TOWN OF FREETOWN, MASSACHUSETTS

RULES & REGULATIONS OF THE PLANNING BOARD GOVERNING THE SUBDIVISION OF LAND



April 2003

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SECTION I

A. Authority

Under the authority vested in the Planning Board of the Town of Freetown by Section 81-Q of Chapter 41 of the Massachusetts General Laws, said Board hereby adopts these Rules and Regulations governing the subdivision of land in the Town of Freetown.

B. References

The attention of all applicants submitting a plan for approval under these Rules and Regulations is directed to the provisions of the Coastal Wetlands Act (Chapter 130, Section 105), and of the Wetland Protection Act (Chapter 131, Section 40), and to all of the Federal and Massachusetts General Laws. Compliance with the requirements of the aforementioned provisions may necessitate major or minor changes in any plan submitted to the Board.

C. Purpose

These subdivision Rules and Regulations are enacted for the purpose of protecting the safety, convenience, and welfare of the inhabitants of Freetown, put in effect by regulating the laying out and construction of ways in subdivisions providing access to the several lots therein, but which have not become public ways, and ensuring sanitary conditions in subdivisions and in proper cases parks and open areas. The powers of the Planning Board and of the Board of Appeal under the Subdivision Control Law shall be exercised with due regard for the provision of adequate access to all of the lots in a subdivision by ways that will be safe and convenient for travel; for lessening congestion in such ways and in the adjacent public ways; for reducing danger to life and limb in the operation of motor vehicles; for securing safety in the case of fire, flood, panic and other emergencies; for ensuring compliance with the Town of Freetown zoning ordinances and by-laws; for securing adequate provision for water, sewerage, drainage, underground utility services, fire, police, and other similar municipal equipment, and street lighting and other requirements where necessary in a subdivision; and for coordinating the ways in a subdivision with each other and with the public ways in Freetown and with the ways in neighboring subdivisions. It is the intent of the Subdivision Control Law that any subdivision plan filed with the Planning Board shall receive the approval of such Board if said plan conforms to the recommendation of the Board of Health and to the reasonable Rules and Regulations of the Planning Board pertaining to subdivisions of land; provided, however, that such board may, when appropriate, waive, as provided for in Section 81 R, such portions of the Rules and Regulations as is deemed advisable. (Taken from Section 81-M of Chapter 41, M.G.L.)

SECTION II - GENERAL

A. Definitions.

APPLICANT A person who applies for the approval of a plan of a subdivision or approval not required plan (ANR). "Applicant" refers to "an owner or his agent or representative, or his assigns". (Section 81-L of Chapter 41,M.G.L.)

BASE FLOOD ELEVATION The "Base Flood Elevation" shall be the level of flooding having a one percent chance of being equalled or exceeded in any given year, (100 year flood) as designated on the most current Flood Insurance Rate Map (FIRM), as prepared by the Federal Emergency Management Agency (FEMA), or, in the absence of such designation, to be determined by the Planning Board based upon the best available information regarding flood hazards, including any available United States Geologic Survey, Soil Conservation Service, and Corps of Engineers studies. BOARD

The Planning Board of the Town of Freetown, unless specified otherwise.

BRIDGE The term "bridge" shall apply to any structure whether single or multiple span construction that spans a body of water, depression, highway or railway, and affords passage for pedestrians, or vehicles of any kind, or any combination

thereof having a total length of ten feet (10') or more or a height greater than five feet.

BRIDGE HEIGHT The "height" of a bridge shall be considered from the road centerline finish grade to the finish grade below the bridge.

BRIDGE LENGTH In general, the "length" of a bridge is that distance measured horizontally along the centerline of roadway between extreme centerlines of bridge shoes or bearings, or when shoes or bearings are not used the distance between vertical faces of abutments, or spring lines of arches, or extreme ends of openings for multiple reinforced concrete boxes.

CERTIFIED BY "Certified by (or endorsed by) the Planning Board", as applied to a plan or other instrument required or authorized by the subdivision control law to be recorded, shall mean bearing a certification or endorsement signed by a majority of members of the Planning Board. (Section 81-L of Chapter 41, M.G.L.)

CULVERT A structure not classified as a bridge which provides an opening under the roadway.

DESIGNER Professional Civil Engineer or Land Surveyor registered to practice in Massachusetts. All work defined as professional engineering or surveying shall be done under the direct

supervision of a Registered Professional Engineer or Land Surveyor.

DEVELOPER A person (as hereinafter defined) who develops a plan of a subdivision approved under Section III of these Rules and Regulations.

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

LOT An area of land in one ownership, with definite boundaries. (Section 81-L of Chapter 41, M.G.L.)

MONUMENT A permanent marker to indicate a boundary.

MUNICIPAL SERVICES Sewers, water drains, water pipes, gas pipes, electrical lines, telephone lines, cable television, fire alarm systems and their respective appurtenances.

OWNER The person holding the ultimate fee simple title to a parcel, tract or lot of land, as shown by the record in the Land Registration Office, Registry of Deeds, or Registry of Probate.

PERSON An individual, or two or more individuals, or a group or association of individuals, a partnership, trust or corporation having common or undivided interest in a tract of land.

PLAN, PRELIMINARY A plan of a proposed subdivision or re-subdivision of land prepared in accord

with Section IIIB, to facilitate proper preparation of a definitive plan.

- PLAN, DEFINITIVE The plan of a subdivision as submitted (with appropriate application) to the Board for approval, to be recorded in the Registry of Deeds or filed with the Land Court when approved by the Board, and such plan when approved and recorded.
- PLANNING BOARD AGENT Town employee or consultant authorized by the Planning Board to review subdivisions and/or administer the regulations.
- RECORDED "Recorded" shall mean recorded in the Registry of Deeds of Bristol County, except that as affecting registered land, it shall mean filed with the Recorder of the Land Court. (Section 81-L of Chapter 41, M.G.L.)

RETAINING WALL A wall built to resist lateral pressure.

ROADWAY The portion of a street intended for vehicular travel.

SIGHT DISTANCE 1. The minimum distance that can be seen in all directions when stopped at an intersection from a point nine feet (9') behind the curb line, three and one half feet (3 1/2') high, observing an object four feet and three inches (4.25') high in the center of the approaching travel lanes.

> 2. Stopping sight distance as defined by the American Association of State Highway and Transportation Officials (AASHTO).

STREET, DEAD-END A segment of a street which only intersects another street at one end. For the purposes of this regulation any proposed street which intersects solely with a dead end street shall be deemed to be an extension of the dead end street.

- STREET, MAJOR A street which, in the opinion of the Board, is being used or will be used as a thoroughfare within the Town of Freetown, or which will otherwise carry a heavy volume of traffic (generally, over fifteen hundred (1500) vehicles per day). In residential areas, volume per day shall be computed at the rate of ten (10) trips per dwelling day.
- STREET, MINOR A street which, in the opinion of the Board, is being used or will be used primarily to provide access to abutting lots, and which will not be used for through traffic.

STREET, PRIMARY A street which connects two existing major streets.

STREET, SECONDARY A street intercepting one (1) or more minor streets and which, in the opinion of the Board, is used or will be used to carry a substantial volume of traffic (generally, over four hundred (400) vehicles per day) from such minor street(s) to a major street or community facility, and normally including a principal entrance street to a shopping

center, industrial park, planned unit development, or a large subdivision or group of subdivisions, and any principal circulation street within such subdivision. In residential areas, volume per day shall be computed at the rate of ten(10) trips per dwelling day.

SUBDIVISION "Subdivision" shall mean the division of a tract of land into two or more lots and shall include resubdivision, and, when appropriate to the context, shall relate to the process of subdivision of the land or territory subdivided; provided, however, that the division of a tract of land into two or more lots shall not be deemed to constitute a subdivision within the meaning of the subdivision control law if, at the time when it is made, every lot within the tract so divided has frontage on (a) a public way or a way which the Town Clerk certifies is maintained and used as a public way. or (b) a way shown on a plan theretofore approved and endorsed in accordance with the subdivision control law, or (c) a way in existence when the subdivision control law became effective in Freetown, having, in the opinion of the Planning Board, sufficient width, suitable grades, and adequate construction to provide for the needs of vehicular traffic in relation to the proposed use of the land abutting thereon or served thereby, and for the installation of municipal services to serve such land and the buildings erected or to be erected thereon. Such frontage shall be of at least such

distance as is then required by zoning by-law, for erection of a building on such lot. 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 or more buildings were standing when the subdivision control law went into effect in Freetown into separate lots on each of which one of such buildings remains standing, shall not constitute a subdivision. (Section 81-L of Chapter 41, M.G.L.)

SUBDIVISION CONTROL "Subdivision control" shall mean the power of regulating the subdivision of land granted by the Subdivision Control Law, Chapter 41, Section 81-A through GG inclusive as hereinafter amended.

TOWN Town of Freetown.

WALL See Retaining Wall.

WAY A way is synonymous with the terms road, street, highway, and avenue, and shall denote any such line or route for passage, whether public or private.

B. Approved 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 for sale of lots in a subdivision, or the construction of ways, or preparation therefor or the installation of utilities and municipal services therein, unless and until a Definitive Plan of such subdivision has been submitted and approved by the Planning Board as hereinafter provided.

C. Source of Information Required

In those cases in which the land shown on the plan is abutted by land of an owner not the owner of the land as shown, the Board may require a statement from the person who prepared the plan as to the source or sources of the information about the location of boundaries. A separate form for such statement will be furnished by the Board, see Form D, Designer's Certificate.

D. More Than One Building for Dwelling Purposes on Lot

Not more than one (1) building designed or available for use for dwelling purposes shall be erected or placed or converted to use as such on any lot in a subdivision, or elsewhere in the Town without the consent of the Board. Such consent may be conditional upon the providing of adequate ways furnishing access to each site for such building in the same manner as otherwise required for lots within a subdivision. (Section 81-Q of Chapter 41 M.G.L.)

E. Fees and Costs

1. <u>Filing Fees.</u> The minimum filing fee shall be as follows:

Subdivision approval not required plans (Form A) \$100.00 per lot. Preliminary plans (Form B) \$50.00 per lot. Definitive plans (Form C). \$100.00 per lot.

Administrative Fee: \$200.00 per submittal

Plus an additional \$3.00 (3 dollars) per foot of road to be constructed and five dollars (\$5.00) for every abutter submitted on the Form E Certified List of Abutters. Additional costs incurred by the Planning Board for advertising and sending notice to abutters by certified mail shall be borne by the Applicant. Approval and endorsement will be withheld from plans with improper filing fee payment.

 <u>Consultant/Legal Fees</u>. The fees of any professional consultants engaged by the Board to evaluate and provide information on subdivisions shall be borne by the applicant, as provided by pursuant to M.G.L. Chapter 44, Section 53G.

a) When reviewing an application for, or when conducting inspections in relation to an application, the Board may determine that the assistance of outside consultants is warranted due to the size, scale or complexity of a proposed project, because of a project's potential impacts, or because the Town lacks the necessary expertise to perform the work related to the application. The Board may require that applicants pay a "project review fee" consisting of the reasonable costs incurred by the Board for the employment of outside consultants engaged by the Board to assist in the review of a proposed project.

b) In hiring outside consultants, the Board may engage engineers, planners, lawyers, urban designers or other appropriate professionals who can assist the Board in analyzing a project to ensure compliance with all relevant laws, ordinances/bylaws, and regulations. Such assistance may include, but not limited to, analyzing an application, monitoring or inspecting a project or site for compliance with the Board's decision or regulations, or inspecting a project during construction or implementation.

c) Funds received by the Board pursuant to these regulations shall be deposited with the municipal treasurer who shall establish a special account for this purpose. Expenditures from this special account may be made at the direction of the Board without further appropriation. Expenditures from this special account shall be made only for services rendered in connection with a specific project or projects for which a project review fee has been or will be collected from the applicant. Accrued

interest may also be spent for this purpose. Failure of an applicant to pay a review fee shall be grounds for denial of the application.

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

e) Any applicant may take an administrative appeal from the selection of the outside consultant to the Board of Selectmen. Such appeal must be made in writing and may be taken only within 20 days after the Planning Board has mailed or hand delivered notice to the applicant of the selection. The grounds for such appeal shall be limited to claims that the consultant selected has a conflict of interest or does not possess the minimum, required qualifications. The minimum qualifications shall consist either of an educational degree in, or related to, the field at issue or three or more years of practice in the field at issue or a related field. The required time limit for action upon an application by the Board shall be extended by the duration of the administrative appeal. In the event that no decision is made by the Board of Selectmen within one month following the filing of the appeal, the selection made by the Board shall stand.

Approval Not Required Plans (ANR):

At the discretion of the Planning Board a refundable technical/legal review fee of fifty dollars (\$50.00) per lot may be filed with the Planning Board Clerk. For filing purposes, nonbuildable parcels and remaining land shall be considered lots. Failure by the applicant to post said fee for establishment of the review fee account shall be justification for a plan denial.

Preliminary Plans (Form B):

At the discretion of the Planning Board a technical/legal review deposit of two hundred and fifty dollars (\$250.00) plus fifty dollars (\$50.00) per lot or one dollar (\$1.00) per linar foot of roadway, whichever is greater shall be posted with the Planning Board Clerk and used as compensation to a qualified consultant. Surplus funds, if any, are to be returned to the applicant upon completion of the technical review. Failure by the applicant to post said fee for establishment of the review fee account shall be justification for a plan denial.

Definitive Plan (Form C):

At the discretion of the Planning Board a technical/legal review deposit of five hundred dollars (\$500.00) plus fifty dollars (\$50.00) per lot or four dollars (\$4.00) per linar foot of roadway, whichever is greater shall be posted with the Planning Board Clerk and used as compensation to a qualified consultant. Surplus funds are to be returned to the applicant. However, if the account is depleted prior to the technical review completion, the applicant will be required to supplement the account in an amount that the Board may feel is reasonably necessary to complete the review. Failure by the applicant to make the above referenced filing deposit or supplementary deposit, if necessary, shall be justification for plan disapproval.

F. Payment

All applications shall be accompanied by a check payable to the order of the Town of Freetown.

SECTION III - PROCEDURE FOR SUBMISSION AND APPROVAL OF PLANS

A. Plan Believed Not to Require Approval

1. <u>Submission of Plan</u>. 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 and five (5) contact prints thereof and two (2) copies of a properly executed Form A Application 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 to the Board for such determination accompanied by a copy of said application and describing the land to which the plan relates sufficiently for identification. If the notice is given by delivery, the Town Clerk shall give written receipt therefor.

The property owner of record should be present when submitting plans for the Planning Board's consideration. If the owner is not present, he or she shall be represented by an authorized agent with a notarized letter of authorization. Such plan believed not to require approval must be prepared and endorsed by a Professional Land Surveyor, licensed in the Commonwealth of Massachusetts.

In the case of land that lies in more than one city, township, and/or county, identical plans shall be prepared and submitted to the Planning Boards in both municipalities. No plan shall be endorsed as "Plan Believed Not to Require Approval" that does not meet the minimum frontage and area requirements of the Town of Freetown, which may include frontage and/or area in the other municipalities. All plans must conform with all current zoning regulations within the Town of Freetown.

- 2. <u>Contents</u>. Said plan shall be legibly drawn in accordance with the Rules and Regulations of the Registry of Deeds, Chapter 36, Section 13A as amended pertaining to plan size, material, lettering and related requirements. The plan scale shall preferably be forty feet (40') to the inch or such other scale as the Board may accept and shall contain the following:
 - a) Identification of the plan by name of owner of record and location of the land in question; the numbers of Freetown assessors' maps on which the land is located; the scale, north point, and date; and the name, signature, and stamp of a Professional Land Surveyor.
 - b) The statement "Approval Under Subdivision Control Law Not Required", and sufficient space for the date and the signatures of all members of the Board in the lower right-hand corner of the plan.
 - c) When a change in property lines is proposed, the new lines shall be shown as solid black lines, and the lines to be abandoned shall be shown broken. A tint is required around the inside of the new lot lines.
 - d) 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.
 - e) Notice of any decisions by the Board of Appeals, including but not limited to variances and exceptions, regarding the land or any buildings thereon.

- f) Names of abutters from the most recent local tax list unless the applicant has knowledge of any changes subsequent to the latest available Assessor's records.
- g) Names and status of (private or public) streets and ways shown on the plan.
- h) Bearings and distances of all lines of the lot or lots, easements, ways, etc. shown on the plan.
- i) Location of all existing structures, wells, septic systems, and underground structures including front yard, side and rear setback designations.
- j) Location of all bounds, brooks, fences, and walls relevant to boundaries.
- k) Locus map at a 1"=2,000' scale.
- 1) Area of land satisfying lot area requirements, including upland requirements.
- m) All water bodies and wetland areas shall be shown.
- n) Elevation and limits of the base flood.
- o) Zoning classification and location of any Zoning District boundaries that may lie within the locus of the plan, including aquifer protection districts. Dimensional regulations currently in effect, including any conflicts, shall also be listed.
- p) The location of at least three (3) permanent monuments on or near the locus.
- 3. <u>Endorsement of Plan Not Requiring Approval</u>. If the Board determined that the plan does not require approval, it shall without a public hearing and within twenty-one (21) days of submission, endorse the plan and notify the Town Clerk of its endorsement. The Board may add to such endorsement a statement of the reason approval is not required. The original plan shall be returned to the applicant, and the Board shall also notify the Town Clerk in writing of its action.
- 4. <u>Determination That Plan Requires Approval</u>. If the Board determines that the plan does require approval under the Subdivision Control Law, it shall, within twenty-one (21) days of submission of the plan, inform the applicant in writing, return the plan, and notify the Town Clerk in writing of its action.
- 5. <u>Failure of Board to Act</u>. If the Board fails to act upon a plan submitted under this section or fails to notify the Town Clerk and the person submitting the plan of its action within twenty-one (21) days after its submission, it shall be deemed to have determined that approval under the Subdivision Control Law is not required, and it shall forthwith make such endorsement on said plan, and on its failure to do so forthwith, the Town Clerk shall issue a certificate to the same effect.

B. Preliminary Plan

1. <u>Submission of a Preliminary Plan</u>. A Preliminary Plan of a subdivision may be submitted by the applicant and twelve (12) contact prints of it shall be filed with the Planning Board and one (1) set to the Board of Health. The submission of such a Preliminary Plan will enable the subdivider, the Planning Board, the Board of Health, Conservation Commission, the Highway Department, the Fire Department, the Police Department, Water Commission, and other Town agencies and owners of property abutting the subdivision to discuss and clarify the details of such subdivision

before a Definitive Plan is prepared. Therefore, it is strongly recommended that a Preliminary Plan be filed in each case.

A properly executed Form B application shall be filed with the Preliminary Plans submitted to the Planning Board. The applicant shall file, by delivery or registered mail, a notice with the Town Clerk stating the date of submission for such approval of a Preliminary Plan accompanied by a copy of a properly executed Form B application.

The preliminary plan shall be drawn and stamped by a Professional Land Surveyor and/or Professional Engineer licensed in the Commonwealth of Massachusetts. Any plan determined not to completely satisfy Section III, B-2, <u>Contents</u>, may be deemed not to have been submitted. Such plan may be returned to the applicant, and a notice of the Planning Board's determination sent to the Town Clerk. When brought into conformity with the requirements of Section III, B-2, <u>Contents</u>, such plan may be re-submitted and will be considered without prejudice.

Upon the original submittal of an application to the Town Clerk and the Planning Board, the application shall be considered to be conditionally accepted pending review of its contents. Within 21 days of the original submittal of the application, the Planning Board shall determine whether the application is complete. An application which does not contain all of the material described in Section III, B-2 shall not be considered to have been filed and shall not be accepted for processing. If an application is determined to be incomplete, the Planning Board shall notify the Town Clerk and the applicant in writing that the application has been determined to be incomplete setting forth the reasons for that determination and that the application is not considered to have been filed.

If the application is considered to be complete, or if the applicant and the Town Clerk are not notified that the application is incomplete within 21 days, the application shall be considered to be complete as of the date originally submitted.

If a revised application is submitted, it shall be considered to be a new application and shall be subject to the same procedures and determinations as to completemess as are set forth above.

The time periods set forth in these Subdivision Rules and Regulations and Chapter 41, M.G.L., during which the Planning Board shall issue a decision, will not start until all material required by these Regulations has been submitted.

- 2. <u>Contents.</u> The Preliminary Plan shall be drawn on tracing paper or reproduceable film at a suitable scale, preferably forty feet (40') to the inch. The Plan shall be designated as a "Preliminary Plan" and to form a clear basis for discussion of the details of the subdivision and for preparation of the Definitive Plan, the plan should contain the following:
 - a) The subdivision name, if any, boundaries, north point, date, scale legend and title "Preliminary Plan".
 - b) The locus of the land shown on the plan, at a scale no smaller than 1":2,000', with sufficient information to accurately locate the plan.
 - c) The names and addresses of the record owner of the land and the subdivider and the name and address of the designer, engineer or surveyor who made the plan, which shall appear in the lower right-hand corner.
 - d) The names of all abutters within three hundred feet (300'), as they appear on the most recent tax list, including owners of land separated from the subdivision only be a street.
 - e) The existing and proposed lines of streets, ways, easements including purposes, and any public or common areas within the subdivision.

- f) Major features of the land such as, but not limited to, existing walls, fences, monuments, structures, underground structures, utilities, wells, septic systems single free-standing large trees, wooded areas, outcroppings, swamps, wetlands, water bodies and natural waterways, and drainage ditches.
- g) The proposed system of sewage disposal, water installation and drainage, including adjacent existing natural waterways in a general manner.
- h) The approximate boundary lines of proposed lots, with approximate areas and dimensions.
- i) The names, locations and widths (right of way and pavement) of adjacent streets, or streets approaching or within reasonable proximity (within 300') of the subdivision. Also the status of said streets and ways (private or public).
- j) Existing and proposed topography, (2 foot intervals based on USGS datum).
- k) The proposed names of the proposed streets and the lots sequentially numbered.
- 1) The profiles of existing grades and approximate proposed finished grades of the roadways, drain, water and sewer utilities. Profiles to be at a horizontal 1"=40' scale and a vertical 1"=4' scale.
- m) Area of adjoining land and water of the applicant not presently being subdivided.
- n) Zoning classification and location of any Zoning District boundaries that may lie within the locus of the plan including aquifer protection districts. Dimensional regulations currently in effect shall also be listed, including any conflicts. All lots must conform to all zoning requirements.
- o) Notice of any decisions by the Board of Appeals, including but not limited to variances and exceptions, regarding the land or any buildings thereon.
- p) Elevation and limits of the base flood.
- q) Intersecting boundary lines of abutting lands.
- r) All sheets sequentially numbered.
- s) Location of adjacent private water supplies and septic systems within one hundred feet (100') of the subdivisions property line.
- t) Distance to nearest public water supply (if within 2500' or a Zone II or III).
- u) Existing curb cuts within fifty feet (50') of any new proposed intersection.
- v) Any test pit and soil logs performed to determine feasibility of construction and groundwater elevations.
- 3. <u>Approval.</u> The Planning Board may give such Preliminary Plan approval, within forty-five (45) days after submission, with or without modification or suggestion, after the Board's review with the Board of Health, Conservation Commission, Highway Department, Police Department, Fire Department, Building Inspector and Town Planner. Such approval does not constitute approval of the subdivision but facilitates the preparation of the Definitive Plan and the securance of final approval thereof. One (1) copy of the Preliminary Plan will be returned to the applicant. In the event of disapproval, the Planning Board shall state the reasons for its disapproval in accord with Section 81-U of Chapter 41. Approval shall be effective for seven (7) months from the date of plan submittal or until a Definitive Plan evolving from the Preliminary Plan is filed, whichever comes first.

C. Definitive Plan.

- 1. <u>Submission of a Definitive Plan</u>. Any person who submits a Definitive Plan of a subdivision to the Planning Board for approval shall file with the Board the following (all items required in paragraphs 1 and 2 of this section shall be submitted for a Definitive Plan to be "duly submitted" in accord with the General Laws of Massachusetts):
 - a) An original reproducible drawing of the Definitive Plan and twelve (12) contact prints thereof, dark line on white background. The original drawing will be returned after approval or disapproval. Plan distribution shall be the same as a Preliminary Plan filing.
 - b) An original properly executed application Form C, Application for Approval of a Definitive Plan and eight (8) copies, including the time within which the public utilities in the subdivision shall be provided; Form D, Designer's Certificate including three (3) copies; and Form E, Certified List of Abutters including three (3) copies. Approval of all plans shall be upon the condition that all ways shown thereon and public utilities required by the Board shall be completed and installed within the time estimated by the utilities and specified by the developer.
 - c) The appropriate filing fee as specified in Section II, E (<u>Fees and Costs</u>) of these Rules and Regulations.
 - d) The applicant shall file by delivery or registered mail a notice with the Town Clerk stating the date of submission for such approval and accompanied by one original completed Application for Approval of Definitive Plan (Form C).
 - e) The applicant shall file with the Planning Board clerk a Municipal Lien Certificate.
 - f) The applicant shall file two (2) sets of contact prints and the Form C application with the Board of Health. (See Section III.E).
- 2. <u>Contents</u>. The Definitive Plan shall be prepared by a professional engineer and land surveyor registered in Massachusetts and shall be clearly and legibly drawn in black india ink upon linen or mylar. The plan shall be at a scale of one inch (1") equals forty feet (40'), or such other scale as the Planning Board may accept to show details clearly and adequately, and shall include plans and profiles of each individual street at a scale of one inch (1") equals forty feet (40') horizontal and one inch (1") equals four feet (4') vertical. All elevations shall refer to the U.S.G.S. Datum. Sheet sizes shall be twenty-four by thirty-six inches (24" x 36") including a three quarter inch (3/4") border. All plans shall be accompanied by a sheet showing the entire subdivision and adjacent streets and dimensions of the lots and streets and lot numbers. The Definitive Plan shall contain the following information:
 - a) A title on each sheet, appearing in the lower right-hand corner of the plan, showing the name of the subdivision, if any; the date; scale; the names and addresses of the applicant; and the names of the designer, engineer and surveyor who made the plan.
 - b) North point on all appropriate sheets, benchmark at U.S.G.S. datum, and boundaries of the subdivision.
 - c) Location and ownership of abutting property as it appears on Form E, Certified List of Abutters unless the applicant shall have more recent knowledge of such abutters, including all abutting land owned by the applicant not presently being subdivided, and all other land within three hundred feet (300') of the boundaries of the land shown in the subdivision including across an existing street. A certified list of abutters (Form E) is required from an abutting Town if the proposed subdivision is within three hundred feet (300') of a Town line.

- d) Intersecting boundary lines of abutting lands.
- e) Major features of the land, such as existing waterways, swamps, all wetlands and water bodies, natural drainage courses, walls, fences, structures, underground structures, utilities, historic markers, milestones, bridges, clearly defined trails, large trees, wooded areas, outcroppings and ditches which exist on or are contiguous and relevant to the site at the time of survey.
- f) Lines of existing and proposed streets, ways, lots, lot numbers or other designation of each lot, easements (including purposes), and public or common areas within the subdivision. (The proposed names and numbers of proposed streets and lots shall be shown in pencil until they have been approved by the Planning Board.)
- g) Sufficient data to determine the location, direction and length of every street and way line, lot line, boundary line, easement line, and to establish these lines on the ground. This shall include the lengths and bearings of plan and boundary lines of all subdivision lot lines including lot frontage on the streets, of the boundary lines of all streets, easements etc., and the lengths, radii, tangents, and central angles of all curves in lot lines, street lines, easements etc., All angle points, or intersections of tangents along the street lines, shall be shown, areas of lots with sequential lot numbers and the area and frontage on public ways as set forth in Section 81-L of Chapter 41, M.G.L. of adjoining lands of the applicant not included in the subdivision will be shown.
- h) Location of all permanent monuments properly identified as to whether existing or proposed.
- i) Location, names and present widths of streets or private ways bounding, approaching or within reasonable proximity (within 300') of the subdivision, showing both roadway widths and rights-of-way widths.
- j) Indication of all easements, covenants or restrictions applying to the land and their purposes, including any decision on appeal or any variances or exceptions made by the Zoning Board of Appeals applicable to the subdivision of the land or any building thereon.
- k) If the property that comprises the subdivision or any part or boundary thereof has been examined, approved, and confirmed by the Massachusetts Land Court, such information shall be noted on the plot with case numbers and other pertinent references to Land Court Procedure, and the same requirement shall apply to any adjoining parcels of land of the applicant.
- 1) Suitable space on every plan sheet to record the action of the Planning Board and the signatures of the five (5) members of the Planning Board, including the date of approval and the date of endorsement.
- m) Proposed layout (including plans and profiles) of street construction, storm drainage, water supply, sewage disposal systems, and all other utilities, including details required for construction as deemed by the Board (size, grades, inverts, location by station and offset, and material type).
- n) Existing roadway profiles drawn in fine black line for existing centerline, dotted for left and dashed for right side, and the proposed profile of the existing finished center-line drawn in thick black solid line of proposed streets at a horizontal scale of one inch (1") equals forty feet (40') and vertical scale of one inch (1") equals four feet (4'). At least two (2) benchmarks, with descriptions, are to be shown on the plans and profiles, and existing and proposed grade elevations at every 50 foot (50') station on tangents and at every twenty five foot (25') station within vertical curves. All existing and proposed intersections and sidewalks shall be shown with all proposed grade elevations calculated. The plan and profile of one (1) street only shall be drawn on each sheet.

Plan and profiles of easements are required to verify maintenance equipment accessability.

Elevations are to be referred to as either mean sea level or zero equals mean low water as established by the Coast and Geodetic Survey. Gradient shall be shown by figures expressed in percent.

Elevations and locations of vertical curve PVC'S, PVT'S, high points, low points, "K" values and curve lengths must be shown. (Point of Vertical Curvature, Point of Vertical Tangency)

- existing and proposed topography at two foot (2') contour intervals. The Board may require additional information on abutting land, whenever it is deemed necessary, to ensure compatibility of grades and drainage. Reference benchmarks, including descriptions must be identified. The road stationing shall be shown on the grading plans.
- p) A signed statement that all surveying conforms to Land Court Standards shall appear on the original "plot" sheets.
- q) Boundary traverse closure tables showing the areas and precision will be supplied for all lots, streets and easements.
- r) Location and results of soil, percolation, and water table tests using the Department of Environmental Protection Soil Evaluation procedures under Title V. Water table tests are required under all proposed drainage detention facilities and adjacent to any road cuts greater than three feet (3').
- s) Drainage design. Existing drainage characteristics of the general area of the proposed subdivision, and the effect of the proposed use and any proposed drainage facilities on the existing drainage characteristics, shall be included with the plan.

A drainage plan will be prepared by a Registered Professional Engineer in the Commonwealth of Massachusetts and show existing and proposed streets, lots, two foot (2') contours, and other pertinent data; the drainage limits and acreage of the area tributary to each storm-water inlet and culvert, location and type of inlets proposed; and location, size, length, invert elevations and slope of proposed drains and culverts, structural details of inlets, manholes, pipe, headwalls, and all other drainage structures required to complete the plan shall be attached. (The grading plan may be used provided that it includes all the information required here. See Section IV, Design and Construction Standards, Part D, Drainage and Runoff Control, for details on drainage standards) and appendix B.

- t) Location and species of proposed street trees will be shown including those location of trees to be retained as determined in the field by the Highway Surveyor.
- u) Cross sections typical of each street, roadway and sidewalk to be constructed.
- v) In tabular form as follows for each sheet of the subdivision plan as submitted:
 - 1) The total area which is being subdivided on each sheet.
 - 2) The total area of lots included on each sheet.
 - 3) The total of areas dedicated for street purposes, drainage, sewer or utility easements on each sheet.
 - 4) The total of areas reserved for parks, schools, and other public use on each sheet.
- w) Locus map at a one inch (1") equals two thousand feet (2000') scale with a minimum of two (2) existing streets shown.
- x) A letter requesting all waivers of the Subdivision Rules and Regulations.
- y) All "plot" sheets to be stamped and signed by a professional Land Surveyor licensed in the Commonwealth of Massachusetts and all other sheets to be signed and stamped by a Registered Professional Engineer licensed in the Commonwealth of Massachusetts.
- z) Zoning Classification and location of any Zoning Districts boundaries that may lie within the locus of the plan. Dimensional regulations currently in effect shall also be listed including any conflicts. All lots must conform to all zoning requirements.
- aa) Each lot shall be shown in its entirety on at least one "plot" sheet.

bb) The following Covenant note shall be supplied on all the plot sheets if not posting other security:

SUBDIVISION APPROVED (DATE) , SUBJECT TO COVENANT CONDITIONS SET FORTH IN A COVENANT EXECUTED BY (APPLICANT) , (DATE) AND TO BE RECORDED HEREWITH.

- cc) Notice of any decisions by the Board of Appeals, including but not limited to variances and exceptions, regarding the land or any buildings thereon.
- dd) Elevation and limits of the base flood.
- ee) All sheets consecutively numbered.
- ff) Location of adjacent private water supplies and septic systems within one hundred feet (100') of the subdivisions property line.
- gg) Distance to nearest public water supply (if within two thousand five hundred feet (2500') or a Zone II or III).
- hh) Existing curb cuts within fifty feet (50') of any new proposed intersection.
- ii) Registry of Deeds block on all sheets.
- jj) A note that states: "All construction shall conform to the Rules and Regulations of the Town of Freetown Planning Board and Highway Department specifications."
- kk) A Town Clerk note on each "plot" sheet that states:

FREETOWN TOWN CLERK CERTIFICATION I, _____, CLERK OF THE TOWN OF FREETOWN, HEREBY CERTIFY THAT NOTICE OF APPROVAL OF THIS PLAN BY THE PLANNING BOARD WAS RECEIVED AND RECORDED AT THIS OFFICE ON _____. NO NOTICE OF APPEAL WAS RECEIVED DURING THE TWENTY DAYS NEXT FOLLOWING SUCH RECEIPT AND RECORDING OF SAID NOTICE.

DATE TOWN CLERK

- ll) Proposed driveway locations.
- mm) Construction standard detail sheets consisting of Freetown Standards germane to the applicant's subdivision, (See Appendix A-E).
- 3. <u>Determination of Completeness.</u> Upon the original submittal of an application to the Town Clerk and the Planning Board, the application shall be considered to be conditionally accepted pending review of its contents. Within 30 days of the original submittal of the application, the Planning Board shall determine whether the application is complete. An application which does not contain all of the material described in Section III, C shall not be considered to have been filed and shall not be accepted for processing. If an application is determined to be incomplete, the Planning Board shall notify the Town Clerk and the applicant in writing that the application has been determined to be incomplete setting forth the reasons for that determination and that the application is not considered to have been filed.

If the application is considered to be complete, or if the applicant and the Town Clerk are not notified that the application is incomplete within 30 days, the application shall be considered to be complete as of the date originally submitted.

If a revised application is submitted, it shall be considered to be a new application and shall be subject to the same procedures and determinations as to completeness as are set forth above.

The time periods set forth in these Subdivision Rules and Regulations and Chapter 41, M.G.L., during which the Planning Board shall notify parties in interest, hold a public hearing, and issue a decision, will not start until all material required by these Regulations has been submitted.

D. Soil Survey and Percolation Tests

Where appropriate, the Planning Board requires at the expense of the applicant soil surveys and percolation tests utilizing the Department of Environmental Protection's Soil Evaluation Procedures under Title V to establish the suitability of the land for the proposed storm drainage installations, and proposed street construction. Such soil surveys and tests must be filed with all plans.

E. Review By Town Officials

- 1. <u>Review by Board of Health as to Suitability of the land</u>. At the time of filing of the Definitive Plan, the applicant shall also file with the Board of Health two (2) contact prints of the Definitive Plan, dark line on white background, a copy of the Form C, together with such information on the nature of percolation tests and deep test holes as the Board of Health may require. The Board of Health shall within forty-five (45) days after the filing of the plan report to the Planning Board in writing approval or disapproval of said plan. If the Board of Health disapproves said plan it shall make specific findings as to which, if any, of the lots shown on such plan cannot be used for building sites without injury to the public health, and include such specific findings and the reasons therefore in such report, and, where possible, shall make recommendations for the adjustment thereof.
- 2. <u>Review by Other Town Officials.</u> It is the Board's responsibility to distribute copies of the Definitive Plan to Town Officials as follows:

One (1) copy each to the Conservation Commission, Assessors Office, Highway Surveyor, Fire Department, Police Department, Water Commission, Town Planner, and the Building Inspector.

Before the Definitive Plan is approved, the Board will request written statements from the above officials with regard to the proposed improvements in the following respect:

- a) Conservation Commission as to potential involvement with Chapter 131, Section 40, G.L. and the effects of the subdivision on streams, wildlife and similar considerations within the scope of the Conservation Commission.
- b) Highway Surveyor as to the design of the street system, location of easements, monuments, street lights, and drainage systems.
- c) Fire Department as to location of hydrants, installation of the alarm system, street names and emergency access.
- d) Police Department as to street safety, both vehicular and pedestrian, street names and access for emergency vehicles.
- e) Town Planner as to overall layout of streets, lots, and drainage systems in terms of adherence to principles of good planning.

- f) Building Inspector as to suitability of lots for building purposes and adherence to principals of good planning.
- g) Assessors Office as to whether the property is under special assessments or if back taxes are owed.
- h) Water Commission as to their Rules and Regulations.

F. Public Hearing

Before taking any action to approve, modify and approve or disapprove a Definitive Plan, the Board shall hold a hearing at which parties in interest shall have an opportunity to be heard, in person or by agent or attorney. Notice of the time and place of such hearing and of the subject matter, sufficient for identification shall be published in a newspaper of general circulation in the Town of Freetown once in each of two (2) successive weeks, the first publication to be not less than fourteen (14) days and the second not less than seven days before the date of the hearing and by mailing a copy of such advertisement to the applicant and to all owners of land abutting the land and all owners of land within three hundred feet (300') of a property line of the land shown on the plan as shown on the most recent tax list, including across an existing street.

G. Planning Board Procedure

The procedure that the Board will follow with regard to approval, disapproval or modification of the Definitive Plan submitted by the applicant will be that as set forth in Chapter 41, Section 81-U of the Massachusetts General Laws, as amended. In summary, the Board, after receiving the plan and profiles, will review the same to determine whether they are in compliance with its adopted Rules and Regulations.

Before approval of the plan, the Board shall establish that the street pattern is safe and convenient, that proper provision is made for street extension and that all other purposes of the Massachusetts General Law are met. The Board may, as a condition of granting approval under Section 81-U, impose reasonable requirements designed to promote the health, convenience, safety and general welfare of the community and to benefit the Town. In such event, the Board shall endorse such conditions on the plan to which they relate, or set forth a separate instrument attached thereto, to which reference is made on such plan and which shall for the purpose of the Subdivision Control Law be deemed to be a part of the plan.

H. Performance Guarantee

Before endorsement of its approval of a Definitive Plan of a subdivision by the Planning Board, the subdivider shall agree to complete the required improvements (construction of ways and its installation of municipal services) specified in Section IV for all lots in the subdivision, such construction and installation to be secured on one or in part by one and in part by the other, of the following methods which may from time to time be varied by the applicant:

- 1. <u>Final Approval With Covenant.</u> The subdivider shall file a Covenant (see Form F), executed and duly recorded by the owner of record, running with the land, whereby such ways and services as specified in Section IV not covered by bond or deposit under "2." hereof, shall be provided to serve any lot before such lot may be built upon or conveyed, other than by mortgage deed.
- 2. <u>Final Approval With Bonds or Surety</u>. The subdivider shall either file a performance bond (see Form G) or a deposit of money (see Form H) or negotiable securities (see Form I) or bank passbook (see Form J) in an amount determined by the Planning Board to be sufficient to cover the cost of all or any part of the improvements specified in Section IV not covered by a Covenant

under H-l hereof. Such bond or security, if filed or deposited, shall be approved as to form and manner of execution by the Town Counsel and as to sureties by the Town Treasurer and shall be contingent on the completion of such improvements within a reasonable time period specified by the Board.

The period for completion in H-l and H-2 may be extended by the Planning Board at the written request of the subdivider accompanied by satisfactory proof that such extension is necessary and in the public interest.

I. Approval or Disapproval

The action of the Board in respect to such plan shall be by vote, copies of which shall be filed with the Town Clerk and sent to the applicant. If the Board modifies or disapproves such plan, it shall state in its vote the reasons for its action. Failure of the applicant to submit revised plans and other required submittals within six (6) months of approval with modification shall automatically rescind approval of the plan. The Board shall rescind its disapproval if, within six (6) months of such disapproval, the applicant submits revised plans and other required submittals fully conforming to the Rules and Regulations of the Board and resolving the specific reasons for disapproval.

The action of the Board to approve or disapprove a definitive plan must occur within ninety (90) days after submission, except in the case of a residential subdivision, where no preliminary plan has been submitted and acted upon or where forty-five (45) days has not elapsed since submission of such preliminary plan, the Board has one hundred thirty-five (135) days to take final action on the definitive plan.

At least twenty (20) days prior to endorsement, all required Covenants shall be provided to the Board's agent, along with a Designer's Certification that title to the premises shown on said plan and appurtenance thereto, including any off-site easements and rights-of-way, are in the Applicant's name and are free of all encumbrances, or that the encumbrances set forth will not preclude any required subdivision improvements.

Final approval, if granted, shall be endorsed on the original drawing of the Definitive Plan by the signatures of a majority of the Planning Board but not until the statutory twenty (20) day appeal period has elapsed following the filing of the Board's certificate of approval or disapproval, as the case may be, with the Town Clerk and said Clerk has notified the Board that no appeal has been filed. If appeal has been made, said endorsement shall be made after the entry of a final decree of the Court obtaining the approval of such plan. Final approval shall be subject to the construction specifications contained herein and to the rules and requirements of the Planning Board. After the Definitive Plan has been approved and endorsed, the Board shall return the original to the applicant.

After endorsement the applicant will supply to the Planning Board all of the approved plans on computer disk compatible with AutoCad, Version 12.

The Board may extend the period permitted by statute between submission of a Definitive Plan and action thereon upon written request of the applicant.

Approval of the Definitive Plan does not constitute the laying out or acceptance by the Town of streets shown on the plan.

- 1. <u>Time for Completion</u>. If the ways in any subdivision are not completed and the utilities aforesaid are not installed within the time so agreed to by the applicant or so required by the Board, any such bond may be enforced and any such deposit may be applied by the Planning Board for the benefit of the Town. Ways or portions thereof not completed within the time required shall thereafter be completed in accordance with the design and construction standards of the Board in effect upon the expiration of such time.
- 2. <u>Endorsement</u>. The endorsement of the plan approval by the Board shall be valid for a period of eight (8) years from the date of said endorsement. Beyond eight (8) years following the date of endorsement of the Definitive Plan, any undeveloped areas must conform to the current Protective By-Laws and the Rules and Regulations.

J. Recording

The applicant shall file all approved Definitive Plans and the Covenant, if any, at the Registry of Deeds, and shall notify the Board in writing, presenting evidence of the recording of the plan and the Covenant. The Building Inspector shall not issue any building permits for the subdivision until evidence of the recording of the plan and covenant have been received by the Board. The Applicant shall deliver to the Board one (1) copy of the approved and recorded Definitive Plans, and a copy of an affidavit filed by the owner stating that the title to the premises shown on said plan and appurtenances thereto are in the name of the applicant and free of all encumbrances or with encumbrances as set forth. Failure to do so within six months will permit the Board to vote to recind said plan.

K. Release of Performance Guarantee

Upon the completion of ways and the installation of municipal services in accordance with these Rules and Regulations, security for the performance of which was given by bond, deposit or covenant, or upon the performance of any covenant with respect to any lot, the applicant may send by registered mail to the Town Clerk a written statement in duplicate that the said construction or installation in connection with which such bond, deposit or covenant has been given, has been completed in accordance with said Rules and Regulations, such statement to contain the address of the applicant, and said Clerk shall forthwith furnish a copy of said statement to the Planning Board. If the Planning Board determines that said construction or installation has been completed, it shall release the interest of the Town in such bond and return the bond or deposit to the person who furnished the same, or release the covenant by appropriate instrument, duly acknowledged, which may be recorded (see Form K).

If the Board determines that said construction or installation has not been completed, it shall specify to the applicant in writing the details wherein said construction and installation fails to comply with its Rules and Regulations and do so within forty-five (45) days after the receipt by said Clerk of said statement. All obligations under the bond shall cease and terminate by operation of law, any deposit shall be returned and any such covenant shall become void. In the event that said forty-five (45) day period expires without such specification, or without the release and return of the bond or return of the deposit or release of the covenant acknowledged, the Town Clerk shall issue a certificate to such effect, duly acknowledged, which may be recorded. Final Release of Performance Guarantee will not be made until an As-Built plan meeting Section III.1. and an Acceptance Plan meeting Section IV A.8. are submitted, reviewed, all construction work deemed acceptable and a revised As-Built, and/or an Acceptance Plan (meeting Section IV,A,8.) submitted if any field corrections were deemed required.

The subdivider shall file with the Planning Board an As-Built plan on mylar and on a computer disk compatible with AutoCad, Version 12 of the completed street or streets, utilities and easements together with proper legal descriptions for initiating an article in the Town Warrant pursuant to the acceptance of the ways by the Town Meeting and shall grant a deed to the Town of the streets, utilities and easements, as contained in the plan said deed to be recorded by the Town upon acceptance of the streets by the Town Meeting (see also Section IV, A-8 and 9. Eleven (11) contact prints must also be supplied.

- 1. The As Built plan will meet the following criteria:
 - a. Scale one inch (1") equals forty feet (40')
 - b. 24" X 36" sheets
 - c. Index plan at one inch (1") equals one hundred feet (100') or otherwise approved by the Board.
 - d. A signature block for the Planning Board to sign when the road construction and as-built plan are complete and acceptable.
 - e. Professional Land Surveyor's stamp and signature
 - f. Lot numbers
 - g. Name of subdivision
 - h. Name of street(s)
 - i. Date
 - j. Name of owner
 - k. Name of subdivider
 - l. Name of engineer
 - m. North point and reference
 - n. Bench marks
 - o. Locus map (1"=2000')
 - p. Intersecting boundary lines of abutting land

- q. All necessary bearings, lengths of lines and radii, tangents, arc lenghts, and central angles of curves of all lot lines, street lines and boundary lines, etc. needed to adequately describe but not limited to the following:
 - 1. streets
 - 2. ways
 - 3. lots
 - 4. easements
 - 5. common or public areas
- r. Sufficient data to determine the locations, elevation, direction and length of:
 - 1. streets
 - 2. ways

s.

- 3. lot lines
- 4. boundary lines
- 5. Pavement and right of way widths
- 6. Location of permanent monuments
- 7. Location and names of streets intersecting the subject area
- Locations of the following (station and offset where appropriate):
- 1. storm drains and all appurtances
- 2. water mains and all appurtances
- 3. sewer mains and all appurtances
- 4. other underground and above ground utilities (electric, telephone, gas, etc.) and all appurtances.
- 5. Hydrants
- 6. water services, gate valves and sewer services including ties to buildings and other permanent structures.
- 7. street signs
- 8. headwalls
- 9. wheelchair ramps
- 10. guardrails
- 11. curbing and/or berms
- 12. edge of pavements
- t. Sizes and material type of the following:
 - 1. storm drains
 - 2. water mains
 - 3. sewer mains
 - 4. gas mains
- u. Rim and invert elevations of the following:
 - 1. storm drains
 - 2. sewer mains
- v. sidewalks and driveways
- w. U.S.G.S. elevation datum
- x. U.S.G.S. bench marks
- y. Original datum bench mark described
- z. Rates of gradients for drainage and sewer mains.
- aa. Roadway centerline stationed.
- bb. Offsite easements shown and completely described.
- cc. Profiles should meet the following requirements:
 - 1. Horizontal scale: 1"=40' vertical scale: 1"=4'
 - 2. Proposed center line grades-heavy line
 - 3. Grade elevations at 50' stations
 - 4. Locations of the following (station and offsets as appropriate):
 - a. storm drains and all appurtances
 - b. sewer mains and all appurtances
 - c. headwalls
 - 5. Sizes and material type of the following:
 - a. storm drains
 - b. sewer mains

- 6. Rims and inverts of the following
 - a. storm drains
 - b. sewer mains
- 7. U.S.G.S. elevation datum
- 8. Rates of gradients for drainage and sewer mains.
- 9. Roadway centerline stationed.
- 10. Off street easements shown with all utilities.
- 2. A preliminary Utility As-Built Plan will be supplied by the applicant (six (6) contact prints), reviewed and approved of by the Planning Board before any bituminous concrete is installed. If any construction modifications are required they also will be performed, a revised preliminary asbuilt submitted, reviewed and approved by the Planning Board prior to any bituminous concrete being installed. The preliminary Utility As-Built Plan must meet all applicable criteria of paragraph 1 above. All applicants must plan ahead sufficiently to allow adequate time for Planning Board review and approval.

SECTION IV - DESIGN AND CONSTRUCTION STANDARDS

A. Design and Construction Standards

- 1. No street or way through private property shall be recommended for acceptance by the Town unless the same be previously constructed and completed in accordance with the appropriate Standard Cross Section (See Appendix A) and the following specifications.
- 2. Unless otherwise specified, all the work and the materials used in the work to be done shall conform to the requirements of the "Commonwealth of Massachusetts, Highway Department, Standard Specifications for Highways and Bridges, 1988 Edition as amended", hereinafter referred to as the Standard Specifications, as amended and the Special Provisions included hereinafter.
- 3. Supplementing the aforesaid Standard Specifications, certain specifications or special provisions shall apply particularly to the work to be done hereunder. References in the following specifications, unless otherwise stated, are to be aforesaid Standard Specifications, amendments or addenda. These specifications and special provisions shall take precedence and shall govern when they are stricter.
- 4. To facilitate reference, each paragraph in these specifications is noted with paragraph number of the particular section as contained in the Standard Specifications.
- 5. All work and materials shall conform to the latest requirements of the American Disability Act (ADA) and the Massachusetts Architectural Access Board (MAAB). The ADA and MAAB regulations take precedence over these regulations.
- 6. The context of work required is as shown upon approved plans, and is in compliance with the Standard Cross Section Plans. Stakes shall be set which will indicate the exact amount of cut or fill.
- 7. As each construction operation is completed, it shall be approved by the proper Town authority prior to starting work on the succeeding operation (see Section V, D, <u>Inspection Notices</u>).
- 8. At the time the street or way or portion thereof is ready for acceptance and to facilitate acceptance by the Town of Freetown, the developer shall have prepared and certified by a Professional Land Surveyor licensed in the Commonwealth of Massachusetts, a "Plan of Acceptance" that meets the following criteria:
 - a. Scale: 1"=40'
 - b. North Arrow and reference

- c. They must be supplied on the original material (linen or mylar) along with two sets of sepia prints and eleven sets of contact prints.
- d. 24" x 36" sheets
- e. Street name
- f. $3\frac{1}{2}$ " by $3\frac{1}{2}$ " registry block
- g. Certification and stamped by a Professional Land Surveyor licensed in the Commonwealth of Massachusetts.
- h. Locus map
- i. Location of all monuments
- j. Dimensions of streets(widths, areas, etc..)
- k. All necessary bearings, lengths of lines and radii, tangents, arc lengths, and central angles of curves of all street lines and boundary lines, etc. needed to adequately describe but not limited to the following:
 - 1. streets
 - 2. ways
 - 3. easements
 - 4. common or public areas
- 1. Ownership of abutting lots
- m. Lot lines within one hundred feet (100') of the street right-of-way and/or easements
- n. The acceptance plan must be recordable at the Registry of Deeds or Land Court as applicable.
- o. A signature block for the Planning Board to sign when the road is acceptable for acceptance by the Town of Freetown.
- p. A blank space (4" x 8") shall be provided on the lower right hand corner on the plan for a title block to be filled in by the developer. The Surveyor shall place a certification on the plan stating "The street (or way or portion thereof) is laid out and the bounds have been set as shown on this plan" and shall be dated, signed and the surveyor's stamp affixed thereon. The plan shall be submitted to the Board of Selectmen.
- 9. The developer shall have the original plans and profiles that were submitted to the Planning Board and that are on file in the Planning Board office, corrected and certified by his Engineer and Surveyor to show the actual as built locations and grades of all utilities and roadway profile and any changes authorized by the Planning Board. See Section III.K.

B. Streets and Roadways

1. LOCATION

a) All streets in the subdivision shall be designed so that, in the opinion of the Planning Board, they will provide safe vehicular travel and an attractive street layout in order to obtain the maximum safety and

amenity for future residents of the subdivision, and they shall be in accord with the Rules and Regulations of the Planning Board, Board of Selectmen, and the Highway Surveyor.

- b) The proposed streets shall conform in location, and design, to any existing plans of the Planning Board, and where required by the Planning Board, to the existing street system. Street names are to be approved of by the Planning Board.
- c) Provision satisfactory to the Planning Board shall be made for the proper protection of streets, or for access to adjoining property, whether or not subdivided.
- d) Reserve strips prohibiting access to streets or adjoining property shall not be permitted, except where, in the opinion of the Planning Board, such strips shall be in the public interest.
- e) Where the proposed streets are to connect to existing travelled ways the developer must get permission from the Highway Surveyor prior to commencement of any construction.

2. ALIGNMENT, GRADE, DEAD-END AND INTERSECTIONS

a) These shall be in accordance with the standards in Table 1.

Characteristic	Primary, Major and	Minor
	Secondary Streets	Streets
Horizontal Alignment		
Minimum radius at centerline, ft.	400	150
Vertical Alignment		
a) Minimum "K" Value	30	30
b) Minimum clear sight distance at 4.5 ft.	350	200
above pavement, ft.		
c) Minimum vertical curve length, ft.	200	100
Grade (1)		
a) Maximum, percent	6.0	9.0
b) Minimum, percent	1.0	1.0
Intersection (2)		
a) Minimum intersection angle, degrees (3)	60	60
b) Minimum centerline offset, ft.	150	150
c) Minimum radius at edge of roadway (4)	30	30
d) Sight distance, ft.	270	270

TABLE 1. RECOMMENDED STREET DESIGN STANDARDS

Dead End Streets (5)		
Maximum length with a turnaround, ft.	Not Permitted	750'(5)
Minimum turnaround radius at edge of		
roadway, ft.	Not Permitted	50' (6)
Minimum turnaround radius at property		
line, ft.	Not Permitted	60' (6)

- (1) Where changes in grade exceed one percent (1%), vertical curves, as required by the Board will be provided; and where a grade is two percent (2%) or greater within one hundred and fifty feet (150') of the intersection of street right-of-way lines, there shall be provided a levelling area of at least two hundred feet (200'), with a maximum grade of two percent (2%).
- (2) Streets shall be laid out so as to intersect at intervals in a range of six hundred feet (600') to twelve hundred feet (1200') in length, unless otherwise specified by the Planning Board. In special instances the Planning Board may approve an easement for a future street, in lieu of actual construction of a cross street.
- (3) Streets shall be laid out so as to intersect as nearly as possible at right angles. No street shall intersect any other street at less than sixty (60) degrees.
- (4) Property lines at street intersection shall be rounded or cut back to provide for a curb radius of not less than thirty feet (30'). However, when the intersection of two (2) streets varies more than ten (10) degrees from a right angle, the radius of the curve at the obtuse angle may be less and of the acute angle may be greater than thirty feet (30') to the extent approved or required by the Planning Board.
- (5) For the purposes of this section, any proposed street which intersects solely with a dead-end street shall be deemed to be an extension of the dead-end street. Dead-end streets and their extensions, if any, shall not be longer than seven hundred and fifty feet (750'). A dead-end street and their extensions, if any, may be constructed up to a length, but no longer than one thousand, five hundred feet (1500') as long as it's constructed to the standards of a Secondary street.
- (6) If the dead-end street is not intended to connect with another street at some future point in time, the Planning Board may, at its option, in a non-residential subdivision, require a minimum outside roadway diameter of one hundred forty feet (140'), a property line diameter of one hundred sixty feet (160') and the placement of a circular landscaped island with minimum radius of twenty feet (20') at the center of the turnaround. The landscaping and trees shall be with a low maintenance ground cover acceptable to the Planning Board and the Highway Surveyor.

3. CROSS SECTIONS

a) Cross-sections shall be in accordance with the standards as shown in Table 2.

TABLE 2.	STREET	CROSS	SECTIO	NAL	DESIGN	STANDARDS	
Cross-section		Pri	mary	Majo	or	Secondary	Minor
Item		Str	eet	Stre	eet	Street	Street
Minimum right-of-wa	ay	60'		50'		50'	42'
width (feet) (1)							

Pavement width (ft.)

(including parking lanes				
where applicable but not				
shoulders)	40'	30'	30'	24'
Minimum shoulder width				
(ft. each)	10'	10'	10'	9'
Planting strips, minimum				
width of each (ft.) (2)				
(without sidewalk)	10'	9.5'	9'	8'
(with sidewalk)	5'	4.5'	4'	3'

TABLE 2.(Continued)	STREET CROSS	SECTIONAL	DESIGN STAN	IDARDS
Cross-section Street	Primary Street	Major Street	Secondary Street	Minor Street
Sidewalk, minimum width of each (ft.) (3)	5'	5'	5'	5'
Curbing required throughout Curbing required at	Yes	Yes	No	No
intersections only	No	No	Yes	Yes

- (1) Includes shoulders where applicable.
- (2) Shall be between berm/curb and property line or berm/curb and sidewalk.
- (3) The Board shall require two (2) sidewalks when deemed necessary.
 - b) When on a secondary or minor street and potential volume warrants, the Board may require greater right-of-way and pavement width than that specified above and may require construction of a divided highway.
 - c) When a major street will provide the only access for lots fronting on a length in excess of five hundred feet (500') or where, on a major street, potential volume warrants, the Planning Board may require construction of a divided roadway.
 - d) If an existing cul-de-sac is extended, it is the responsibility of the applicant to remove the existing "bulb" if so requested by the Board. The Board may require the applicant to prepare, file and record plans to give the remaining "extra" land to the abutters.
 - e) One hundred foot (100') centerline tangents are required between reverse curves.
 - f) Roadways shall be constructed for the full length and width. The centerline of such roadways shall coincide with the centerline of the street rights-of-way, unless a minor variance is specifically approved by the Board, by waiver.

g) The location of all utilities and planting within the cross-section shall be determined by the Board.

4. ROADWAY CONSTRUCTION

Numbers refer to specific sections in the Standard Specifications. The Standard Specifications should be referred to for more detailed descriptions of the work, materials and construction methods. The roadway shall be graded and prepared for pavement as follows:

- a) <u>101</u> Clearing and grubbing shall be performed to remove all stumps, brush, roots and like material from the area of the travelled way, berms, shoulders, sidewalks, and utility trenches, but wherever feasible, existing vegetation shall be protected. Cleared materials shall be removed from the property unless otherwise approved by the Board.
- b) <u>120</u> Earth excavation shall be the removal of all materials encountered within the area of the travelled way, berms, shoulders, and sidewalks down to the true surface of the subgrade or to suitable material in areas where unsuitable material exists, in preparation for foundation of roadway, sidewalks, driveways and berms. Approved material obtained from the excavation may be used in fills as required if, in the opinion of the Planning Board or its agent, they are suitable. Ledge and boulders shall be removed to a depth of twenty-four inches (24") below the finished grade. Trees intended to be preserved shall be protected by suitable boxes, fenders or wells as appropriate.
- c) <u>150</u> When in the opinion of the Planning Board or its agent, suitable material is not available within the limits of the roadway location to form the subgrade or sub-base, the developer shall obtain suitable additional material from other sources meeting M1.03.0 type a or as may be approved by the Planning Board.
- d) <u>170</u> The subgrade surface, nineteen and one-half inches (19.5") below the finished surface grade in residential streets, and twenty and one-half inches (20 and ½") below the finished surface grade in all streets in non-residential subdivisions or on secondary, major and primary streets shall be prepared true to the lines, grades and cross sections given and properly compacted. All soft or other unacceptable material below the subgrade surface shall be removed to a depth determined by the Planning Board or its agent. The space thus made shall be filled with gravel, conforming to M1.03.0 Type a (6" largest dimension).
- e) <u>401</u> The gravel sub-base or foundation shall be spread in layers on the surface of the subgrade, in conformity with requirements of Section M1.03.0 gravel borrow type b. (3" largest dimension) and of Section 401.60, Gravel Sub-base.

Each layer shall be thoroughly watered, rolled and compacted true to line and grade. Any depressions that appear during and after the rolling shall be filled with additional gravel and re-rolled until the surface is true. Suitable subgrade stability fabric may be required by the Planning Board or its agent prior to gravel placement.

- f) Final grading, rolling and finishing including the shaping, trimming, rolling and finishing of the surface of the sub-base prior to application of gravel for surfacing of the roadway base courses for walks and berms shall be in accordance with this section and as directed by the Planning Board or its agent. Compaction testing and soil gradations shall be performed as required by the Planning Board and/or their agent.
- g) A base course of three inches (3") of processed gravel (two inches {2"} maximum diameter stone size) conforming to Section M1.03.0, Type c of the Standard Specifications, shall be laid in a separate course over the gravel sub-base in accordance with the material and standards designated by Section 405 of the Standard Specifications.

A preliminary Utility As-Built Plan will be supplied by the applicant (six (6) contact prints), reviewed and approved of by the Planning Board before any bituminous concrete is installed. If any

construction modifications are required they also will be performed, a revised preliminary as-built submitted, reviewed and approved by the Planning Board prior to any bituminous concrete being installed. The preliminary Utility As-Built Plan must meet all applicable criteria of Section III.K.1. All applicants must plan ahead sufficiently to allow adequate time for Planning Board review and approval.

 h) Roadway pavement shall be constructed for the full length of all streets within the subdivision and shall have the curb radii required in Section IV, B-4, above. The center line of all roadways shall coincide with the center line of the street right-of-way unless a deviation is approved by the Planning Board.

The minimum widths of a roadway pavement shall be as follows:

Primary Street	Forty Feet (40')
Major Street	Thirty Feet (30')
Secondary Street	Thirty Feet (30')
Minor Street	Twenty-Four Feet (24')
Dead-end Street	Twenty-Four Feet (24') less than or equal to 750' in length
	or Thirty Feet (30') greater than 750' but less than or equal to 1500' in length

i) Pavement for roadways in subdivisions shall be Class I Bituminous Concrete Pavement Type I-I. The material and construction methods for laying pavement shall conform in every way to the applicable sections of Section 400 and Section M of the Standard Specifications except that **no such construction shall be undertaken before March 30th of any year nor after December 1st of any year without written permission of the Planning Board and the Highway Surveyor. Pavement on minor and secondary residential subdivision streets shall be laid to a finished depth of four and one-half inches (4.5") and laid in two (2) courses, binder and top. The binder course shall be three inches (3") rolled and the top course shall be one and one-half inches (1.5") rolled. Pavement on non-residential subdivision streets, major and primary streets shall be laid to a finished depth of five and one-half inches (5 and ½") and laid in two (2) courses, binder and top. The binder course shall be four inches (4") rolled, and top course shall be one and one-half inches (1 and ½") rolled. The Planning Board or Highway Surveyor may require the installation of suitable reinforcing fabric of any approved type over any areas in the base pavement that, in their opinion, require reinforcement prior to the placement of an additional course of pavement.**

The finished surface must be level and even and is to form a close even union around all curbs, and projecting frames. It is the contractor's responsibility to see that all manhole frames, gate boxes, and catchbasin frames are at street grade and accessible for their intended use.

- j) Planting strips and shoulders shall be provided on each side of the roadway, between the curb and property line or between curb and sidewalk, where sidewalks are required.
 - 1. The finished grade of such planting strips shall be two percent (2%) sloping toward the roadway. Where unusual physical land characteristics or topographic conditions exist, the Board may approve the construction of a planting strip at a slope greater than two percent (2%), provided the finished slope will not project above or below a plane sloped one horizontal to one vertical upward or downward from the edge of the roadway.
 - 2. No obstruction shall be placed or retained within the planting strip so as to be closer than three feet (3') from the edge of the roadway.
 - 3. All shoulders and grass strips shall consist of six inches (6") of bank run gravel (per M1.03.0 Type a and Section 150) over the subgrade per Section 170, and six inches (6") of good quality loam (per M1.05.0 and Section 751) placed on top of the gravel base. The shoulder shall be seeded with perennial grass seed mix applied in sufficient quantity to assure adequate coverage (per Section 765).

5. CURBS AND BERMS

- a) Bituminous cape cod berms and/or granite curbs shall be provided along all sides of the roadway.
- b) Berms shall be Class I Bituminous Concrete Cape Cod Berm conforming to Section 470, of the Standard Specifications.
- c) Granite curbing shall be installed at all curved (including gutterlines at angled intersections) intersections of existing and proposed streets within and at the exteriors of all subdivisions. Each curve shall be extended with at least six feet (6') of straight transition curbing at each end of the curved section of curb. (See "Typical Intersection Curve Layout" detail, See Appendix E) Granite curbing shall be Type VA4 (Section M 9.04.1).
- d) Granite curbing shall be installed to provide both a header and throat for catchbasins, (Referred to in Section IV, D,2,K).
- e) Granite curbing, not Cape Cod Berms, are required along all major and primary streets.
- f) The profile of the berms and curbs shall be per Appendix E.

6. CURB CUTS AND HANDICAP RAMPS

- a) Proposed driveways shall be between ten feet (10') and twenty four feet (24') in width. Proposed locations and grades will be shown on the definitive plans.
- b) Driveway cuts shall not be within sixty-five feet (65') of the intersection of the center line of intersecting streets, within ten feet (10') of a catchbasin or within thirty feet (30') of another driveway.
- c) Driveways shall intersect the right-of-way at right angles.
- d) Driveways shall have a maximum grade of three percent (3%) within twenty five feet (25') from the edge of the right-of-way.
- e) All driveways shall access a lot through the frontage of said lots. In the case of a corner lot, with legal frontage and adequate depth from either street, the driveway may access either street.
- f) Handicap ramps shall be located at all intersections and termini of all sidewalks or every three hundred feet (300') if there are no driveway curb cuts between.
- g) All handicap ramps shall adhere to the latest requirements of the Americans with Disabilities Act and the Massachusetts Architectural Access Board. A detail demonstrating this shall be supplied on the plans.

7. SIDEWALKS

- a) Sidewalks shall be constructed within the subdivision where required by the Planning Board.
- b) The sidewalks shall extend the full length of the street, and shall be of the following widths:

Along Secondary and Minor Streets

Five Feet wide (5')

On one side minimum

On both sides

A sidewalk shall wrap around the entire outside of a cul-de-sac.

- c) Sidewalks shall have a finished grade of two percent (2%) sloping toward the roadway. When unusual physical land characteristics or topographic conditions require, the Board may approve the placement of a sidewalk at a greater distance from the roadway or at a higher or lower elevation in relation thereto, provided such variation is indicated on the definitive plan or as-built plan.
- d) In constructing all sidewalks, the material shall be removed for the full width of the sidewalk to a subgrade at least twelve inches (12") below the approved finished grade, and also all soft spots and other undesirable material below such subgrade shall be replaced with a bank-run gravel (per M 1.03.0 Type b) and rolled with a two (2) ton roller or equivalent. Unless the applicant elects to install cement concrete sidewalks (built according to Section 701) the excavated area shall be filled with at least nine inches (9") of crushed-bank gravel (per M 2.01.7 and Section 402) containing some binding material and compressed and rolled to a surface side slope of two percent (2%). Sidewalks shall then be paved to a compacted thickness of three inches (3") with class I Bituminous concrete (per Sections 701 and M 3.11.0) applied in two (2), one and a half inch (1 ½") courses.

8. GUARDRAIL

Guardrails shall be required as warrented by the Massachusetts Highway Department's Highway Design Manual, July 1989, as amended, or as required by the Board. Guardrail shall be supplied per Section 600 of the Standard Specifications. Steel Beam Highway Guard- Type SS with wood posts is preferred. A suitable detail shall be supplied on the plans, including appropriate end treatments.

9. EMBANKMENTS

Outside the right-of-way, embankments shall be evenly graded and pitched at a slope of not greater than 2 horizontal to 1 vertical in fill. Other slopes may be allowed with the approval of the Planning Board. Where terrain necessitates greater slopes, fencing, or rip-rap may be used either alone or in combination to provide safety and freedom from maintenance, but must be done in accordance with plans filed with and approved by the Planning Board. Retaining walls and terracing are not allowed. Whenever embankments are built in such a way as to require approval by the Planning Board, the developer must furnish to the Town duly recorded access easements free of encumbrances for maintenance of the slopes, terraces or retaining walls. The area covered by the easement must ensure the ability to properly and economically maintain the slopes, etc. and will be of a size deemed acceptable to the Planning Board. All such slopes shall be grassed in accordance with the specifications for the area between the roadway and sidewalk or roadway and boundary of the right-of-way (See Section IV, B.). Temporary construction easements must be supplied around the entirety of all the proposed roads to ensure the proper construction of sideslopes beyond the right of way even after the sale of lots.

C. Utilities

1. Excavation.

Excavation for structures, including foundation for drains and water pipes, walls and other structures shall be made to the depth as indicated on the Definitive Plan or established by the Highway Surveyor or Water Commission, as applicable.

2. Installation.

All drain, sewer, gas and water pipes, underground utilities, and other structures shall be installed upon the completion of roadway subgrade and before the placing of the sub-base, gravel base course, sidewalks or pavement.

a. Water

- 1) Water distribution and consumption also comes under the jurisdiction of the Town of Freetown Water Commission. All applicants are referred to the Water Commission's Rules and Regulations. All applicants must satisfy the Planning Board's and the Water Commissions requirements. If there is a conflict between the Board's/Commissions requirements then the strictest requirements must be adhered to. If an applicant wishes not to adhere to any of the Planning Board's requirements, a waiver of that requirement must be requested of the Planning Board by the applicant.
- 2) Water mains, with hydrants, valves and other fittings, shall be constructed and installed within the subdivision as necessary to provide to all lots therein adequate water supply for domestic and fire protection use. Water mains shall extend in front of the entire street property lines of all subdivided lots. Proper connections shall be made with existing public water systems. Where property adjacent to the subdivision is not subdivided, provision shall be made for proper projections of the systems by continuing appropriate water mains to the exterior boundaries of the subdivision, at such size and grade as will allow for the projections. See Appendix C for Freetown Standard Details.
- 3) Potable water of quality and quantity acceptable to the Board of Health for domestic use, and fire protection water with a minimum open hydrant flow of 500 gallons per minute shall be provided in each subdivision, at minimum residual pressure of 20 pounds per square inch. Water lines shall be furnished with adequate valves and appurtenances to the specifications of the Planning Board and Water Commission. No dead ends shall be permitted. On dead end streets the full size water main shall be extended through easements to connect with existing water mains.
- 4) Public water mains shall be class 52 Cement Lined Ductile Iron pipe and shall not be less than twelve inches (12") in non-residential subdivisions and not less than eight inches (8") in residential subdivisions. Two bronze wedges shall be inserted at each water main joint for purpose of providing electrical continuity through the joints. The wedges shall be located on opposite sides of the joint. A "Freetown Standard Hydrant" shall be located at each street intersection and not more than three hundred and fifty feet (350') apart in all subdivisions. The Planning Board and/or Water Commission shall decide the size of mains, hydrants and services, taking into consideration the pressure level hydraulic gradients of the distribution system. *See Appendix C.
- 5) Each "Freetown Standard Hydrant" shall be served directly from the water main through a six inch (6") lateral connection. Water main valves shall be located in such number and locations that lines by individual block may be isolated for maintenance purposes.
- 6) Where a public water system is located within four hundred feet (400') of the subdivision, the subdivider shall connect the public water system. Where a public water system is not located within four hundred feet (400') of the subdivision, the subdivider shall not be required to connect

with the system; however, the Planning Board shall require, the installation of a "dry" water main system throughout the subdivision.

7) Permission for extending the water main system must be obtained from the Water Commission prior to commencing construction. A copy of the permit shall be given to the Planning Board. Individual service connections must be installed to the property line for all lots.

The location of the chlorination and sampling points will be determined by the Water Commission in the field.

8) All water mains and services/connections, shall have a minimum of five feet (5') of cover.

b. Gas

Gas mains shall be installed per the gas companies rules and regulations if gas connection is available unless said installation is specifically waived by the Planning Board.

c. Telephone

Telephone lines shall be installed in underground conduits in conformity with the Telephone Companies rules and regulations.

d. Electric

Electric lines shall be installed underground in accordance with the regulations of the appropriate utility.

e. Sewerage

On-site sewage disposal shall be installed and constructed in conformity with the rules, regulations and requirements of the Board of Health.

- 1. If a public sewerage system is located within four hundred feet (400') of the subdivision, the applicant shall connect all lots to the public sewerage system. See Appendix D for construction details.
- 2. If a public sewerage system is planned to be installed within four hundred feet (400') of the subdivision within three (3) years of the date of submission of the definitive plan as indicated prior to Town Meeting action, the applicant shall install, at his cost, in the street and to every lot, sewerage laterals which can be connected later to the public sewerage system. In order for the applicant to design and install properly such laterals, the Town shall be responsible for establishing and providing the applicant, at the applicant's expense, with the necessary plan, specifications and design standards of the proposed public sewerage system.
- 3. If the public sewerage connections are not required according to the above, or if the planned sewerage system has not yet been installed to within four hundred feet (400') of the proposed subdivision, the lot owners shall install private on-lot sewerage systems.
- 4. Where public sewers are required, the following design criteria and testing standards shall apply:
 - a.) Public sewers shall be designed according to professional engineering practices.
 - b.) Public sewers in non-residential subdivisions shall be extra strength vitrified clay. Public sewers in other subdivisions shall be polyvinyl chloride or of other material acceptable to the Planning Board. The minimum size shall be eight inches (8") in diameter.
 - c.) Manholes, with manhole covers with the word "Sewer" cast upon the cover, shall be located at every change in grade or horizontal alignment but not more than three hundred feet (300') apart. Sewer ejector pumps may be permitted at the discretion of the Board of Health.

- d.) The contractor shall perform the sewer main leakage tests using the low pressure air test. This test shall conform to the requirements listed below:
 - (aa) The contractor shall furnish all equipment and personnel to conduct an acceptance test using low pressure air. The test shall be conducted under the supervision of the Town of Freetown Board of Health. Any section failing to pass the test shall be repaired by the contractor and retested.
 - (bb) Upon completion of the test, a report shall be filed by the testing company with the Planning Board and the Board of Health.
 - (cc) All branch fillings and ends of lateral stubs shall be securely plugged to withstand the internal test pressures. The section of line being tested shall also be securely plugged at each manhole. All stoppers shall be adequately braced when required.
 - (dd) Air shall be slowly supplied to the plugged pipe line until the internal air pressure reaches 4.0 pounds per square inch greater than the average hydrostatic pressure of any groundwater that may submerge the pipe. At least two (2) minutes shall be allowed for temperature stabilization before proceeding further.
 - (ee) The rate of air loss shall then be determined by measuring the time interval required for the internal pressure to decrease from 3.5 to 2.5 pounds per square inch. There shall be no permissible leakage in sanitary sewers located within the aquifer protection districts.
 - (ff) The pipe line shall be considered acceptable if the time interval for the 1.0 psi pressure drop is not less than the holding time listed in the following air test table:

MINIMUM HOLDING TIME IN SECONDS (REQUIRED PRESSURE TO DROP FROM 3 ¹/₂ TO 2 ¹/₂ PSIG)

Length of Sewer Main	Eight Inch Diameter	Twelve Inch Diameter
(in feet)		
25	18	40
50	35	79
75	53	119
100	70	158
125	83	198
150	106	238
175	123	277
200	141	317
225	158	340
250	176	340
275	194	340
300	211	340

- (gg) Permission for extension of the proposed sewer system shall be obtained from Massachusetts Division of Water Pollution Control prior to the commencement of construction. Applications shall be submitted through the Board of Health. A copy of the approved application from Water Pollution Control shall be given to the Planning Board prior to commencing construction.
- (hh) Upon completion of the installation of the sewerage system, all main lines shall be inspected and, if deemed necessary, at the discretion of the Planning Board, by

means of closed circuit television. The inspection shall be done one manhole section at a time and the section being inspected will be suitably isolated. Measurement for location of defects shall be at the ground level by means of a meter device. Printed location records shall be kept showing the exact location of each infiltration point, locations of laterals, unusual conditions, collapsed sections, and other discernible features. A copy of these records shall be supplied to the Planning Board.

- (ii) Pipe deflection testing shall be required on all main PVC sewer lines. The testing shall be by using a "go-no-go" deflection mandrel having a minimum of nine (9) evenly spaced arms or prongs. The "go-no-go" gauge shall be hand pulled through all sections of the pipeline. Any section of pipe found to be equal or exceed 5.0 percent deflection shall be deemed a failed pipe and shall be replaced. Pipe deflection testing shall not be performed until the pipeline has been under soil backfill for a minimum of six (6) months.
- e.) A temporary sanitation facility (portable toilet) shall be made available on all subdivision construction sites during all phases of construction work.
- f.) Private on-lot sewerage systems shall be designed and constructed in conformity with Title 5 of the State Sanitary Code and the Town Board of Health Regulations.
- g.) All sewer mains and services shall have 3 feet (3') minimum of cover.
- h.) Sewer stubs will be supplied to the property line of all new lots.
- i.) The minimum sewer main slope shall be .5%.
- j.) Bolted and gasketted sewer manhole covers will be required at all off-road locations, adjacent to any gutterlines, low points and anywhere else deemed by the Board.
- k.) Sewerage pumping stations will only be allowed when it has been proven to the Planning Board that no other alternate means of a gravity system is feasible.
- 1.) All sewer lines and appurtances to be designed for H-20 Loading, minimum.
- m.) All lines deeper than twenty feet (20') shall be Sch 80PVC, or equivalent.
- n.) No sewer lines or appurtances located within one hunderd feet (100') of all surface water supplies except where to cross tributaries and where they will reduce the possibility of pollution to the water supply.
- o.) All manholes within one hundred feet (100') of surface water or wetlands, etc. are of watertight construction, with sealed manholes, bolted and gasketted.
- p.) All sewer lines within 2,640' of a municipal well will be of watertight construction.
- q.) All pumping stations to have standby power and high level alarms telemetered to an appropriate location that is manned at all times or any other acceptable method.
- r.) Pumping stations will be protected and operable during a one hundred (100) year storm and accessible during all weather conditions.
- s.) Buoyancy calculations for stations will be supplied and acceptable. Force mains will enter gravity feed manhole not more than two feet (2') higher than the invert out.

t.) There will be a ten foot (10') horizontal or eighteen inches (18") vertical (below) separation from water lines or else all sewer main joints will be encased in concrete within ten feet (10') of the water crossing. See "Typical Water Crossing Detail, Appendix D.

f. Miscellaneous Utility.

- 1.) Where adjacent property is not subdivided or where all the property of the applicant is not being subdivided at the same time, provision shall be made for the extension of all utility systems by continuing the mains the full length of streets and to the exterior limits of the subdivision, at such grade and size which will, in the opinion of the Planning Board, permit their proper extension at a later date.
- 2.) The applicant shall employ, at there own expense, an engineer to set all lines and grades in a manner satisfactory to the Board.
- 3.) All water mains shall have a minimum of five feet (5') of cover, laid to line and grade in a workmanlike manner, and all necessary fittings, valves, blowoffs, hydrants, and other necessary features installed. Water main apprutenences including service connections and hydrants shall meet the latest Standard Specifications for "Cast Iron, Water, Pipe, and Special Castings" as adopted by the American Water Works Association.
- 4.) Sanitary sewers and drains shall have a minimum of three feet (3') of cover. However, depth will be as required to adequately sewer or drain the subdivision. Sewers shall be laid to true line and grade.
- 5.) Electric, telephone, cable TV, and an empty conduit for fire alarm shall be installed underground and shall have a minimum cover of two and one half feet (2 ¹/₂[']).
- 6.) Unsuitable material below pipe bedding shall be removed and replaced by bank-run gravel (per M 1.03.0 Type a) approved by the Planning Board or its agent. Unsuitable material shall not be used for trench backfill.
- 7.) Width of trench shall be equal to four thirds (4/3) diameter of the pipe or conduit plus eighteen inches (18").
- 8.) Sheeting, if used, shall be cut off twelve inches (12") above top of pipe or conduit.
- 9.) Pipe and conduits shall be surrounded by six inches (6") of crushed stone (per M 2.01.4, one inch maximum diameter stone size) if set in earth and twelve inches (12") if set in rock.
- 10.) Backfill shall be compacted to ninety five percent (95%) of the maximum dry density of the materials as determined by the American Association of State Highway Officials, Designation T-180D and the Standard Specifications.
- 11.) All underground utilities shall be installed as soon as the subgrading is completed and before any gravel is placed. They shall be tested and approved prior to installation of base course(s) and pavement. The preliminary Utility As-Built Plan (per Section III, K, 2) shall also be submitted, reviewed and approved by the Planning Board before the pavement is installed.
- 12.) All lot connections shall be installed to the right-of-way line, and so marked in the field and on the asbuilt plan so as to be easily located in the future.
- 13.) All utilities and their appurtences will be located within the right-of-way or easements with enough room to allow for maintenence as deemed necessary by the Planning Board. The minimum easement width shall be twenty five feet (25').

14.) All easements shall be labeled as "utility" easements.

D. Drainage and Runoff Control

1. General Requirements.

Approval of subdivision plans may be denied until the Planning Board is assured that either the proposed subdivision will not result in significant increase in the rate and volume of stormwater runoff over natural or existing conditions, or that adequate provisions will be taken to maintain the volume and rate of runoff at its natural or existing level. The objective of this regulation is to maintain the integrity of natural drainage patterns, in order to provide adequate stormwater drainage, prevent flooding, and avoid alteration of existing stream channels.

2. Procedure.

(May be modified by the Planning Board to suit the problems and needs of a particular subdivision.)

a) An estimate of the present rate and volume of runoff, as well as an estimate of the rate and volume of runoff that would occur from the proposed subdivision, shall both be submitted along with supporting data. The runoff calculations shall be developed using the Soil Conservation Service's Technical Release 55 (TR-55), "Urban Hydrology for Small Watersheds, June 1986". The quantity of stormwater carried by bridges, culverts, open channels, drainage control facilities (detention ponds, etc.) and drainage systems enclosing brooks shall be based upon all storms up to a one-hundred (100) year storm.

The quantity of stormwater carried by storm drains shall be determined by the rational method, and the design storm shall be a twenty-five (25) year frequency.

- b) In order to control the rate and volume of stormwater runoff from the development site, the developer may elect to do so through any method which can be demonstrated to control the required amount of runoff, to the satisfaction of the Planning Board. In each instance, the method or methods elected shall be suitable to the site and subject to the approval of the Planning Board.
- c) The system may make use of gutters, inlets, culverts, catch basins, manholes, subsurface piping, surface channels, natural waterways, and open detention basins. The Board will not approve any design or component which, in its opinion, does not meet the standards of good engineering practice, will not function without frequent maintenance, or is unsuited to the character of the subdivision.
- d) Where feasible, stormwater should be directed to enter the nearest open stream channel. At all outfalls of drainage systems, a reinforced concrete headwall approved by the Board shall be provided. Flared end sections are not allowed. The engineer shall submit details and specifications for all headwalls for approval by the Planning Board. Stormwater shall not be permitted to cross any roadway upon the surface but must be piped underground. Stormwater runoff shall not be permitted to flow upon the pavement surface for a longer distance than three hundred feet (300') before it enters the underground system.
- e) In general, the design of pipes shall be such as to provide for a flow of water at speeds between two (2) and ten (10) feet per second; the minimum grade shall be not less than 0.5 percent; the minimum pipe diameter shall be twelve inches (12") and they shall be designed to flow full with the hydraulic gradient at the crown. All pipes must be class III reinforced concrete pipe. In determining the

capacity of concrete pipe drains, the Manning formula shall be used with coefficient of friction "n" equal to 0.013. Catch basins shall have a three foot (3') sump below invert; catch basins or inlets shall be spaced along both sides of a street at no greater than three hundred foot (300') intervals, and located at all low points and corner roundings at street junctions. Drain manholes shall be located at every change of direction and/or grade but in no cases greater than three hundred feet (300') apart.

- f) Streets shall be graded to provide for expeditious runoff of water from the road surface, but must also comply with Department of Environmental Protection (DEP) stormwater management regulations and policies for sediment, pollutant removal, and groundwater infiltration. Roof drains, cellar drains or any other "private" non-pre-existing drainage systems will not be allowed to connect to the drainage system.
- g) Storm drains shall be designed based on a twenty-five year frequency storm. Cross culverts and drainage control facilities shall be based on all storms up to a one-hundred (100) year frequency storm. At the discretion of the Board, stormwater shall pass through an oil separator manhole prior to outfall. The manhole shall have convenient, paved vehicular access. Prior to discharge, all stormwater shall pass through a sediment control facility capable of removing eighty percent (80%) of the waterborne sediment (Total Suspended Solids, TSS). All storm water shall be conveyed in ditches or storm drain lines to stormwater detention (drainage control) facilities capable of mitigating all storms up to the one-hundred (100) year event. Permanent easements and provisions for vehicular access shall be provided along the entire length of ditches and storm drain lines. No increase in stormwater runoff over pre-development conditions will be permitted for all storms up to the one-hundred (100) year event. Evidence of this shall be submitted to the Planning Board in the form of calculations for pre-development versus post development for all channels leaving the site, and any other design points required by the Board.
- h) In some cases earth and stone-paved open channels should be used. The typical section of the earth channel should have a flat bottom and side slopes of one (1) vertical on two (2) horizontal with the top of the slope at least one foot (1') higher than the design water surface. The maximum velocity allowed in an open earth channel at design flow should be six (6) fps. A coefficient of friction "n" equals to 0.025 maximum should be used for both the earth and stone-paved channels. Detailed calculations, plans and profiles showing proposed channels and treatment of channel base and side slopes shall be submitted for Planning Board approval.
- Proper connections may be made with an existing public drainage system if additional capacity plus 25% reserve capacity is available. Where adjacent property is not subdivided and no public drainage system exists, provisions shall be made for extension of the public system, if available, at such size and grade as required by the design criteria.
- j) Wherever drainage systems within the subdivision are located in or terminate in lands owned by others, proper easements in a form and content acceptable to Town Counsel shall be taken for their access and maintenance by Town Personnel.
- k) Granite curb inlets per Section M9.04 shall be installed adjacent to all catchbasins at low points and any other location granite curbing is required. If located within an area of Cape Cod berms, a minimum six feet (6') transition curbing (granite, Type VA4) shall be installed along the curbline on both sides of the curb inlet. The Cape Cod berm shall be constructed to blend with the transition curb.
- 1) If a catchbasin is designated to handle <3 CFS (Cubic feet per second) then a single grated catchbasin is acceptable. If a catchbasin is designed to handle \geq 3 CFS then a double catchbasin grate (\leq 6 CFS) shall be used. If a location is designed to handle >6 CFS of flow then a combination of catchbasins and gutter inlets may be used. The method used is up to the discretion of the Planning Board.
- m) The following additional design standards will govern detention pond and/or other drainage control facilities:

- 1. No stand alone drainage retention facilities at all will be allowed. If drainage retention is required by another Board or regulatory agency, then the drainage system may include the retention facility, however the entire drainage system including detention facilities will still mitigate all storms up to the one hundred (100) year storm assuming a zero amount of retention or leaching. Retention or leaching facilities will not be the responsibility of the Town to maintain.
- 2. Any detention pond invert in will be higher than the pond invert out.
- 3. A one foot (1') minimum depth of sediment storage capacity will be supplied below the invert out within a detention pond. This will allow for sediment storage and the promotion of wetland species growth which will also assist in mitigating pollutents. It is the intent that once accepted by the Town, the Town may excavate the stored sediments including wetlands species as necessary without the filing of a Notice of Intent with the Conservation Commission. This sediment storage area shall be designed to protect the natural wetlands beyond the pond and must be maintained to protect the wetlands further, and to protect the public from flooding. Flood storage capacity will not be used below the invert out at the pond as part of the design calculations.
- 4. Suitable heavy equipment access (including easements and site grading) will be supplied around the entirety of all detention ponds and other flow mitigation facilities and will meet the following criteria as a minimum:
 - a) A twenty foot (20') gravel access road around the entire top of the detention pond berm is required.
 - b) All "gravel access roads" will be constructed of six inches (6") of loam and seed over an eighteen inch (18") base of gravel borrow meeting M1.03.0 Type a. The access "roads" shall lead from the street right-of-way and travel over all easements and around all structures and facilities to the satisfaction of the Planning Board. See "Gravel Access Road Section" Detail, Appendix E.
- 5. Detention ponds shall be constructed with 6:1 side slopes and be designed to blend with their natural surroundings.
- 6. Detention ponds shall be designed with a fifty foot (50') naturally vegetated buffer zone around all sides beyond the toe or top of slopes and/or "gravel access road".
- 7. One foot (1') of freeboard is required in detention ponds over the Flood elevation of the one hundred (100) year storm. This is the vertical distance between the one hundred year flood elevation and the emergency overflow spillway invert elevation.
- 8. Emergency overflow spillways (rip-rapped) shall be provided.
- 9. The maximum annual groundwater elevation as determined using the latest edition of Title V (State Sanitary Code) shall not interfere with the functioning of any drainage control facility. This shall be determined by Town witnessed observation holes prior to the application being submitted. The soil logs shall be submitted with the initial application.
- 10. Detention ponds and/or other drainage control facility calculations will include routings for the two year, ten year, twenty-five year, fifty year, and one hundred year frequency storms. The drainage control facilities will not allow an increase inflow for all of these storms. The intent of this paragraph is to not allow a smaller storm to "sneak" through the facility.
- 11. Detention ponds and/or other drainage control facilities shall be located on privately owned lots with proposed dwellings/commercial structures within easements. They will not be located on lots designed for drainage control facilities only.

- n) Rip-rap meeting the requirements of the "Rip-Rap Detail", Appendix B shall be supplied at all outfall and emergency spillway locations.
- o) A minimum of three foot (3') of cover shall be supplied over all drain lines.
- p) All outfalls shall flow directly into existing on-site wetlands and/or utility easements and at such elevation to provide a positive outflow and no sediment buildup.
- q) Drainage systems including site grading shall eliminate all undesirable or unnatural accumlation of runoff.
- r) Drainage calculations and watershed maps shall include all applicable offsite areas.
- s) No reverse flows shall be allowed in pipes or in manholes. Reverse flows in manholes may be allowed if the invert elevation of the pipe in is higher than the crown of the pipe out.
- t) The drainage design in its entirety shall minimize long term safety issues, maintanence, and/or reconstruction requirements. If the Planning Board does not believe that the applicant has satisfied this requirement then denial of the project is justified.
- u) No catchbasin to catchbasin connections are allowed. All pipes from catchbasins must flow to manholes.
- v) All pipe crowns in manholes must match or the pipes in crowns must be higher than the pipe out crown.
- w) No catchbasins shall be installed in front of driveway or handicap ramp openings.
- x) All runoff from storms up to the one hundred (100) year storm must flow through the drainage control facilities (detention ponds, etc.) and be mitigated prior to flowing beyond the site. Although the pipes are designed for the twenty-five (25) year storm, the runoff for storms up to the one hundred (100) year storm must reach the drainage control facility either through the pipe systems, swales or overland with easements.
- y) No cellar or private drains etc. are allowed to be connected into the street drainage system.
- z) No drainage pump stations are allowed.

3. Final Approval.

Where drainage control facilities are required, a proposed development shall in no case receive final approval until the site has been inspected by the Planning Board or the Board's agent, to ensure that drainage control facilities have been installed as proposed in the Definitive Plan.

4. 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-five feet (25') and proper side slope shall be provided. Storm drainage shall be designed in accord with the specifications of the Board. Where required by the Planning Board or the Board of Health, the applicant shall furnish evidence that adequate provision has been made for the proper drainage of surface and underground waters from any lot or lots. Stormwater shall not discharge over land across lot lines. Drainage conveyances and easements shall be provided to convey stormwater to the nearest permanent stream or municipal drainage system.

5. Construction.

Drainage facilities shall be provided as indicated on the plan and in conformity with these regulations and the requirements of Sections 200, 220, 230 and 258 of the Standard Specifications.

The standard depth of catch basins shall be three feet (3') below the invert of the outlet. Manholes shall be constructed to the required depth at each junction point and as shown on the plan. Pipe culvert and pipe drains shall be in conformity with the requirements of Section 230 for installation of pipes.

All drain pipes except sub-drains shall be Class III reinforced concrete pipe (with 3' of cover) and shall be installed according to the size as shown on the plans. No backfilling of pipes shall be done until approval of the Highway Surveyor. All drainage trenches shall be backfilled per Section 201.65.

Where sub-drains are required they shall be constructed in conformance with Section 260 of the Standard Specifications. Such sub-drains may be required by the Board following clearing and grubbing operations. No drainage pipes from roof drains, driveway drains, or other on-lot sources shall be connected to the street drainage system. Cast iron manhole covers and catchbasin grates shall be as manufactured by or equivalent to E.L. LeBaron Foundry Model No.'s LB 268-3 for manholes, L.F. 248-2 for catchbasins, or for catchbasins on 5% gradient roads No. LK-120A (Cascade Grate). The word "DRAIN" shall be cast into the drain manhole covers.

E. Easements

- 1. Where utilities cross lots or are centered on rear or side lot lines, easements shall be provided for a width of at least twenty-five feet (25').
- 2. Where a subdivision is traversed by a water course, drainage way, channel or stream, the Planning Board may require a storm water easement or drainage right-of-way of adequate width and proper side slope to conform substantially to the lines of such water course, drainage way, channel or stream and to provide for construction, maintenance or other necessary purposes.
- 3. Easements will be provided over all infrastructure and drainage ways to a width acceptable to the Planning Board that insures the Town the ability to maintain said infrastructure and ways for perpetuity. Proper access by heavy equipment and machinery will also be ensured by means of proper grading within the easements.
- 4. "Gravel access roads" meeting Section IV, Part D., Subsection 2, paragraph m, 4 shall be supplied over and within all easements as determined by the Planning Board.
- 5. Access easements to park and conservation land shall be provided, if required by the Planning Board, and shall be at least twenty-five feet (25') wide.
- 6. All easements shall be labeled "UTILITY EASEMENTS" and/or "UTILITY AND ACCESS EASEMENTS" or "HIGHWAY EASEMENTS" as applicable..
- 7. Easements may be required to be wider than twenty-five feet (25') particularly if the infrastructure is deeper than ten feet (10') and in a loose granular material.
- 8. Temporary construction easements must be supplied around the entirety of all the proposed roads to ensure the proper construction of side slopes beyond the right of way even after the sale of lots.

F. Monuments

- 1. Monuments shall be installed on street lines at all points of curvature, at all points of change in direction, and at all other points where, in the opinion of the Planning Board (town line, easements, etc.), permanent monuments are necessary.
- 2. Monuments shall be a reinforced concrete marker of not less than three feet (3') in length and not less than six inches (6") in width and breadth and shall have a three-eighth inch (3/8") drill hole in the center of the top surface. Said monuments shall be installed at the time of final grading with the top flush with top final graded surface. At each point where a lot line intersects the street right-of-way shall be a pipe or steel rod three feet (3') in length.
- 3. The placement and accurate location of these monuments shall be certified by a professional land surveyor and properly located on the street acceptance plans and the As-Built plans.
- 4. A "Concrete Monument Detail per Appendix E shall be included with the plans.

G. Street Signs and Names

- 1. Street signs shall be installed at each intersection and shall contain the names of both streets. A "Street Sign Detail" per Appendix E shall be included with the plans.
- 2. Street names shall be approved by the Planning Board to prevent duplication and to provide names in keeping with the character of the Town. Streets named after people are not allowed (Mary's Way, etc.).
- 3. From the time of rough grading until such time as each street is accepted by the Town as a public way, the sign posts at the intersection of such street with any other street shall have affixed thereto a sign designating such street as a private way.
- 4. Two signs are required at "X" intersections diagonal from one another, except at "T" intersections only one sign is required.
- 5. Street signs shall be installed by the developer following rough grading and shall be maintained by the developer until the Town accepts the road.

H. Street Lights

- 1. Street lights shall be installed to conform to the type and style in general use in the Town of Freetown unless otherwise specified by the Planning Board. A street light detail shall be supplied on the plans.
- 2. Street lights shall not be nearer than twenty-five feet (25') from the intersection of two (2) streets, measured from the intersection of the tangents of the intersecting street curblines; shall be shown on the plans and shall be located at each intersection, on the outside of all curves, at the end of cul-de-sac, and at any other locations deemed by the Planning Board. They shall be located either in the grass strip abutting the sidewalk or four feet (4') off of the curb line within the grassed shoulder as applicable.
- 3. Street lights shall be installed in accord with the procedure required by the Board of Selectmen and the applicable utility company.
- 4. Streets shall be lit at the expense of the developer from the time of installation until such times as the road or roads are accepted as public ways.

I. Utility Poles, Etc.

- 1. Utility poles, hydrants, street shade trees, etc. shall not be nearer than twenty-five feet (25') from the intersection of two (2) streets, measured from the intersection of the tangents of the intersecting street curb lines.
- 2. Utility poles shall be located the same as street lights above. Hydrants shall be located three feet (3') behind the gutter line. See Section J. <u>Trees</u> for tree locations. No obstruction shall be located closer than three feet (3') to a gutter line.

J. Trees

- Deciduous street trees (species to be submitted and approved of by the Planning Board and Tree Warden) shall be planted on each side of each street in a subdivision, except where the Definitive Plan shows trees to be retained which are healthy and adequate. Such trees shall be located five feet (5') outside of the right-of-way, two trees per forty foot (40') intervals (one tree every twenty feet (20'); alternating sides of street), and shall be at least twelve feet (12') in height, two inches (2'') in caliper measured four feet (4') above the approved grade, and shall be planted each in at least one-half (1/2) cubic yard of topsoil unless otherwise required by the Tree Warden.
- 2. The developer shall plant other trees as needed to provide at least one (1) area of shade to each lot.
- 3. All deciduous street trees shall be clear of any branches from the approved grade level to a point seven feet (7') above ground level.
- 4. The developer will be liable for all trees so planted as to their erectness and good health for one (1) year after planting or until the Planning Board accepts the entire subdivision, whichever is greater.
- 5. No evergreen trees such as pine, fir, spruce or hemlock are to be planted on an easterly or southerly side of a road, street or way.

6. All cut bankings that tend to wash or erode must be planted with a low growing evergreen shrub such as laurel, mugho pine or juniper, and seeded with a deep rooted perennial grass to prevent erosion.

K. Bridges/Retaining Walls

No bridges or retaining walls are allowed to be constructed as part of any component of a subdivision. They shall not be allowed in any right-of-way, easement, etc. They will not be allowed anywhere where if they fail, they may have an affect on any right-of-way, easement, etc.

L. Protection of Natural Features

- 1. Due regard shall be shown for all natural features, such as large trees, stone walls, wooded areas, water courses, scenic points, historic spots, and similar community assets, which, if preserved, will add attractiveness and value to the subdivision.
- 2. Every effort shall be made to preserve natural features except where dwellings, driveways, and roadways are to be constructed. Any cutting, thinning or other disturbance to trees twelve inches (12") or over in diameter, measured five feet (5') above finished ground level (dbh), located within the minimum front setback distance (as indicated in the Town of Freetown Protective By-Laws) may be prohibited at the Planning Board's discretion. Tree wells shall be installed for suitable grading around trees. Tree wells shall be of such design to meet the standards as set forth in the Tree Experts Manual or equal publication.
- 3. Filling and cutting of grades shall be kept to a minimum.

M. Maintenance of Improvements

For the purpose of protecting the safety, convenience and welfare of the Town's inhabitants; for the provision of adequate access to all of the lots in a subdivision by ways that will be safe and convenient for travel; for reducing the danger to life and limb in the operation of motor vehicles; for securing safety in the case of fire, flood, panic and other emergencies; under the authority of Chapter 41, Section 81-M as amended, the applicant or his successor shall provide for the proper maintenance and repair of improvements under this Section of the Rules and Regulations during the construction and for the period of twelve (12) months after the completion of the construction of said improvements or until the Town votes to accept such improvements, whichever comes first. Such maintenance shall include snow removal beginning from the time of occupancy of an individual owner or tenant other than the developer.

N. Erosion and Sedimentation

- 1. <u>General Requirements</u>. These requirements may be waived. However, in a subdivision with excessive slope or a subdivision which abuts or includes a stream(s), wetlands or pond(s), or where major earth work is anticipated, an erosion and sedimentation analysis shall be presumed necessary unless a waiver is received. The developer may be required to submit an erosion and sediment control plan, if in the opinion of the Board, sedimentation will have an impact on nearby wetlands, streams, ponds, other water bodies or abutting properties.
- 2. <u>Procedure</u>. (May be modified by the Planning Board to suit problems and needs of a particular subdivision.)

- a) The developer shall submit as part of the Definitive Plan a soil erosion and sedimentation control plan, if required by the Board. This plan shall consist of a drawing certified by a professional civil engineer, identifying appropriate control measures and their location. Also, the drawing shall show all natural drainage ways and water bodies in and related to the proposed subdivision. The drawing shall be at a scale of one inch (1") equals forty feet (40'), and show the existing and proposed topography at two foot (2') contour intervals.
- b) If erosion and sedimentation control measures are required, they shall be adequate to retain all erosion within the subdivision and away from nearby water systems and/or abutters, both during and after construction. A timetable outlining anticipated construction activity and associated erosion and sedimentation control measures shall be submitted to the Board. All work shall be subject to periodic inspection by the Board or Board's agents.

O. Cleaning Up

The entire project area must be cleaned up prior to acceptance so as to leave a neat and orderly appearance free from debris and other objectionable materials. All catchbasins and drainage facilities shall be properly cleaned out.

P. Fencing

Fencing may be required in subdivisions abutting state highways, expressways, other limited access roads, or at any other area that may present a hazard.

Q. Pollution Control

In order to control dust, odor, noise, etc. accompanying the installation of ways, utilities, and drainage, the applicant shall control such pollution on the entire site in conformance with the most current, amended regulations for such control, as adopted by the Commonwealth of Massachusetts Department of Environmental Protection Air Quality Control.

R. Flood Hazard Avoidance

Any subdivision located in any flood prone area shall comply with the following:

- 1. Subdivision design shall be consistent with the need to minimize flood damage within the flood-prone area, through use of open space, reservation, street profile design, and drainage.
- 2. All public utilities and facilities, such as sewer, gas, electrical, and water systems shall be located and constructed to minimize or eliminate flood damage.
- 3. Drainage systems shall be designed in consideration of possible flooding to the one hundred (100) year flood elevations.

S. Resubdivision

Resubdivision of all or part of the land covered by an existing plan shall be governed by the regulations then in force. Such resubdivision shall show clearly the areas being replatted and the reference number(s) of all previous plans of these same areas, together with filing dates. Plans shall clearly indicate previously existing lot lines by dashed lines. These lines shall be clearly identified with proper notations.

SECTION V—ADMINISTRATION

A. Variation

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

B. Reference

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

C. Building Permit

- 1. No building shall be erected within a subdivision without written permission from the Planning Board by release of covenant, bond, or securities resulting from the fulfillment of developed obligations.
- 2. The Building Inspector shall not issue any permit for the erection of a building until he is first satisfied that the lot on which the building is to be erected is not within a subdivision or that a way furnishing the access to such lot as required by the subdivision control law is shown on a plan recorded or entitled to be recorded under Chapter 41 Section 81-X, as amended and that any condition endorsed thereon limiting the right to erect or maintain buildings on such lot have been satisfied or waived by the Board, and in the event that more than one building for dwelling purposes be erected or placed or converted to use as such on any lot, that the Building Inspector is satisfied that consent has been obtained from the Planning Board in accord with Section II, D of these Rules and Regulations, Chapter 41 Section 81-Y, and amendments thereto.

D. Inspection Notices

The subdivider shall notify the Highway Surveyor and the Engineer designated by the Board at least 48 hours prior to the time at which each one of the required inspections should take place. The subdivider shall provide safe and convenient access to all parts of work for inspection by the Highway Surveyor and by the Board's engineer, members or agents. No work shall be approved that has been covered before the required inspection.

To assure compliance, the following procedure must be followed:

- 1. The developer must notify the Highway Surveyor and the engineer designated by the Board in writing seven (7) days before the start of construction.
- 2. The developer must notify the Highway Surveyor and the engineer designated by the Board when underground utilities and drainage are installed in order that inspection may be carried out before any backfilling is done.
- 3. The subgrade must be approved by the Highway Surveyor and the engineer designated by the Board before the application of the gravel base course.

- 4. The gravel base course must be approved by the Highway Surveyor and the engineer designated by the Board before the application of bituminous concrete (street or sidewalk). A preliminary Utility As-Built Plan (per Section III, K. 2.) shall also be submitted, reviewed and approved by the Planning Board before the application of bituminous concrete (street or sidewalk).
- 5. The developer must notify the Highway Surveyor and the engineer designated by the Board forty-eight hours (48) prior to the start of each application of bituminous concrete on the street and sidewalk and of placement of curbing.
- 6. The developer must keep the Highway Surveyor and the engineer designated by the Board informed when materials and other items *of* work are ready for inspection such as the installation of bounds, loam and seeding, and general cleanup.

E. Validity

If, in any respect, any provision of these Rules and Regulations in whole or in part, shall prove to be invalid for any reason, such invalidity shall only affect the part of such provision which shall be invalid and in all other respects these Rules and Regulations shall stand as if such invalid provision of these Rules and Regulations shall be invalidated, impaired, or affected thereby.

TOWN OF FREETOWN

RULES AND REGULATIONS OF THE PLANNING BOARD GOVERNING THE SUBDIVISION OF LAND

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