater management system, water, sewer, and other utilities and appurtenances based upon a field survey conducted (<u>date(s)</u>). I further certify that all permanent monuments are in place according to the approved subdivision plan and are accurately located."

The Professional Engineer shall certify that:

"Based on-site observations by myself or an employee under my direct supervisions and/or based on information provided by a registered land surveyor, I hereby certify that all roadways, grading, stormwater management systems, water, sewer, and other utilities and appurtenances have been constructed in substantial conformance with the approved definitive subdivision plans and the standards of the Town of Winchester. I further certify that the drainage and stormwater management system, as constructed, will operate as designed and approved by the Board in the definitive subdivision."

**7.21.3 Revised Drainage Calculations:** If substantial modifications have been made to the stormwater management systems during construction such that the drainage calculations approved during the definitive subdivision process are no longer valid, then, upon recommendation to the Board by the Town Engineer or the Board's consultant, the Board shall request that the Applicant submit a revised set of calculations based on the as-built conditions demonstrating that the constructed facilities will meet or better the post-development conditions approved by the Board.

#### **SECTION 8. PERFORMANCE GUARANTEE**

#### 8.1 FORM OF SURETY

- **8.1.1** Before endorsement of its approval of the definitive subdivision plan, the Board shall require a performance guarantee to insure construction of ways and the installation of municipal services. The method of securing performance shall be one of the following:
  - (a) By a proper Bond (Form E-3), sufficient in the opinion of the Board to secure performance of the construction of ways and the installation of municipal services required for lots in the subdivision shown on the plan, and the Board may require that the Applicant specify the time within which such construction shall be completed. Bonds shall be issued by a company properly registered and licensed to issue bonds in the Commonwealth of Massachusetts.
  - (b) By a Tri-partite Agreement (Lending Bank, Developer, and Board) (Form E-4) sufficient in the opinion of the Board to secure performance of the construction of ways and the installation of municipal services required for lots in the subdivision shown on the plan.
  - (c) By a deposit of money (Form E-2) sufficient in the opinion of the Board to secure performance of the construction of ways and the installation of municipal services required for lots in the subdivision shown on the plan, and the Board may require that the Applicant specify the time within which such construction shall be completed. A signed withdrawal slip payable to the Winchester Board shall be obtained with the bankbook, plus an agreement from the bank stating that no withdrawal from the account will be made without approval of the Board.
  - (d) By a covenant (Form E-1), executed and duly recorded by the owner of record, running with the land, whereby such ways and installation of municipal services shall be provided to serve any lot before such lot may be built upon or conveyed, other than by mortgage deed. Conveyance of either the entire parcel of land shown on the plan or all lots not previously released by the Board by a single deed shall not be prohibited, but such land shall be subject to such covenant. The Board may specify a time period within which such construction and installation shall be completed.
- **8.1.2 Form of Bond:** As provided in M.G.L. Chapter 41, Section 81U of the Subdivision Control Law, the Board may expend the proceeds of such bond or deposit not exceeding \$25,000.00 without specific appropriation by the Town, provided the Board of Selectmen approves the expenditure. At the anniversary date of posting of bond or other security and when circumstances otherwise warrant such action, the Town may verify that the security is still in force and effect, and that the surety or financial institution is solvent and capable of paying the required amount.

- **8.1.3 Amount of Bond or Surety**: In determining the amount of the bond or surety, the Board shall be guided by the following formula in setting the sum of the security:
  - (a). the Board's estimate of the cost to complete the work; plus
  - (b). a ten percent margin of error; plus
  - (c). an appropriate rate of inflation over a five year period.
- **8.1.4** Required Terms. All performance bonds shall contain the following provision:

If the Applicant shall fully and satisfactorily observe and perform in accordance with the qualifications and time schedule herein and specified in all the covenants, agreements, terms and provisions set forth in the following:

- (a). The application for definitive plan approval (Form C);
- (b). The subdivision control law and the Rules and Regulations of the Winchester Planning Board which govern this subdivision;
- (c). The decision of the Planning Board as dated:
- (d). The definitive plan, as approved by the Planning Board in the Decision;

then this obligation shall be void; otherwise, it shall remain in full force and effect and the aforesaid sum shall be paid to the Town of Winchester as liquidated damages.

- 8.1.5 The Applicant may select the method of securing performance and may vary the method from time to time, as well as secure performance in part by one method and in part by another. The Board shall determine that the method of securing performance as selected by the Applicant is sufficient. The Board also may require security to assure compliance with the requirements of the Board of Health.
- **8.1.6** At the Board's discretion, it also may factor into the amount of the surety to be provided, administrative costs, applicable prevailing wage schedules, engineering and inspection services, and a contingency for the project.

#### 8.2 CONVERTING COVENANT TO ANOTHER PERFORMANCE GUARANTEE

**8.2.1** If the Applicant desires that lots be released from a covenant and that the improvements remaining to be constructed or installed be secured by another form of performance guarantee, a formal written request shall be sent to the Planning Board by registered mail which sets forth and includes:

- (a) Extent. The extent and scope of remaining work to be completed to satisfy the requirements for the construction or installation of all required ways and municipal services.
- (b) Estimate. An estimate, pursuant to these Rules and Regulations, which reflects all remaining costs related to the construction of all required ways and installation of all required municipal services.
- (c) Form and Type. The form and type of guarantee being given to the Planning Board to secure all remaining improvements.
- (d) Planning Board Action. The Planning Board or its agent will make a determination as to the sufficiency of the submitted estimate, and, if such estimate is accepted, a new performance guarantee will be given to the Planning Board. Upon acceptance by the Planning Board of the new performance guarantee, all applicable lots shall be released from the covenant.

### 8.3 CONVERTING BOND, DEPOSIT OR AGREEMENT TO COVENANT

8.3.1 If the Applicant desires to secure by means of a covenant the construction of ways and the installation of municipal services in a portion of a subdivision for which no building permits have been granted nor any lots have been sold, and to have the Planning Board release the bond, deposit of money or negotiable security, or agreement and mortgage previously furnished to secure such construction and installation, the Applicant shall submit to the Planning Board a reproducible tracing and three (3) contact prints of the reproducible tracing of the Definitive Plan, limited to that part of the plan which is to be subject to such covenant. Upon approval of the covenant by the Planning Board, reference thereto shall be inscribed on such section of the plan, and it shall be endorsed by the Planning Board and recorded with the covenant at the expense of the Applicant. Certified copies of all documents which the Applicant records at the Registry of Deeds shall be provided to the Planning Board as set forth in these Regulations.

#### 8.4 REDUCTION OR RELEASE OF PERFORMANCE GUARANTEE

**8.4.1 Written Request:** Upon the completion of improvements required by these Rules and Regulations and shown on the approved plan to serve any lot or lots within the definitive subdivision, the Applicant may submit via registered mail to the Town Clerk and the Board a written statement of completion requesting either partial or full release of the bond, deposit, tri-partite agreement, or covenant.

The statement shall include:

(a) Professional certifications as required in Section 2.18 of these Rules and Regulations;

- (b) Written evidence from the Engineering Department and/or the Board's outside consultant that as-built plans have been submitted, reviewed, and approved by each party;
- (c) Written evidence from the Engineering Department and/or the Board's outside consultant that the improvements have been exposed to one complete winter environment (December 1 to April 30) without damage, or that damage, if incurred, has been repaired to the satisfaction of the Board's Consulting Engineer or the Engineering Department and
- (d) Written evidence from the Tree Warden and/or the Board's outside consultant that installation of street trees and other plants as described in Section 7.11 have been completed satisfactorily, the plant materials are in healthy condition and that the warranty has been assigned to the Town.
- **8.4.2** Within forty-five days (45) after receipt of the Applicant's statement by the Board, the Board shall take one of the following actions:
  - (a) If the Board determines that the construction and installation has been adequately completed and accurately documented in the final as-built plans, it shall release the interest of the Town, in part or in whole, in any security to the person who furnished same, or it shall release the covenant by appropriate instrument, duly acknowledged, which may be recorded; or
  - (b) If the Board determines that the construction and installation have not been completed and/or that the final as-built plans are not sufficient, it shall specify in a notice sent to the Applicant and to the Town Clerk wherein said construction, installation, or as-built plan is deficient.
- **8.4.3 Partial Release:** Prior to final release of security, the Board may, at its discretion; grant up to three (3) partial releases from the required security for partial completion of improvements provided that:
  - (a) No reduction shall reduce the bond, deposit, or covenant to a value below the estimated cost of completing the unfinished portions of the improvements;
  - (b) No lot shall be released from the covenant unless and until construction of ways and installation of municipal services up to and including the base course of asphalt to serve said lot both have been completed to the Board's satisfaction;
  - (c) No partial release of security shall be granted until the Board has received written verification from the Engineering Department or the Board's outside consultant that substantially more than fifty percent (50%) of the required improvements have been completed satisfactorily;
  - (d) No partial release shall reduce the security by more than fifty percent (50%) of the amount being held at the time the release is requested; and

- (e) No partial release of security shall be granted until the Board has received stamped record plans documenting construction completed to date.
- **8.4.4 Final Release of Security:** In addition to the requirements of M.G.L. c. 41, §81U, no subdivision shall be accepted and no final release of a performance guarantee shall be given by the Board until:
  - (a) The integrity of road pavement and drainage has been verified following a full winter in place. The Board shall retain a surety in the sum of fifteen percent (15%) of the total cost of improvements which shall be released following the verification that the utilities have withstood the winter or have been repaired to the Board's satisfaction upon advice of the Town Engineer or the Board's consultant.
  - (b) Any required planting areas have been installed for a sufficient time and are in a healthy condition so that the Board, upon advice of the Tree Warden, may be satisfied that the vegetation has been established. The required time period shall be one (1) year from installation through to the following July 1 for shrubs and grassed areas and the period specified in Section 7.11.7 for trees. The Board shall retain a surety in the amount of five percent (5%) of the total cost of improvements to ensure the establishment of the vegetation. Upon advice of the Tree Warden, the Board shall require the proper installation of replacement plantings in accordance with the above-referenced period of time for insurance of tree survival.
  - (c) All improvements proposed in the Definitive Subdivision Plan have been completed and have been verified in writing as completed by the Town Engineer or the Board's Consulting Engineer.
  - (d) Written evidence from Town Counsel or the Board's consultant that the Applicant conveyed to the Town, without cost, in a form satisfactory to the Board (Form H-W and Form H-S), valid unencumbered title to the water mains and appurtenances, and sewers and any prescribed easements therefore.
  - (e) Written evidence from the Board of Health that the Board's requirements have been complied with.
  - (f) Written evidence from the Conservation Commission that any order of conditions issued under the Wetlands Protection Act, as amended, has been complied with.
- **8.4.5** If the Board determines that the required improvements have been completed in accordance with these Rules and Regulations and the approved plan, it may release the interest of the Town in any bond, tri-partite agreement, or deposit and return the bond or deposit to the Applicant, or release the covenant by appropriate instrument.

However, the Board may retain security to ensure construction adequacy against latent defects. The security shall not be released until the fee in the road and any related instruments have been conveyed to the Town and said road has been accepted at Town Meeting or until three years have elapsed since completion of improvements in accordance with the approved plans and associated conditions, whichever occurs first.

The Board may delay the final release of the performance guarantee if completion of construction on any remaining undeveloped or partially developed lots poses a substantial risk of damage to the subdivision improvements.

**8.4.6 Refusal of Release:** If the Board determines that required construction or installation has not been completed, it shall specify, in a detailed written determination, the items of construction or installation, which fail to comply with its rules and regulations by notice sent by registered mail to the Applicant, a copy of which shall be delivered to the Town Clerk. If the Board fails to so notify the Town Clerk and the Applicant within forty-five (45) days of receipt of a request for release of security, the deposit or bond shall be returned and any covenant shall become void. In the event that the forty-five (45)-day period expires without such specifications or without release of the security, the Town Clerk shall issue a certificate to such effect which may be recorded.

#### 8.5 MUNICIPAL COMPLETION OF SUBDIVISION

Any such bond may be enforced and any such deposit may be applied by the Board for the benefit of the Town of Winchester, as provided in M.G.L. Chapter 41, Section 81Y, upon failure of the performance for which any such bond or deposit was given to the extent the reasonable cost to the Town for completing the construction and installation of the improvements.

The proceeds of any such bond or deposit shall be made available to the Town for expenditure to meet the cost and expenses of the Town in completing the work as specified in the approved plan.

#### **SECTION 9. STREET ACCEPTANCE PROCEDURES**

#### 9.1 GENERAL PROVISIONS

This section contains the guidelines and procedures to be followed by those applicants wishing to submit subdivision streets to the Town for acceptance at Town Meeting. It is imperative that applicants, attorneys, and engineers review, understand and follow these procedures, especially as to documents required and deadlines, in order to eliminate confusion and delay to all parties.

Final approval of the "Form C" definitive subdivision plan does not constitute the laying out or acceptance by the Town of streets within a subdivision, nor entitle the streets to such acceptance.

Street acceptances within a subdivision are the financial and legal responsibility of the Applicant.

#### 9.2 GENERAL GUIDELINES

No application for street acceptance may be made until the following minimal requirements are met:

- **9.2.1** The way must be completed in every respect, including installation of utilities and drainage control structures as shown on approved plans and have the Director of Public Works' approval.
- **9.2.2** All conditions as listed on the certificate of approval of a definitive plan as issued by the Board must have been met.
- **9.2.3** The Applicant shall have received a certificate of compliance from the Conservation Commission in the case where an order of conditions has been issued for the construction of the roadway and/or its drainage system.
- **9.2.4** All fees and taxes due the Town or any of its boards in regard to any aspect of the project shall have been paid.
- 9.2.5 All required documents, including any conservation restrictions pursuant to M.G.L. Chapter 184, Sections. 31 through 33, declaration of covenants and restrictions and easements shall have been properly approved and recorded at the Registry of Deeds.

#### 9.3 PROCEDURE SEQUENCE

**9.3.1** At least ninety (90) days prior to Town Meeting the Applicant shall submit an application for street acceptance to the Board with all required documents and plans as listed in Section 9.4. Failure to include all required documentation shall result in rejection of the application. The Board shall forward all properly completed applications and documents to Town Counsel and the Engineering Department for review and approval.

- 9.3.2 At least seventy-five (75) days prior to Town Meeting, Town Counsel and the Engineering Department shall complete their review of the application and documents and shall notify the Board in writing of approval or disapproval of these applications and documents. Those applications and documents found defective shall be returned to the applicant with explanations of the deficiencies. Those applications and documents found to be satisfactory shall be forwarded to the Board of Selectmen who shall schedule and hold a public hearing pursuant to the provisions of M.G.L. Chapter 82, Section 22.
- 9.3.3 The Selectmen shall conduct the public hearing, and, if finding the way ready for acceptance, shall place an Article on the Town Meeting Warrant proposing acceptance of the street by Town Meeting voters. After the Selectmen vote to accept the layout of the road, the layout with the boundaries and measurements of the way shall be filed with the Town Clerk. Said filing with the Town Clerk shall be made at least seven days prior to Town Meeting.
- **9.3.4** Town Meeting shall vote upon the motion to accept the subdivision street(s).
- **9.3.5** The selectman shall then sign the street acceptance plan(s).
- **9.3.6** All deeds, covenants, easements and Street Acceptance Plans relating to the acceptance of the subdivision street shall be recorded at the Middlesex South Registry of Deeds and a copy of all recorded documents and plans shall be provided to the Board and the Town Engineer.
- 9.4 STREET ACCEPTANCE DOCUMENTATION

The applicant shall submit the following documents and materials to the Board:

- **9.4.1** A Mylar plan and four (4) paper prints thereof showing the street or streets to be accepted. This plan shall be entitled "Street Acceptance Plan" and shall show the streets and all appurtenant easements by bounds, courses and distances. (Note: This plan is not to be confused with the "as-built" plan required under Section 7.21 of these Rules and Regulations.)
- 9.4.2 Instruments suitable for recording running to the "Town of Winchester" for all easements which are not a part of the street or streets (including, but not necessarily limited to drainage, water and other utilities). These instruments must be signed by all parties having an interest or rights in such easements.
- **9.4.3** Deed for the street itself, running to the "Town of Winchester." This deed shall contain a legal description of the street named in the acceptance application and shall be signed by all parties having any rights or interests in such street.
- **9.4.4** Deed of gift in trust for "open space" parcels (if applicable) running to the "Town of Winchester" in the form acceptable to the Winchester Conservation Commission.
- **9.4.5** Certificate of compliance for any and all orders of conditions issued by the Winchester Conservation Commission or Massachusetts Department of Environmental Protection

- for work in relation to construction of the roadway, drainage, or any associated infrastructure.
- **9.4.6** A statement from the Winchester Fire Chief certifying that all fire protection requirements, including but not necessarily limited to installation of hydrants and cisterns, have been provided and are satisfactory.
- **9.4.7** Certificate(s) signed by the Applicant and/or his/her attorney certifying that all necessary parties have signed all easement instruments, street deeds, and open space deeds.
- **9.4.8** Names and addresses of each property owner and mortgagee having rights or interests in the streets, easements and open space, and the names and addresses of each abutter thereto, along with a request for a public hearing by the Board of Selectmen for street acceptance pursuant to M.G.L. Chapter 82, Section 22.
- **9.4.9** Check made payable to the Town of Winchester for the recording of all instruments and deeds for filing at the Middlesex South Registry of Deeds at the prevailing rate at the time of filing. Copies of these easement instruments and deeds shall be submitted to the Town Planner and Town Engineer for review prior to recording.
- **9.4.10** Using the certification of monuments form (Form I) the Applicant shall produce certification that the granite bounds were placed as required by the approved Planning Board definitive plans and this form shall be stamped by a Registered Land Surveyor.
- 9.4.11 Upon such determination of a completed application and roadway construction compliance, and upon scheduling of the subject submittal on the next available Fall Town Meeting, the Applicant shall be eligible for a reduction in the road bond currently being held by the Planning Board as surety for completion of all required public improvements. The minimum retainage required in this situation shall be determined by taking the number of stations (each 100 l.f. of roadway) or fraction thereof, of the affected subdivision roadway and multiplying that by \$1,000. For example, subdivision with 1,450 l.f. of roadway will be required to hold a minimum retainage of \$14,500 (\$1,000 = \$14,500).
- 9.4.12 The Applicant shall execute and provide to the Board an instrument, in a form approved by the Board transferring to the Town, without cost, valid unencumbered title to all sanitary and storm sewers, water mains, and appurtenances thereto, constructed and installed in the subdivision or approved portion thereof, and shall convey to the Town, without cost and free of all liens and encumbrances, perpetual rights and easements to construct, inspect, repair, renew, replace, operate, and forever maintain such sanitary and storm sewers and water mains, with any manholes, pipes conduits, and other appurtenances, and to do all acts incidental thereof, and if any such sanitary and storm sewers, water mains and appurtenances thereto has been constructed and installed in land not within such streets, then in, through and under the land within that easement.

# Appendix I:

# LID Site Planning and Design Checklist

The applicant must document specific LID site planning and design strategies applied for the project. If a particular strategy was not used, a justification and description of proposed alternatives must be provided. If a strategy is not applicable (N/A), applicants must describe why a certain method is not applicable at their site. For example, preserving wetland buffers may be not applicable for sites located outside any jurisdictional wetland buffers.

1.	Strategies to Avoid the Impacts
A.	Preservation of Undisturbed Areas
	☐ Not Applied or N/A. <i>Use space below to explain why:</i>
	Select from the following list:
	☐ Limits of disturbance clearly marked on all construction plans.
	☐ Mapped soils by Hydrologic Soil Group (HSG).
	☐ Building envelopes avoid steep slopes, forest stands, riparian corridors, and floodplains.
	☐ New lots, to the extent practicable, have been kept out of jurisdictional wetland areas.
	☐ Important natural areas (i.e., undisturbed forest, riparian corridors, and wetlands) identified and protected with permanent conservation easement.
	☐ Percent of natural open space calculation is provided.
	☐ Other (describe):
	Explain constraints when a strategy is applied and/or proposed alternatives in space below:
В.	Preservation of Buffers and Floodplains  ☐ Not Applied or N/A. Use space below to explain why:
	Select from the following:
	☐ Applicable vegetated buffers of wetlands and perennial and intermittent streams have been preserved, where possible.
	☐ Limits of disturbance included on all construction plans that protect applicable buffers
	☐ Other (describe):
	Explain constraints and/or proposed alternatives in space below:
	Expluin constituins and or proposed differentiatives in space octow.

	LID Site Planning and Design Checklist
C.	Minimized Clearing and Grading
	□ Not Applied or N/A. <i>Use space below to explain why:</i>
	Select from the following list:
	☐ Site fingerprinting to extent needed for building footprints, construction access and safety (i.e., clearing and grading limited to 15 feet beyond building pad or 5 feet beyond road bed/shoulder).
	☐ Other (describe):
	Explain constraints and/or proposed alternatives in space below:
D.	Locating Sites in Less Sensitive Areas
	□ Not Applied or N/A. <i>Use space below to explain why:</i>
	Select from the following list:
	☐ A site design process, such as conservation development, used to avoid or minimize impacts to sensitive resources such as floodplains, steep slopes, erodible soils, wetlands, hydric soils, surface waters, and their riparian buffers.
	☐ Development located in areas with most appropriate soils.
	☐ Development on steep slopes, grading and flattening of ridges has been avoided to the maximum extent practicable.
	☐ Other (describe):
	Explain constraints and/or proposed alternatives in space below:
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	LID Site Planning and Design Checklist
Ε.	Compact Development
	□ Not Applied or N/A. <i>Use space below to explain why:</i>
	Select from the following list:
	A site design technique (e.g., conservation development) used to concentrate development to preserve as much undisturbed open space as practicable and reduce impervious cover.
	☐ Other (describe):
	Explain constraints and/or proposed alternatives in space below:
F.	Work with the Natural Landscape Conditions, Hydrology, and Soils
	□ Not Applied or N/A. <i>Use space below to explain why:</i>
	Select from the following list:
	☐ Stormwater management system mimics pre-development hydrology to retain and attenuate runoff in upland areas (e.g., cuts and fills limited and BMPs distributed throughout site; trees used for interception and uptake).
	$\square$ The post-development time of concentration (t <sub>c</sub> ) should approximate pre-development t <sub>c</sub> .
	☐ Flow velocity in graded areas as low as practicable to avoid soil erosion (i.e., slope grade minimized).
	☐ Site designed to locate buildings, roadways and parking to minimize grading (cut and fill quantities)
	☐ Other (describe):
	Explain constraints and/or proposed alternatives in space below:

LID Site Plannin	g and Design Checklist	
Strategies to Reduce the Impacts		
Reduce Impervious Cover		
☐ Not Applied or N/A. <i>Use space below</i>	to explain why:	
Select from the following list:		
☐ Reduced roadway widths	☐ Reduce driveway areas	
☐ Reduced building footprint	☐ Reduced sidewalk area	
☐ Reduced dead-ends	☐ Reduced parking lot area	
Other (describe):		
Explain constraints and/or proposed al	ternatives in space below:	
Strategies to Manage the Impacts		
Disconnecting Impervious Area		
☐ Not Applied or N/A. <i>Use space below</i>	to explain why:	
Select from the following list:		
☐ Impervious surfaces have been disc	onnected to the extent possible.	
Other (describe):		
Explain constraints and/or proposed al	ternatives in space below:	
	Strategies to Reduce the Impacts  Reduce Impervious Cover  Not Applied or N/A. Use space below is Select from the following list: Reduced roadway widths Reduced building footprint Reduced dead-ends Other (describe): Explain constraints and/or proposed also select from the following list:  Disconnecting Impervious Area Not Applied or N/A. Use space below is Select from the following list: Impervious surfaces have been disconditional content of the conte	Reduce Impervious Cover  Not Applied or N/A. Use space below to explain why:  Select from the following list:  Reduced roadway widths Reduced sidewalk area Reduced building footprint Reduced parking lot area Other (describe):  Explain constraints and/or proposed alternatives in space below:  Strategies to Manage the Impacts  Disconnecting Impervious Area  Not Applied or N/A. Use space below to explain why: Select from the following list: Impervious surfaces have been disconnected to the extent possible.

	LID Site Planning and Design Checklist
B.	Mitigation of Runoff at the point of generation
	☐ Not Applied or N/A. <i>Use space below to explain why:</i>
	Select from the following list:
	☐ A green roof has been designed to reduce runoff.
	☐ Small-scale BMPs applied at source.
	Other (describe):
	Explain constraints and/or proposed alternatives in space below:
C.	Stream/Wetland Restoration
	☐ Not Applied or N/A. <i>Use space below to explain why:</i>
	Select from the following list:
	☐ Historic drainage patterns have been restored by removing closed drainage systems and/or restoring degraded stream channels and/or wetlands.
	☐ Removal of invasive species.
	Other (describe):
	Explain constraints and/or proposed alternatives in space below:

	LID Site Planning and Design Checklist
D.	Reforestation
	☐ Not Applied or N/A. <i>Use space below to explain why:</i>
	Select from the following list:
	☐ Low maintenance, native vegetation has been proposed.
	☐ Trees are proposed to be planted or conserved to reduce runoff volume, increase nutrient uptake, and provide shading and habitat.
	Other (describe):
	Explain constraints and/or proposed alternatives in space below:
Е.	Source Control
	☐ Not Applied or N/A. <i>Use space below to explain why:</i>
	Select from the following list:
	☐ Source control techniques such as street sweeping or pet waste management have been proposed.
	Other (describe):
	Explain constraints and/or proposed alternatives in space below:

# Appendix II.

### Fee Schedule PLANNING BOARD FEE SCHEDULE FOR SUBDIVISION OF LAND

PURSUANT TO THE "RULES AND REGULATIONS GOVERNING THE SUBDIVISION OF LAND IN THE TOWN OF WINCHESTER, MASSACHUSETTS"  $\,$ 

#### FORM A (ANR) PLANS:

	CATEGORY	<u>FEE</u>
	Lot line adjustments <u>not</u> resulting in the creation of additional buildable lots	\$250
Lot line changes resulting in the creation of additional buildable lots:		
	≤ 3 buildable lots created	\$500
	4 to 10 buildable lots created	<b>\$7</b> 50
	> 10 buildable lots created	\$1000

# FORM B- PRELIMINARY SUBDIVISION

	CATEGORY	<u>FEE</u>		
Prop	Proposed number of lots:			
	≤3 lots	\$250		
	4 to 10 lots	\$500		
	> 10 lots	\$750		
Prop	osed linear feet of roadway:			
(mea	sured at centerline)			
	≤ 300 feet	\$250		
	> 300 feet to ≤ 600 feet	\$350		
	> 600 feet	\$500		
Prop	osed roadway gradient (%):			
	≤ 3%	\$0		
	$> 3\%$ to $\le 6\%$	\$0		
	> 6%	\$250		
Envi	Environmental Considerations (see list below):			
	None	\$0		
	1 to 2	\$100		
	> 2	\$500		
Utilit	Utility easements outside of road right-of-way:			
	Length (in feet) =	\$50 plus \$0.50 per linear foot		
	Modification of Preliminary Subdivision	•		

#### PLANNING BOARD FEE SCHEDULE FOR SUBDIVISION OF LAND

PURSUANT TO THE "RULES AND REGULATIONS GOVERNING THE SUBDIVISION OF LAND IN THE TOWN OF WINCHESTER, MASSACHUSETTS"

#### FORM C – DEFINITIVE SUBDIVSION

CATEGORY		<u>FEE</u>	
		NO PRELIM	<u>APPROVED</u>
		<u>PLAN</u>	PRELIM PLAN
Prop	osed number of lots:		
	≤3 lots	\$500	\$200
	4 to 10 lots	\$1000	\$500
	> 10 lots	\$2000	\$1000
Prop	osed linear feet of roadway:		
(mea	sured at centerline)		
	≤ 300 feet	\$500	\$200
	> 300 feet to ≤ 600 feet	\$750	\$400
	> 600 feet	\$1000	\$500
Proposed roadway gradient (%):			
	≤ 3%	\$0	\$0
	$> 3\%$ to $\le 6\%$	\$0	\$0
	> 6%	\$1000	\$750
Environmental Considerations (see list below):			
	None	\$0	\$0
	1 to 2	\$500	\$400
	> 2	\$1000	\$500
Utili	ty easements outside of road right-of-way:	\$100 plus	\$50 plus \$0.50
	I anoth (in fact) =	\$0.50 per	per linear foot
	Length (in feet) =	linear foot	

# Environmental Considerations (please check all that apply):

- Any portion of the proposed roadway or drainage system located within the 100-foot buffer zone of a bordering vegetated wetland (BVW) or inland bank, as defined in the Massachusetts Wetland Protection Act, or any portion of roadway drainage proposed to be discharged to the BVW or inland bank.
- ☐ Any portion of the proposed roadway or drainage system located within a 200-foot Riverfront Protection Zone, as defined in the Massachusetts Riverfront Protection Act.

#### PLANNING BOARD FEE SCHEDULE FOR SUBDIVISION OF LAND

PURSUANT TO THE "RULES AND REGULATIONS GOVERNING THE SUBDIVISION OF LAND IN THE TOWN OF WINCHESTER, MASSACHUSETTS"

	Any portion of the proposed roadway or lots located within the 100-year floodplain, as defined on the most recent Flood Insurance Rate Map (FIRM) published by FEMA for the Town of Winchester.
	Any portion of the proposed roadway, drainage system, or lots intersecting or encompassing "Isolated Land Subject to Flooding" (ILSF), as defined in the Massachusetts Wetland Protection Act, or any portion of the roadway drainage proposed to be discharged to the ILSF.
	Any portion of the proposed subdivision property regulated under Massachusetts General Law Chapter 21E.
	number of environmental considerations =
MOL	IFICATION TO AN APPROVED DEFINITIVE SUBDIVISION PLAN
	\$300 plus \$100 for each lot affected and \$100 for each new building lot created. In addition, a few of \$50 shall be required for the consideration of a modification of the roadway, and a fee of \$50 shall be required for each drainage structure modified, not including drain pipe.
	Number of lots affected and/or new building lots created =
	Length of proposed roadway to be modified =
	Number of drainage structures to be modified =

# **Appendix III. Standard Forms**

The following forms are specifically identified in the Subdivision Regulations:

- Form A Application for Endorsement of Plan Believed Not to Require Approval
- Form B Application for Approval of a Preliminary Plan
- Form C Application for Approval of a Definitive Plan
- Form D- Request for Certified Abutter's List
- Form E -1- Covenant
- Form E-2 Performance Secured by Bank Passbook
- Form E-3 Performance Secured by Bond
- Form E-4 Performance Secured by Tripartite Agreement
- Form F Road Security Establishment/Security Release Request
- Form G Street Improvement Guarantee Summary Sheet
- Form H-S Conveyance of Sewer Easements
- Form H-W -Conveyance of Water Easements
- Form I Certification of Monuments
- Form J- 3<sup>rd</sup> Party Billing
- Form K- Certificate of Amendment, Modification or Rescission of the Approval of a Definitive Subdivision Plan