



Subdivision Rules & Regulations

Chapter 300, SUBDIVISION OF LAND

With most recent amendments adopted February 1, 1999.

ARTICLE I, Authority

§ 300-1. Statutory authority; adoption.

Under the authority vested in the Planning Board of the Town of Franklin by M.G.L.A. C. 41, § 81-Q, said Board hereby adopts these rules and regulations governing the subdivision of land in the Town of Franklin by vote dated September 29, 1986, which will become effective when duly recorded as required by law.

ARTICLE II, General Provisions

§ 300-2. Definitions.

As used in these regulations, the following terms shall have the meanings indicated:

AASHTO: American Association of State Highway and Transportation Officials.

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

DEAD-END STREET: A permanent or temporary street to provide sole access to and from an existing or proposed through street. This category is meant to include, but not be limited to cul-de-sacs and hammerhead turn-arounds.

DEPARTMENT STANDARDS AND SPECIFICATIONS: The Standard Specifications for highways and Bridges of the Massachusetts Department of Public Works, dated 1973, including all revisions thereto and the Construction Standards of 1977 of the Massachusetts Department of Public Works, as most recently amended.

FRONTAGE: For the purposes of these regulations, physical access, or the demonstrated feasibility for physical access, to a property from a street designed for such purposes.

ITE: Institute of Traffic Engineers.

LAYOUT: The full strip of land designated as a way or street as distinguished from the roadway. A way.

NFPA: National Fire Protection Association.

RESIDENTIAL SUBDIVISION -- A subdivision, no part of which lies within the Commercial, Business or Industrial Districts established by the Franklin Zoning Bylaw.

ROADWAY -- The area within the limits of the traveled way.

SUBDIVISION -- The division of a tract of land into two (2) or more lots in such a manner as to require provision for one (1) or more new ways, not in existence when the Subdivision Control Law became effective in the Town of Franklin, to furnish access for vehicular traffic to one (1) or more of such lots, and shall include resubdivision, and, when appropriate to the context, shall relate to the process of subdivision or the land or territory subdivided; provided, however, that the division of a tract of land into two (2) or more lots shall not be deemed to

constitute a "subdivision" within the meaning of the Subdivision Control Law if, at the time when it is made, every lot within the tract so divided has frontage on a public way, or a way shown on a plan theretofore approved in accordance with the Subdivision Control Law, of at least such distance as is then required by zoning or other ordinance or bylaw, if any, of said city or town for erection of a building on such lot and, if no distance is so required, has such frontage of at least twenty (20) feet. Conveyances or other instruments adding to, taking away from or changing the size and shape of lots in such a manner as not to leave any lot so affected without the frontage above set forth or the division of a tract of land, on which two (2) or more buildings were standing when the Subdivision Control Law went into effect in the city or town in which the land lies, into separate lots on each of which one (1) of such buildings remains standing shall not constitute a "subdivision."

SUBDIVISION CONTROL -- The power of regulating the subdivision of land granted by the Subdivision Control Law.

THROUGH STREET: A street within or outside of the boundaries of a subdivision with a minimum of two (2) points of egress on which vehicular traffic is given preferential right of way and intersecting subdivision streets are required to yield the right of way in obedience to a stop sign, yield sign or other traffic control device.

Other words shall have the meaning assigned to them in the Subdivision Control Law and the Franklin Zoning Bylaw.

§ 300-3. Plan necessity; approval or endorsement.

Only those plans which constitute subdivisions, as that term is defined in § 300-2, require the approval of the Planning Board. However, all plans, whether subdivisions within the meaning of the law or not, must have either approval as a subdivision or endorsement that they do not require approval before they will be accepted for recording at the Registry of Deeds or for registering at the Land Court.

§ 300-4. Definitive plan required.

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

§ 300-5. Compliance with zoning required.

No subdivision plan shall be approved unless all the lots located therein comply with the Town of Franklin Zoning Bylaw in effect at the time of plan submittal.

§ 300-6. Plan believed not to require approval.

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 his plan does not require approval under the Subdivision Control Law may submit his plan, Certificate of Ownership (see Appendix) and application Form A (see Appendix) to the Planning Board, 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 and a filing fee as established in Chapter 82, Fees, of the Code of the Town of Franklin.

B. The plan shall be a digital submission on AutoCAD Release 14 (or any subsequent release which the Franklin Department of Public Works adopts) as described in § 300-8 (l)(1)(a).

C. Plan Contents. The Plan shall be legibly drawn at a scale of one inch equals forty feet and contain the following:

(1) Identification of the plan by name of owner of record and location of land in question, the scale, north point and date.

(2) The statement "Approval Under Subdivision Control Law Not Required" and sufficient space for the date and signature(s) of the Board.

(3) Zoning classification and location of any zoning district boundaries that may lie within the locus of the plan. The Assessor's map, block and lot numbers shall be shown.

(4) Notice of any proceedings and copies of decisions by the Zoning Board of Appeals, including but not limited to Special Permits and Variances, regarding the land or any buildings thereon.

(5) In the case of the creation of a new lot, the remaining land area and frontage of the land in the ownership of the applicant shall be shown.

(6) Names and status of public or private street(s) and easements to include the construction materials of the street(s), the width of the layout of the street or easement.

(7) Location of all existing buildings, including setbacks on the land under

consideration.

(8) Location of all bounds on land under consideration.

(9) Location of all wetland resource areas on the land under consideration.

(10) All plans shall be annotated above the signature block with the following statement: "Planning Board endorsement is not a determination as to conformance with the Zoning Bylaw."

D. If the majority of the members of the Board determines that the plan does not require approval, the Board shall forthwith, without a public hearing, endorse on the plan the words "Planning Board Approval Under the Subdivision Control Law Not Required."

The endorsed plan shall be returned to the applicant, and the Board shall notify the Town Clerk of its action, both within twenty-one (21) days of submittal of the plan.

E. If the Board determines that the plan does require approval under the Subdivision Control Law, it shall, within twenty-one (21) days of submittal of the plan, so notify both the applicant and the Town Clerk and return the plan to the applicant.

F. The Applicant shall file the approved plan at the Registry of Deeds and shall notify the Board by presenting written evidence of recording of said plan documents within six (6) months of approval.

ARTICLE III, Plan Submission and Approval Procedure

§ 300-7. Preliminary plan.

A. General. A preliminary plan must be submitted for any proposed nonresidential subdivision and may be submitted for any proposed residential subdivision. The submission of such a preliminary plan will enable the subdivider, the Board and other municipal agencies and owners of property abutting the subdivision to discuss and clarify the problems of such subdivision before a definitive plan is prepared. Therefore, it is strongly recommended that a preliminary plan be filed in every case.

B. Submittals.

(1) Planning Board submittals. Any person who seeks approval of a preliminary plan of a subdivision shall submit to the Planning Board:

- (a) An application (Form B).
- (b) Twelve (12) copies of the preliminary plan.
- (c) A filing fee as established in Chapter 82, Fees, plus a per-lot fee as established in Chapter 82, Fees, of the Code of the Town of Franklin.
- d. If required by the Planning Board, a Consultant Review Fee as established in

§ 300-18.

(2) Board of Health submittals. Any person who seeks approval of a preliminary plan of a subdivision shall submit to the Board of Health:

- (a) A copy of the application (Form B).
- (b) One (1) print of the preliminary plan.

(3) Town Clerk submittals. Any person who seeks approval of a preliminary plan of a subdivision shall submit to the Town Clerk, by delivery or certified mail, a copy of the application (Form B) and the preliminary plan as now required.

(4) Other. In addition to those items required to be submitted, it is requested that the following be furnished:

(a) A locus plan of the subdivision, showing its street configuration in relation to the surrounding area within one thousand six hundred (1,600) feet of the perimeter of the subdivision and to zoning district boundaries, at a scale of one (1) inch equals eight hundred (800) feet.

(b) In the case of a subdivision covering less than all of the land owned by the subdivider in the area of the subdivision, a plan showing in a general manner that proposed overall development of all of said land.

(c) Preliminary findings, in a general way, of the environmental analysis, if expected to be required.

(5) Completeness review. The Planning Board's designee will be responsible for ensuring the completeness of all preliminary plan applications, and shall notify all applicants of any deficiencies with their preliminary plan application within seven (7) days of submission to the Planning Board. Applicants should be advised that failure to submit or provide any required item shall be deemed a deficiency, and the Board may act to deny the application based on its technical deficiencies. Submissions pertaining to 300-7 B. (1) (d) Consultant Review Fee are not required prior to application acceptance.

A. Plan contents. Said preliminary plan should show sufficient information about the subdivision to form a clear basis for discussion of its problems and for the preparation of the definitive plan and shall show:

(1) The subdivision name, boundaries, North point, date, scale, legend and the title "Preliminary Plan."

(2) The name and address of the record owner, applicant, registered engineer and registered surveyor.

(3) The names of all abutters within three hundred feet of the property from the most recent tax list.

(4) Existing and proposed lines of streets, ways, easements and any public or common areas within the subdivision, in a general manner.

(5) The proposed system of drainage, including adjacent existing natural waterways, in a general manner.

(6) The approximate boundary lines of proposed lots, with approximate areas and dimensions.

(7) The location, names, widths and condition of adjacent streets approaching or

near the subdivision.

(8) Topography at two-foot intervals and approximate location of any wetlands (as defined by MGL C.131, S. 40) to include all abutting parcels within 100 feet.

B. Approval. Before approval of the preliminary plan, a public hearing will be held by the Planning Board. Notice of such hearing shall be given by the Board by advertisement in a newspaper of general circulation in the town fourteen (14) days before the day of the public hearing. A copy of said notice shall be mailed to the applicant and all owners within three hundred (300) feet of the subdivision as appears on the most recent tax list. Within forty-five (45) days after the date of submission of a preliminary plan, the Planning Board shall notify the applicant and the Town Clerk either that the plan has been approved or that the plan has been approved with modification suggested by the Board or agreed upon by the person submitting the plan or that the plan has been disapproved. In the case of disapproval, the Planning Board shall state, in detail, its reasons therefore in accordance with Section 81-S of the Subdivision Control Law. Such approval does not constitute approval of a subdivision, but does facilitate the procedure in securing final approval of the definitive plan.

§ 300-8. Definitive plan.

A. Submittals.

(1) Planning Board submittals. Any person who desires approval of a definitive plan of a subdivision shall submit fourteen (14) copies of the following to the Planning Board:

(a) The definitive plan, as described at Subsection B of this section. The original definitive plan drawing will only be needed if and when the actual signing of the plan takes place.

(b) Street plans and profiles of every proposed street, as described at Subsection C of this section.

(c) At the same scale as the definitive plan, a development plan of the premises plus adjoining land within three hundred (300) feet of the property line. The development plan shall show topography at two-foot intervals, graphic drainage analysis, including distinction between upland and wetland (as defined by MGL C. 131, § 40 and the Franklin Wetland Bylaw) and location of tree cover, ledge outcroppings, outstanding individual trees of 10-inch diameter or greater within fifty (50) feet of the right-of-way, location of proposed trees, large boulders, existing structures, including fences and walls and proposed lot lines. If located within the Floodplain District, the location of the base flood elevation (one-

hundred-year flood) shall be indicated. Wetlands delineation shall be based upon field identification and flagging by a botanist qualified for wetlands identification under the Wetlands Protection Act. It is recommended that the wetlands identification be done in coordination with the Conservation Commission.

(d) A stormwater management plan indicating both on-site and off-site contributory areas, including calculations for the sizing of drainage pipes in accordance with Section 300-11. The stormwater management plan shall include a groundwater recharge comparison between pre- and post-development conditions. The stormwater management and drainage calculations shall be prepared and signed by a registered professional engineer and be filed as part of the definitive plan. The stormwater management plan shall be drawn to scale and showing the incremental areas contributing to each catch basin, ditch or watercourse, including contributory areas outside of the subdivision. The stormwater management plan shall also show existing and proposed contours as required above.

(e) An overlay at the same scale as the definitive plan, showing the Soil Conservation Service interpretation of suitability for on-site sewage effluent disposal or showing United States Geological Survey surficial geology, or both, except for areas proposed to be served by town sewerage.

(f) Test pit logs, with not more than one (1) pit required per four (4) proposed lots, selected to reveal general patterns of subsurface characteristics, after consultation with the Board of Health and the Conservation Commission. Locations shall be indicated on the development plan.

(g) Where connection to the public water system is not proposed, information indicating why such connection is not feasible, description of provisions to be made for water for fire fighting and information adequate to allow determination of compliance with requirements of § 300-12A regarding potable water quality and quantity.

(h) A comprehensive erosion and sedimentation control plan indicating the erosion control measures to be employed, including a description of locations of temporary stockpiles, spoil areas, temporary drainage systems, slope stabilization techniques and sediment basins and a narrative description of how erosion from individual lots onto streets and into drainage systems is proposed to be controlled.

(i) A locus plan of the subdivision showing its street configuration in

relation to surrounding streets within one thousand six hundred (1,600) feet of the perimeter of the subdivision and to zoning district boundaries, at one (1) inch equals eight hundred (800) feet.

(j) Prints, eight and one-half by eleven (8 1/2 x 11) inches, showing an outline of the subdivision at a scale of one hundred (100) feet or three hundred (300) feet to the inch, showing all ways and lots, street names, lot numbers and street numbers.

(k) The environmental analysis, if required.

(l) Construction details and specifications and road cross sections for each cross-section variant, except that, where the proposed cross sections are identical with those shown in this regulation annotation to that effect may be placed on the definitive plan, and the cross-section drawing may be omitted.

(2) Other Planning Board submittals. Any person who desires approval of a definitive plan of a subdivision or modifications thereto shall submit the following to the Planning Board:

(a) North arrow references, references to plans of record, ties into the Mass. Coordinate System, ties into County layouts, evidence of ownership, language of any easements, covenants or deed restrictions applying or proposed to apply to the area being subdivided, rights and easements obtained for utilities or drainage outside of the subdivision and description of erosion control methods at all critical locations, showing existing and proposed grades for the width of the right-of-way plus at least twenty-five (25) feet on each side, and, if requested, traverse notes.

(b) Two (2) copies of properly executed application Form C and the definitive plan.

(c) A filing fee as established in Chapter 82, Fees, of the Code of the Town of Franklin plus a fee per lot potentially created by the plan. If a preliminary plan for the subdivision has been approved within twelve (12) months previous to the filing date of the plan, the filing fee plus a fee per lot potentially created by the plan shall be as established in Chapter 82, Fees. [Amended 12-9-87 as Bylaw Amendment 87-116]

(d) A Board of Assessors certified list of names and mailing addresses for all abutters as they appear on the most recent local tax list, including property owners on the opposite side of any streets abutting the subdivision.

(e) A description of the land and the proposal, suitable for advertising.

(f) Sight distance computations in accordance with § 300-10B(6).

(3) Town Clerk submittals. Any person who desires approval of a definitive plan of a subdivision shall submit the following to the Town Clerk by delivery or registered or certified mail:

(a) A notice stating the date of definitive plan submission to the Planning Board.

(b) A copy of the completed application Form C and plan.

(4) Board of Health submittals. Any person who desires approval of a definitive plan of a subdivision shall file one (1) copy of each of the following with the Board of Health:

(a) Definitive plan.

(b) Development plan.

(c) Environmental analysis as well as information required in 300-8 (A)(1)(e) and (f) if any.

(5) Completeness review. The Planning Board's designee will be responsible for ensuring the completeness of all definitive plan applications, and shall notify all applicants of any deficiencies with their definitive plan application within seven (7) days of submission to the Planning Board. Applicants should be advised that failure to submit or provide any required item shall be deemed a deficiency, and the Board may act to deny the application based on its technical deficiencies. Submissions pertaining to 300-8 A (2) (f) Consultant Review Fee are not required prior to application acceptance.

A. Definitive plan contents.

(1) The definitive plan shall be prepared by a registered professional engineer and registered land surveyor project design team and shall be clearly and legibly drawn in black India ink upon tracing cloth or mylar and shall be prepared utilizing AutoCAD 14 or another Town-approved drawing package. The plan shall be at a scale of one (1) inch equals forty (40) feet or other such scale as the Board may accept to show details clearly and adequately. Sheet sizes shall be twenty-four by thirty-six (24 x 36) inches. If multiple sheets are used, they shall show each lot in its entirety on one (1) sheet and shall be accompanied by an index sheet showing the entire subdivision at a scale of one (1) inch equals two hundred (200) feet. The index sheet shall correlate to match lines shown on

individual sheets.

(2) In addition, the proposed subdivision shall be tied into the Mass. Coordinate mainland plane of 1983-1988 (a minimum of three points at the third order of accuracy) and the nearest existing county layout plan within five hundred (500) feet. All horizontal surveys shall be made to second order accuracy of one to twelve thousand (1:12,000), and vertical surveys shall be to second order accuracy. All surveys shall conform to the

Massachusetts Board of Registration of Professional Engineers and Land Surveyors Procedural and Technical Standards for the Practice of Land Surveying and also the Land Court's latest instructions.

- (a) A title stating the date, scale and bench mark; the name and address of the record owner and subdivider, engineer or surveyor; the name of the subdivision, if any; the names of proposed streets; and the zoning classification.
- (b) The meridian used, town meridian if required.
- (c) The location and ownership of abutting property.
- (d) The location and character of all rights-of-way or other easements, existing or proposed.
- (e) The lengths and bearings of plan boundary lines.
- (f) The lengths and bearings of all subdivision lot lines, including lot frontages on the streets.
- (g) The location of all permanent monuments, properly identified as to whether existing or proposed.
- (h) The lengths, radii, tangents and central angles of all curves in the lot lines.
- (i) The location, names and present widths of all adjacent streets bounding, approaching or within reasonable proximity of the subdivision, sufficient to analyze the traffic flow.
- (j) The area of lots, with street numbers, and areas of other adjoining vacant land not included in the subdivision. Street numbers will be obtained as directed by the Franklin Department of Public Works. An area shall be provided for DPW to designate street numbers on each lot prior to

endorsement.

(k) Details on one (1) or more of the plans showing appropriate sewer, drainage, water and roadway sections in accordance with the Franklin Department of Public Works standards and details attached hereto. Where unusual site conditions require additional details where the subdivider is proposing a unique construction solution or where the Planning Board or Department of Public Works requests additional information, details shall be submitted by the subdivider.

(l) Information regarding the ninety-percent-lot-area definition in § 185-3 of the Franklin Zoning Bylaw.

(m) The location of all sidewalks, driveway aprons, trees and grass plots, shown on horizontal plans.

(n) The street classification of all roads.

- o. North arrow and north arrow reference.
- p. House numbers.
- q. Assessor's map, block and parcel numbers.

B. Street plan and profile contents. For each street there shall be a separate plan at one (1) inch equals forty (40) feet and a profile at one (1) inch equals forty (40) feet horizontal, one (1) inch equals four (4) feet vertical, showing the following data:

(1) The exterior lines of the way, with sufficient data to determine its location, direction and length.

(2) The existing center-line profile to be shown as a fine, continuous line; existing center-line profile for intersecting streets to be shown for at least one hundred (100) feet each side of the intersection of the street center lines. The proposed right side line shall be shown as a light dashed black line; the left side line as black dots. Elevations shall be based on United States Geological Survey datum.

(3) The proposed center-line profile, to be shown as a heavy, continuous line, with elevations shown every fifty (50) feet [twenty-five (25) feet on vertical curves].

(4) Existing and proposed watercourses, ponds and wetlands.

(5) Road center line stationing.

(6) All sewer and drainage facilities, to be shown on the profiles indicating

proposed pipe sizes, slopes and rim and invert elevations and, on the street plans, showing pipe sizes.

(7) The plan location and size of existing and proposed water mains, hydrants and main gate valves.

(8) The location of proposed streetlights.

(9) The location of existing and proposed street paving, sidewalks and curbs.

(10) Proposed grade stakes, to be set by a registered professional land surveyor at a minimum of 100-foot stations for roadway right-of-way, centerline, sidelines and sidewalks.

C. Environmental analysis. An environmental impact analysis shall be submitted for any subdivision allowing five (5) or more dwelling units and in all cases involving commercial and industrial development. The analysis shall be prepared by an interdisciplinary team, to include a civil engineer and an architect or landscape architect and wetland biologist/scientist. The Planning Board will require that the scope of such analysis include as many suggestions as would identify the best approach providing for the public benefit in the areas of environmental impact listed below:

(1) Impact upon ground- and surface water quality and level, including estimated phosphate and nitrate loading on groundwater and surface water from septic tanks, lawn fertilizer, toxic wastes, storage of petroleum products and other activities within the development. For all developments located in whole or in part within Water Resource Districts, this shall include analysis of open and closed drainage system alternatives, examining effects upon the basic water budget and upon the speed of transport of contaminants.

(2) Material effects upon important wildlife habitats, outstanding botanical features and scenic or historic environs.

(3) Capability of soils, vegetative cover and proposed erosion control efforts to support proposed development without danger of erosion, silting or other instability.

(4) Relationship to the requirements of M.G.L.A. C. 131, § 40 and 40A, the Wetlands Protection Act and the Town of Franklin Wetlands Bylaw.

(5) Impact upon the existing water supply and distribution systems and well capacity of the town.

(6) Pretreatment of waste materials considered by the Department of

Environmental Quality Engineering to be hazardous to the public, including but not limited to the proper containment and handling of petrochemical substances.

D. Performance guaranty.

(1) Form of guaranty. Before the Planning Board endorses its approval of a definitive plan, the developer shall agree to complete, without cost to the town, all improvements required by this regulation and shall provide security that he will do so, either by covenanting not to sell or build upon any lots until completion of the improvements (which covenant must be referred to on the plan and registered or recorded with it) or by posting bond or other security which the town can utilize in the event that the improvements are not completed within two (2) years or by some combination of these. Such security shall provide, among other things, that no building permit shall be issued until streets or ways serving such structures have been graded to within one (1) foot of final subgrade and that no structure shall be occupied until streets or ways serving such structure have been surfaced with at least the two-inch (minimum) binder course. The Board may grant partial release from such security for partial completion of improvements, provided that the completed portion provides a reasonable system for circulation and utilities pending completion of the rest. The Board may release the developer from the covenant upon receipt of an agreement executed by the applicant and by the holder of a first mortgage on the premises providing for retention of funds and their availability to the town upon default. (See M.G.L.A. C. 41, § 81-U, 11th paragraph.)

(2) Release of guaranty. Following request for final release of the guaranty (either bond or covenant) and at least thirty (30) days prior to granting same, the Planning Board shall give public notice of the request for release by advertising, at the expense of the subdivider, in a newspaper enjoying substantial circulation in the community. Full security shall not be released until the integrity of road pavement and drainage has been verified following a full winter of use, December 21 to March 21, until trees and other vegetation have been established, until as-built plans are received and until a report, in writing, has been received from the Department of Public Works Director stating that the work has been fully completed in an acceptable manner (See form in Appendix.)

(3) Bond estimate and bond reductions.

- a. Along with each request from a developer for a bond estimate or a bond reduction, a fee shall be paid to the Planning Board as described in Chapter 82 of the Code of the Town of Franklin.
- b. Said fee represents the costs incurred by the Town of Franklin to review said bond estimate or bond reductions.
- c. Reductions for systems (water, sewer, drainage) shall not be granted until

- the system is complete, tested and operational.
- d. There is a twenty five percent (25%) contingency added to the total bond estimate for the entire subdivision and the Board retains a minimum of ten percent (10%) of the original bonding amount for maintenance of streets and systems. In the case of a non-private street, this is released only after the subdivision street(s) has been accepted by the Town Council. This is released for private streets at the Board's discretion.

(4) Town acceptance of improvements. If a definitive plan shows streets or roadways that will become town streets or roadways, a nonrefundable fee shall be paid to the Planning Board for each such street or roadway before the Planning Board releases security for the street or portion of the street. Said fee shall be used to defray the engineering, GIS mapping, legal, appraisal, recording and administrative costs related to the town's acceptance and acquisition of such streets or roadways and any underlying or related sewer, water, drainage or other easements or interests.

(5) No bond estimate or reduction shall be established or released without a DPW inspection sheet.

E. Review by Board of Health. The Board of Health shall report to the Planning Board, in writing, its approval or disapproval of the 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 specific findings and the reasons therefor in such report and, where possible, shall make recommendations for the adjustment thereof. Such Health Board or officer shall send a copy of such report, if any, to the person who submitted said plan. Any approval of the plan by the Planning Board shall then only be given on condition that no building or structure shall be built or placed upon the areas designated without written consent of the Board of Health which shall endorse on the plan such condition, specifying the lots or land to which said condition applies.

F. Public hearing.

(1) Definitive plan. Before approval of the definitive plan is given, a public hearing shall be held by the Planning Board. Notice of such hearing shall be given by the Planning Board by advertisement in a newspaper of general circulation in the town, once in each of two (2) successive weeks, the first publication being not less than fourteen (14) days before the day of such hearing. A copy of said notice shall be mailed to the applicant and to all owners within three hundred (300) feet of the subdivision as appearing in the most recent tax list.

(2) Waivers. Requests for waivers from Planning Board regulations shall be submitted with the definitive plan and either stated on the plan or contained in a

separate instrument attached thereto and referred to on said plan. All such requests for waivers shall be heard at the public hearing on the definitive plan. For each waiver requested, the applicant shall provide the following data for application review: the reason the waiver is requested, alternatives to granting the waiver, impact of waiver denial on the project, and reasons the applicant believes the waiver to be in the best interests of the Town. (See Appendix for Form R)

G. Decision. After the public hearing, the Board in due course will approve, modify and approve, or disapprove the definitive subdivision plan submitted. Criteria for action by the Board shall be the following:

- (1) Completeness and technical adequacy of all submissions.
- (2) Determination that development at this location does not entail unwarranted hazard to safety, health and convenience of future residents of the development or of others because of possible natural disasters, traffic hazard or other environmental degradation.
- (3) Conformity with the requirements of Articles IV and V.
- (4) Determination, based upon the environmental analysis (where submitted), that the subdivision as designed will not cause substantial and irreversible damage to the environment, which damage could be avoided or ameliorated through an alternative development plan.
- (5) Conformity with all applicable zoning requirements.
- (6) Consistency with the purposes of the Subdivision Control Law.
- (7) Notice of such action, or of an agreed extension of the time for such action, must be provided by the Planning Board to the Town Clerk within ninety (90) days following the date of submission of the plan if it follows action on (or failure to timefully act on) a preliminary plan, or one hundred thirty-five (135) days following the date of submission in cases where no preliminary plan was submitted.
- (8) Condition of approval.
 - (a) Any definitive subdivision plan approved hereunder, or any modification of any such subdivision plan previously approved, shall receive an approval which shall be automatically limited to a period of four (4) years unless one (1) of the following two (2) events occurs within four (4) years from the date of approval of such plan and not the date of

endorsement nor the date of recording of such plan:

[1] Event 1. Issuance of a determination of completion by the Department of Public Works Director in accordance with § 300-16E and a vote of acceptance by the Planning Board of the determination of completion, which said determination shall then be recorded with the Town Clerk and binding on all parties.

[2] Event 2. Issuance of a one-year extension by the Planning Board, which extension may only be granted upon petition by the applicant; such a request for extension shall be deemed to be a request for modification of the approved definitive subdivision plan.

(b) In the event than an applicant has failed to so perform within the requisite period, the previously issued conditional approval is deemed rescinded without any further action by the Planning Board and no extension or modification shall be granted. An applicant may apply for a new definitive subdivision plan approval for the site; however, the application will be subject to rules and regulations then in effect.

(c) In every event, the Planning Board shall retain jurisdiction over every subdivision until such time as the determination of completeness has been accepted by the Planning Board.

H. Certificate of approval.

(1) Certificate.

(a) The action of the Board in respect to such plan shall be by vote, copies of which shall be certified and filed with the Town Clerk and sent by delivery or registered mail to the applicant. If the Board modifies or disapproves such plan, it shall state in its vote the reasons for its actions. Final approval, if granted, shall be endorsed on the original drawing of the definitive plan by the signature of a majority of the Board or by the signature of the person officially authorized by the Board, but not until the statutory twenty-day appeal period has elapsed following the filing of the certificate of the action of the Board with the Town Clerk and said Clerk has notified the Board that no appeal has been filed. Prior to endorsement by the Planning Board, the applicant shall submit the approved version of the plan on a three-and-one-half-inch diskette(s), in AutoCAD Release-14 (or any subsequent release which the Franklin Department of Public Works adopts), to the Department of Public Works for review and approval. The computer version of the definitive plan shall be identical, full size, and shall contain all information included on the plan of land, topographic plan views, and plan and profile sheets. Layer names shall

conform to Department of Public Works standards. A transmittal letter from the Department of Public Works verifying receipt of such information and compliance with Department of Public Works standards shall be submitted to the Planning Board. Failure to submit such information to the Department of Public Works and obtain the compliance letter shall be cause for the Planning Board to rescind approval or not to endorse said plans.

(b) After the definitive plan has been approved and endorsed, the applicant shall furnish the Board with five (5) prints thereof and two 50% reduced prints. In addition, the applicant shall furnish five (5) blue line prints of the approved plan, reduced to a scale which will fit on an eight-and-one-half-by-eleven-inch sheet. Said plan shall contain the following: the title of the definitive plan, North point, street numbers and street names.

(c) Final approval of the definitive plan does not constitute the laying out or acceptance by the town of streets within a subdivision.

(2) Rescission. Failure of the developer to record the definitive plan within a six-month period of its endorsement or to comply with the construction schedule of the performance agreement shall constitute sufficient reason for the Planning Board to consider rescission of such approval, in accordance with the requirements of M.G.L.A. C. 41, § 81-W.

ARTICLE IV, Design and Construction Standards

§ 300-9. General.

A. Base requirements. The subdivider shall observe all design standards for land subdivision as hereinafter provided. These standards shall be considered minimum standards and shall be varied from or waived only as provided in § 300-17.

B. Design guides.

(1) Requirements. All subdivisions shall be designed and improvements made by the developer consistent with the requirements of § 300-9 and the typical cross section. (See Appendix.)

(2) Mitigation. Design and construction shall reduce, to the extent reasonably possible, the following:

- (a) The volume of cut and fill.
- (b) The area over which existing vegetation will be disturbed, especially on land within two hundred (200) feet of a wetland, river, pond or stream or having a slope of more than fifteen percent (15%) or overlying easily eroded soils.
- (c) The number of trees to be removed.
- (d) The extent of waterways altered or relocated.
- (e) The visual prominence of man-made elements not necessary for safety or orientation.
- (f) The removal of existing stone walls.
- (g) The visibility of building sites from existing streets.
- (h) The number of driveways exiting into existing streets.
- (i) The alteration of groundwater or surface water elevations or chemical constituents.
- (j) The disturbance of important wildlife habitats, outstanding botanical

features and scenic or historic environs.

(k) The soil loss or instability during and after construction.

(3) Enhancement. Design and construction shall increase, to the extent reasonably possible, the following:

(a) Vehicular use of collector streets to avoid traffic on streets providing house frontage.

(b) Visual prominence of natural features of the landscape.

(c) Legal and physical protection of views from public ways.

(d) Street layout facilitating South orientation of houses.

(e) Use of curvilinear street patterns.

C. Floodplain District. All subdivision proposals shall be reviewed to determine whether such proposals will be reasonably safe from flooding. If any part of a proposed subdivision is located within the Floodplain District established under the Zoning Bylaw it shall be reviewed to assure that:

(1) The proposal is designed consistent with the need to minimize flood damage.

(2) All public utilities and facilities, sewer, gas, electrical and water systems, are located and constructed to minimize or eliminate flood damage.

(3) Adequate drainage systems are provided to reduce exposure to flood hazards.

(4) Base flood elevation (the level of the one-hundred-year flood) data is provided for proposals greater than five (5) acres for that portion within the Floodplain District.

D. Construction standards. To ensure high quality and uniformity of construction, and unless otherwise specified, all the work and the materials used shall conform to the requirements of the Commonwealth of Massachusetts, Department of Public Works, Standard Specifications for Highways and Bridges, the latest edition, as amended, hereinafter referred to as the "Standard Specifications," and to these regulations. Where in conflict, the provisions of these regulations shall apply.

§ 300-10. Streets.

A. Classification.

(1) Streets within a subdivision shall be classified as follows:

(a) Collector: a street which carries traffic equivalent to that generated by fifty (50) dwelling units or more or which serves property either used or zoned for commerce or industry.

(b) Major: a street which carries traffic equivalent to that generated by more than twelve (12) but fewer than fifty (50) dwelling units, which has no abutting property either used or zoned for commerce or industry and which is not capable of extension to serve more than fifty (50) dwelling units.

(c) Minor: a street which carries traffic equivalent to that generated by twelve (12) or fewer dwelling units, which has no abutting property either used or zoned for commerce or industry and which is not capable of extension.

(2) In determining the classification of subdivision roads, the Board shall take into consideration abutting developable lands and the extension of utilities.

B. Location and alignment.

(1) Safety and attractiveness. All streets in the subdivision shall be designed so that, in the opinion of the Board, they will provide safe vehicular and pedestrian travel. Due consideration shall also be given by the subdivider to the attractiveness of the street layout in order to obtain the maximum livability and amenity of the subdivision.

(2) Conformance to study plans. The proposed streets shall conform to any master or study plan as adopted in whole or in part by the Board or the Town of Franklin.

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

(4) Intersections and access.

(a) Streets shall be laid out so as to intersect, as nearly as possible, at right angles. No street shall intersect any other street at less than seventy

degrees (70°).

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

(c) Intersections of street side lines shall be rounded with a curve of not less than a thirty-foot radius, measured at the curbline.

(5) Center line.

(a) The minimum horizontal center-line radius of any curve on a major or minor street shall be one hundred fifty (150) feet and two hundred (200) feet on a collector street. The Planning Board may require a greater radius where deemed necessary for the public safety. A shorter radius may be allowed if the Planning Board determines that a shorter radius will result in the preservation of trees or other natural features without detriment to public safety.

(b) Center-line offsets for intersecting streets shall not be less two hundred (200) feet.

(c) In all cases, the center line of the paved surface shall be coincidental with the center line of the right-of-way, unless specifically excepted by the Board.

(6) Sight distances. Sight distance requirements along roadways and at intersections shall be evaluated under two categories as defined by the Massachusetts Highway Department in its most current Highway Design Manual. Specifically, Stopping Sight Distance (SSD) and Intersection Sight Distance (ISD). At a minimum, stopping sight distance criteria, shall be met along every roadway utilized for direct access/egress to and from a parcel; that is, along any internal site roadway/driveway, as well as existing or proposed off-site roadways providing direct access/egress to and from the parcel. On existing roadways utilized for direct site access/egress, the SSD criteria shall only be applicable in the area of an intersection with a proposed site roadway/driveway.

For larger subdivisions, in addition to the SSD criteria as detailed above, decision sight distance (DSD) shall also be met at any existing or proposed intersection utilized for direct access/egress to and from the parcel. That is, any intersection of an existing roadway and proposed site roadway/driveway and/or an intersection of two existing roadways in close proximity to proposed site access/egress. Larger subdivisions shall be defined as any proposed development which shall generate in excess of 120 trips per day as calculated utilizing the current edition of the Institute of Transportation Engineers (ITE) Trip

Generation manual.

C. Width requirements.

(1) Street right-of-way and pavement widths, measured inside curbs or berms, shall be as follows:

Right-of-way Pavement

Type of Width Width

Street (feet) (feet)

Collector 56 32

Major 56 28

Minor 56 26

(2) A narrower right-of-way may be allowed if the Planning Board determines that a narrower right-of-way will result in the preservation of trees and other vegetation and will be consistent with the location and character of the subdivision. Private retaining walls and other permanent structures are not to be proposed or constructed within the right-of-way.

(3) Standards of adequacy. The Board may require, as a condition of its approval of a subdivision plan, that the developer dedicate a strip of land for the purpose of widening ways providing access to the subdivision and that he either make physical improvements within such ways or compensate the town for the cost of such improvements in order to meet the standards specified above.

D. Grade.

(1) Design. Street grades shall be designed in relation to existing grades such that the volume of cuts and fills made within the right-of-way approximately balances, except to offset peat, boulders or other unusable materials to be removed.

(2) Minimum and maximum. Grades of streets shall not be less than one and five-tenths percent (1.5%). Grades shall not be more than six and zero-tenths percent (6.0%) for collector streets nor more than eight and zero-tenths percent (8.0%) for all other roads.

(3) Leveling area. On any street where the grade exceeds six and zero-tenths percent (6.0%) on the approach to an intersection, a leveling area with a slope of

not more than three and zero-tenths percent (3.0%) shall be provided for a distance of not less than one hundred (100) feet, measured from the nearest exterior line of the intersecting street.

(4) Vertical curves. All changes of grade exceeding one percent (1%) shall require vertical curves.

(5) Right of way grade. Proposed grades within the right of way shall not be more than five (5) feet above or below the existing grades unless specifically authorized by the Board in unusual topographical circumstances. At any time the proposed right of way grades are below the existing right of way grades, the Department of Public Works may request soil borings be performed to determine soil conditions and the annual high water table elevation. Based on the results, an underdrain system may be required by the Department of Public Works. The Department of Public Works shall observe all testing.

(6) Cul-de-sac (turnaround) grades. Proposed cul-de-sac or turnarounds shall contain slopes of not more than plus or minus three and zero-tenths percent (3.0%) starting from a distance of not less than fifty (50) feet measured from the throat of the cul-de-sac or turnaround area.

E. Dead-end streets.

(1) Dead-end streets shall be provided at the closed end with a turnaround capable of serving a vehicle of a thirty-foot length and having an outside turning radius of fifty-seven (57) feet. The right of way radius will be sixty (60) feet, the pavement radius fifty (50) feet and all pavement will be kept within the right of way.

Other. Dead-end streets shall serve no more than twelve (12) dwelling units and shall be no longer than six hundred (600) feet and having a minimum length of two hundred (200) feet, measured from the center of the turnaround to the side line of the closest, connecting through street.

(2) Through streets. Through streets indicated on the plan that are not constructed to provide through traffic shall provide for paved temporary turnarounds suitable for snowplowing purposes, to be approved by the Board, before any houses on such streets shall be occupied.

(3) Approval. Approval of dead-end streets may be contingent upon provision of easements and necessary facilities to allow continuity of utility and drainage systems. Water mains shall normally be looped.

F. Construction.

(1) Layout, clearing and grubbing. Prior to starting any construction activities, a registered land surveyor shall set offset grade stakes along the roadway right-of-way, centerline, sidelines, and sidewalks at one-hundred foot (100') intervals. All trees to be preserved shall be flagged. The site shall be walked with a designated representative of the Department of Public Works. Clearing and grubbing shall be performed to remove stumps, brush, roots, boulders and like material from the area of the traveled way, shoulders, sidewalks and utility trenches, but elsewhere, wherever feasible, existing vegetation shall be protected.

(2) Subgrade.

(a) When establishing the roadway subgrade, all existing material shall be removed to the subgrade plane as defined by the typical cross-section (see Appendix) for the entire width of the finished roadway. If, however, the soil is soft and spongy or contains undesirable material such as clay, sand pockets, tree stumps, stones over six (6) inches in diameter or any other material detrimental to the subgrade, a deeper excavation below the subgrade shall be made as required by the Department of Public Works Director.

(b) At this point all utilities, including drainage, water, sanitary sewer and gas (where applicable), shall be installed and brought to the property line in accordance with these regulations.

(c) Any excavated or natural area below the subgrade shall be filled to the subgrade with suitable granular material, to be approved by the Department of Public Works Director prior to its installation.

(d) The entire roadway width then shall be rolled with a roller having an effective force of twelve (12) tons, forming the subgrade with a three-eighths-inch-per-foot crown, as required on the cross-section plan.

(3) Gravel base.

(a) The gravel base of the roadway and sidewalks shall consist of unfrozen, hard, durable stone and coarse sand, free from loam and clay, uniformly graded, containing no stone having a diameter of more than three (3) inches and conforming to the requirements of the Standard Specifications (section M1.03.0 type B).

(b) Gradation tests (sieve analysis) shall be performed by an independent testing laboratory on the material to be utilized as gravel base and shall be submitted to the Department of public Works for review. This analysis, to be done at the expense of the subdivider in advance of applying or

grading the material, shall certify that it falls within the allowable limits for gravel borrow in accordance with the Standard Specifications. The Department of Public Works Director may, at any time during the roadway construction, require additional sieve analyses.

(c) The subdivider must demonstrate to the Department of Public Works Director that he has sufficient suitable material on site, or he shall have to haul in gravel conforming to the Standard Specifications. His intent shall be made clear to the Director.

(d) Before the gravel is spread, the roadbed shall be sloped to a true surface, conforming to the proposed cross section of the road, and no gravel is to be spread until this subgrade is approved by the Department of Public Works Director.

(e) Gravel for base shall be spread in two (2) layers of equal thickness, each thoroughly rolled true to lines and grades with a roller having an effective force of at least twelve (12) tons so as to yield a total depth of twelve (12) inches after thorough compaction. Any depression or soft spots that appear during or after rolling shall be filled with crushed bank gravel and be re-rolled until the surface is true and even. Gradation and compaction tests shall be performed and submitted to the Department of Public Works for review. Testing results should be satisfactory to the Department of Public Works prior to placement of base course of pavement.

(f) All sidewalk areas shall be provided with a gravel base foundation consistent with that required for roadways, except that the compacted depth shall be eight (8) inches and the slope of the base shall be three-eighths (3/8) inch per foot, sloping from the back of the sidewalk towards the curb. Gradation and compaction tests shall be performed and submitted to the Department of Public Works for review.

(g) Each layer shall be compacted to not less than ninety-five percent (95%) of the maximum dry density of the material, as provided in the Standard Specifications. The rolled gravel shall be tested for compaction. All such tests shall be submitted to the Department of public Works for review and shall be made at the expense of the developer.

(h) Before pavement is placed, the rolled gravel base and sidewalk base shall be surveyed by a registered professional land surveyor. As-built plans in plan view with an accuracy of one-tenth foot vertical at every 100-foot station along the centerline, sidelines and sidewalks shall be submitted to the Department of Public Works for review. They shall also include water, sewer, and storm drainage systems, inverts, services and

service stubs. In addition, the topography of drainage facilities shall be provided at one-foot accuracy. All shall be approved by the Department of Public Works Director prior to paving.

(4) Pavement. A two-course bituminous concrete surface shall be applied to residential streets. A three-course bituminous concrete shall be applied to commercial and industrial streets. The first course for residential streets shall be a binder course as defined by the Standard Specifications, which, after compaction is two and one half (2 ½) inches thick. The first course for commercial and industrial streets shall be a base course as defined by the Standard Specifications, which, after compaction, is four (4) inches thick. The second course for commercial and industrial streets shall be a binder course as defined by Standard Specifications, which, after compaction is two and one half (2 ½) inches thick. Gradation (sieve analysis) and asphalt content tests shall be performed on the material utilized as base course and/or binder course after it has been placed, and submitted to the Department of Public Works for review. All pavement shall be machine placed and rolled with a tandem roller having an effective force of not less than twelve (12) tons. If requested by the Department of Public Works Director, compaction and plane of finished surface tests shall be performed on the base and/or binder course once in place. All requested testing shall be performed by an independent testing laboratory at the expense of the subdivider. The binder course must remain through one (1) complete winter (December 1 to March 31). After wintering over and prior to the finished course of pavement being applied, the binder course shall be approved by the Department of Public Works Director; then the following steps are taken to complete the roadway pavement.

(a) Paving will not be allowed if it is raining or the roadway is wet, if frost is present, or when the air temperature is below forty degrees Fahrenheit (40° F.). The temperature of the bituminous concrete mixture shall be a minimum of 290° F prior to being placed and a minimum of 170° after intermediate rolling, all in accordance with standard Specifications.

(b) All frames, grates, manhole covers and water gates shall be adjusted to the proper finished grade by setting the same in a two-thousand-five-hundred-pound-per-square-inch concrete bed. Any depressions or irregularities in the binder pavement are to be cut out to a depth of eight (8) inches and replaced with compacted crushed bank and hot binder at least one (1) week before final paving.

(c) The binder course pavement must be swept clean of all loose material. A tack coat of emulsified asphalt shall be applied with a pressure distributor at a rate of ten-hundredths (0.10) gallons per square yard, immediately preceding the top course paving. An environmentally safe synthetic mat specifically designed for the purpose may be substituted for

the tack coat of emulsified asphalt.

(d) The finished course of Type I-1 bituminous concrete top course shall be applied to a one and one half (1 ½) inch thickness after compaction on residential, commercial and industrial streets, with a roller having an effective force of not less than twelve (12) tons. No greater than one percent (1%) of finished road shall have exposed aggregate defined as greater than one-eighth inch depression around the stone. Any sections of finished road surface with exposed aggregate that is greater than two feet square in area shall be removed and replaced with new finished surface. Loose aggregate is not allowed at any time.

(e) The developer shall make and maintain all subdivision roadways so that any and all occupied dwelling units within the subdivision are easily accessible to all municipal and emergency services. In addition to the above requirement, the developer must comply with the following conditions to the satisfaction of the Department of Public Works Director prior to the first day of December (the beginning of the wintering over period):

[1] All roadways shall be prepared in such a manner that all manholes, catch basins, valve gates or other structures in the roadway are installed with bituminous paving around the perimeter of each such structure such that a smooth transition is maintained between the top of each structure and the road surface.

[2] No curbing or any other material shall be left in the roadway(s).

[3] At the discretion of the Director of Public Works, temporary installation of catch basin gates may be required at levels lower than the base coat elevation so as to make them functional prior to application on the finish coat.

(f) If requested by the Department of Public Works Director, compaction and plane of finished surface tests shall be performed on the top course paving once in place. All requested testing shall be performed by an independent testing laboratory at the expense of the subdivider. The Director of Public Works may request remedial repairs or replacement of any portion of the pavement system if it fails to meet these and/or the Standard Specifications.

G. Driveways.

(1) Location. Driveway cuts shall not be allowed within sixty (60) feet of the intersection of the center line of intersecting streets. In no instances shall catch

basins be located along a driveway curb opening. Driveway openings shall be shown on the definitive plan.

(2) Paving. Driveways shall be paved from the curb to the property line. That portion of all driveways within the street right-of-way limits shall be constructed to the same specifications as the roadway: twelve-inch gravel base binder at two and one half (2 ½) inches after compaction and top coat at one and one half (1 ½) inches after compaction. Sidewalk grades shall be continuous across driveway openings. Transition in grade of no more than two inches will be allowed.

(3) Width. Driveways shall be at least ten (10) feet wide and shall have an opening of at least sixteen (16) feet in the curb at the gutter line.

(4) Grade. At all driveways the grade at the back of the sidewalk shall be at least six (6) inches higher than the grade at the gutter line.

(5) Other. The junction of sidewalks, driveways and roadways shall be constructed in such a manner as to prevent recessed areas where puddling may form.

(6) Driveways serving the premises shall provide access through the required frontage of the serviced lot, except in the case of a common driveway.

H. Curbing.

(1) Type. Curbing shall be placed the full length of all streets. The type shall be VA4 (Massachusetts Department of Public Works Specification M9.04.1) vertical granite where high-frequency parking is anticipated, such as where multifamily units are to be near the street or at drop-off points in nonresidential development. At all other locations, curbing shall be Type SB sawn (smooth) top slant granite (Massachusetts Department of Public Works Specification M9.04.2).

(2) Slant granite.

(a) Slant granite curbing shall be of lengths determined by the Department of Public Works to be adequate to serve the situation (Massachusetts Department of Public Works Specification M9.04.2). It shall be set on a compacted gravel at some angle not less than forty five degrees (45°) and not greater than sixty degrees (60°). In addition it shall have a reveal of seven (7) inches plus or minus three quarters inches (¾"). It shall be supported in place by blocks or undisturbed earth. The granite shall be set in a concrete base approximately six (6) inches square which shall abut against the binder course. The concrete shall be placed in front and under the granite during an initial pour. The concrete shall be placed in back and

under the granite during a second pour. The top course of paving will cover the concrete and key the granite in place. Joints on the face and top of the granite curb shall be mortared.

(b) The angle, alignment and reveal shall be uniformly maintained.

(3) Vertical granite. Vertical granite curbing shall be upright four-foot-minimum lengths, finished side facing the traveled way, with a reveal of eight (8) inches. It shall be installed in accordance with the specifications of the Massachusetts Department of Public Works (Section 501).

(4) Driveways.

(a) Two foot vertical granite radius cornerpieces shall be placed at all driveway openings along vertical granite curbing.

(b) Transition pieces shall be placed at all driveway openings along slant granite curbing. The transition shall be a piece of slant granite curbing (minimum length four feet) that starts with proper angle reveal and tilts downward to be flush with finish grade at the driveway opening.

§ 300-11. Stormwater management.

A. General approach.

1. Protection. The definitive plan shall provide adequate drainage facilities within the subdivision for collecting, conveying and disposing of stormwater in a manner which will ensure proper protection of the roadway and the areas adjacent thereto. The definitive plan shall provide for recharging groundwater with pre-treated (if applicable) stormwater in an amount equal to or exceeding pre-development conditions.
2. On-site recharge. Developers will submit a detail of the stormwater treatment facility showing side stabilization, depth and soil character. The use of detention basins is prohibited. Stormwater treatment facilities shall be employed to trap possible pollutants and handle peak stormwater flow into any off-site wetland, water body or drainage facility so that said flow will, in a ten-year and also a one-hundred-year storm, be no higher following development than it was previously. The grading for these components must blend in naturally with existing contours. Subdivisions may not increase the peak rate and volume of stormwater flow, or increase the contaminant burden from stormwater flows. The Board may authorize an increase following applicant demonstration that such increase will cause no environmental harm or damage to public or private property. Where the only method of drainage is via public or private property, the subdivider shall furnish plans, obtain easements where

- necessary in the town's behalf and assume all financial responsibility for drainage of the area. All drainage facilities proposed shall utilize Best Management Practices as outlined in the current stormwater management policy promulgated by the Commonwealth of Massachusetts.
3. Stormwater management components must be located on a separate lot that conforms to zoning requirements.
 4. Closed systems. Drainage system design shall provide for a closed drainage system (stormwater carried on the street surface to catch basins to storm sewers discharging to surface waters). No catch-basin-to-catch-basin connections will be allowed.

(5) Lot drainage. Lots shall be prepared and graded in such a manner that development of one shall not cause detrimental drainage on another. If provision is necessary to carry drainage to or across a lot, an easement or drainage right-of-way of a minimum width of twenty (20) feet and proper side slope of at least three to one (3:1) shall be provided. Storm drainage shall be designed in accordance with the specifications of the Board. Where required by the Planning Board, the applicant shall furnish evidence as to any lot or lots for which adequate provision has been made for the proper drainage of surface and underground waters from such lot or lots.

B. Construction.

(1) General. Culverts shall be designed to accommodate a fifty-year-frequency storm; underground storm drains, catch basins and related installations shall be designed to accommodate a twenty-five-year-frequency storm with a design velocity of between two and five-tenths (2.5) feet and ten and zero-tenths (10.0) feet per second. In high volume conditions [greater than fifteen (15) cubic feet per second (CFS)], the maximum design velocity shall not exceed eight (8) feet per second.

(2) Piping.

(a) The drainage pipe shall be reinforced concrete, with bell and spigot gasketed joints. The pipe shall be Class III in accordance with ASTM C-76. The gaskets shall be O-ring type in accordance with ASTM C-443. The minimum diameter shall be twelve (12) inches. The pipe shall be laid in undisturbed trenches below the grade of pipes, starting with the downstream end on a firm bedding. All bells shall be facing upstream. Reference bench marks shall be clearly marked to enable the Department of Public Works Director to check the grade and invert elevations. The joints of all concrete pipes shall include a pre-molded neoprene continuous O-ring flexible compression gasket. No backfilling of pipes or culverts shall be done until the installation has been inspected and approved by the Department of Public Works Director. Backfilling shall be

in layers not exceeding twelve (12) inches, with each layer compacted by an appropriately sized plate vibrator, regardless of the method of final compaction at the subbase or gravel base level. The minimum cover is forty-two (42) inches above the top of the pipe.

(b) If required by the Department of Public Works Director, side underdrains shall be installed on both sides of all streets, except in fill sections, and connected to the surface drainage system. In circumstances where the groundwater table is not within four (4) feet of the finished grade and each linear foot of underdrain would serve a surface drainage area of not more than twenty (20) square feet, or in other circumstances which would render such underdrains superfluous, the Department of Public Works may waive such requirement. The side drains shall be shown in cross-section detail.

(c) At each outfall of a drain line, a Type B winged headwall of reinforced concrete shall be constructed according to the detail shown in the Appendix.

(3) Catch basins and drain manholes.

(a) Catch basins shall be installed on both sides of the roadway on continuous grades at intervals not exceeding three hundred (300) feet, at low points on the roadway, at the corners of intersecting streets, within each turnaround and at such other locations as required by the Board. Three (3) catch basins and two (2) manholes are required in turnarounds sloped towards the bulbed end. Two (2) catch basins and one (1) manhole are required in turnarounds sloped towards the entering roadway. No catch basins are allowed in driveway openings.

(b) Catch basins and drain manholes shall be constructed of concrete-block masonry eight (8) inches in thickness with an inside diameter of four (4) feet or more. They shall be built with horizontal and vertical mortared joints. The arch or cone section shall be twenty-four (24) inches in height consisting of a first row, second row, third row and a ring row (either round or square as appropriate). The cone section shall be mortared on the exterior. The faces of all pipes shall be flush with or project not more than four (4) inches into the basin or manhole. Precast catch basins and manholes may be used in lieu of concrete-block-masonry structures. Flat-topped structures are not allowed, unless with written authority of the Department of Public Works Director.

(c) Catch basins shall have a minimum sump of forty-eight (48) inches. They shall have a base of precast concrete plates, four (4) inches thick,

laid flat with a twelve-inch weep hole in the center.

(d) Drain manholes shall have a four-inch-thick concrete base. At least one (1) row of blocks shall be set on the base to allow the construction of a brick table within the manhole. Arched inverts of one-half (1/2) the pipe diameter shall be sloped upward to the sides of the manhole. The tops of the main drain lines entering and leaving a manhole shall be matched.

(e) No more than four (4) pipe openings shall be allowed in any one (1) manhole. Four-foot-diameter manholes will be used for drains up to thirty (30) inches in diameter. Five-foot-diameter manholes are necessary for pipe diameters between thirty-six (36) and forty-eight (48) inches. All flows into a manhole shall be in the same direction (no reverse flows allowed), with a maximum angle between the main and any connecting line of ninety degrees (90°). All connecting lines shall have bricked inverts rounded into the direction of flow.

(f) Drain manholes shall be installed at all catch basin connections, at changes in grade, size and alignment, but in no event shall the distance between manholes exceed three hundred (300) feet.

(g) Catch basins and drain manholes shall be constructed with cast-iron frames and covers or grates. Frames must be set in a full bed of cement mortar. Bricks shall be used between the frame and top course for grade adjustment. They shall be laid in a radial fashion with full bearing on the ring row. A maximum of two (2) brick courses will be allowed. Frames shall be at least two hundred sixty-five (265) pounds and shall be of North American manufacture. Covers or grates shall be no less than two hundred ten (210) pounds, in accordance with the Standard Specifications and shall be of North American manufacture. The word "drain" shall be cast into the solid cover in letters at least three (3) inches in height.

(h) Manhole casting shall be set flush with the designed finish grade of the pavement. Catch basin grates shall be set one (1) inch below the finished gutter grade and shall be of the eggbox variety (square openings). Manhole castings and catch basin grates shall not be raised until thirty days prior to final paving. If paving does not occur within said thirty days, they shall be lowered immediately. Ramping is prohibited.

(i) Details of standard manhole, catch basin, frame and grate and curb inlet are shown in the Appendix.

(j) Drain manholes shall have rung manhole steps fifteen (15) inches on center built into the vertical side.

§ 300-12. Utilities.

A. Water supply.

(1) Design.

(a) Public supply standards. Wherever feasible, water supply shall be provided from a public water supply system. In such cases, the water supply system will be considered adequate only if it is capable, without booster pumps, of providing each proposed fire hydrant with a minimum flow of seven hundred fifty (750) gallons per minute at twenty (20) pounds per square inch residual pressure for single-family residential developments. In cases where a finished floor elevation of a house is between elevation 310' and 340', individual booster pumps are recommended for each home. Where finished floor elevations are between 340' and 390', individual booster pumps are required for each home. Above floor elevation 390', public water supply is not currently available.

(b) Public supply responsibility. If connection to a public water system is proposed but it is determined by the Board that the above standards will not be met in part or all of the subdivision, the Board may nevertheless approve the plan subject to a condition that any lot not adequately served shall not be built upon until service has been made adequate.

(c) Private supply standards. Where connection to an adequate public water supply is infeasible prior to the time that lots will be built upon, the Planning Board shall approve a subdivision only upon making the following determinations:

[1] That adequate water supplies are available for fire safety through reserved access to an existing or created fire pond, dry hydrants piped to such a pond or other means to be determined following consultation with the Fire Department; and

[2] That water supplies for domestic use are likely to be able to meet Board of Health regulations for yield and quality.

(2) Construction.

(a) Public water mains shall be not less than eight-inch diameter Class 52 cement-lined ductile-iron pipe with push-on gasket joints.

(b) Connection to existing town water mains shall be the subdivider's responsibility but shall be made only under the direction of a Department

of Public Works Director. A water permit must be obtained from the Department of Public Works prior to tapping any main.

(c) Water mains shall be laid in a dry trench on a twelve-inch bed of sand or approved material. Construction pipe shall be manually tamped with sand the full length of the pipe up to one-half (1/2) the diameter of the pipe so as to eliminate any voids under the pipe.

(d) Water mains shall be laid to provide a minimum cover of five (5) feet below the finished grade and a maximum of seven (7) feet.

(e) A hydrant shall be located at each street intersection, and between intersections hydrant spacing shall not exceed five hundred (500) feet. Each hydrant shall be served directly from a water main through a six-inch mechanical joint connection. Hydrants shall be set in thrust blocks and of the type currently in use or approved by the Franklin Department of Public Works. A drainage sump of one-half (1/2) cubic yard's volume of one-and-one-half-inch stone shall be located at the base of the hydrant. Hydrants shall be located at the back of the sidewalk, with the breakaway hydrant flange at the finished grade or higher with a four-foot clear zone radius from the center nut and four inch steamer connection center line shall be a minimum of eighteen inches (18") off the ground. Hydrants should be located on lot lines where possible. If only one (1) sidewalk is to be installed, hydrants should be on the opposite side of the street. All hydrants shall be painted by the developer (color as determined by the Department of Public Works) after installation, prior to the first occupancy permit, once per year, and within six months of the release of final bonding moneys.

(f) All water gates and hydrant gates are to be left to the finished grade in paved traveled ways and shall have a minimum of five (5) feet and a maximum of six (6) feet depth of cover. Service boxes are to be placed at the property line and to the finished grade, with a maximum depth of six (6) feet and a minimum depth of five (5) feet. Gate valves, of the type currently in use by the Department of Public Works, resilient seat openings left, shall be installed on each outlet of all tees and crosses, every one thousand two hundred (1,200) feet of main and on hydrant branches. Water main gates shall be located approximately six (6) feet from all road tees.

(g) All elbows, bends, tapping sleeves and tees shall be of ductile iron and designed for a working pressure of one hundred fifty (150) pounds per square inch. They shall be installed with concrete thrust blocks of poured-in-place two-thousand-five-hundred-pounds-per-square-inch concrete suitable in size to prevent pipe movement due to internal pressure

changes or restrained joints approved by the Department of Public Works.

- h.** House service shall be obtained by the subdivider for each dwelling unit. The Franklin Department of Public Works will install a water meter of its specification with outside register and inspect the house service. House service connections shall be Type K copper tubing of one-inch-minimum diameter. Service connections shall include a corporation stop [American Water Works Standards (AWWA) thread inlet] at the main and a curb stop with service box located behind the sidewalk at the property line. Corporation stops, curb stops and service boxes shall be of a type approved by the Department of Public Works. The subdivider shall provide the Department of Public Works with suitable sketches showing ties to all water gates, stops and curb stops before acceptance of the system. On field inspections, the developer shall supply manpower to assist the Department of Public Works in the inspection of all water service boxes and water main gates to assure that all are in working order. Before final bonding moneys are released, the developer must submit all ties to water gates and service boxes to the Engineering Department for filing. Failure to provide proper service ties will be cause for rejection.

- (i) The installation of water pipes or related equipment shall not be backfilled until inspected by the Department of Public Works. Backfilling and compaction techniques are the same as those for drainage.

- (j) Upon completion of the water main and prior to putting it into service, leakage and pressure tests are to be conducted in accordance with AWWA standards by a competent independent testing company approved by the Department of Public Works. After successful testing, mains shall be chlorinated according to AWWA specifications by a competent third party. Before mains are put into service, written test results for leakage and chlorination must be presented to the Director of the Department of Public Works. Chlorination tests are to be conducted by a laboratory approved by the Department of Environmental Quality Engineering. Both leakage and chlorination tests are to be witnessed by a Department of Public Works Director. Any defects shall be corrected immediately.

B. Sanitary sewers.

(1) Design.

- (a) Sanitary sewers, including all appurtenances, shall be designed to serve all lots in a subdivision and to provide connection to the municipal sewerage system wherever possible. Where no municipal system exists to tie into, on-site sewage disposal facilities shall be installed and constructed in conformity with the rules, regulations and requirements of

the Franklin Board of Health and state regulations.

(b) No portion of a sewerage system shall be approved if it requires a connection to the municipal system over land of other owners, unless appropriate easements are first obtained.

(c) Sewer grades shall be designed to allow sewer entrances below basement floor grades.

(d) Public sewers shall be designed according to professional engineering practices by a registered professional engineer.

(e) The minimum design velocity of flow shall be two (2) feet per second.

(f) Manholes shall be located at every change in grade, change of horizontal alignment, change in pipe size and where two (2) mains intersect, but not more than three hundred (300) feet apart.

(2) Construction (all locations).

(a) Sewer pipes shall not be less than eight (8) inches in diameter and shall be Class SDR-35 polyvinyl chloride, ductile iron or reinforced concrete. The joining method shall be with O-ring rubber gasket joints or other equals approved by the Department of Public Works. A six-inch bed of three-fourths-inch screen gravel stone shall be provided for the pipe, and an additional layer shall be provided to a height of one-half (1/2) the diameter of the pipe. To ensure proper installation of pipe laid to a minimum slope of one-half (1/2) foot per one hundred (100) feet, laser instruments shall be used to control the grade.

(b) Manholes shall be a minimum of four (4) feet in diameter and shall be precast reinforced concrete. A four-inch-minimum base shall be constructed, on top of which a brick table inverted arch shall be built with the bricks laid on edge as stretchers. Rung manhole steps, fifteen (15) inches on center, shall be built into the vertical side of the eccentric cone section. A typical sanitary manhole section is shown in the Appendix. Sewer manhole covers shall be flush with the finished grade and shall be constructed in accordance with applicable requirements of § 300-11B(3)(g) and (h) regarding drain manholes.

(c) Where sewer lines intersect with a manhole, brick invert arches are to be rounded into the flow line.

(d) The frame and cover for a sanitary manhole is similar to a drain manhole in every respect except that the name "sewer" shall be cast into

the solid cover in letters at least three (3) inches in height.

(e) Standard Y-tees shall be installed in the main line for each residence or lot. The subdivider shall install the building sewer in accordance with the sewer regulations of the Town of Franklin from the main to the residence. A separate sewer permit shall be obtained from the Department of Public Works for each dwelling unit.

(f) The installation of public sewers or building sewers shall not be backfilled until inspected by the Department of Public Works. Backfilling procedures are the same as for drainage. The pipe must be properly tamped by hand with sand or suitable material up to one-half (1/2) the diameter of the pipe for the full length of the pipe, to eliminate any voids under the pipe. No sewer pipe shall be laid on a ledge. Where a ledge is encountered, the pipe shall be laid on a twelve-inch bed of sand or approved material.

(g) Before a new public sewer is accepted or placed in service, a low-pressure air test conforming to ASTM C828 and an infiltration/exfiltration measurement shall be performed to demonstrate the integrity of the sewer line and manholes. Lines demonstrating leakage of less than fifty (50) gallons per day per inch per diameter per mile shall be accepted or placed in service. [Amended 6-3-1996]

(3) Construction (within the Water Resource District). (Note: Refer to § 185-40, Water Resource District, Subsection F, Installation of new public sewers.)

- a. Sewer pipes shall be of material deemed watertight and corrosion-resistant. Solid-wall plastic pipe (polyvinylchloride (PVC) (Class SDR-35 minimum), ductile-iron pipe (Class 52 minimum), reinforced concrete cylinder pressure pipe and reinforced concrete pipe (RCP), or material of equal strength and durability according to ASTM standards and as approved by the Franklin Department of Public Works, shall be considered adequate for purposes of this section. In areas where a force main is required, only ductile-iron pipe shall be used. Where a sewer line is to cross a creek, brook, stream or other body of surface water, the line shall be placed no less than two (2) feet below the creek, brook or stream bed, and the pipe shall be enclosed in concrete [four thousand (4,000) pounds per square inch] for all creek, brook or stream crossings, and the pipe must be ductile-iron pipe, Class 53 minimum.

[1] Whenever, during the excavating, corrosive soils, cinder fills, old landfills or similar type excavations are encountered and the contractor and/or town is using ductile-iron pipe, then the pipe shall be fully enclosed in an eight-mil polyethylene protective coating

jacket.

(b) Sewer joints shall be compression gasket joints. In areas where a force main is required, ductile-iron mechanical joints shall be used at all bends.

(c) Trenches shall be as narrow as engineering considerations allow, and bentonite dams shall be installed in all trenches. Bedding and backfill shall be a combination of both coarse and fine aggregate, and filter fabric shall be used in fine sands, silts or clay in bedding preparation. Construction shall proceed only in dry conditions.

(d) Manholes shall be precast concrete and designed with as fewer construction joints as possible, and all joints shall be sealed with neoprene O-rings or bitumastic sealant. In areas of the Water Resource District which lie within the Floodplain District, only watertight or bolt-down manhole covers shall be used.

(e) Before a new public sewer is accepted or placed in service, a low-pressure air test conforming to ASTM C826 and an infiltration/exfiltration measurement shall be performed to demonstrate the integrity of the sewer line and manholes. Within the Water Resource District, only lines demonstrating leakage of less than fifty (50) gallons per day per inch per diameter per mile shall be accepted or placed in service.

C. Other utilities.

(1) Wiring. Electrical, telephone and television community cable conduits shall be placed underground. Size and materials of these conduits and lateral spacing between conduits shall meet the requirements of the respective utility company. The utilities shall not be located under the sidewalks. Poles and any associated overhead structures, of a design approved by the Planning Board, shall be provided for use for police and fire alarm boxes and any similar municipal equipment and for use for streetlighting.

(2) Streetlighting.

(a) It is the responsibility of the developer of any subdivision within the Town of Franklin to provide for the installation of sodium vapor streetlighting within that subdivision in accordance with Massachusetts Electric Company "Street Lighting - Underground - Division of Ownership S-3" standards, as may be amended or updated from time to time by the Massachusetts Electric Company. In those situations where a dwelling unit is completed, the developer shall install all roadway lighting in those designated locations along the roadway that would be considered the normal path of ingress and egress to that dwelling. A developer may

select either of the following options:

[1] Unaccepted streetlighting. Where the town has not agreed or is likely not to accept future payment for streetlighting, the developer, contractor or association of customers shall:

[a] Provide, install and retain ownership of all streetlighting equipment, including underground conductors, conduits, foundations, poles and luminaries; and

[b] Contract directly with Massachusetts Electric Company to provide electricity for light operation and to service and maintain all equipment on a long-term basis.

[2] Accepted streetlighting.

[a] Where the town has accepted a roadway or is likely to accept streetlighting, or itself owns a parking lot or other way, or has otherwise agreed to supply streetlight service to a private way, the developer, contractor or association of customers, or the town in the case of a municipal facility, shall provide and install all streetlighting, including underground conductors, conduit and foundations on which poles and luminaries are set; and

[i] If metal poles are to be installed, provide and install such poles.

[ii] If wood poles are to be installed, provide and install such poles or enter into an arrangement with Massachusetts Electric Company to provide and install such poles at the developer's, contractor's or association's expense.

[b] In case of accepted streetlighting, the town shall contract with Massachusetts Electric Company to provide electricity for light operation and to service and maintain all equipment.

(b) Streetlighting shall be installed as follows: within a subdivision each intersection, intersecting way, cul-de-sac, curve [with a radius of sixty

degrees (60°) or greater over a linear distance of two hundred (200) feet] or other road hazard shall be illuminated by a lighting fixture(s) which is to be installed on a structure(s) (pole, post, etc.) nearest the road hazard identified.

(c) The quantity, type and location of lights within a proposed subdivision shall be subject to Planning Board approval and shown on the definitive plan. The lighting fixture and structure specification is as follows:

[1] Fixture lumen rating: four thousand (4,000).

[2] Nominal structure mounting height above street grade: twenty-five (25) feet.

[3] Gas. Where natural gas service is available, a gas main may be installed in the grass plot, two (2) feet inside the traveled way. The depth of the gas main is to be determined by the utility owning the service installed.

[4] Other.

[a] All underground utilities shall be installed prior to application of the gravel base.

[b] All other utilities installed in a subdivision shall be shown on the as-built plans.

[c] All underground utilities shall be installed in a parallel fashion. The sewer line shall be in the center of the road and drainage and water on either side, with at least ten (10) feet separating the water and sewer lines.

§ 300-13. Other improvements.

A. Sidewalks.

(1) Location. Sidewalks are required on both sides of the road, unless the Board determines that one (1) sidewalk will adequately service pedestrian traffic. The Board shall also consider the preservation of natural features in making its determination concerning the number of sidewalks required.

(2) Construction.

(a) In residential areas, sidewalks shall be five (5) feet wide. In commercial

and industrial areas, sidewalks shall be six (6) feet wide. A minimum of five-foot-wide traveled way shall be maintained at all times. In all areas all materials shall be removed or filled to a depth of thirteen (13) inches below the finished design grade. In areas of high groundwater, as determined by soil borings, all materials shall be removed or filled to a depth of seventeen (17) inches below the finished design grade. Any soft spots of undesirable materials shall be removed and replaced with gravel. The sidewalk area shall be filled with gravel and rolled or compacted with a vibratory plate of a suitable size to a compacted depth of eight (8) inches with a slope of three-sixteenths (3/16) inch per foot towards the curb. In areas of high groundwater as previously determined, the compacted depth of gravel shall be increased to twelve (12) inches. [Amended 6-3-1996]

(b) Sidewalks shall extend to the paved roadway at intersections to provide convenient walk-off for crossings and shall be ramped for the handicapped to the gutter with no curb. Handicap ramps shall be shown on the plan and shall be constructed in accordance with the latest revision of the architectural access codes.

(c) A five-inch-thick Class A [four thousand (4,000) pounds per square inch (psi)] concrete shall be applied to the prepared gravel base. A slump test shall be performed by an independent testing lab for every other truck. The slump shall vary between two and four inches. Department of public Works personnel shall observe and accept or reject the concrete delivery based on test results. Sidewalk grade shall be continuous across driveways openings. Transition in grade will not be allowed. Four-by-four-inch welded wire mesh or equal shall be installed at all driveway aprons. The welded wire mesh or equal shall be supported in place such that a minimum two-inch concrete coverage is maintained in all locations. The concrete shall be a plant mix, placed, floated, trowled and then finished with a broom. Curing and sealing compound shall be applied. Preformed expansion joints shall be installed fifteen (15) feet on center for five-foot-wide sidewalks and eighteen (18) feet on center for six-foot-wide sidewalks. Finished sidewalks shall be sloped three-sixteenths (3/16) inch per foot towards the curb. Trowled joints shall be installed five (5) feet on center in residential areas and six (6) feet on center in commercial and industrial areas. Plant mix design data and delivery slips shall be submitted to the Department of Public Works for review. All construction and concrete repair (if necessary) shall be in accordance with Massachusetts Highway Department Standards. Finished concrete sidewalks shall be inspected by the Department of Public Works Director and will not be accepted until the surface is uniform and contains no defects.

B. Grass plots.

(1) Location. A vegetated area of at least four (4) feet in width shall be located between the sidewalk and the curbing, maintained in grass or retained natural vegetation.

(2) Construction and maintenance.

(a) Planting areas and shoulders shall pitch toward the traveled way not less than one-fourth (1/4) inch nor greater than two (2) inches to the foot. The area between the sidewalk and traveled way shall have six (6) inches of loam which, when rolled, shall match with the top course of the sidewalk and the top of the front face of the slant granite.

(b) All disturbed unpaved areas within the street right-of-way shall be loamed to a minimum of six-inch thickness and seeded.

(c) Grass seed shall be spread during the growing season at the rate of four (4) pounds per one thousand (1,000) square feet. It shall be a mixture of creeping red fescue and perennial rye grass. It shall be properly fertilized, limed and watered. A guaranty period of one (1) year from full growth and final bond release shall be honored by the subdivider.

C. Slopes.

(1) Design. The area in back of the sidewalk or shoulder shall be sloped at not more than the ratio of three (3) feet horizontal to one (1) foot vertical to a point where it precisely coincides with the surrounding ground or abutter's lawn. Side slopes shall be loamed and seeded or retained in existing vegetation exactly the same as grass strips.

(2) Terracing.

(a) Terracing and/or sloping of grades to the roadway will be required when the normal runoff from a lot onto another has been made greater by new construction or by man-made land changes.

(b) Terracing shall be done with earthen embankments, and each terrace shall have no more than a three-foot vertical drop. Natural slopes or terraces will be no greater than one (1) foot horizontal to one (1) foot vertical, although no slopes greater than three (3) feet horizontal to one (1) foot vertical shall be allowed within ten (10) feet of the lot line.

c. "Terrace" shall mean a raised flat mound of earth with sloping sides.

D. Bounds.

(1) Location.

(a) Bounds shall be installed at all street intersections, at all points of change in direction or curvature of street side lines, arcs on curves at intervals of 300 feet, all easement boundaries, and at other points where, in the opinion of the Planning Board, permanent bounds are necessary. Such bounds shall be precast reinforced concrete not less than thirty-six (36) inches in length and six (6) inches square. Other than bounds that exist, bounds shall be installed at all turning points for parcels designated as open space.

(b) Each lot shall have at least one (1) side line marked by a bound. Where not required by anything in Subsection D(1)(a), such bounds shall be precast reinforced concrete and not less than thirty-six (36) inches in length and six (6) inches square.

(2) Installation. Bounds shall be set to the finish grade and installed only after all construction which would destroy or disturb them has been completed. Furthermore, a registered land surveyor shall certify to the Planning Board that the location of such bounds has been verified by him, following all earthwork and paving and shown on as-built plans.

E. Shade trees. The applicant and/or his agent shall submit a shade tree and landscaping plan to the Planning Board. This plan shall indicate all arboricultural details, including, but not limited to, which trees are to be retained, the planting schedule and the maintenance program. The Planning Board shall approve said plan, with or without conditions, if said plan conforms to the standards set forth below. Said plan, upon approval, shall be filed with the Planning Board and shall constitute a condition of approval.

(1) Retention. Outside of the street lines but within twenty (20) feet of the right-of-way no trees over six-inch caliper shall be removed or have the grade level underneath them altered more than six (6) inches without approval by the Planning Board during the definitive plan review process.

(2) Planting.

(a) Existing trees shall be preserved and new trees planted so that, at the time a subdivision is completed, at least three (3) trees of approved caliper shall be located on each lot within fifteen (15) feet of the nearest exterior line of the street. Shade trees shall not be planted where their growth will interfere with utility lines or entrances. New trees shall be planted at approximately fifty-foot intervals and shall be planted not closer than five

(5) feet and not more than twenty (20) feet from the right-of-way line unless otherwise approved by the Planning Board.

(b) The subdivider shall be responsible for all approved trees for a minimum period of one (1) year. Any unhealthy or dead tree shall be replaced with another which again shall be guaranteed for one (1) year. Trees approved for planting are Flowering and Green/Red Ash; Littleleaf and Silver Linden; Shademaster, Honey and Skyline Locust; Crimson King and Columnar Maple; White, Scarlet, Pin and Northern Red Oak. Other species may be planted if approved in advance by the Tree Warden. They shall be two-inch caliper measured four (4) feet above grade and planted in at least one-half (1/2) cubic yard of topsoil. At least three (3) species shall be planted in every subdivision and they shall be staggered so that no one species shall be next to a like species.

F. Street signs.

(1) Location. The subdivider shall furnish and install double faced extruded-aluminum street signs, mounted on two-inch-diameter posts equal to those in use by the Franklin Department of Public Works, at each street intersection within the subdivision. At T-intersections, one (1) sign post shall be sufficient; at four-way intersections, two (2) posts and sets of signs are required.

(2) Installation. Street signposts shall be ten (10) feet in length, three (3) feet of which shall be buried in the ground. An anchor rod shall be installed with the underground portion to prevent turning or removal.

(3) Other. Any street not yet accepted by the Town of Franklin shall be so indicated by a sign stating "Private Way" mounted on the same post just below the street sign. Prior to the issuance of an occupancy permit for a dwelling fronting a street within a subdivision, a sign indicating the name of that street shall be installed at the beginning of the street and at every intersecting way along that street. [Amended 2-6-1989]

§ 300-14. Other requirements.

A. Open spaces. Before approval of the definitive plan, the Board may require the plan to show a park or parks suitably located for playground or recreation purposes. The park or parks shall not be unreasonable in area in relation to the land being subdivided and to the prospective uses of such land. The Board may, by appropriate endorsement on the plan, require that no building be erected on such park or parks for a period of not more than three (3) years without its approval. This shall in no way prohibit the gift of such land to any public or private cooperative nonprofit organization for recreational and open space use to

improve community life and social welfare.

B. Easements.

1. Utilities. Where utilities cross lots or are centered on the rear or side of lot lines, easements shall be provided with a width of at least thirty (30) feet, and documentation of recordation shall be submitted with the as-built plan.

(2) Drainage. Where a subdivision is traversed by a watercourse, drainageway, channel or stream or contains a water storage area or facility, the Board may require that there be provided a stormwater easement or drainage right-of-way of adequate width to conform substantially to the lines of said feature and to provide for the possibility of flooding, protection of banks and adjacent properties, future maintenance or construction and other necessary purposes.

C. Cleanup. Upon issuance of an occupancy permit, the subdivider shall remove from the street and adjoining property all temporary structures, debris, tree stumps, loose rocks and surplus materials which may have accumulated during the prosecution of the work, leaving the subdivision in a neat and orderly condition. Prior to final completion of work, the applicant shall clean the entire stormwater management system, both on-site and off-site to its point of discharge.

D. As-built plans.

(1) Contents. After all street construction is completed and before the release of the final bond or covenant, the subdivider shall file with the Board one (1) reproducible copy and two (2) contact prints of the definitive plan, corrected and certified by a registered professional engineer or registered land surveyor, in proper form for recordation or registration at the Norfolk County Registry of Deeds, to show the following as built:

- (a) Side-line locations of roadways and sidewalks.
- (b) Center-line elevations, at fifty-foot intervals, of all roadways.
- (c) Profiles and plans of the drainage system, with sewer and drain invert elevations.
- (d) Bounds as installed.
- (e) Main gates and utilities as installed, including ties to all services.

(2) Certificate. A certificate signed by the engineer or surveyor preparing such

any such subdivision plan previously approved, shall require that construction of the ways, utilities and other infrastructure in the proposed subdivision shall be completed within four (4) years of the date of said approval and not from the date of endorsement nor from the date of recording of such subdivision plan. Failure to so complete shall constitute a default of a condition of approval as set forth in § 300-8H(8).

(2) Once construction is begun, all construction of the ways, utilities and other infrastructure shown on such subdivision plan shall be completed with two (2) years unless development phasing under the growth management by-law requires differently.

ARTICLE V, Administration

§ 300-15. Preconstruction meeting.

Following approval of the definitive plan and before actual construction begins on the roadway or utilities, the subdivider is required to submit a revised definitive plan to the Planning Board and the Department of Public Works, showing Planning Board approvals, waivers and conditions, and to schedule a meeting with the Department of Public Works Director and his staff. The subdivider is urged to bring his engineer and his roadway contractor to this meeting. The subdivider's attorney is also welcome to attend. Any problems contemplated in the construction phase, as well as inspection stages, contact persons, etc., will be discussed, as well as procedures to be followed. A summary of said meeting, as prepared by the Department of Public Works Director, shall be initialed by himself and the subdivider and forwarded to the Planning Board.

§ 300-16. Inspections.

A. General. The Franklin Department of Public Works Director, directly or through employees of the Department of Public Works, shall act as the Planning Board's inspector to ensure that the construction of roadways and utilities is carried out in accordance with these Subdivision Regulations and the Franklin Department of Public Works construction specifications. All elements of work are to be at all times subject to inspection. The Director shall require tests and interim as-builts to be done by the subdivider, at his expense, to demonstrate that these regulations and the construction specifications contained herein have been met. These tests shall include, as applicable, but are not limited to, the following: pressure and bacteriological test of the water lines; pressure and mandrill test of the sewer lines; vacuum test of the sewer manholes; thickness, gradation and compaction of the gravel road base; thickness, gradation and compaction of the binder coarse of pavement; certification by a licensed engineer or surveyor, in writing or on a plan, at any time during construction. The Director may approve deviations indicated by these tests or interim as-builts if they fall within acceptable engineering tolerances, if it maintains the intent of the Planning Board approval and the Department of Public Works Director informs the Planning Board in writing. The Planning Board may retain independent consultants, at the expense of the developer, in accordance with § 300-18, to ascertain whether these regulations and construction specifications have been met. [Amended 3-27-1995 by S-95-14]

B. Inspection form. The Department of Public Works Director shall maintain an inspection form (Form I) for each subdivision. At each critical step, the Director shall initial and date it to indicate completion and approval. Where appropriate,

additional written reports shall be filed with the Planning Board.

C. Notification. A minimum of forty-eight (48) hours' notice shall be given to the Department of Public Works Director by any subdivider wishing an inspection.

D. Failure to comply. Failure to comply with the inspection procedure may necessitate removal of improvements, at the expense of the applicant, or rescission of the approval of the plan in accordance with M.G.L.A. C. 41, § 81-W, or withholding of the subdivider's posted bond. If work is not "authorized to proceed" the contractor will be notified, if violation is not known, and no inspections will be furnished. It will be the contractors responsibility to prove quality of work through testing/certification or remove the improvements.

E. Determination of completion. The Department of Public Works Director shall, upon request of the subdivider and payment of any fees attendant thereto, cause the subdivision to be inspected for compliance with the Subdivision Rules and Regulations and the decision(s) of the Planning Board. If the Director is satisfied that the subdivision is in full compliance, he shall so certify on the determination of completion form, to which shall be appended the engineer's certification, and forward them to the Planning Board for acceptance.

§ 300-17. Waiver of requirements.

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

§ 300-18. Fee Structures and Regulations.

(A) Reasonable fees shall be imposed for the review of applications which come before the Planning Board, as set forth in Appendix A, List of Service Fee Rates, in Chapter 82 of the Code of the Town of Franklin.

(B) Administrative Fees.

1. Applicability. An Administrative Fee shall be assessed to offset the expense of review by the Planning Board and its office with regard to all applications set forth in Appendix A, List of Service Fee Rates, in Chapter 82 of the Code of the Town of Franklin.

(2) Submittal. Administrative Fees shall be submitted at the time of the submittal of the application. Any application filed without this fee shall be deemed incomplete and no review work shall commence until the fee has been paid in full.

(3) Fees for Revised Applications. Where an Administrative Fee has been calculated by the number of lots or units proposed, and the application is revised after payment of said fee, the following rules shall apply:

- a. If the number of proposed lots or units increases, the applicant shall pay a fee equivalent to the difference between the fee originally paid and the fee that would have been paid had the original submission included these additional lots or units. No review of these additional lots or units shall take place until this additional fee is paid to the Planning Board office, and failure to make this payment after requesting additional lots shall be grounds for denial of the application.
- b. If the number of proposed lots or units decreases, a refund of that portion of the application fee predicated on those lots or units shall be granted only if, in the judgment of the Planning Board, no cost associated with the review of those lots or units has been yet incurred.

(4) Fee Waivers. The Planning Board may waive or reduce any Administrative Fee, if, in the opinion of the Board, unusual circumstances exist regarding the subject property or the applicant.

(5) Refund. Once the review process has been commenced, the Planning Board shall not refund Administrative Fees, including the case of withdrawal of the application by the applicant, except as provided in Section 4.b, above.

(C) Project Review Fees.

(1) Applicability. The Planning Board, at its sole discretion, may determine that a proposed project's size, scale, complexity, potential impact or use of the land warrants the use of outside consultants (such as engineers, planners, lawyers, hydrogeologists, or others). Such consultants shall assist the Planning Board, or any town board or commission to which a matter is referred for review and comment prior to action by the Planning Board in plan review, impact analysis, inspection or other technical assistance necessary to ensure compliance with all relevant laws and regulations. Such assistance may include, but shall not be limited to, analyzing an application, monitoring or inspecting a project or site for compliance with the Board's decisions or regulations, or inspecting a project during construction or implementation. Such consultants shall be selected and retained by the Planning Board, with the actual and reasonable costs for their services to be paid by the applicant.

(2) Submittal. Project Review Fees shall be submitted upon receipt of notice of estimated consultant review cost for deposit in an account established pursuant to G.L. c. 44, s. 53G (53G Account). Any application filed without this fee shall be deemed incomplete and no review work shall commence until the fee has been

paid in full.

(3) Those Projects which are deemed by the Planning Board to require review by outside consultants shall be delivered to the selected consultant or consultants, who will submit a cost to the Planning Board. Where more than one type of application has been submitted for Planning Board action, only the largest of the applicable Project Review Fees shall be collected for deposit into the 53G Account, and not the sum of those fees.

(4) Replenishment. When the balance in an applicant's 53G Account falls below twenty-five percent (25%) of the initial Project Review Fee, as imposed above, the Planning Board shall consider whether to require a supplemental Project Review Fee to cover the cost of the remaining project review.

(5) Inspection Phase. After the granting of a Definitive Plan approval, the Planning Board may require a Supplemental Project Review Fee for the purpose of ensuring the availability of funds during the inspection phase of the review process.

(6) Handling of Project Review Fees. The Project Review Fee is to be deposited into a special account as set forth in G.L. c. 44, s. 53G.

- a. Outside consultants retained by the Planning Board to assist in the review of an application shall be paid from this account.
- b. Project Review Fees shall be turned over to the Town Treasurer by the Planning Board for deposit into a 53G Account.
- c. A copy of the latest statement from the banking institution handling the 53G Account shall be forwarded from the office of the Town Treasurer to the Planning Board Office as soon as it is received for timely and accurate accounting.
- d. The Town Treasurer or Comptroller shall prepare a report on activity in the 53G Account on an annual basis.

[1] This report shall be submitted to the Town Council for its review.

[2] This report shall be printed in the Annual Report for the Town of Franklin.

- e. An accounting of an applicant's funds held in the 53G Account may be requested by the applicant.

[1] The Planning Board Office shall respond to the request in a timely fashion.

[2] This accounting shall include the following information:

[a] The latest statement from the banking institution handling the account, which should include an accurate accumulated interest portion to the closing date of the statement if such statements are subdivided into individual applicants' account. Otherwise, a statement of principal and interest, prepared by the Planning Board office, based on the latest statement from the banking institution.

[b] A report of all checks authorized for issuance since that last banking statement.

f. An applicant may request an estimate of bills pending from consultants for work completed, or in progress, but not yet invoiced.

(g) Excess fees in the 53G Account, including accumulated interest, shall be returned to the applicant or the applicant's successor in interest, at the conclusion of the review process, as defined below. For the purpose of this section, any person or entity claiming to be an applicant's successor in interest shall provide the Board with documentation establishing such succession in interest.

[1] With the approval or disapproval of a Preliminary Subdivision Plan.

[2] With the disapproval of a Definitive Subdivision Plan.

[3] With the release of the performance bond at the end of construction of an approved Definitive Subdivision Plan.

(7) Selection Appeal. The applicant shall be notified in writing of consultant selection at least seven (7) days prior to the initiation of consultant efforts, unless this notice period is waived in writing by the applicant. As provided in M.G.L. Chapter 44, § 53G, the applicant may administratively appeal the selection of the consultant to the Franklin Town Council, on grounds that the proposed consultant selected has a conflict of interest (A consultant shall not have a financial interest in the project under review, or be in a position to financially benefit in some way from the outcome of the pending review process. Consultants must be in compliance with the Massachusetts Conflict of Interest Law, G.L. c. 268A.) or does not possess the minimum required qualifications of an educational degree or three (3) or more years of practice in, or closely related to, the field at issue. Such an appeal may be initiated by the applicant filing notice with the Town Clerk within seven (7) days of notice of the selection. Consultant efforts shall not begin until any appeal has been decided or until one (1) month passes without Council decision, in which case the selection made by the Planning Board shall stand.

The required time limits for action upon an application by the Planning Board shall be extended by duration of the appeal. This appeal shall not preclude further judicial review, if otherwise permitted by law, on the grounds provided for in this section.

(8) Remedy. Failure of an applicant to pay the consultant review fee determined by the Planning Board, or to replenish the special account when requested, shall be grounds for plan disapproval, denial of the application or permit or refusal to release development security.

§ 300-19. Matters not covered.

For matters not covered by these rules and regulations, reference is made to M.G.L.A. C. 41, §§ 81-K to 81-G inclusive.

The following Appendixes, Diagrams and Forms can be found in the Code book at the end of Ch. 300, Subdivision of Land:

Appendix 1: Street Cross Section

Typical Cross Section

Appendix 2: Construction Details

Catch Basin Details

Drain Manhole Details

Sewer Manhole Details

Endwall Details

Granite Curb Detail

Method of Setting Vertical Curb

Hydrant Details

New Water Service Connection Detail

Sewer Service Connection

Sewer Y-Branch

Reducer, Tree and Horizontal Bend

Appendix 3: Forms

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 Definitive Plan

Form D-1 Certificate of Approval of a Definitive Plan

Form R Subdivision Waiver Request