

April 2007

RULES AND REGULATIONS GOVERNING THE SUBDIVISION
OF LAND

ASHFIELD PLANNING BOARD
ASHFIELD, MA

Preamble

The term subdivision is defined in detail in Section 81-L of Chapter 41: only this carefully worded definition has legal status. Within the limits of this definition, the Planning Board is likely to find that any division of land is a subdivision if it creates one or more new lots which do not have frontage on an existing street: either a public way, a duly approved subdivision street, or a private way adequate in the opinion of the Planning Board.

Table of Contents

Page

I.	AUTHORITY AND PURPOSE	3
II.	APPLICABILITY	4
	A. General	4
	B. Definition	4
	C. Recording of Plan Believed not to be a Subdivision	4
	D. Fees	5
	E. Recording of Plan Requiring Approval	5
III.	PROCEDURE FOR SUBMISSION AND APPROVAL OF PLANS	5
	A. Preliminary Subdivision Plan	5
	1. General	6
	2. Contents	6
	3. Site Visit	7
	4. Approval	7
	B. Definitive Subdivision Plan	7
	1. General	7
	2. Submission process	8
	3. Contents of Plans	8
	4. Review by Board of Health as to Suitability of the Land	13
	5. Review by Other Town Officials	14
	6. Public Hearing	14
	7. Performance Guarantee	14
	8. Approval with Covenant	16
	9. Completion Time Schedule	16
	10. Certificate of Approval	17
IV.	DESIGN STANDARDS	19
	A. Classification of Streets	19
	B. Design of Streets	19
	1. Location	19
	2. Adequate Access from Public Way	20
	3. Alignment and Standards	21
	C. Easements	22
	D. Open Spaces	22
	E. Protection of Natural Features	22
	F. Guard Rails	22
	G. Drainage	23
V.	REQUIRED IMPROVEMENTS	23
	A. Street and Roadway Construction	24
	B. Utilities	25
	1. Underground Utility Systems	25

2. Utility Installation	26
3. Drainage	27
4. Water	28
5. Electrical	29
C. Sidewalks	29
D. Landscaping	30
E. Monuments and Signs	33
F. Inspection Costs	33
G. Street Acceptance	34
H. Buildings	35
I. Pre-Construction Conference	35

VI. ADMINISTRATION	35
A. Variation	35
B. Reference	36

These Rules and Regulations shall be effective on and after _____
 And so remain until modified or amended by the Planning Board.

Adopted: _____
 Amended: _____ {List each amendment with date and amended section number.}

I. AUTHORITY AND PURPOSE

These Rules and Regulations are enacted by the Ashfield Planning Board under authority granted by Section 81-Q of Chapter 41 of the General Laws, for the purposes set forth in Section 81M of said Chapter 41. For matters not covered by these rules and regulations, reference is made to the Subdivision Control Laws, Sections 81-K to 81-GG of Chapter 41 of the General Laws, as most recently amended. The purpose of the Regulations shall be to protect the safety, convenience, welfare, and to preserve the environment and the natural resources of the inhabitants of the Town of Ashfield in the laying out and construction of ways and subdivisions, including adequate access to all lots and to ensure good drainage and sanitary conditions.

II. APPLICABILITY

- A. General.** No person shall make a subdivision, within the meaning of the Subdivision Control Law, of any land in the Town of Ashfield or proceed with the improvement or sale of lots in a subdivision, or the construction of ways or the installation of municipal services therein, unless and until a Definitive Plan of such subdivision has been submitted to and approved by the Planning Board as hereinafter provided.
- B. Definition.** The term subdivision is defined in detail in Section 81-L of Chapter 41: only this carefully worded definition has legal status.
- C. Recording of Plan Believed not to be a Subdivision.** (Form A) 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 and who believes that their plan does not require approval under the Subdivision Control Law may submit their plan with a minimum of three (3) copies and one (1) application Form A to the Planning Board at a regularly scheduled meeting. Such plan shall be accompanied by the necessary evidence to show that the Plan does not require approval. Said person shall file, by delivery or registered mail, a notice with the Town Clerk stating the date of submission for such determination and accompanied by a copy of said application. If the notice is given by delivery, the Town Clerk shall, if requested, give a written receipt thereof. If the Planning Board determines that the plan does not require approval, it may, through its chairman or other authorized representative, without a public hearing and without unnecessary delay endorse on the plan the words "approval under the Subdivision Control Law not required."

The Board may add to such endorsement a statement of the reason approval is not required. The plan will be returned to the Applicant, and the Planning Board shall notify the Town Clerk of its action.

If the Planning Board determines that the plan does require approval under the Subdivision Control Law, it will so inform the Applicant and return the plan. The Board will also inform the following parties.

- Select Board
- Town Clerk
- Conservation Commission
- Board of Health
- Police Department
- Fire Department
- Building Commissioner
- Highway Superintendent
- Assessors

If the Planning Board fails to act upon a plan submitted under this section within twenty-one (21) days after its submission approval under the Subdivision Control Law is not required. Submission shall take place at a regularly scheduled meeting of the Planning Board.

D. Fees. Each application Form A to the Planning Board shall be accompanied by an administrative filing fee in the amount of \$50.00 per each new lot created. The fee shall be paid by check or money order made payable to the "Town of Ashfield, Massachusetts."

E. Recording of Plan Requiring Approval. If the Planning Board determines that a plan does require approval, said plan may not be recorded until such approval is obtained in accordance with the provisions outlined below. After such plan, or modification thereof, is approved by the Planning Board the Applicant shall record it in the Registry of Deeds within six (6) months, or said approval will no longer be valid.

III. PROCEDURE FOR SUBMISSION AND APPROVAL OF PLANS

A. Preliminary Subdivision Plan (Form B)

1. General

- a. Preliminary plan of a subdivision, from hereon referred to as the Preliminary Subdivision Plan, may be submitted by the Applicant to the Planning Board and to the Board of Health for discussion and approval, modification, or

disapproval by each board. The Applicant is encouraged to submit preliminary plans to the Conservation Commission, Fire Department, Police Department and the Building Commissioner at this time. The submission of such a preliminary plan will enable the Applicant, the Planning Board, the Board of Health, other municipal agencies and owners of property abutting the subdivision to discuss and clarify the problems of such subdivision before a Definitive Subdivision Plan is prepared. Therefore, it is strongly recommended that a Preliminary Subdivision Plan be submitted in each case. A properly executed application Form B shall be filed with the Preliminary Subdivision Plan submitted to the Planning Board.

- b. Preliminary plans shall be required for mixed-use or non-residential subdivisions.
- c. Any such Preliminary Subdivision Plan application shall be accompanied by an administrative filing fee in the amount of one hundred dollars (\$100.00) per lot, e.g. one hundred dollars times the number of new lots shown on the Preliminary Subdivision Plan presented; the fee shall be paid by certified check or money order made payable to the "Town of Ashfield, Massachusetts."
- d. The Preliminary Subdivision Plan shall be filed at a regularly scheduled meeting of the Planning Board. If at this time the Planning Board considers the plan to be incomplete, the application may be rejected.
- e. If, in the judgment of the Planning Board, consulting services are necessary or appropriate, the Applicant shall, prior to the determination on the Definitive Subdivision Plan by the Planning Board, reimburse the Town for the full cost of such services. All such consultants shall be selected by the Planning Board. Reimbursement shall be by certified check or money order, made payable to the "Town of Ashfield, Massachusetts."
- f. The Applicant shall also file by delivery or registered mail a completed Form B with the Town Clerk stating the date of submission for such approval of a Preliminary Subdivision Plan.

2. Contents

The Preliminary Subdivision Plan shall be drawn clearly on a reproducible medium and at a scale of one inch equals forty feet (1" = 40') or such scale as the Planning Board may accept to show details clearly. Said Plan shall include basic topography and indicate major features including, but not limited to ponds, wetlands, buildings, roads lot layouts and other proposed changes. Ten (10) sets of plans shall be filed with the Planning Board and two (2) with the Board of Health. Said plan shall be identified as a Preliminary Subdivision Plan and show all the information described

under the definition of the Preliminary Subdivision Plan as to form a clear basis for discussion of its problems and for preparation of the Definitive Subdivision Plan. During discussion of the Preliminary Subdivision Plan the complete information required for the Definitive Subdivision Plan (Section III-B-5 Performance Guarantee) will be developed. If prints have been produced in Auto CAD or other digital methods then a CD or suitable recording shall be submitted.

3. Site Visit

The Applicant shall schedule a site visit at an agreed upon time for the Planning Board and other parties.

4. Approval

The Planning Board may give such Preliminary Subdivision Plan its approval with or without modification. Such approval of Preliminary Subdivision Plan does not constitute approval of a subdivision. Notice of its action must be given by the Planning Board to the Applicant and Town Clerk within forty-five (45) days of the date of submission.

B. Definitive Subdivision Plan (Form C)

1. General

Any person who submits a Definitive Subdivision Plan to the Planning Board for approval shall file with the Board the following:

- a. Fifteen (15) prints made from the original drawing of the Definitive Subdivision Plan, dark line on white background. The original drawing will be submitted for signatures at a later date if approval is granted. If prints have been produced digitally then a digital recording shall also be furnished.
- b. A properly executed application Form C.
- c. Any such Definitive Subdivision Plan application shall be accompanied by an administrative filing fee in the amount of one hundred dollars (\$100.00) per lot if a Preliminary Subdivision Plan was filed or three hundred dollars (\$300) per lot if no Preliminary Subdivision Plan was filed; said fee shall be in the form of a check or money order made payable to the "Town of Ashfield, Massachusetts."
- d. If in the judgment of the Board, consulting services are necessary or appropriate, the Applicant shall, prior to the determination on the Definitive Subdivision Plan by the Board, reimburse the Town for the full cost of such services. All such consultants shall be selected by the Board. Reimbursement shall be by certified check or money order, made payable to the "Town of Ashfield, Massachusetts."

- e. The Applicant shall file by delivery or registered mail a completed Form C with the Town Clerk stating the date of submission of a Definitive Subdivision Plan.
- f. The Applicant shall ensure that all submittals are clear and well organized. The Planning Board reserves the right to require new plans be submitted if they find the plans are difficult to read and understand.

2. Submission process

- a. The plan, accompanying forms, documentation, and the applicable fee, shall be submitted by hand delivery or certified mail to the municipal clerk (for date stamping) AND to the Planning Board.
- b. The Applicant shall submit fifteen copies (15) of all plans (dark line on white background), application forms (see forms) and all other information and documentation required in these Rules and Regulations. The Planning Board shall file prints with the following :
 - Select Board
 - Town Clerk
 - Conservation Commission
 - Board of Health
 - Police
 - Fire Department
 - Assessors
- c. Any supplemental materials submitted by the Applicant after the original submission must provide the number of copies and the format required for the original submittal. The Planning Board may elect not to consider such revised plans or other additional materials if such plans/materials are not filed at least fourteen (14) days prior to the date of the Public Hearing or meeting at which the Applicant wishes them to be considered. This is to ensure adequate time for review.

3. Contents of Plans

- a. The Definitive Subdivision Plan shall be drawn at a scale of 1" = 40' or greater on 24" by 36" sheets and every sheet shall bear the seal of a Massachusetts Registered Land Surveyor and/or a Registered Professional Engineer as appropriate. If multiple sheets are used, they shall be accompanied by an index sheet showing the entire subdivision

- b. At least one print shall have the significant features illustrated in color to clearly show roads, streams and water-bodies, wetlands, one hundred year floodplains, dedicated open space and recreation, pedestrian and bicycle paths, and subdivision boundaries.
- c. The Definitive Subdivision Plan shall be prepared by an engineer or surveyor who is currently registered in the state of Massachusetts. The plan shall be at a scale of one inch equals forty feet or such other scale as the Planning Board may accept to show details clearly and adequately. Sheet sizes shall preferably not exceed 24" x 36". Final approval of the Definitive Subdivision Plan does not constitute acceptance by the Town of Streets within a subdivision.
- d. All plans drawn by digital means must be accompanied by a digital CAD File. After final approval by the Planning Board a digital CAD file in both model and paper space must be submitted to the Planning Board.
- e. The subdivision name, boundaries, the coordinate north arrow, date, scale, legend and title, "Definitive Subdivision Plan."
- f. Certification by the Surveyor that all surveying conforms to the technical standards for property surveyors of the American Congress on Surveying and Mapping shall appear on the plan.
- g. Existing and proposed lines of streets, lots, rights-of-way, easements, and any public or common areas within the subdivision. (The proposed names of proposed streets shall be shown in pencil until they have been approved by the Planning Board.) Purpose of easement(s) shall be identified.
- h. Name and address of record owner, Applicant and engineer or surveyor.
- i. Name of all abutters and lots as they appear in the most recent tax list.
- j. Location, names and present widths of streets bounding, approaching, or within reasonable proximity of the subdivision.
- k. Location of wetlands, perennial and intermittent streams, vernal pools, upland habitat areas, waterways and water bodies within and adjacent to the subdivision.
- l. Major site features, such as existing stone walls, fences, buildings, large trees, rock ridges and ledge, swamps, flood plains, historic features, and wooded areas on and within 100 feet of the proposed subdivision. The plan shall identify which of the above shall remain undisturbed.
- m. Sufficient data, including lengths, bearings, and curve data to determine

the exact location, direction and length of every street and way line, lot line and boundary line, and to establish these lines on the ground. All surveys must tie to the Massachusetts State Plane coordinate System (NAD 1983 Datum), using said published control points or the global positioning system.

- n. Location of all permanent monuments and control points identified as to whether existing or proposed, and identified according to the Massachusetts State Plane coordinate system (NAD 1983 Datum). At least two permanent native stone or granite monuments must be placed on site and shown in the plans prior to construction. Bounds are required at all intersections of street lines, angle points and changes of curvature of street lines. All control points shall be tied to and employ NAVD 1988 AND the Massachusetts State Plane Coordinate System (NAD 1983 Horizontal Datum), with horizontal control using said published control points or the global positioning system (with horizontal coordinates provided in metric). Vertical benchmarks separate from horizontal control points may be provided, provided these points are also tied to permanent native stone or granite monuments.
- o. Boundary lines, areas in square feet, and dimensions of all proposed lots, with all lots designated numerically and in sequence.
- p. Suitable space to record the action of the Planning Board and the signatures of the members of the Planning Board on each sheet of the Definitive Subdivision Plan and reference to separate certificate by municipal clerk.

A separate plan showing existing and proposed topography (sufficiently differentiated) with two (2) foot contour intervals for the entire parcel, unless the Planning Board agrees that the natural surface of the ground may be adequately represented by contours with larger intervals or by figures of elevation. (The existing and proposed topographical information presented shall be sufficient to define the grading of each proposed lot and street.) Datum to be NAVD 1988 or later.
- r. A separate plan showing where a storm drainage line, or any type of drainage structure discharges within 200 feet of a brook, stream, or drainage area, a profile will be shown of the brook, stream, or drainage area to determine condition, and proposed method of stabilization.
- s. A separate plan showing street layout, horizontal scale 1" = 40', for each street in the subdivision showing exterior lines, roadway lines, partial lot lines, curb lines, intersection angles, points of tangency, and radii of curves. Also included on the street layout plan shall be location, size, type of construction, elevations and invert, whenever applicable, of all pipes

and conduits of the:

- i. Proposed layout of storm drainage, water supply and sewage disposal systems including profiles and layout of all underground utilities including all structures.
 - ii. Existing profiles and proposed profiles on the center line of proposed streets at a horizontal scale with that of the plan, and with an appropriate vertical scale
- t. A Profile Plan on the same sheet located directly below and coordinated with the street layout plan, indicating existing profiles on the exterior and center lines (using light weight lines) and proposed profile on the center line (using heavy weight lines) of each proposed street, at a horizontal scale of 1" = 40' and a vertical scale of 1" = 4'. All elevations shall refer to NAVD 1988 datum. Profiles shall show existing and proposed street grades, rates of gradient on percentages, ground and proposed elevations at center line of each fifty (50) foot station, and grades of intersection streets and ways shall be clearly indicated. The Profile Plan shall show location of existing and proposed water, drainage and sanitary sewer lines, slopes and types (material and class) of all storm and sanitary sewer lines, invert, rim elevations and station of each manhole or catch basin.
 - u. A typical cross section for the full width of the proposed right-of-way shall be shown in accordance with the standards of these Rules and Regulations showing foundation material, wearing surface, crown and width of traveled way, curbing, grass strips, sidewalks, utility locations, etc.
 - v. Construction details for catch basins, manholes, end-walls, head-walls, rip-rap, and energy dissipaters, detention ponds, access rows, level lip spreaders, etc.
 - w. Every plan shall have at least four survey-quality (centimeter, or its English equivalent, accuracy) points on each sheet tied into the Massachusetts State Plane Coordinate System (NAD 1983 datum), using said published control points or the global positioning system. The plan must note the coordinates, in metric, of the four tie-in points, the datum, and the source and location of monuments used for data.
 - x. Proposed roads shall be staked prior to the Definitive Subdivision Plan application.
 - y. A table listing lot numbers with the corresponding lot size and street frontage for every lot.
 - z. Locations of borings shall be shown on the plan with a numbering system corresponding to boring logs which will be submitted as part of the

application. The purpose of borings is to assist the Applicant and the project's engineer in designing an appropriate roadway and related utilities based on existing water table and subsurface soil conditions (i.e., a clay subsurface might necessitate extra excavation and extra depth for gravel base; a water table near ground surface might necessitate the installation of sub-drains along the edge of the road, etc.). The actual location at which each boring is made shall be shown on the plans. The borings shall be certified by a Massachusetts Professional Engineer. Boring or test pits used for the purpose of design detention facilities must include estimates of high groundwater based on mottles and hydromorphic features, which generally requires test pits witnessed by a qualified soil scientist. Test pits may be used instead of borings except when borings are required for any geotechnical (structural) reasons.

- aa. Hydrology Study and Drainage Calculation. The Applicant shall submit drainage calculations, including rational method and TR-55 or TR-20, showing (a) that any proposed drainage system has been designed according to the standards set forth in these rules; and (b) any impact said drainage system would have on existing drainage systems downstream from the proposed point of discharge.
- bb. Sanitary Sewer Study. The Applicant shall submit calculations showing (a) that any proposed sanitary sewer system has been designed according to the standards set forth in these rules; and (b) any impact said sanitary system would have on existing sanitary systems downstream from the proposed point of discharge.
- cc. Water Study. The Applicant shall submit a study certified by a professional engineer with demonstrated qualifications as a water consultant, showing that the proposed water system would provide the development with adequate fire flows and demonstrate that each service connection shall have a minimum residual water pressure at street level of 20 PSI under all design conditions of flow. The standard for fire flows will be determined by these regulations and the recommendations of the Insurance Services Office (ISO), the National Fire Protection Association (Fire Protection Handbook), and the (National Fire Code, Vol. 8, §1231, as amended). The standards for residual water pressure and potential impact on the area within 2000 feet of the proposed subdivision are set forth in these regulations. Conclusions of the study shall demonstrate how to mitigate the impacts of the development on the water pressures in the surrounding area.
- dd. Plan for erosion and sedimentation control.
- ee. Development Impact Statements. The Applicant shall submit an analysis of the impact of the proposed development by qualified professionals.

Each of the sections of said analysis (water, sewer, etc.) shall be presented as a separate document so that it can be forwarded by the Planning Board to the appropriate reviewer. The purpose of said analysis is to assist the Planning Board in assessing the cumulative impact of development. Regardless of the above, the Planning Board's decision shall be based on criteria set in these regulations:

- i. Water and Sewer: Projected generation of sewage based on standards in 314-CMR by the Massachusetts Department of Environmental Protection. Projected consumption of water based on standards in "DESIGN", latest edition, Ellyn E. Seelye. Fire flow standards cited in these regulations. Explain impacts of project on sewerage facilities, public water facilities (including impacts on fire flow requirements), and on private facilities.
- ii. Public Works: Additional costs for future plowing and sanding per lane mile (costs based upon average of past 5 years). Cost of cleaning annual cleaning services (street sweeping & catch basin cleaning) for the new street. Miles of additional pavement added by the subdivision.
- iii. Municipal services such as public works, police, fire, libraries, and recreation
- iv. Environment, including wetlands, floodplains, open space, archeological features, wildlife, water quality, and water supplies.
- v. Schools: For purposes of future planning, to provide leeway for expected changes in school enrollment the school enrollment impact analysis should assume 0.35 school age children per housing unit unless there is evidence to the contrary.

4. Review by Board of Health as to suitability of the land.

At the time of filing of the Definitive Subdivision Plan, the Applicant shall also file with the Town Clerk for submission to the Board of Health two (2) prints of the Definitive Subdivision Plan, dark line on white background. The Board of Health shall, within forty-five (45) days after filing of the Plan, report to the Planning Board in writing, approval or disapproval of said Plan. If the Board of Health disapproves of said Plan, it shall make specific findings as to which, if any, of the lots shown on such Plan cannot be used for building sites without injury to the public health, and include such specific finding and the reasons therefore in such reports, and, where possible, shall make recommendations for the adjustments thereof. Every lot (so located that it cannot be served by a connection to the municipal sewer system) shall be provided with a septic tank and drain field in compliance with Title V and the rules of the Ashfield Board of Health.

5. Review by other Town Officials.

The Planning Board shall within ten (10) days after submission of a Definitive Subdivision Plan transmit two (2) contact prints to the Select Board and Board of Health and one (1) to each of the following:

Town Clerk
Conservation Commission
Police
Fire Department
Assessors

for review of the layout of the proposed improvements as shown on the plans. The Select Board shall within forty-five (45) days after filing the plan, report in what respects, if any, the proposed streets and improvements would fail to comply with the standards for design, layout, construction and acceptance by the Town. The Select Board may also make such recommendations and suggestions to the Planning Board which in their opinion would improve the subdivision and its future development as an integral part of the entire town.

6. Public Hearing

Before approval of the Definitive Subdivision Plan is given, a public hearing shall be held by the Planning Board. Notice of such hearing shall be given by the Planning Board at least fourteen days prior thereto by advertisement in a newspaper of general circulation in the Town of Ashfield. A copy of said notice shall be mailed to the Applicant and to all owners of land abutting upon the subdivision as appearing in the most recent tax list. Notice shall be posted at Town Hall.

7. Performance Guarantee

Before endorsement of the Planning Board's approval of a Definitive Subdivision Plan, the Applicant shall agree to complete the required subdivision improvements for all lots in the subdivision, such construction and installation to be secured in accordance with Section 8IU of the Subdivision Control Law by one, or in part by the other, of the following methods which may from time to time be varied with the Applicant:

- a. Approval with Financial Performance Guarantees (Surety Bonds, Money, Three Party Lender Agreement, or Letters of Credit). The Applicant shall either file a surety company performance bond or provide a deposit of money or negotiable securities, including letters of credit, in an amount determined by the Planning Board in consultation with their advisers to be sufficient to cover the cost of all or any part of the improvements specified in these regulations at State "prevailing wage rates" not covered

by a covenant under "ii" below, and to cover the costs of inspections, record plans, street acceptance plans, and legal work, and a 20% contingency/inflation factor. Warranty principal shall be not less than 15% of the estimated cost of those components of the entire project which shall be dedicated for public use and shall cover workmanship and materials.

i. If financial performance guarantees are used, at least two lots in a subdivision which can be built on must be covered by a covenant (under paragraph "ii" below) to insure that all work, including legal work, is completed.

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

iii. Such bond, deposit of money or negotiable securities, shall be approved as to form, the surety or financial institution, and manner of execution by the Planning Board.

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

8. Approval with Covenant. Instead of filing a bond or depositing money, the Applicant may fulfill a covenant, executed and duly recorded concurrent with recording the subdivision approval by the owner of record, running with the land, that no lot in the subdivision

shall be sold and no building erected thereon until such ways, services and, whenever applicable, temporary turnarounds are constructed and installed, and until record plans, street acceptance plans, and other required work are accepted by the Planning Board in accordance with these Rules and Regulations so as to adequately serve the lots.

Such covenant shall be inscribed on the Definitive Subdivision Plan or on a separate document referred to on the plan and delivered to the Planning Board. The Planning Board shall turn over the covenant agreement to the town counsel, who shall review its contents and forward his comments in writing to the Planning Board. Upon approval of the covenant by the Planning Board, the Applicant shall note the Planning Board's action on the Definitive Subdivision Plan and the Planning Board shall record the covenant, endorsed Definitive Subdivision Plan, and other appropriate documents at the Registry of Deeds or Registry of Probate, as appropriate.

9. Completion Time Schedule. The Performance Guarantee, whether by bond, deposit of money, letter of credit, or covenant, as previously described herein, shall be contingent upon the completion of such improvements, and on the required one year warranty as required in these Rules and Regulations within a maximum period of three (3) years of the date of such bond, deposit of money, or covenant. There shall be at least a three (3) month period after the completion of all improvements and the one year warranty period and the expiration date of any bond, deposit of money, or letter of credit. Said three (3) month period shall give the Planning Board the opportunity to collect the financial performance guarantee so that it will be able to complete the necessary improvements in case (a) the Applicant is unable to do so; and/or (b) the Planning Board denies any requests for an extension of time. "Warranty" shall include all design, workmanship, and materials.

Upon written request from the Applicant, the Planning Board may, at its discretion, grant an extension of time, and such agreement shall be executed and affixed to the financial performance guarantee or covenant.

In the case of a surety company bond, such an agreement for an extension shall not be effective until the surety delivers to the Planning Board a written statement that the surety agrees to the proposed alteration of the completion schedule and that such alteration shall not relieve or affect the liability of the surety company.

Failure to complete all improvements as required by these Rules and Regulations within the time allotted shall cause the Planning Board (a)

to draw upon the performance guarantee (surety bond, deposit of money, letter of credit) in order to complete said improvements; and/or (b) schedule a Public Hearing in order to rescind approval of the subdivision in accordance with appropriate sections of Chapter 41, Section 81, of M.G.L.

10. Certificate of Approval

Within one hundred and thirty five (135) days of the receipt of the original application, unless an extension of time is agreed upon in writing, the Planning Board will approve, modify and approve, or disapprove said Plan, and submit notice of its action to the Town Clerk and to the Applicant. Provided approval is voted, at the conclusion of the Statutory twenty (20) day appeal period, a majority of the of the members of the Planning Board shall endorse the original of the Definitive Subdivision Plan by signing and returning it to the Applicant for recording.

Definitive Plan Endorsement: The Planning Board shall endorse reproducible drawings of the Definitive Subdivision Plan in accordance with the Subdivision Control Law and these regulations once:

- a. The final reproducible plans have been approved by the Planning Board, including any necessary corrections required in the Planning Board's approval on the plan, easements, master deeds, restrictive covenants, etc.
- b. The statutory twenty (20) day appeal period has elapsed following the filing of the certificate of the action of the Planning Board with the municipal clerk and said clerk has notified the Planning Board that no appeal has been filed, or if appeal has been taken, not until the entry of a final decree of the court sustaining the approval of such plan.
- c. Posted the necessary performance guarantee. The monetary value of said guarantee, using any method other than a covenant, shall be based on a revised construction quantity estimate based on the final plans and with a monetary value adequate to cover all municipal costs to complete the project at the end of the expiration of said guarantee, including but not limited to construction costs at State "prevailing" wages, record plans, street acceptance plans, and legal costs.
- d. Paid the necessary inspection and other fees.
- e. Presented to the Planning Board for their approval, two sets of plans showing the complete natural gas, electrical, telephone, cable TV supply systems, and, if applicable, street lighting (including pipes, pumps, valves, gates, hand-holes, transformer pad mounts and similar

equipment). Said plans will be accompanied by endorsements from the respective utilities that the plans have received their approval. In addition the electrical utility shall place a statement on the plans that the proposed underground electrical distribution system is capable of accommodating a future street lighting system with provisions for street lights (including hand-holes). The engineer must certify that these utilities will not interfere with each other or with other utilities.

- f. Delivered to the Planning Board two (2) sets of reproducible drawings of the Definitive Subdivision Plan with the necessary corrections. After endorsement by the Planning Board, the Applicant shall deliver to the Planning Board three (3) sets of copies of the endorsed Definitive Subdivision Plan to then be filed with the Planning Board, Assessors, and Building Commissioner. All plans must be accompanied by digital CAD file. The digital graphic file must include all final signatures.
- g. Deliver an Irrevocable Offer of Dedication of all facilities to be dedicated to the public. Said offer must be accompanied by a lawyer's title opinion that the offer is free of any liens and encumbrances and all mortgages must be subordinated to the Offer. The Offer shall be irrevocable, except the offer can be withdrawn if the project proponent does not proceed with the project and requests that the subdivision approval be rescinded or otherwise amended such that the dedication is no longer necessary.
- h. Failure of the Applicant to meet the above requirements shall be full and sufficient reason to withhold endorsement.
- i. Maintenance of subdivision roads shall be assured by a recorded deed, covenant, or landowner's association or other lawful agreement binding upon those served by the subdivision roads. Developer shall show that said agreement shall have legal control of all proposed public ways and rights of ways with in the subdivision adequate to ensure snow plowing and other road maintenance as required for public safety.
- j. If the Applicant fails to submit the required Performance Guarantees, easements and other documentation and the endorsement of the Plan by the Planning Board is delayed more than six (6) months after the expiration of the twenty (20) day appeal period, the Planning Board, on its own motion, shall exercise its power to modify, amend, or rescind its approval of the subdivision plan or to require a change in the plan as a condition of said plan retaining the status of an approved plan.

IV. DESIGN STANDARDS

A. Classification of Streets

1. For the purpose of this and the following sections, all streets in subdivisions shall be divided into three classes: major, secondary, and minor.
 - a. Major Streets: a street which, in the opinion of the Planning Board is a through street or could lead to commercial land, and is likely to carry substantial volumes of traffic.
 - b. Secondary Street: a street other than a major street which, in the opinion of the Planning Board, could serve more than 40 units or lead to commercial land and/or is likely to carry traffic other than just to or from lots on that street.
 - c. Minor Street: a short dead end street no longer than 800 feet which is likely to be used only by vehicles going to or from lots on that street.
2. The Planning Board may impose more stringent requirements than those set forth below for the design and construction of street within the subdivision.

B. Design of Streets

1. Location
 - a. All streets in the subdivision shall be designed so that, in the opinion of the Planning Board, they will provide safe vehicular travel. Due consideration shall also be given by the Applicant to the attractiveness of the street layout in order to obtain the maximum livability and amenity of the subdivision.
 - b. The proposed streets shall conform, so far as practicable, to the Master or Study Plan as adopted in whole or in part by the Planning Board.

2. Adequate Access from Public Way

- a. Where the street system within a subdivision does not connect with or have, in the opinion of the Planning Board, adequate vehicular, pedestrian, and/or bicycle access from a public way or private way, the Planning Board shall require, as a condition of approval of a plan, that such adequate access be provided by the Applicant, and/or that the Applicant make physical improvement(s) of access to and within such a way, in accordance with the provisions for these Subdivision Regulations, either from the boundary of the subdivision to a public way or private way, or along such public way for a distance which, in the opinion of the Planning Board is sufficient to provide adequate access to the subdivision.
- b. Where the physical condition or width of a public way from which a subdivision has its access is considered by the Planning Board to be inadequate to either provide for emergency services or carry the traffic which is expected, in the opinion of the Board, to be generated by such subdivision, the Planning Board shall require the Applicant to dedicate a strip of land for the purpose of widening the abutting public way to a width commensurate with that required within the subdivision and to make physical improvements to and within such public way to the same standards required within the subdivision or by these Subdivision Regulations. Any such dedication of land for the purpose of the way and any such work performed within such public way shall be made only with permission of the governmental agency having jurisdiction over such way, and all costs of any such widening or construction shall be born by the Applicant.

Where the right of way of the access road leaves the existing public way it shall be 60' wide for the first 150 feet from the pavement or graded surface of the existing way. The Applicant shall have full legal control of the proposed right of way at the time of application. The 60' width of this right of way shall not be part of any other legally required frontage either proposed or existing.

- c. The Planning Board shall disapprove of a subdivision plan where, in the opinion of the Planning Board, the existing surrounding municipal infrastructure (e.g. street width and construction, sanitary sewer, public water, storm sewer, etc.) is insufficient and/or incapable of handling the additional volumes (e.g. traffic, sewage, storm water, etc.) anticipated, by the Planning Board, to be generated by the project. Planning Board may accept or require off-site improvements to mitigate any of these impacts.

3. Alignment and Standards

- a. Street jogs with centerline offsets of less than 100 feet shall not be allowed.
- b. Streets shall be laid out so as to intersect at a greater angle than:

Major Streets	90 degrees
Secondary Streets	80 degrees
Minor Streets	70 degrees

Angles shall be measured for 20 feet from the point of intersection.
Streets shall slope 3% or less within 25 feet of the intersection.

- c. The minimum centerline radii of curved streets shall be:

Major Streets	- 500 feet
Secondary Streets	- 300 feet
Minor Streets	- 100 feet

- d. Property lines at intersections of secondary or major streets shall be rounded or cut back to provide for a curb radius of not less than 30 feet. For minor streets a radius of not less than 20 feet is required.
- e. The minimum width of street right-of-ways shall not be less than:

Major Street	- 60 feet
Secondary Street	- 50 feet
Minor Street	- 40 feet

- f. The maximum grade of streets at any given point shall be:

Major Street	- 6%
Secondary Street	- 8%
Minor Street	- 10%

The Planning Board may waive these requirements where, in its opinion, unusual topographic conditions so require and public safety is not compromised.

- g. The centerline grade for any streets shall no be less than five-tenths of one percent (0.5%).
- h. Dead-end streets shall be no longer than 800 feet unless, in the opinion of the Planning Board, a greater length is necessitated by topography or other special conditions.

Whether temporary or permanent, every dead-end street shall be provided at the closed end with a turn-round having an outside diameter of at least 100 feet and a property line diameter of at least 120 feet.

Cul-de-sacs shall have a landscaped island as defined in Section V, D at least 40 feet.

C. Easements

1. Easements for utilities across lots or centered on rear or side lot lines shall be provided where necessary and shall be at least fifteen (15) feet wide.
2. Where a subdivision is traversed by a water course, drainage way, channel or stream, the Planning Board may require that there be provided a storm water easement or drainage right-of-way of adequate width to conform substantially to the lines of such water course, drainage way, channel or stream, and to provide for construction or other necessary purposes.

D. Open Spaces

Before approval of a plan, the Planning Board may also, 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. The park or parks shall not be unreasonable in area in relation to the land being subdivided, and to the prospective uses of such land. The Planning Board may, by appropriate endorsement on the plan, require that no building be erected upon such park or parks without its approval for a period of three years.

E. Protection of Natural Features

Due regard shall be shown for all natural features, such as large trees, water courses, wetlands, critical wildlife habitat, scenic points, historic features, and similar community assets, which, if preserved, will add attractiveness and value to the subdivision and the community.

F. Guard Rails

Guard rails shall be provided at points of hazard along the roadway, such as fixed objects and the pavement edge, high fills, fills on sharp curvature, along water courses, steep cliffs, along deep ditches in cuts and similar locations as required by the MA Highway and Bridge Standards (4:1 slopes). Type and installation of guard rails shall be approved by the Planning Board.

G. Drainage

1. The design capacity of the drains (closed drainage systems and pipes) shall be determined by the rational method, unless the project engineer exhibits satisfactory evidence that another approach is more appropriate for the specific case. The project engineer shall design the drainage system in accordance with natural drainage boundaries of the total contributing drainage area, using a minimum of a ten (10) year design frequency storm. Where, in the opinion of the Planning Board, flooding would produce property damage or a safety hazard, the design frequency storm shall be increased to twenty-five (25) years. A one-hundred (100) year design frequency storm shall be used for all bridge openings and major culverts. Drainage calculations and a list of all assumptions used for calculating the information shall be submitted with the Definitive Subdivision Plan. A Hydrology Study should include:
 - Plan of watershed drainage basin
 - Location of any and/or all detention basin structures within the watershed, especially if located on a stream if it will be used to take drainage away.
 - Generally, an estimate of amount of impervious surface in watershed
 - Identification of possible downstream restrictions/obstructions (including sizes of culverts under roadways)
 - Name and locus of receiving waters at end
2. Drainage systems, including detention, retention, and infiltration, must be designed to prevent any increase in peak flows for the one (1) or two (2), ten (10), and one-hundred (100) year Natural Resource Conservation Service (NRCS) design storms. TR-55 (or TR-20 with all inputs and outputs shown) should be used for calculating drainage systems. In addition, drainage systems should include water quality/settling basins that detain the stormwater draining off the site in a 4/10 inch rain storm for an average of at least six (6) hours. Need to mimic existing drainage patterns & flows, not release peak prior to normal peak flow, unless there is a documented problem and this will not cause a direct downstream impact

V. REQUIRED IMPROVEMENTS

The improvements required herein must be installed to the satisfaction of the Planning Board schedule for installation of improvements should be filed with the Planning Board, who will provide Applicant with check-list of required inspection. Failure to file such schedule, or otherwise to give adequate notice as to when improvements can be inspected, may significantly delay certification of such improvements and subsequent release of bond or covenant.

A. Street and Roadway Construction

1. The entire area of each street or way shall be cleared of all stumps, brush, boulders, like material and all trees not intended for preservation.
2. All loam, soft material, clay hummus muck or mulch shall be stripped from the line of the streets for the full length and width, to a depth which will provide a firm foundation. No soft or inferior material shall be allowed below sub-grade and the sub-grade shall be thoroughly compacted before applying the gravel base. Eighteen inches (18") of good quality binding gravel shall be placed over the compacted base and where appropriated a geotextile fabric approved by the engineer. The top three inches (3") of gravel shall be screened or crushed with appropriate fines to facilitate compaction. Extreme care shall be taken to insure that all trenches for utilities have been thoroughly compacted to prevent future settling.
3. Pavement Structure: The pavement structure shall be constructed in accordance with applicable provisions of Section 400 of the Standard Specifications and the following:
 - a. The sub-base shall be gravel borrow meeting MI.03.0 Type a specifications, except that the top four (4) inches shall be gravel borrow meeting MI.03.1 specifications. A tolerance of one-half (1/2) inch above or below finished sub-grade will be permitted, provided this difference is not maintained over fifty (50) feet and the required cross section is maintained. The gravel borrow shall be laid to a depth indicated below.
 - b. The binder course shall be asphalt concrete, in accordance with Section 420, Class I Bituminous Concrete Pavement type I-1 (Binder Course Mix). It shall be laid to a depth indicated below.
 - c. The surface course shall be asphalt concrete, in accordance with Section 460, Class I Bituminous Concrete Pavement Type I-1 (Top Course Mix). It shall be laid to a depth indicated below.
 - d. Inspections shall be made by the project engineer and the municipality upon completion of each layer of sub-base and the binder and surface courses.

e. Required Depth of Pavement Sections

Sub-base or asphalt course	Poor sub-grade support	Medium sub-grade support	Good to Excellent sub-grade support
Sub-grade definition Soils which are:	Quite soft and plastic when wet. Includes soils. Appreciable amount of clay, silt and fine sand.	Retain a moderate degree of firmness when saturated. Fine sands, silty sands, and sandy gravel with some silts and clays.	Retain a substantial amount or all of their load-supporting capacity when saturated. Clean sands and gravel free of detrimental amounts of plastic silts and clays.
Surface Course (all)	2"	2"	2"
Binder course (residential)	2"	2"	2"
Binder Course (commercial)	3"	3"	3"
Sub-base (all subdivisions)	18-24"	12-18"	12"

4. All streets and roads shall be constructed to the following widths of paving exclusive of curbing:

<u>Classification</u>	<u>Rights of Way</u>	<u>Paved Width</u>
Major Street	60 Feet	24 Feet
Secondary Street	50 Feet	20 Feet
Minor Street	40 Feet	18 Feet

Bituminous concrete shall be completed in accordance with the requirements of the Town of Ashfield. Minor streets may be left unpaved with permission of the Planning Board. Curbs may be required on streets where the Planning Board deems that special conditions of topography, drainage, alignment, or unusually high densities so require.

In all situations where curbing is not required, the roadway edge and adjoining grass plot or shoulder shall be so treated as to provide adequately for the carrying of surface water run-off.

B. Utilities

1. Underground Utility Systems

All utility distribution systems, public or private, shall be placed underground.

2. Utility Installation

- a. The installation of public utilities shall conform to the standards in the following sections:
- b. Sewer pipes and related equipment, such as manholes and connecting Y's, shall be constructed in conformity with specifications of the Town of Ashfield.
- c. The Applicant shall employ, at his own expense, an engineer to set all lines and grades in a manner satisfactory to the Planning Board.
- d. All utility lines shall be installed with the minimum cover.
- e. Sewers shall be laid to true line and grade.
- f. Electric, telephone, cable TV, fiber optic, and all other conduits shall be installed underground beneath the grass strip with a minimum cover.
- g. Width of trench at the pipe or conduit shall be equal to four thirds ($4/3$) diameter of the pipe or conduit, plus eighteen (18) inches.
- h. Sheet piling shall be used, whenever necessary, upon the direction of the Engineer.
- i. Pipe and conduits shall be surrounded by six (6) inches of compacted screened gravel if set in earth, and twelve (12) inches if set in rock. In rock, clay, or peat excavation, trenches shall be excavated to a depth of twelve (12) inches or more below the bottom of any water pipe, storm drain, or sewer and filled with bank-run or select gravel, whichever is approved by the Municipal Engineer.
- j. Back-fill shall be compacted to ninety (90) percent of the maximum dry density of the material as determined by the American Association of State Highway Officials, Designation T-180D.
- k. The water and sanitary sewer systems shall be tested and approved prior to installation of base course(s) and pavement.

1. All lot connections shall be installed to the right-of-way line, and marked and surveyed so as to be easily located in the future.

3. Drainage

- a. Pipe drains, where used, shall have a minimum diameter of twelve (12) inches, and shall be laid in true line. All drainage pipe shall be reinforced concrete pipe, ACCM pipe, (14 gauge), or other approved equal of appropriate strength. Rubber gaskets ("O" rings) shall be used for all pipe joints of the reinforced concrete pipe mentioned above. The rubber gaskets ("O" rings) shall be of approved composition, size and shape to provide for a proper joint per the manufacturers specifications.
- b. Where required by the Conservation Commission, stormwater shall be directed to enter an artificial wetland or stormwater treatment facility before entering an open stream channel. Stormwater shall not be permitted to cross any roadway upon the surface but must be piped underground. Stormwater runoff shall not be permitted to flow upon the road surface for a longer distance than three hundred (300) feet before it enters the underground system. Catch basins shall be located on both sides of the roadway on continuous grades at intervals of not more than three hundred (300) feet, at all sags in the roadway, and near the corners of the roadway at intersecting streets.
- c. Where adjacent property is not subdivided and no public drain is within four hundred (400) feet, adequate provisions shall be made for the detention of surface drainage within the boundaries of the subdivision. When that is not feasible, proper connections shall be made with any existing public drainage system within four hundred (400) feet of the subdivision, if that system has the capacity to absorb the flows from the project area. Where adjacent property is not subdivided and no public drain is within four hundred (400) feet, adequate provisions shall be made for the detention of surface drainage within the boundaries of the subdivision.
- d. Manholes and catch basins shall be pre-cast, cast in place or block, and a typical detail of such, noting materials, dimensions and construction details, shall be part of the Definitive Subdivision Plan.
- e. Iron casting for manhole frames and covers and catch basin frames and grates shall be in accordance with Massachusetts Department of Public Works Standards.
- f. Drain manholes shall be located at every change in grade or direction, of the drainage line, at catch basin connections, and shall

not exceed three hundred (300) feet apart in a continuous system.

- g. All catch basins shall connect directly to drain manholes.
- h. All catch basins shall have four (4) foot sumps.
- i. If roadway sub-drainage is required, rigid SDR 35, slot perforated corrugated plastic (ADS) surrounded by stone-perforated PVC pipe of appropriate size shall be used. Installation and materials shall conform to the provisions of Section 260 of the Standard Specifications and the sketch shown in §7:01(6).
- j. If lot sub-drainage (i.e., foundation drains) is required, rigid six (6) inch PVC or ACCM pipe shall be used within the public layout. The method of connecting said sub-drainage to the public drainage system shall be approved by the DPW Director prior to construction.
- k. The maximum allowable slope on a drainage system for reinforced concrete pipe shall be seven (7) percent. The maximum allowable difference in elevation between inlet and outlet pipes in a drain manhole shall be one (1) foot. If greater slopes than seven (7) percent are necessary, ACCM pipe of appropriate size shall be used.
- l. The maximum depth of any portion of the storm system shall be ten (10) feet.

4. Water

- a. Water pipes and related equipment, such as hydrants and main-shutoff valves, shall be constructed to serve all lots on each street in the subdivision in conformity with specifications of the proper local agency. Where, in the opinion of the Planning Board, existing municipal water mains are not reasonably accessible, the plan may be approved without provision of street water lines, provided that no lot shall be built upon without the provision of on-lot water facilities specifically approved by the Board of Health.
- b. Where a public water system is located within two thousand (2,000) feet of the subdivision, the Applicant shall connect to the public water system. Where the public water system is not located within two thousand (2,000) feet of the subdivision, the Applicant must:
 - i. Install a private on-lot water system (a well) for each lot.
 - ii. Provide a system to insure that the above fire flow volume, but

not distribution system, requirements are met and the system recharges in a reasonable time period to be available for future fire flow requirements. The Planning Board may require a distribution system if it feels it is necessary to provide adequate hydrants. If a private system is used, there must be adequate means provided for insuring the system is maintained, operated and funded without taxing municipal resources. Such means shall include backup pumps and equipment, escrow accounts, long term maintenance contracts, and authority to place liens on properties not contributing to the fund.

c. Fire Ponds

- i All subdivisions of greater than two (2) units shall provide a fire pond or be located within ¼ mile of an approved fire pond or hydrant.
- ii Fire ponds shall be furnished with a dry hydrant located at a parking space adequate for fire truck access.
- iii Fire ponds shall have a minimum capacity of 200,000 gallons.
- iv The fence around the pond shall meet CMR 780 Building Code standards for fences around pools.
- v A fourteen foot (14') gate shall be provided so maintenance vehicles can access the fire pond.
- vi Design of fire pond shall be approved by the Ashfield Fire Department.

5. Electrical

All lots shall be served by underground electrical conduits with at least three (3) raceways as approved by the local power company.

C. Sidewalks

1. Sidewalks of not less than four (4) feet in width shall be constructed on one or both sides of the street in conformity with specifications of the Town of Ashfield when, in the opinion of the Planning Board such sidewalks are necessary.
2. Sidewalks shall be required when subdivisions are located within four-hundred (400) feet of municipal sidewalks.

3. Sidewalks shall be constructed from cement concrete or approved equal.
4. Sidewalks shall be required on both sides of major streets.
5. Sidewalks shall be required on one side of streets that contain curves in excess of 80% of the radii standards or 75% of the minimum slope standards.

D. Landscaping

The entire width of the right-of-way, except for roadway, curb and gutter, and sidewalk, shall be left undisturbed or shall be planted or landscaped to the satisfaction of the Planning Board to one of the following specifications.

Any other land disturbed by the construction shall be seeded or landscaped to one of the following specifications:

1. Tree belts a minimum of eight (8) feet wide shall be provided on each side of the roadway (seven (7) feet if it is not possible to accommodate eight (8) feet in the right-of-way). When sidewalks are required, the tree belt shall be between the curb and the sidewalk with the trees planted along the center line of the tree belt. The finished grade of such tree belts shall have a slope of one-half (1/2) inch per foot toward the roadway. Where unusual physical land characteristics of topographic conditions exists, and where no sidewalk is to be constructed, the Planning Board may approve the construction of a tree belt of a greater slope with the finished slope not projecting above a plane sloped four (4) horizontal to one (1) vertical from the back of the curb.
 - a. The top twelve (12) inches of tree belt shall consist of good quality loam extending to the right-of-way, hydroseed in sufficient quantity to assure adequate coverage.
 - b. Street shade trees shall be on both sides of subdivision streets in the tree belt when possible and otherwise within the right-of-way or within five (5) feet of the right-of-way. There shall be one tree planted an average of every thirty (30) feet of street frontage along each lot and not less than two (2) trees per lot. Any mature deciduous shade trees preserved may be applied toward this average.
 - c. Street trees shall not be permitted within twenty-five (25) feet of the curb line of the intersection of two streets.
 - d. Trees shall be mature deciduous trees or newly planted trees no less than three inch (3") caliper at time of installation

Clumping is permitted, using both sides of the sidewalk for tree planting, in order to frame or enhance a view. The center of the tree should be four (4) feet from pavement or curbs.

- e. Street trees shall be deciduous shade trees, including, but not limited to, those listed in the table below. No more than 35% of any one species shall be used throughout the subdivision.
- f. Street trees shall have a minimum caliper of three inches (3") measured six inches (6") above soil root ball. They shall be single-stemmed with a single, straight leader. All tree species must meet American Association of Nurserymen Standards for the types and sizes specified. These standards shall be included on the detail sheets.
- g. The Applicant shall install on each lot the street trees specified on the approved plans prior to the issuance of the final Certificate of Occupancy. Trees must survive one year after planting prior to the release of warranty performance guarantees.
- h. Planting operations and requirements for street trees shall be in accordance with the American Association of Nurserymen Standards for Planting and shall have a two (2) year growth warranty. These standards shall be indicated on detail sheets.

A Selection of Approved Street Tree Species

A. Botanical Name	B. Common Name	C. Notes
Acer rubrum	Red Maple	Low salt areas
Acer saccharum	Sugar Maple	In special circumstances, low salt, wide root zone areas
Fraxinus Americana	American Ash	
Ginko Biloba	Ginko	Male only
Gleditsia triacanthos var. inermis	Thornless Common Honeylocust	
Juglans Nigra	Black Walnut	
Lirodendron Tulifera	Tulip tree	
Quercus coccinea	Scarlet Oak	
Quercus alba	White Oak	
Quercus rubra	Red Oak	Will tolerate poor, sandy soils
Tilia cordata	Littleleaf Linden	
Ulmus americana 'Valley Forge'	Valley Forge Elm	
Ulmus americana 'Princeton'	Princeton Elm	
Ulmus parvifolia 'Allee'	'Allee' Lacebark Elm	

2. When the land adjacent to a street is permanently protected open space, by fee or less-than-fee ownership by the Town, Commonwealth, or a land trust, the requirements for planting street trees shall not be required provided that the site is landscaped to match the adjacent natural environment using native plants in twelve inches (12") of loam and matching stonewalls, ledge outcroppings, and other existing features.
3. When the land adjacent to a street is farmland which is permanently protected by an agricultural preservation restriction or by public or land trust ownership, the requirements for planting street trees shall not apply provided that the site is landscaped to match the adjacent farmland. Farmland that is not permanently protected may be landscaped to match farmland at the discretion of the Planning Board.
4. The Planning Board may waive street planting requirements when the site is to be landscaped using stonewalls, ledge outcroppings, existing and new landscaping which, in the opinion and sole discretion of the Planning Board, is more in keeping with the character of the area than new street plantings.

E. Monuments and Signs

1. Survey monuments shall be installed at all street intersections, at all points of change in direction of curvature of streets and at other points, where, in the opinion of the Planning Board, permanent monuments are necessary.
 - a. Granite or native stone six feet (6') in length, dressed to six inches (6") at the top with a three-eighths (3/8) inch drill hole in the center, and not less than six inches (6") square at the bottom shall be set to finish grade as shown on plans.
 - b. No permanent monuments shall be installed until all construction which could destroy or disturb the monuments is completed.
 - c. Monuments shall be installed, with documentation of the horizontal metric coordinates of the center point of the monument provided on as built-plans (using Massachusetts State Plane Coordinates, NAD 1983). All monuments shall be installed under the direction of a Massachusetts registered land surveyor.
 - d. All monuments shall be installed prior to any release of the performance guarantee.
2. Street name signs shall be installed at all intersections including intersections with public roads serving the proposed subdivision. Signs shall conform to the standards of the Ashfield Highway Department.
3. The Applicant shall furnish one extra of each street sign to the Highway Department as spares.

F. Inspection Costs

The Applicant shall be responsible for the cost of all supervision, inspection, grades and levels, etc., pertaining to the subdivision, which are formed or supplied by the Town, its engineers or representatives. No subdivision bond or covenant shall be released until all such expenses have been paid to the satisfaction of the Planning Board.

1. All streets, underground utilities, shoulders, curbing, sidewalks, planting strips, side slopes, street name signs, monuments and markers, drainage systems, water systems, sewerage systems, and easements shall be obtained and installed by the Applicant.

2. Record Plans and Street Acceptance Plans are a part of required improvements to document their location and type. The obtaining and installing of these improvements shall be in accordance with these Regulations.
3. Inspections and certifications in no way relieve the Applicant, contractor or project engineer of responsibility in insuring that all materials and all construction meet all standards as stated in these Rules and Regulations.
4. For projects with public or community water or sanitary sewer systems:
 - a. After the installation of the complete water and sanitary systems and prior to the placement of any gravel on the proposed roadway, the Applicant shall present ties to fixed and easily identifiable objects and elevations (whenever applicable) on 4"x 6" cards of all appropriate components of said systems (such as bends, trees, gates, corporations, service boxes for water systems and ways and of sanitary services for sanitary sewer systems), so that public works staff will be able to physically locate said components in the future. Said cards are to be prepared by the project's engineer.
 - b. The water main shall be tested by the Applicants or their designee at their own expense, for adequate fire flow. The fire flow test shall be conducted by a competent professional under the supervision of the Fire Department at a time to be chosen by the latter.
 - c. Water main should be tested for water quality according to the standards of the Ashfield Board of Health.
5. The Applicant shall test, upon the request of the Planning Board or its inspectors and at the Applicant's own expense, all materials to be used in the construction of the public ways.
 - a. The tests shall be conducted by qualified firms/individuals that have been approved by the Planning Board or inspectors.

Prior to use within roads or sidewalks, the Applicant shall present proof, at his own expense, by a qualified person/firm, to be approved by the Planning Board, that the gravel to be used on the project meets State specifications.
 - b. The Board may require compaction tests as needed.
 - c. All sub-grades shall be inspected by the Town.

G. Street Acceptance. The acceptance of a plan by the Planning Board does not make any street shown thereon a public way. Existing laws of the Commonwealth

of Massachusetts and by-laws and procedures of the Town of Ashfield must be complied with for the acceptance of any street.

H. Buildings. The Building Commissioner shall not award any building permits for lots within a subdivision prior to Planning Board approval of said lots.

I. Pre-Construction Conference. Prior to ANY construction, the Applicant, their project engineer, and their contractor must meet with the Planning Board, the public works staff, and other appropriate town parties to review the subdivision permit and conditions. The Applicant must provide evidence that all required documents have been recorded and adequate copies of all documents have been provided to the Planning Board. AFTER the pre-construction conference, the Applicant shall notify in writing the Planning Board and municipal public works staff at least two (2) business days in advance of the date of commencement of construction and subsequent phases of construction.

- a. The Planning Board may require periodic progress meetings.
- b. The Applicant shall furnish the Planning Board with a standard construction schedule which shall be updated at periodic progress meetings.

VI. ADMINISTRATION

A. Variation

1. Strict compliance with the requirements of these rules and regulations may be waived when, in the judgment of the Planning Board, such action is in the public interest and not inconsistent with the Subdivision Control Law.
2. All plans and work must be in conformance with the Subdivision Regulations unless a specific waiver is granted in writing by the Planning Board. Subdivision approval or Planning Board endorsement of plans is **not** a waiver, regardless of what is shown on the plans, without specific Planning Board approval of the waiver.
3. Waivers must be requested in writing stating the reasons for the waiver and listing such improvements as the Applicant might propose so as to offset the impact of strict noncompliance. Such proposals might consist of but not be limited to the following:
 - a. Preservation of open space
 - b. Enhancement of local trail systems
 - c. Protection or improvement of environmental quality

- d. Preservation of significant natural or man made features.
- e. Enhancement of public transportation infrastructure
- f. Protection or enhancement of agricultural resources
- g. Improvements to the local economy
- h. Enhancement of communication infrastructure

B. Reference

For matters not covered by these rules and regulations, reference is made to Section 81-K to 81-GG, inclusive, of Chapter 41 of the General Laws.