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Rules and Regulations Governing the Subdivision of Land in Hubbardston, Massachusetts

SECTION 1 GENERAL PROVISIONS

1.01 TITLE

These Rules and Regulations shall be known as the Rules and Regulations Governing the Subdivision of Land in the Town of Hubbardston and may be cited as Hubbardston Subdivision Rules and Regulations.

1.02 AUTHORITY

These Rules and Regulations are adopted pursuant to the statutory rule making authority of section 81Q of chapter 41 of the General Laws for the purposes set forth in section 1.3 of these Rules and Regulations.

1.03 PURPOSE

These Subdivision regulations have been enacted for the purpose of protecting the safety, convenience and welfare of the inhabitants of the cities and towns in which it is, or *may* hereafter be, 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 Appeals under the Subdivision Control Law and these regulations 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 insuring compliance with the applicable zoning ordinances or by-laws; for securing adequate provision for water, sewerage, drainage, underground utility service, fire, police, and other requirements where necessary in a subdivision; for protecting, promoting and enhancing the natural beauty and amenities of Hubbardston; and for coordinating the ways in a subdivision with each other and with the public ways in the Town and with the ways in neighboring subdivisions.

1.04 CONSTRUCTION

These Rules and Regulations shall be construed and applied to promote the purposes set forth in Section 1.3 of these Rules and Regulations.

1.05 WAIVER OF REQUIREMENTS

Where necessary or convenient to accomplish the purposes of these Rules and Regulations, the Board *may* waive and requirement(s) of these Rules and Regulations. All requests for waivers of these Rules and Regulations must be submitted in writing by the applicant to the Board. Any such waiver shall be upon vote of a majority of the Board.

1.06 EFFECTIVE DATE

These Rules and Regulations are to be effective and from that time shall supersede all prior rules and regulations governing the subdivision of land in the Town of Hubbardston.

SECTION 2 DEFINITIONS

2.1 Unless a contrary intention or definition is clearly expressed herein, terms and words defined in the Subdivision Control Law, chapter 41 of the General Laws, shall have the meaning given there for purposes of these Rules and Regulations.

2.2 The following terms and words shall have the meaning defined herein:

A. ABUTTER:	An owner of land as listed in the most recent real property tax list, certified by the Board of Assessors, whose real property is within 300 feet of the boundaries of a proposed subdivision of land as shown on the definitive plan.
B. APPLICANT:	A person, corporation, real estate trust, or other legal entity who/which makes application to this Board for approval of a plan for subdivision of land pursuant to chapter 41 of the General Laws or who/which makes application to this Board for determination that a plan of land does not require approval under the Subdivision Control Law, chapter 41 of the General Laws.
C. ARTERIAL STREET:	A proposed or existing street servicing more than 120 dwelling units, or for non-residential subdivisions is to be used for major through traffic with a volume in excess of 1200 vehicles in a representative 24 hour period, as determined by the most recent edition of <u>Institute of Transportation Engineers (ITE). Trip Generation.</u>
D. BIKEWAY:	A way designed to be used principally or exclusively by a bicycle or similar unpowered vehicle.
E. BOARD:	The Planning Board of the Town of Hubbardston.
F. BUILDING:	A structure designed to be used as a place of occupancy, storage or shelter.
G. COLLECTOR STREET:	A proposed or existing street which is to be used primarily for residential purposes and servicing no more than 120 dwelling units, or in the case of a non-residential subdivision is to be used for through traffic with a volume of not more than 1200 vehicles in a representative 24 hour period, as determined by the most recent edition of <u>Institute of Transportation Engineers (ITE) I. Trip Generation.</u>
H. DEFINITIVE PLAN:	A proposed plan for subdivision of land submitted pursuant to chapter 41 of the General Laws and Section 6 et seq. of these Rules and Regulations for approval of the Board.
I. DWELLING:	An enclosure containing sleeping, kitchen and bathroom facilities designed for and used or held ready for use as a permanent residence by one family.
J. EASEMENT	A right acquired by public authority or other person to use or control property for a utility or other designated public purpose.
K. ENGINEER:	A person who is registered and/or lawfully permitted to practice professional engineering in the Commonwealth of Massachusetts.
L. ENVIRONMENTAL & COMMUNITY IMPACT ANALYSIS	A comprehensive, technical analysis and report by the Applicant which is required to be submitted to the Board pursuant to Section 6.04 of these Rules and Regulations. The General Laws of the Commonwealth of Massachusetts, Ter. Ed.
M. GENERAL LAWS:	

- N. INDUSTRIAL- A proposed or existing street which, in the opinion of the Board, is to be
COMMERCIAL STREET: used to provide local access to industrial-commercial enterprises.
- O. LAND SURVEYOR: A person who is registered and/or lawfully permitted to practice land surveying in
the Commonwealth of Massachusetts.
- P. LANE: A proposed street which, in the opinion of the Board, is to be used primarily for
residential purposes and servicing no more than 10 dwelling units.
- Q. LOT: An area of land in one ownership, with definite boundaries, used, or available for
use, as the site of one or more buildings.
- R. MDPW: The Department of Public Works, Commonwealth of Massachusetts.
- S. MINOR STREET: A proposed or existing street which, in the opinion of the Board, is to be used
primarily for residential purposes and servicing no more than 40 dwelling unitai

- T. PERSON: An individual, or two or more individuals or a group or association of individuals, a partnership, trust or corporation, or other legal entity having common or undivided interests in a tract of land.
- U. PRELIMINARY PLAN: A proposed plan for subdivision of land submitted pursuant to chapter 41 of the General Laws and Section 5 et seq. of these Rules and Regulations for the information of and analysis by the Board and other regulatory agencies of the Town of Hubbardston.
- V. SECURITY Means by which the planning board requires that the construction of ways and the installation of municipal services is secured by one, or in part by one and in part by another, of the methods described in General Laws Chapter 41, Section 81 U.
- W. SIDEWALK: A way within the right-of-way of a street normally parallel, or roughly parallel, to the street, designed for use by pedestrians.
- X. STREET: The tight of way or taking and includes the traveled way, curbing, grass strips, sidewalks, drainage facilities, and utilities.
- Y. SUBDIVISION: 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 or 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 with in 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 Clerk of the Town certifies is maintained and used as a public way, or (b) a way shown on a plan heretofore approved and endorsed in accordance with the Subdivision Control Law, or (c) a way in existence when the Subdivision Control Law became effective in the Town, 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 a least such distance as is then required by zoning or other ordinance or bylaw, if any, of the Town for erection of a building, on such lot, and if no distance is so required, such frontage shall be of at least twenty feet. Conveyances 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 the Town in which the land lies into separate lots on each of which one of such buildings remains standing, shall not constitute a subdivision.
- Z. SUBDIVISION CONTROL: The lawful authority of the Board pursuant to the Constitution of the Commonwealth of Massachusetts, chapter 41 of the General Laws, these Rules and Regulations, and other statutes, ordinances, and bylaws to regulate the subdivision of land in the Town of Hubbardston.
- AA. UTILITIES: Gas, electric, water, drainage, cable television, telephone, sewer, steam distribution and related and ancillary services.
- BE. WETLANDS: Any lands or waters subject to sections 40 and/or 40A of chapter 131 of the General Laws and the regulations promulgated pursuant thereto.

SECTION 3: GENERAL

3.01 BASIC REQUIREMENT

No person shall make a subdivision within the meaning of the Subdivision Control Law of any land within the Town, or proceed with the improvements or sale of lots in a subdivision, or the construction of ways, or the installation of municipal services therein, unless and until a plan has been endorsed "Planning Board Approval Not Required" or a Definitive Plan of such subdivision has been submitted to and approved by the Board (M.G.L. C. 41, s. 81-0).

3.02 LIMITATION OF ONE BUILDING ON ANY LOT

Not more than one building designed or available for use for dwelling purposes shall be erected or placed or converted to use as such on any lot in a subdivision, without the consent of the Board, and such consent may be made 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. (M.G.L. C. 41, s. 81-Q).

3.03 EFFECT OF PRIOR RECORDING

The recording of a plan of subdivision within the Town in the Worcester District Registry of Deeds prior to the effective date of the Subdivision Control Law in the Town of Hubbardston shall not exempt the land within such subdivision from the application and operation of these Rules and Regulations except as specifically exempt by Chapter 41, Section 8 IFF, of the General Laws and the Hubbardston Zoning Bylaws.

3.04 REFERENCE

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

3.05 SEVERABILITY

If any part or portions of these rules and regulations should be adjudicated as invalid, the adjudication shall apply only to the material so adjudged, and the remaining rules and regulations shall be deemed valid and of full force and effect. (M.G.L. C. 41, s. 81-GG)

SECTION 4: PLAN BELIEVED NOT TO REQUIRE APPROVAL

4.01 SUBMISSION

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 in triplicate with Application Form A, along with 'a submittal fee of \$175 *, to the Planning Board, accompanied by the necessary evidence to show that the plan does not require approval

The plan shall be submitted by delivery to the Planning Board office (preferably five (5) days prior to a meeting of the Board) or by certified mail, postage prepaid, to the Board In addition, written notice of such submission using Application Form A shall be given by the applicant to the Town Clerk by delivery and, the Town Clerk shall, if requested, give a written receipt to the person who delivered such notice.

4.02 REQUIREMENTS OF PLAN

A plan not requiring approval shall be prepared by a registered land surveyor and shall be clearly and legibly drawn to the requirements of the Recording Rules adopted by Registry of Deeds in Massachusetts If multiple sheets are used, they shall be accompanied by an index sheet showing the entire plan. A plan not requiring approval shall contain the following information:

1. Property boundaries, north point, date and scale.
2. Name of the record owner. name of the registered land surveyor, and the Worcester Registry of Deeds book and page reference of conveyance to record owner.
3. Area of each lot.
4. Sufficient data to determine the location, direction and length of every street and *way* line, lot line and boundary line, monuments or references necessary to establish these lines on the ground.
5. Where practical, boundary lines of contiguous and adjacent land and the names of the owners thereof, as determined from the most recent tax list.
6. Location of all permanent monuments properly identified.
7. Location, names and present widths of non-public (private) *ways* abutting the property.
8. Suitable space to record the endorsement of the Board that Approval is not required and the signatures of the members of the Board.
9. Zoning classification and location of any Zoning District Boundaries that may lie within the locus of the plan.
10. In the case of the creation of a new lot the remaining land area and frontage of the and in the ownership of the applicant shall be shown.
11. Location of all existing buildings, including setback and side and rear *yard* designations.
- 12 .Location and area of any wetlands on the lots being created by the plan (including the lot being created by the remaining land). In lieu of delineating the wetlands on the remaining land. the applicant may provide written certification from the Surveyor or Professional Engineer who prepared the plan that the remaining parcel of land contains the minimum required upland area required under the Zoning by-laws.

SECTION 5: PLANS TO BE APPROVED UNDER THE SUBDIVISION CONTROL LAW – PRELIMINARY**5.01 SUBMISSION**

A preliminary plan of any proposed subdivision should be submitted to the Planning Board and to the Board of Health for the tentative approval, modification or disapproval by each Board. Thereafter, he shall file by delivery or by certified mail, a notice with the Town Clerk stating the date of submission of the plan and accompanied by a receipted copy of the application form. If notice is given by delivery, the town clerk shall, if requested, give written receipt therefor.

Submission of Preliminary Subdivision plans are required for all non-residential subdivisions and is strongly advised for all residential subdivisions. Three (3) copies of Form B (see Appendix) shall be submitted and accompanied by the original and five (5) copies of the preliminary plan, along with a fee of \$25 per lot, \$100 minimum. The preliminary plan shall not be deemed to have been submitted to the Planning Board until the application forms and plans have been delivered to the Board at a regular or special meeting.

5.02 PLAN CONTENT.

The preliminary plan shall show clearly the following:

1. Subdivision name, boundaries, north point, date, scale, legend and title "Preliminary Plan".
2. Names and addresses of the record owner, and the Applicant and the name or names of the engineer or surveyor.
3. Names and addresses of all abutters as determined from the most recent tax list and such others to whom notices are to be sent.
4. Existing and proposed lines of streets, easements, and any public areas within the subdivision, in a general manner.
5. The proposed system of drainage, including the location of all swamps, marshes and lowland, water bodies, streams, open drains and ditches, natural or man-made, and flowage Eights, public and private, adjacent to (and to be affected by the drainage from the Subdivision) or within the proposed subdivision in a general manner.
6. A general description of the type of sewage disposal and water distribution system.
7. Approximate boundary lines of proposed lots with approximate areas and dimensions.
8. Names, approximate locations and widths of adjacent streets.
9. The existing topography of the land at two (2) foot intervals based on field survey and referenced to United States Geodetic Survey (U.S.G.S.) datum. Existing topography is to be indicated by dashed lines with elevations shown.
10. The proposed topography of the land at two (2) foot intervals. The proposed topography to be indicated by solid lines with proposed elevations shown enclosed in blocks.
11. Other existing site features (regardless of proposed construction) including water bodies, wetlands, buildings, stone walls, rock outcroppings, and trees twelve (12) inches in diameter or the perimeter of heavily wooded areas
12. Zoning classification of the area and any Zoning District boundaries that may lie within the locus of the plan.
13. If the Preliminary Plan does not include all of the contiguous land owned by the application in the area, a plan, in a general manner, should be submitted of the overall proposed development. If the developer does not agree to provide future development plans to the Board, the Board shall assume that the remaining land will be developed to the maximum amount allowed under Zoning.
14. Soil association types of the locus based on U.S. Soil Conservation Service Soils Mapping of the Town of Hubbardston, if available.

5.03 APPROVAL OR DISAPPROVAL

The Board and the Board of Health shall act upon the preliminary plan and its accompanying materials in accordance with Chapter 41 of the General Laws. Approval, if given, does not constitute approval of a subdivision, but does facilitate the procedure in securing approval of the definitive plan.

Any plan submitted by the Applicant to the Board in advance of the definitive plan which does not conform to the requirements hereof pertaining to a preliminary plan shall not be considered to be a preliminary plan, nor shall such plan afford protection under the Subdivision Control Law.

SECTION 6: DEFINITIVE SUBDIVISION PLAN

6.01 APPLICATION PROCEDURE

Any person who desires approval of a Definitive Plan of a subdivision shall:

1. Submit to the Planning Board the following, with the drawings consolidated onto a single sheet or on separate sheets:
 - a. Three copies (blue) of the Definitive Plan. dark line on white background. The original drawing of the Definitive Plan will only be needed if and when signing of the plan takes place.
 - b. Three copies (blue) of a locus plan of the subdivision at 1" = 400' showing proposed roads and their relation to the surrounding area. and the location of the zoning district or districts applicable to the site.
 - c. Three copies (blue) of street plans and profiles of every proposed street prepared in accordance with Section 6.03.
 - d. Three copies (blue) of street cross sections for each class of street within the subdivision, drawn at 1" = 4', showing location of all utilities and other elements within the street right-of-way, and typical cross sections of any altered drainage courses or off-street paths.
 - e. A properly executed application Form C (see Appendix).
 - f. Any application of a definitive subdivision plan to the Planning board shall be accompanied by a filing fee of \$200 for every lot. In addition to the filing fee, the applicant shall pay the cost of legal advertising and notification of all abutters by regular mail. Said filing fee shall be received prior to any action of the Planning Board. *
 - g. Drainage calculations certified by the engineer who prepared them.
 - h. Evidence of ownership and traverse notes, language of any easements, covenants Or deed restrictions applying or proposed to apply to the area being subdivided, rights and easements obtained for utilities or drainage outside of the subdivision, description of erosion control methods to be employed.
 - i. The Planning Board may require outside consultants and engineering review of the preliminary and definitive plans. Consultants and engineers to be specified by the Planning Board and all fees are to be paid in advance by the developer. *
 - j. Four copies of the Environmental and Community Impact Analysis, as may be required under Section 6.04
 - k. A list of names and mailing addresses for all abutters as they appear on the most recent local tax list, including property owners on the opposite side of any streets abutting the subdivision.
 1. Three copies (blue) of the Construction Plan prepared in accordance with Section 6.05.
 - m. Three copies (blue) of an Erosion and Sediment Control Plan prepared in accordance with Section 6.06.
 - n. Three copies of a landscaping plan prepared in accordance with Section 6.07.
 - o. The Board may require soil surveys and/or test pits or borings to be prepared at the applicant's expense to determine the suitability of the land for the proposed ways, drainage and utilities.
 - p. A description, in a general manner, of the proposed source of domestic drinking water, which is to service the subdivision.
2. Submit to the Town Clerk by delivery or registered or certified mail:
 - a. A notice stating the date of Definitive Plan Submission to the Planning Board and b. A copy of the completed application Form C.
3. Submit to the Board of Health:
 - a. Two copies of the Definitive Plan;
 - b. Two copies of the Street Plans and Profiles;
 - c. A copy of the completed application Form C;
 - b. Two copies of the soils test and environmental analysis, if any.

4. Submit to the Conservation Commission one copy of each of the following:

- a. Definitive Plan
- b. Locus Plan
- c. Street Plans and Profiles
- d. Street Cross Sections
- e. Environmental Analysis, if necessary
- f. Construction Plan
- g. Erosion and Sediment Control Plan
- h. Landscaping Plan

5. Submit to the Fire Chief one copy of each of the following:

- a. Definitive Plan
- b. Locus Plan
- c. Street Plans and Profiles
- d. Street Cross Sections
- e. Environmental Analysis, if necessary

6. Submit to the Police Chief one copy of each of the following:

- a. Definitive Plan
- b. Locus Plan
- c. Environmental Analysis, if necessary

7. Submit to the Highway Department one copy of each of the following:

- a. Definitive Plan
- b. Locus Plan
- c. Street Plans and Profiles
- d. Street Cross Sections
- e. Environmental Analysis, if necessary
- f. Construction Plan
- g. Erosion and Sediment Control Plan
- h. Landscaping Plan

6.02 DEFINITIVE PLAN CONTENTS

The Definitive Plan shall be prepared by a Registered Land Surveyor and a Registered Professional Engineer, in a form acceptable to the Worcester District Registry of Deeds, as outlined in M.G.L. Ch. 36, Section 13A. The definitive plan shall be prepared by art engineer and surveyor and shall be clearly and legibly drawn at a scale of 1" = 40' in black India ink upon sheets of tracing cloth or Mylar, 24" by 36", with minimum 1/2" border except on the left side which shall be a minimum of 1-1/2". If multiple sheets are used, they shall be accompanied by an index sheet showing the entire subdivision. The Definitive Subdivision Plan shall include the following:

1. Title Block, in lower right hand corner, containing the Subdivision name, names and addresses of present record owner(s) and applicant, and name(s) of the engineer and surveyor who prepared the plan; certificates and seals of the engineer and surveyor; and a certificate that the classification and precision of all surveying conforms Class A or better of the most recent Land Court Manual of Instruction, Commonwealth of Massachusetts.
2. Boundaries and true and magnetic north point.
3. Names and locations of all abutters as, determined from the most recent tax list, including property owners on the opposite side of any streets abutting the subdivision.
4. Zoning Classification of the land and Zoning district boundaries, including watershed protection, aquifer protection and flood plain districts and any other overlay district boundaries.
5. Designation of the Flood Insurance Rate Zone as designated on the Federal Insurance Rate Maps prepared by the Federal Emergency Management Agency (FEMA) and any boundary lines of such flood zones affecting the locus.
6. Location of Base Flood elevation contour if encountered within 100 feet of subdivision.

7. Existing and proposed lines of streets, rights-of-way, easements, and any public or common areas within the subdivision. (The proposed names of streets will be shown in pencil until approved by the Board).
8. Location, names and present widths of streets bounding, approaching, or within reasonable proximity of the subdivision.
9. Boundary lines, areas in square feet, and dimensions of all proposed lots, with all lots designated numerically and in sequence.
10. Sufficient data to determine the exact location, direction and length of every street line, lot line and boundary line and sufficient survey data referred to existing permanent monuments such that these lines may be readily established 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 radii, tangents, and central angles of all curves in lot lines and street lines. All angle points, or intersections of tangents along the street lines, shall be shown, areas of lots with lot numbers and the area and frontage on public ways or adjoining lands of the applicant not included in the subdivision. The engineer or surveyor shall have the mathematical computations available to present to the Board for a matter of record. Traverse computations shall be provided on a separate sheet.
11. One or more corners of the plan, shall, by a system of azimuths or courses and distances, be accurately located and coordinated with a monument of some United States or State Agency survey system, such as the U.S. Geodetic Survey (formerly U.S. Coast and Geodetic Survey) system, where such monument is within 2,000 feet of such corner(s).
12. Location of natural waterways and water bodies within and adjacent to the subdivision.
13. Major site features, such as existing waterways, swamps and water bodies, natural drainage courses, stone walls, fences, buildings, rock ridges, rock outcroppings, trees over twelve (12) inches in diameter, and the perimeter of heavily wooded areas. Location and area of all wetlands located in or within 100 feet of the subdivision.
14. Soil types of the locus based on U.S. Soil Conservation Service Soils Mapping of the Town of Hubbardston, if available, and results of required soil tests.
15. Monuments at all points of curvature and at changes in directions of street side lines or where designated by the Board.
16. Existing and proposed topography at a two (2) foot contour interval (may be shown on a separate sheet). The proposed topography will be indicated by solid lines with proposed elevations shown enclosed in blocks. The existing topography to be indicated by dashed lines with elevations shown.
17. Size, material, type and location of existing and proposed storm drains, water mains, hydrants, underground utility lines and sewers including all appurtenances, within and adjacent to the subdivision.
18. Existing and proposed drainage including drainage areas inside the subdivision, areas outside the subdivision which drain into it, and the route, for all existing and proposed drainage discharging from the subdivision, to the primary receiving water course or other body of water. Drainage calculations shall be included with the definitive plan submittal. Cross sections of each drainage ditch or pond shall be included.

Size and location of existing and proposed water supply mains and their appurtenances, hydrants, sewer pipes and their appurtenances and/or sewer disposal systems, storm drains and their appurtenances, and easements pertinent thereto, and curbs and curb dimensions, including data on borings and soil test pits, and methods of carrying water to the nearest watercourse or easements for drainage as needed, whether or not within the subdivision.

If surface water drains will discharge onto adjacent existing streets or onto adjacent properties not owned by the applicant, the applicant shall clearly indicate what course the discharge will take, and shall present to the Board evidence that such discharge is satisfactory to the owner of adjacent property and permitted by public or private ownership of adjacent street or property.
19. Suitable space, on each sheet of the definitive plan for endorsement by the Town Clerk and to record the action by the Planning Board, with spaces for annotating date of approval and the signatures of the members of the Board.

6.03 STREET PLANS AND PROFILES

For each street there shall be a separate plan at 1" = 40', and profile at 1" = 40'. horizontal, 1" = 4' vertical, elevations referenced to the USGS datum drawn to the requirements of the recording rules of the Registry of Deeds, showing the following data:

1. Subdivision name, owners name and address, boundary lines of ways, north point, scale, date. annotation of revision dates and content, as on the Definitive Plan;
2. Name and address of person preparing the plan together with his Massachusetts registration certificate number as Land surveyor and/or engineer,
3. The plan shall show beatings and distances, radii and arcs, central angle and tangent distances on all curves with stationing on the center line;
4. The profile shall show the existing ground on the center line in a dashed black line, the existing right side in a short dash line and the existing left side in a long dash line; the proposed centerline grade shall be shown in a heavy black line with the elevation shown at each 50 foot station, with the rate of grade indicated;
5. The grade of all streets intersecting the proposed streets shall be shown for at least 100 feet each side of the intersection of street center line;
6. The proposed drainage, catch basins, manholes, pipes and *any* other drainage facilities shall be shown on both plan and profile;
7. Existing and proposed sidewalks, bikeways and walkways shall be shown with width and grade elevations;
8. All plans and profiles shall include a notation on each drawing that the same is one of an indicated total number of sheets;
9. Existing and proposed Fire protection mechanisms, ie. Fire Holes, Hydrants, etc.
10. Such additional information as the Board may deem necessary. 6.04

ENVIRONMENTAL AND COMMUNITY IMPACT ANALYSIS

1. Any submission of a residential subdivision creating **400**** feet or more of subdivision street/roadway, and all non-residential subdivisions, shall be accompanied by four (4) copies of an Environmental and Community Impact Analysis. The Environmental and Community Impact Analysis shall clearly and methodically assess the relationship of the proposed development to the natural and man-made environment of Hubbardston. This report shall be prepared by an 'interdisciplinary team of professionals qualified, experienced, and, where applicable, licensed, in their fields. Such team shall typically consist of a Registered Professional Engineers, Traffic e"ngineers. Architects, Landscape Architects, Land-Use Planners, Hydrogeologists, Hydrologists, Biologists and other environmental professionals.
2. It is intended that the report be a guide to the Planning Board in its deliberations and will build into the board's decision-making process an appropriate and careful consideration of the environmental and community impacts of the proposed development.
3. For each of the components of the Environmental and Community Impact Analysis listed under paragraph 4 below, each of the following concerns must be separately addressed:
 - a. The Environmental and Community Impacts of the Pro^posed Development - All primary and secondary environmental and community impacts, both beneficial and adverse, anticipated as a result of the proposed development This section shall include all impacts resulting from the construction phase as well as those resulting from the projects completion.
 - b. Adverse Impacts which cannot be avoided should the proposed development be implemented - The report shall describe the kinds and magnitudes of adverse impacts which cannot be reduced in severity or which can be reduced in severity, but not eliminated
 - c. Alternatives to the proposed development - The report shall develop, describe, and objectively weigh alternatives to the proposed development which are allowed by the Zoning By-law **Revised 9/27/01

d. Measures to be used to minimize adverse environmental and community impacts - Corrective and protective measures which will be taken, as part of the project, to minimize adverse impacts shall be described in detail.

4. The Planning Board, as part of a review for a Preliminary Subdivision Plan. submitted in accordance with the requirements of Section 5. shall specify which of the following topics shall be evaluated, and the level of detail required for each topic, in the Environmental and Community Impact Analysis and submitted with the Definitive Plan. If no preliminary subdivision plan is submitted. The Environmental and Community Impact Analysis shall evaluate all of the following topics:

A. NATURAL ENVIRONMENT

i. Air and Noise Pollution - The impact of local air quality and noise from the proposed development (including traffic generated from the development), both during and after construction, shall be evaluated. For larger developments (over 100 dwelling units) the Planning Board may require detailed technical reports of such impacts.

ii. Water Pollution - The impact of storm water run-off on adjacent and downstream surface water bodies and sub-surface ground water shall be evaluated. Dangers of flooding as a result of increased downstream runoff, especially peak runoff. The impact of the proposed project on water table levels shall also be analyzed.

M. Land - Compatibility of the proposed development with existing soils; the impact of any soils or other materials to be removed from the site; and the potential dangers and impacts of erosion and sedimentation caused by the proposed development.

Plants & Wildlife - The impact that the proposed project may have on wildlife habitat and on any rare or endangered plant or animal species known to exist in the area.

v. Water Supply - The average and peak daily demand and the impact of such demands on groundwater aquifers.

vi. Sewage Disposal - The average and peak daily disposal and the impact of such disposal on groundwater aquifers.

R. MAN-MADE ENVIRONMENT

Existing Neighborhood Land Use - Compatibility with adjacent or nearby existing land uses, or approved private development plans, if known, for adjacent or nearby land use changes to occur during the life of the proposed development. If not compatible, reasons therefore shall be detailed. Consultation with the Planning Board is strongly recommended.

ii. Zoning - Compatibility of proposed development with the purposes of the Zoning By-Law and the Zoning district.

Architecture - The style of architecture, of the buildings shall be described; its relation to prevailing types of architecture for similar buildings; and its compatibility with the function of the building and . to the architecture of adjacent buildings. Sketches, photos, elevations and renderings are encouraged to illustrate architectural appropriateness as well as innovation.

C. PUBLIC SERVICES

Schools - The expected impact on the school system both elementary and secondary levels, the number of students; projected school bus routing changes and projections of future school building needs resulting from the proposed project.

ii. Police - The expected impact on police services, time and manpower needed to protect the proposed development and service improvements necessitated by the proposed development.

iii. Fire - Expected fire protection needs; on-site fire fighting capabilities; on-site alarm or other warning devices; fire-flow water needs, source and delivery system and other needs shall be presented. ,Fire department service improvements necessitated as a result of the proposed project shall also be

- iv. Recreation - On-site recreation provisions shall be detailed and off-site recreation demands shall be estimated. Provision for public open space, either dedicated to the Town or available to its residents shall be described. Open space available primarily or exclusively for residents or employees shall also be described.
- v. Solid Waste Disposal - Analysis of the projected volume and type of solid waste to be generated by the proposed development and methods of removal.
- vi. Traffic - The expected impact of traffic generated by the proposed development on area roadways. Discussion shall include existing average and peak traffic volumes and composition, projected *average* and peak traffic generation and composition, intersection impacts and analysis of area roadway and intersection capacities. Methodologies used to make projection shall be included.
- vii. Highway - Projected need, responsibility and costs to the Town of roadway maintenance shall be analyzed. Impacts of construction equipment on area roadways shall also be discussed.

D. AESTHETICS

Lighting - The type, design, location, function and intensity of all exterior lighting facilities shall be described. Attention given to safety, privacy, security, and daytime and nighttime appearance shall be detailed.

Landscaping - Provisions for landscaping shall be described including type, location and function of all plantings and materials.

Visual - Attention given to views into the site and from the site shall be described. Included shall be long-distance views as well as views to and from adjacent properties.

E: PLANNING

Analyze the compatibility of the proposed development and its alternatives with the goals and objectives of the most recent Hubbardston Growth Management Master Plan and the most recent Open Space Plan. F.

COST/BENEFIT ANALYSIS

This municipal benefit/cost analysis should follow standard and usual procedures for measuring both the benefits to be derived and costs to be incurred by the Town of Hubbardston as a result of the proposed development. This element should also estimate net benefits or costs of non-quantifiable environmental impacts.

6.05 CONSTRUCTION PLAN CONTENTS

The Construction Plan shall be drawn at the same scale as the Definitive Plan. It shall contain the following:

1. Subdivision name, north point, legend, date, annotation of revision dates and contents and scale.
2. At two-foot contour intervals, existing topography and topography resulting from development of streets, drainage, and other required improvements.
3. Location of tree cover and individual trees over 12" diameter at breast height, if within the area of disturbance, existing structures including fences and walls, existing water supplies and on site disposal systems, wetlands, and if encountered, the boundary of the Flood Plain District established in the Zoning Bylaws;
4. Existing and proposed streets, ways, and easements;
5. Road centerline stationing, referenced to the Street Plans and Profiles;
6. Drainage system schematic layout, with elevations and sizes for any facilities not shown on the Plans and Profiles of Streets.

6.06 EROSION AND SEDIMENTATION CONTROL PLANS

A plan for erosion and sedimentation control covering all proposed excavation. Filling and grade work for improvements shall be required. Said plan shall be prepared and certified by a Registered Professional Engineer.

Requirements for Erosion Control: Such plans shall show proper measures to control erosion and reduce sedimentation, as set forth in Section 8.08. Such Erosion and Sedimentation Control Plan shall consist of

1. All Construction Plan Contents plus,
2. Location of areas to be stripped of vegetation and other exposed or unprotected areas.
3. A schedule of operations to include starting and completion dates for major development phases, such as Land clearing and grading, street, sidewalk, and storm sewer installation, and sediment control measures.
4. Seeding, sodding, or revegetation plans and specifications for all unprotected or unvegetated areas.
5. Location and design of structural sediment control measures, such as diversions, waterways, grade stabilization structures, debris basins, etc.
6. General information relating to the implementation and maintenance of the sediment control measures.

6.07 LANDSCAPING PLAN

A plan for landscaping and plantings to be made shall be required. Said plan shall be prepared and certified by a Registered Landscape Architect. Such Landscaping Plan shall consist of:

1. All Erosion and Sedimentation Control Plan contents plus:
2. Locations, type and size of all trees and shrubs to be planted
3. Methods to be used to plant such trees and shrubs and for supporting such materials.
4. Specifications and composition of grass seed to be used in unpaved right-of-way areas.

6.08 OTHER**A. Staking**

To facilitate review of the Definitive Plan by the appropriate authorities, at the time of filing of the Definitive Plan, the applicant shall stake the center line of all proposed streets at a minimum of every one hundred feet (100') with the centerline stations.

B. Soil Survey and Percolation Tests

The Board or its agent may require soil surveys and/or test pits or borings which are to be prepared at the expense of the applicant to establish the suitability of the Land for the proposed storm drainage system and proposed street construction.

1. Test pits, borings, soil surveys or soundings shall be taken along the center line of each street shown on the plan at intervals of at least every two hundred feet (200') and at locations such as cut sections and areas of questionable foundation material where the subsurface conditions may be, in the opinion of the Board or its Agent, factors affecting the quality and service life of the street. Test pits shall be made under the supervision of an Agent of the Planning Board, and shall not be backfilled until the applicant has been notified by the Board or its Agent that all necessary inspection and sampling has been completed. Where borings are used, samples shall be taken at five foot (5') intervals and at each change in strata. Test pits and boring, where required, shall extend to a minimum depth of five feet (5') below the street profile grade or to bedrock, whichever is less. The applicant shall indicate on the plan a proposed layout of the subsurface exploration program complete with location, spacing, and type of exploration proposed.
2. All information concerning the test pits, borings, or soundings (location, depth, soil strata, depth of water table) shall be submitted to the Board in a written report to be made, evaluated and stamped by a Registered Professional Engineer.

6.09 REVIEW PROCEDURES**A. Board of Health**

The Board of Health shall, within 45 days after the plan is Filed, report to the Planning Board in writing, approval or disapproval of said plan, and, in the event of disapproval, shall make specific findings as to which, if any, areas shown on such plan cannot be used for building sites without injury to *the* public health, and include such specific findings and the reasons therefore in such report, and where possible, shall make recommendations for the adjustments thereof. Failure of Board of Health to report shall be deemed approval by such board. When the Definitive Plan shows that no town sewer system is to service the proposed lots, approval by the Board of Health shall not be treated as, nor deemed to be approval of a permit for the construction and use of any lot of an individual sewage system; and approval of a Definitive Plan for a subdivision by a Board of Health shall not be treated as, nor deemed to be, an application for a permit to construct or use an individual sewage system on any lot contained therein. If the report of the Board of Health shall so require, the approval by the Planning Board shall be on condition that no building or structure shall be built or placed upon the areas designated, without consent by said Board of Health. In the event approval by the Board of Health is by failure to make a report, the Planning Board shall note on the plan that approval by the Board of Health is by failure to report.

B. Conservation Commission Review

The developer shall document prior to Planning Board approval of the Definitive Plan either that the Conservation Commission has determined that the Wetlands Protection Act, and/or the Hubbardston General Wetland By-Law, is not applicable to the proposed development or that he has filed a Notice of Intent with the Commission.

C. Review by Other Town Officials

Prior to approval of any Definitive Plan and Profile, the Planning Board will require a letter of review from the Highway Superintendent, the Chief of the Fire Department, and the Chief of Police. If any of the above officials fail to report, such failure shall be noted in the minutes of the Public Hearing.

D. Public Hearing

The Board will not approve a Definitive Subdivision Plan submitted to it until it shall *have* held a Public Hearing with respect to such plan. Notice of each such public hearing shall be given by the Board in accordance with M.G.L. Ch. 41, Section 81-T.

6.10 ACTION BY THE PLANNING BOARD AND PERFORMANCE GUARANTEES**A. Decision**

After the Public Hearing, the Board shall within 135 days (90 days in the case of non-residential subdivisions and subdivisions for which a preliminary plan has been submitted), unless otherwise agreed upon by the applicant and the Board, approve, approve with modifications, or disapprove the Definitive Subdivision Plan submitted. Criteria for action by the Board shall be the following;

1. Completeness and technical adequacy of all submissions;
2. Determination that development at this location does not entail unwarranted hazard to safety, health and convenience of future residents of the development or of others because of possible natural disasters, traffic hazard, or other environmental degradation which will result in an increased threat to public health and safety.
3. Conformity with the requirements of these Rules and Regulations;
4. Determination, based upon the Environmental Analysis, where submitted, that the subdivision as designed will not cause substantial damage to the environment, which damage could be avoided or ameliorated through an alternative development plan;
5. Conformity with all applicable zoning requirements;
6. Consistency with the purposes of the Subdivision Control Law.

Following such action, the Board will file a certificate of its action with the Town Clerk and will send notice of its action by registered or certified mail to the applicant at his address stated in the application. Such summary will be available to any person upon request. A copy of the certificate shall be transmitted by the Board to the Inspector of Buildings.

B. Performance Guarantee

The Board's approval of a subdivision plan, if granted, shall be endorsed on the Definitive Plan only after the expiration of any applicable statutory appeal period. Before the Board endorses its approval on the plan, the applicant shall provide assurances as set out below.

The applicant shall File security in an amount determined by the Board to be sufficient to cover the cost of all or any pan of the improvements as shown on the Definitive Plan and as specified in the design and construction standards not covered by a covenant below. The form of the security all be as required by the Board. Such security, 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 improveinents within three years of the date of the security. At the discretion of the Board a time extension may be granted f o r a period not to exceed one (1) year; provided that such an extension may be conditioned upon an increase in the amount of such security as determined by the Board.

Alternatively, the *owner*, may execute an appropriate covenant which shall be recorded with the subdivision plan. stipulating that no lot of the land shown on the plan shall be sold, or buildings or ether structures erected or placed on, or application *for a* building permit made with respect to, any such lot until:

- I. All required improvements required by the Board shown on the plans and profiles have been constructed throughout in accordance with the requirements of these Rules and Regulations.
2. The subdivision plan. bearing the Board's signed endorsement thereon, and a signed copy of such agreement have been recorded in the Registry of Deeds or with the Recorder of the Land Court;
3. The owner has executed a Contract with the Board on behalf of the Town, accompanied by appropriate security .to secure performance of the terms and conditions thereof; to complete construction of all required improvements not later than a specified date;
4. The owner has recorded in the Registry of Deeds or with the Recorder of the Land Court a certificate of release from the Board indicating that the conditions set forth in this section have been met. In addition, the owner shall covenant that no Building Certificates of Use and Occupancy shall be applied for until streets serving such building have been surfaced with at least at the required base course of bituminous concrete.

However, nothing in this section shall be construed as a limitation on the authority of the Board to condition its approval of any plan upon the satisfaction of additional conditions.

C. Copies of Documents

At the time of plan approval, the applicant shall provide the Board with the original mylar of plans to be signed for recording purposes, one reproducible mylar copy of every plan submitted to the Board under Section 6.01. Following plan endorsement and record'ng the applicant shall provide the Board with five Copies of the Definitive Plan and two copies of final covenants and restrictions, noting book and page number, and date of record'ng for each; and two copies of the Plan and a copy of the covenant shall be transmitted to the Inspector of Buildings by the Planning Board.

D. Evidence of Satisfactory Performance

Before the Board will release the interest of the Town in a performance bond or deposit, or issue a release of covenant, the applicant shall File with the Planning Board a certified copy of the layout plan of each street in the subdivision (with accompanying cross-sections and profile). Certification shall be by a Registered Civil Engineer and Registered Land Surveyor, and shall indicate that streets, storm drains, utilities, and their appurtenances have been constructed, and monuments have been installed, in accordance with these rules and regulations and with said plan and are accurately located, as shown thereon.

E. Release of Performance Guarantee

Upon completion of improvements required by this regulation, the subdivider may requiem either partial or full release of his bond, deposit or covenant by sending a statement of completion and request for release by registered mail to the Planning Board and to the Town Clerk. Copies of release from covenants or agreements regarding building or use and occupancy permits shall be sent by the Planning Board to the Inspector of Buildings.

2. Partial Release. The Board may grant partial release from such security for partial completion of improvements, provided that the completed portion provides a reasonable system for circulation and utilities pending completion of the rest, and provided that appropriate arrangements have been made for later disposition of interim facilities.

3. Security. The Board may release the applicant from the covenant upon receipt of an agreement executed by the applicant and by the holder of a first mortgage on the premises providing for retention of funds and their availability to the Town upon default (see Ch. 41, G.L., Sec. 81-U, 11th paragraph).
4. Retainment of Security after Completion. The developer shall remain liable for landscaping and trees planted within the street right-of-way for a period of three years after planting. The Board shall retain security sufficient to cover the cost of such landscaping to assure survival. Such security shall be retained for a period of three years from the date of landscaping or tree planting or until the road is accepted as a Public Way, whichever is sooner.
5. Refusal of Release If the Planning Board determines that said construction or installation has not been completed, it shall specify in a notice sent by registered mail to the applicant and to the Town Clerk the details wherein said construction and installation fails to comply with the requirements of these Subdivision Rules and Regulations.

F. Rescission

Failure of the developer to record the Definitive Plan within six months of its endorsement, or to comply with the construction schedule, if *any*, incorporated into the performance agreement or to either initiate construction of improvements or sell lots in a subdivision or portion thereof within eight years of the approval of the Definitive Plan, or to comply with all applicable Zoning Bylaws and requirements of the Conservation Commission under the Wetlands Protection Act, or unauthorized departure from any agreements made from these regulations or plans submitted, whether or not at the direction of other public agencies or officials, shall constitute sufficient reason for the planning board to consider rescission of such approval, in accordance with the requirements and procedures G.L.c. 41 s. 81-W.

6.11 WAYS AND EASEMENTS

- A. Approval by the Planning Board of a definitive subdivision plan shall not constitute the laying out or acceptance by the Town of any streets, sidewalks, jogging path or bicycle path within a subdivision.
- B. The subdivider shall retain title to the fee of each street, path or easement in or appurtenant to the subdivision until conveyed to the Town of Hubbardston. Notation that this is to be done shall be placed on the Definitive Plan and a notation stating "the grantor *hereby* retains all title in the streets, path and easements referenced to in the description" or words of similar import and meaning, shall be placed on all deeds transferring lots within the subdivision. This notice must also be given, as a disclosure, to any and all future buyers of any or all of the property in the proposed subdivision.**

6.12 INSPECTIONS

- A. Purpose Inspections of the quality of materials used and methods of installation of the improvements within a subdivision by the Board are required to protect the health and welfare of the future subdivision residents, and of the Town.
- B. Access The applicant will provide safe and convenient access to all parts of the subdivision, for the purposes of inspection, to representatives of the Board or other Town agencies and Boards.
- C. Responsibility The applicant is responsible for requesting inspections at the proper stage in the process of installation of improvements (see Section 8.02). Should an inspection not be performed due to the failure of the applicant to notify the Planning Board, the applicant will be required to uncover the improvements. No work will be accepted that has been covered before inspection.
- D. Inspection Fee. Upon approval of the definitive plan, an inspection fee of five dollars (\$5.00) per linear foot of roadway shall be charged to cover the cost of inspections.
- E. Inspection Process. The applicant shall request each inspection in writing at a properly posted Planning Board meeting at least ten (10) days before the preferred date for such inspection. Inspections shall be made at the proper time in the construction schedule.

6.13 AS BUILT PLANS

Upon completion of construction, and before release of the performance guarantee, the subdivider shall have prepared and submitted As-Built Plans at the same scale as the street plans, which shall indicate the actual locations of street line; traveled way edges; path locations; permanent monuments; inverts and location of required utilities and drainage; locations of all underground utilities. The accuracy of such As-Built Plans shall be certified by a Registered Land Surveyor and Registered Professional Engineer retained by the subdivider. The Planning Board shall be provided with one mylar copy of said As-Built Plan.

SECTION 7: DESIGN STANDARDS

7.01 GENERAL

A. All standards in this regulation shall be considered minimum standards and may be varied from or waived where the board considers that alternative conditions will serve substantially the same *objective*. All waivers must be made in writing from the Planning Board with an explanation for the reasons therefor. A copy of any written waiver shall be filed with the Town Clerk.

1.02 DESIGN OBJECTIVES

Design and construction shall reduce, to a maximum extent possible, the following features:

1 Volume of cut and fill;

2. Area over which existing vegetation will be disturbed, especially if within 200 feet of a river, wetland or waterbody or in areas having a slope of more than 15%;

3. Number of trees removed having a diameter over 12" diameter at breast height (DBH);

4. Extent of waterways altered or relocated;

5. Dimensions of paved areas (including streets) except as necessary for safety and convenience, especially in aquifer recharge areas;

6. Buildings located within 500 feet of existing Town Roads.

Design shall emphasize, to the extent possible, visual prominence of natural features of the landscape, and the maintenance within the subdivision of runoff and vegetative cover equivalent to the conditions that existed before development. Street grades shall follow the natural contour of the land as nearly as is possible so as to minimize excessive cuts and fills.

7.03 EASEMENTS

Where utilities cross lots or are centered on rear or side lot lines, easements shall be provided of a width of at least twenty feet (20').

Where a subdivision is traversed by a water course, drainage way, channel or stream, the Board shall require an easement of adequate width and proper side slopes to conform substantially to the lines of such water course, drainage way, channel or stream and to provide for construction or other necessary purposes. In no case shall the width of said easement be less than twenty feet (20') or the side slope be steeper than two (2) horizontal to one (1) vertical.

Access easements to adjacent property shall be provided, if required by the Board, for use by emergency vehicles and for the benefit of the Town. They shall be a minimum width of twenty feet (20'). Bikeways or walkways may satisfy this requirements

7.04 OPEN SPACE

The Board may require the plan to show a park or parks, suitably located for playground or recreation purposes or for providing light and air. The park or parks shall not be unreasonable in area in relation to the land being subdivided and to the prospective uses of such land and shall be at least equal to one (1) acre of land for each twenty (20) single family dwelling units or fraction thereof shown on the plan. For all non-residential subdivisions, the park shall be equal to three (3) times the floor area of the buildings. The

Board may, by appropriate endorsement on the plan, require that no building be erected upon such park or parks without its approval for a period of three (3) years. Each area reserved for such purpose shall be of suitable area, dimensions, topography and natural character for the purpose of a park and/or playground. the area or areas shall be so located as to serve adequately all parts of the subdivision as approved by the Board The Board may require that the area or areas reserved shall be located and laid out so as to be used in conjunction with similar areas of adjoining subdivisions or of probable subdivisions.

7.05 PROTECTION OF NATURAL FEATURES

All natural features, including, but not limited to, stone walls, trees, wooded areas, water courses, wetlands, acetic points, historic **sites, one hundred year flood plains, marshes, ponds and other water-bodies shall be preserved pursuant to an approved build** out clearing plan for roadways, house site development, driveways, yards, and septic clearing.. Any clearance, b a l l i n g , cutting, thinning or other disturbance to trees twelve inches (12") or over in diameter measured four *fed* (4') above finished ground level (**dbh**), located within the minimum front setback distance shall be prohibited unless specifically approved by the Board. Any such proposed clearance shall be shown on the plan and written reasons thereto; may be requested by the Board. Tree wells or retaining walls should be installed whenever necessary for suitable

grading around trees and where necessary to protect trees during the construction process. Tree wells or retaining walls shall be of such design to meet the standards as set forth in the Tree Experts Manual or similar publication.

7.06 LOT DRAINAGE

Lots shall be prepared and graded consistent with drainage into the subdivision and in such a manner that development of one shall not cause detrimental drainage onto another or on areas outside the subdivision, to the extent permitted by law. If provision is necessary to any drainage to or across a lot, a utility easement of a minimum width of twenty feet (20') and proper side slope shall be provided. To the maximum extent possible runoff exiting the overall subdivision area shall not be of greater volume after the completion of all improvements than existed prior to such improvements.

7.07 UTILITIES

All required utilities exclusive of transformers shall be placed underground at the time of initial construction. 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 the utility system by continuing the utility lines/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 Board, permit their proper extension, at a later date. The applicant shall not deny others connection to the utilities provided they pay all cost of such connection.

Connections for utilities located in the way shall be constructed for each lot whether or not there is a building thereon, except that the Board may waive such requirement, in whole or in part, in the case of a lot to be used for a park, playground or for any other purpose for which, in the opinion of the Board, such connections shall not be required.

7.08 MISCELLANEOUS

A. All streets, sidewalks, bikeways, walkways, water mains, pipes, hydrants, utilities, drains, basins, culverts, and other related facilities and services shall be installed and completed without expense to the town in accordance with these regulations and the specifications of the appropriate boards.

B. Reserve strips prohibiting access to streets or adjoining property shall not be permitted except what, in the opinion of the Planning Board, such strips are in the public interest.

C. Access through another municipality: In case access to a subdivision crosses land in another municipality, the Board may require certification by the appropriate officials that such access is in accordance with the zoning and subdivision requirements of such municipality and that a legally adequate performance bond has been duly posted and that such access is adequately improved to handle prospective traffic.

D. Resubdivision: Resubdivision of all or part of land covered by an existing plan shall be governed by regulations then in force. Such resubdivision shall show clearly the areas being resubdivided and the file number of all previous plans of the same area, together with filing dates.

E. All street and pedestrian path designs shall be consistent with the Hubbardston Growth Management Master Plan, as may be adopted, in whole or in part, at the time of submission.

7.09 STREETS AND WAYS

A. General.

Residential street systems shall be designed to be compatible with existing streets, and to rationalize traffic patterns within new subdivisions. The street plan shall accommodate existing street alignments which enter or border the tract. No street shall be constructed within one hundred (100) feet from any wetland, on any one hundred year flood plain, or on any other land subject to the jurisdiction of the Hubbardston Conservation Commission and the Massachusetts **Wetlands Protection Act or regulations issued thereunder, or a local wetlands by law.****

B. Residential Street Classification.

The following classification of residential streets is intended to assist in the evaluation of the design of each street in a subdivisions system, and not intended to be used to set arbitrary standards without assessing the complete plan for a subdivision and the intended use of each street.

Residential streets shall be classified, according to their design, use (actual or intended), their relationship to other streets in the hierarchy and their residential character, in the following categories, defined in Section 2: lane, minor street, collector, arterial.

Residential streets in each category shall meet construction specifications as required in this regulation after inspection and analysis of the soil types, site contours and site considerations deemed necessary by the Planning Board to obtain the objectives of these regulations.

C Dwelling Unit Access.

Dwelling units shall not be given direct driveway access to arterial streets, except:

1. Where existing lots of record abut on arterial streets;
2. In subdivisions which front on an existing arterial street or;
3. In special instances where the configuration of the tract prevents the construction of an access road or an interior roadway, after review and approval by the Planning Board and Highway Department.

Where practical and compatible with the zoning and internal layout of the subdivision, dwelling unit driveway access to collector streets shall be avoided. Lanes and Minor Streets shall not connect two or more streets of higher classification. (Residential streets which conned higher order streets often become shortcuts, thereby increasing the traffic load on purely residential streets and defeating the purpose of the design). Subdivisions over 25 lots shall require two means of access.

The Board may disapprove a plan where it determines that dangerous traffic conditions may result from inadequacy of the proposed access or of the proposed ways within the subdivision or of any of the ways adjacent to or providing access to the subdivision.

D. Street Location and Alignment

1. All streets shall be designed so that in the opinion of the Planning Board, they will provide safe vehicular travel. Provision shall be required for access to adjoining land, not yet subdivided.
2. Visibility from centerline of a street shall never be less than 50 feet for lanes 75 feet for minor streets and collector streets and 100 feet for Arterial Streets. Sight distance at street intersection shall not be less than 300 feet in each direction and the Board may require greater sight distances for intersection with heavily traveled, main roads.
3. The length of a dead-end street or cul-de-sac shall not exceed 500 feet, as measured to the back of the cul-de-sac loop, unless a greater length is deemed desirable by the Planning Board, because of topography or other local conditions. 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. Loop Roads are not allowed. **
4. Dead-end streets shall be provided at the closed end with a turn-around having an outside roadway diameter of at least one hundred feet (100'), and a property line diameter of at least one hundred and twenty feet (120') unless otherwise specified by the Planning Board. The Planning Board may, at its option allow an outside roadway diameter of up to two hundred (200') with the placement of a circular landscaped island with minimum radius of twenty feet (20') at the center of the turn-around, if the dead-end street is not intended to connect with another street at some future point in time. The unpaved area of all cul-de-sac turnarounds must be landscaped with low maintenance trees and shrubbery.
5. Street jogs with centerline offsets of less than 125' should be avoided.
6. Property lines at street intersections shall be rounded or cut back to provide for a radius of not less than thirty (30) feet.
7. The minimum centerline radii of curved streets shall be 100 feet for a lane, 150 feet for a minor street or collector Street and 300 feet for an Arterial street.
8. No streets shall intersect at less than 60° angle.
9. Except where no other alternative is practicable, no two streets may intersect with any other street on the same side at a distance of less than 400 feet measured from centerline to centerline of the intersecting street. When the intersected street is an arterial street, the distance between intersecting streets shall be at least 1,000 feet.

**Revised 9/27/01

10. Streets shall be related appropriately to the topography. In particular, streets shall be designed to facilitate the drainage objectives set forth in Section 7.10. Street grades shall conform as closely as practicable to the original topography and must be within the parameters listed below. Under no circumstances shall any street have a grade of more than 4% within 50 feet of an intersection. A dead end street shall not have a grade greater than 2% for the last 100 feet at the closed end."

	Maximum	Minimum
Lane	9%	1% *
Minor Street	7%	1%
Collector	6%	1%
Arterial	5%	1% *

E Street Width

The required width for two-way, paved residential streets shall be as follows:

Lane	22 feet *
Minor Street	22 feet
Collector	30 feet
Arterial	34 feet

Reductions of width which are a part of an overall drainage plan to reduce the impervious surface in the subdivision and reduce runoff from the parcel shall be permitted if plans for safety, parking, pedestrian circulation and other factors are deemed superior by the Planning Board to accommodate the requested reductions.

F. Rights-of-way

The minimum width of street rights of way shall not be less than the following;

Lane	50 feet*
Minor Street	50 feet
Collector	60 feet
Arterial	75 feet

Rights of Way for pedestrian access adjacent to paved streets shall be obtained where sidewalks, bikeways, or other structures are necessary.

Slopes adjacent to roadways, natural or man-made, may be placed within easements on individuals properties rather than acquired as rights-of-way.

G. Curbing Curbing shall be required to be installed on all arterial streets, collector streets, minor streets and lanes.*' In addition, curbing shall be required in the following locations:

1. Along the entire perimeter of all cul-de-sacs turnarounds.
2. Along all curves of street intersections.
3. All curves having a radius of sixty (60) feet or less at the street line or a central angle of thirty (30) degrees or more shall have the gutter line curbed with curbing both circular and straight to fit the curve, and the ends of the curve shall be extended by a straight section of curbing not less than five (5) feet long.
4. **Both sides of roadway.**

Curbing shall be constructed of granite, sloped or block, unless, in the opinion of the Planning Board, other material will be satisfactory. Slanted curbing shall be provided on sidewalks at pedestrian crosswalks. Curbing shall be sealed to the road pavement.

The need for curbing may be eliminated along certain roadways, when drainage is provided in swales, which are designed to reduce the rate of runoff and restore or supply needed water to vegetation in the street right of way.

* Revised 4/4/2000

**Revised 9/27/01

II. Pedestrian and Bicycle Paths

Sidewalks shall be placed parallel to roadways as follows:

1. On both sides of all streets within one-half (1/2) mile of *any* public school.
2. On both sides of arterial or collector streets.
3. On one side of a minor street and Lane. *

Where sidewalks are required on both sides of a street, one of the sidewalks may be eliminated where, in the opinion of the Planning Board, one sidewalk will provide adequate pedestrian circulation.

Sidewalk design shall be varied in horizontal layout and location to enhance aesthetic value. When located within the street right of way, sidewalks shall be located at or near the outside of the layout, when possible, with a maximum of pedestrian-vehicular separation. This separation may be achieved by either distance or plantings. Where sidewalks are located outside of the right of way, the developer shall reserve suitable easement therefore.

Public bicycle paths may be required by the Board to provide circulation or access to schools, recreational areas, retail facilities, transportation and community facilities, or where in the opinion of the Planning Board, bicycle travel in the streets would be dangerous. These paths may, or may not, be part of the normal sidewalk provisions.

Bicycle paths shall be designed with a minimum ten foot right of way, 4-6 feet paved width and a maximum gradient of 5% except for segments of less than 200 feet, where a maximum gradient of 10% will be allowed, and a minimum centerline radius of 25 feet.

I. Trees and Shrubs

Street trees of nursery stock conforming to the Standards of the American Association of Nurserymen, of a species approved by the Planning Board, after consultation with the Tree Warden, shall be planted on each side of each street in a subdivision, except where the Definitive Plan shows trees along the ways which are healthy and adequate, shall be retained. Street trees shall be located outside of the right-of-way or at the discretion of the Board within the unpaved portion of the right-of-way at approximately forty foot (40') intervals; two inches (2") in caliper measured four feet (4') above the approved grade (dbh); shall be planted each in at least one-half (1/2) cubic yard of topsoil, and be not closer than five feet (5') nor more than twenty feet (20') from said right-of-way line unless otherwise approved by the Board. Trees shall be properly planted, wrapped, and guyed to insure their survival.

The developer will be responsible for all trees so planted as to their erectness and good health after planting and until the release of all guarantees.

Except as otherwise provided, all cut bankings shall be planted with a low growing shrub or vine and wood chips or bark mulch to a minimum depth of six inches (6") or seeded with a deep-rooted perennial grass to prevent erosion, or other accepted low-maintenance slope stabilization methods.

Other Landscaping along ways may be required by the Board

7.10 DRAINAGE

A. General Approach

Storm drains, culverts, and related facilities shall be designed to permit the unimpeded flow of all natural water courses, to ensure adequate drainage at all low points along streets, to control erosion, and to intercept storm water runoff along streets at intervals reasonably related to the extellt and grade of the area being drained To the maximum extent feasible, storm water must be recharged utilizing structures designed to prevent water quality degradation, rather than piped to surface water. In areas identified as high yielding, aquifer and aquifer recharge areas, recharge is especially critical. Peak stream and channel flows and overland runoff at the boundaries of the development in the ten (10) and one hundred (100) year frequency storm shall be no higher following development than prior to development.

Where the water table is not too high and where the soil is reasonably permeable to adequate depths, drainage shall feature swales, detention/retention ponds *and* multi-use areas. Open drainage systems may be required for recharge of aquifers and recharge areas provided that runoff is not seriously polluted Open drainage featuring grassed areas will be preferred as providing better filtration than pits and shafts.

B. Design Basis

Storm sewers shall be designed to convey peak discharge of the 10 year frequency storm, and culverts shall be designed to convey the peak discharge of the 100 year frequency storm. Detention ponds, when utilized, shall be designed to provide no increase in peak discharge to any off-site area in both the 10 year and 100 year storms. Retention ponds, when utilized, shall be designed such that the combined storage and 24-hour recharge volumes are greater than the inflowing runoff volume.

C Design Method

Storm Drainage calculations shall be based upon the modified soil cover complex method with Storm Drainage design based upon the objectives, principles and design considerations set forth in Urban Hydrology for Small Watersheds, published by the USDA, Soil Conservation Service, Technical Release 55, 2nd Edition, June, 1986. This publication is hereby incorporated as a part of these regulations.

Water velocities in pipes and gutters shall be between two (2) and ten (10) feet per second, and not more than five (5) feet per second without scour protection.

For determination of the extent of development, all undeveloped off-site tributary areas shall be assumed to be fully developed in accordance with the Hubbardston Zoning Bylaw.

D. Connections

Proper connections shall be made with any existing drains in adjacent streets or easements which must be proven by the developer, to be adequate to accommodate the drainage flow from the subdivision. In the absence of such facilities, or inadequacy of the same, it shall be the responsibility of the developer to extend drains from the subdivision as required to properly dispose of all drainage from said subdivision in a manner determined to be proper by the Board. Should any such outlet extend onto adjoining privately owned property, the developer should obtain all necessary easements running to the Town of Hubbardston in a manner approved by the Board. Any connection to existing facilities shall also meet the requirements of the Highway Superintendent.

E. Flood Hazard Avoidance Any subdivision located partially or wholly within the Zone A of the Flood Insurance Rate Maps prepared by the Federal Emergency Management Agency (FEMA) 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 clustering, 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 Base Flood Elevation.

7.11 STONE MONUMENTS

Granite monuments 6" x 6" x 4' with a 3/8 inch drill hole in the center are to be furnished and set on both sidelines of all points of change of direction or curvature of streets, and points of tangency. They shall also be set at the intersections of lot lines and street rights of way, and in no case shall be spaced any more than 1000 feet apart.

Monuments shall not be set until all street and utility construction which might destroy or disturb their location has been completed. Monuments shall be accurately set in the ground with the top flush with the finish grade of the surface of the ground adjacent to the location in which they are to be placed, unless otherwise specified by the Board. The developer shall excavate a hole sufficiently large to properly place these stones and thoroughly tamp around them sufficient material to hold them securely in position. If the material is not satisfactory for backfill, in the opinion of the Planning Board, then said holes shall be filled with gravel.

7.12 ROAD NAMES AND STREET SIGNS

Road names shall be determined by the Planning Board at the time of approval of the Definitive Plan. Street name signs shall be furnished and erected, conforming with street signs used by the Town at all street intersections. Other road signs, i.e. "private street", shall be furnished and erected, as the Board determines is necessary.

7.13 STREET LIGHTING

' Street and pedestrian/bicycle path lighting shall be installed by the developer, except on lanes and cul-de-sacs along all roadways where sidewalks are required Lighting shall be cast downward to prevent light from shining into residences or the *eyes* of pedestrians or drivers. Lighting fixtures shall be placed a maximum of 300 feet apart, except on curves or other hazardous locations, as determined by the Planning Board, where less separation will be required Lighting fixtures shall have a maximum height of twenty (20) feet. All lighting fixtures must be compatible with Massachusetts Electric Co owned equipment and be in accordance with Massachusetts Electric Co. specifications, so as to assure equipment eligibility for Massachusetts Electric Co service under Street Lighting Rate S-23 Option B (M.D P U No 423, Effective June 8, 1975) or the most recently effective equivalent rate Other types of luminaries and/or poles desired by the developer may be used if approved by the Planning Board.

7.14 FIRE PROTECTION

Where a public water supply will be installed within the subdivision, hydrants shall be placed at intervals not exceeding five hundred feet (500') There shall be gates at leads to hydrants. All gates, valves and hydrants shall be as specified and approved by the Fire Chief.

Where no public water supply is to be installed, fire holes and "dry hydrants" shall be installed as specified and approved by the Fire Chief as to number, water volume and design.

7.15 EARTH REMOVAL

- A. The tentative or final approval of a subdivision plan by the Planning Board shall not be construed as authorizing the removal of material from the premises, except in connection with the construction of streets shown on the plan. The removal of 5,000 yards per lot or more shall be in accordance with the Rules and Regulations governing earth removal for the Town of Hubbardston, MA.*
- B. All other earth removal within subdivisions shall be in accordance with the Rules and Regulations Governing Earth Removal for the Town of Hubbardston Massachusetts.

7.16 TOWN ACCEPTANCE

Completed utilities and roads are required to satisfactorily pass one complete winter prior to presentation to the

Town for acceptance

SECTION 8 CONSTRUCTION STANDARDS

8.01 GENERAL

All streets within a subdivision shall be constructed in conformity with the current edition of the Massachusetts Department of Public Works, "Standard Specifications _____ for Highways, __ Bridges and Waterways", as most recently amended.

Each street or portion thereof necessary to serve each lot in a subdivision shall be constructed and brought to finish grade as indicated on the approved Definitive Plan and in accordance with these regulations.

The subdivider or his contractor shall furnish and maintain all stakes and such temporary structures as may be necessary or required by the Planning Board, or its agent, for marking and maintaining joints and lines for the installation of the roadway and related utilities throughout the period of construction of the subdivision.

8.02 PROCEDURE

It is assumed that under normal conditions work will proceed in accordance with the following construction schedule and site inspections will occur as indicated. Major shifts in the schedule must be approved by the Planning Board.

I. Establish Construction Control

2. Clearing and grubbing; including excavating or stripping poor material.
3. Preparation of sub-base; including necessary cuts and fills.

SITE INSPECTION

4. Installation of drainage pipes.
5. Installation of other underground utilities.

SITE INSPECTION

6. Application of material for sub-base.
7. Application of gravel in or above sub-base.
8. Application of gravel in sidewalks.

SITE INSPECTION

9. Installation of granite curbing.
10. Application of oil or other binding material where needed as determined by the Planning Board.
11. Application of bituminous concrete base course.

SITE INSPECTION

12. Application of and installation of concrete sidewalks.
13. Removal or application of material for slopes.
14. Application of bituminous concrete base course.
15. Application of loam for lawns and slopes.
16. Installation of bounds.
17. Clean up

SITE INSPECTION**8.03 PREPARATION AND SURFACING OF ROADWAY**

- A. The right of way shall be cleared of all stumps, brush, roots, boulders, like material and trees, prior to any other work except that trees of aesthetic value and over four (4) inch caliper may be allowed to remain provided they are located at least four (4) feet from the proposed side line of the finished roadway for Arterial, Collector, and Minor Street and at least two (2) feet from the proposed side line of the finished roadway for a Lane and such trees are approved by the Tree Warden and the Planning Board. If fill is to be placed around trees, a tree well shall be constructed prior to placement of the fill.
- B. Grade stakes shall be set and maintained at 50 foot intervals on each side of the right of way.
- C. All loam and other yielding material not suitable for foundation material shall be stripped from the roadway area of each street or way to a depth of four (4) feet below the finished sub-grade and to a greater depth as may be required by the Planning Board or Highway Superintendent and replaced with an approved material. >>No loam, peat, silt, organic matter, or other soft material shall be used below sub-grade and the sub-grade shall be thoroughly compacted before applying the gravel surface. Ledge and large boulders occurring anywhere in

the full cross-section of the roadway must be cleared to a minimum depth of eighteen inches (18) below the finish surface. No loam or gravel shall be removed from the area shown on the definitive plan except in accordance with the approved plan.

- D. *The roadway shall be provided with a gravel base consisting of at least 15 inches compacted thickness of binding gravel 18 inches in the case of Collector, Arterial and Industrial-Commercial Streets, satisfactory to the Highway Superintendent, dean, free of organic matter, and containing no stones over three (3) inches in diameter. The gravel shall be spread in two layers, each thoroughly watered, and rolled true to line and grade and 4" of processed 3/4" - 1 1/2" gravel.**

Before the gravel is spread, the roadbed shall be taped to a true surface conforming to the proposed cross-section of the road. Rolling shall be with an approved three wheel roller or equivalent, weighing not less than ten (10) tons. All layers shall be compacted to not less than ninety-five (95) percent of the maximum dry density of the material as determined by the Standard A.A.S.H.O. Test Designation T99 compaction test Method C. at optimum moisture content. Any depressions that occur, either during or after rolling, must be filled with additional gravel and re-rolled until the surface is true and even. When required by the Planning Board or the Highway Superintendent, samples of the gravel to be used shall be tested for gradation by a sieve analysis and the compacted gravel shall be tested for compaction. All tests are at the expense of the developer. The Planning Board may require streets to be re-excavated if the gravel base is placed prior to plan approval or prior to an inspection and approval of the base.

The grading shall conform to the following requirements:

Sieve	Percent Passing
1/2 Inch	50%-85%
3/8 inch	45% - 80%
No. 4	40% - 75%
No.10	30%-60%
No. 40	10% - 35%
No.200	0%- 10%

- E. *The completed gravel base shall be treated the full pavement width as specified by the Highway Superintendent.*
- F. *The wearing surface of roadways and driveways within the right of way shall be a two course "Type-I" Bituminous concrete pavement, applied with a base course as per the below table, after compaction, and a 1 1/2 inch finish course, after compaction, in accordance with the Massachusetts Department of Public Works (DPW) Standard Specifications for Highways and Bridges Section 460. A two percent (2%) cross-slope shall be maintained for drainage.*

Pavement Base Course Thickness

Lane	11/2"
Minor Street	2"
Collector Street	2"
Arterial Street	2 1/2"
Industrial-Commercial Street	3"

The base course shall be applied after the treated roadway has been sufficiently contacted, as approved by the Highway Superintendent. No pavement shall be laid if frost is present in the ground. The finish course shall be applied only after the base course has weathered through at least one winter.

p.04 DRAINAGE

A. Storm Drainage Structures

1. Catchbasin, Manholes and Piping

A catch basin to manhole drain configuration shall be used. All drain pipes shall be at least twelve (12) inches inside diameter, made of reinforced concrete or **High Density Polyethylene (HDPE)** corrugated piping (N-12) ADS pipe conforming to Massachusetts DPW specifications for Class III pipe, or such higher class as may be required by depth of cover, which shall be not less than thirty-six (36) inches. Generally, catch basins will be required on both sides of the roadway at every low point of the roadway and on continuous grades at intervals of not more than 400 feet. Any catch basins and manholes used shall be at least six (6) feet deep and four (4) feet diameter (inside measurements), with a thirty (30) inch or greater sump below pipe invert and shall be constructed of concrete blocks or precast concrete units.

* revised 4/4/2000

Manhole covers and grates shall be in conformance with Massachusetts DPW specifications, designed and placed so as to cause no hazard to bicycles.

2. Security Bar

Security bars shall be provided at the entrance to all culverts or open pipe drains over 18 inches in diameter. The grate shall be constructed of steel bars not less than 1/2 inch diameter welded together to provide a grate not smaller than the pipe opening. The vertical bars shall be placed with 2 inch clear openings between them, and the horizontal bars shall be placed 12 inches on center. The grate shall be installed not closer than one pipe diameter upstream from the entrance in a manner approved by the Planning Board or its agent. A suitable sketch of the grate and method of installation shall be submitted for approval with the plans for the drains and appurtenances.

3. Headwalls

Concrete or Field Stone masonry headwalls shall be provided at both ends of culverts and the discharge aids of storm drains, and be placed a distance of not less than 65 feet from the edge of pavement, unless site conditions require a shorter distance.

B. Scour Protection

The discharge ends of all drains with flowing full velocities of 4 feet per second or more shall be protected with a rip-rap apron of a width not less than three times the nominal diameter of the pipe. The rip-rap apron shall extend for a distance of not less than 10 times the nominal pipe diameter from the end of the discharge pipe. The rip-rap for exit velocities of 10 feet per second or less shall be composed of a layer of stones 12 inches in thickness or more, placed upon a bed of sand and gravel 6 inches in thickness. The stones shall be sized so that not less than 60 percent shall have one dimension 12 inches or more. The stones after being laid shall be carefully chinked by hand to make a reasonably smooth and shaped surface. Where exit velocities are greater than 10 feet per second, the thickness of stones and the dimensions of the individual pieces shall be sized to prevent displacement by the flow. In this case, details shall be submitted to the Board for approval.

8.05 SIDEWALKS

A Sidewalks shall be installed pursuant to Section 7.09 (H) of these regulations.

B. Preparation of the base shall be accomplished by removing material to a depth of 10 inches below finished grade. Any organic or yielding material shall be removed and replaced with eight (8) inches compacted thickness of binding gravel of the same specifications as that to be used for the gravel base on the roadway.

C. Forms shall be set to grade, and one two inch (2") Bituminous Concrete (Type-1) Finish Course or one four inch (4") layer of Portland Cement Concrete Pavement shall be placed.

D. The driveway area within the street right-of-way shall have either two 1 1/2" layers of Class I Bituminous Concrete Pavement or one 4" layer of Portland Cement Concrete Pavement.

8.06 SHOULDERS

All disturbed areas between the exterior street right-of-way line and the curb line of the paved roadway which are not occupied by sidewalks or driveways shall be graded, loamed and sodded or seeded with a high quality perennial grass seed

8.07 GRADING OF SLOPES

All slopes resulting from grading of street and sidewalks shall not exceed 1 foot vertical to 3 feet horizontal in fill; 1 foot to 2 feet in cut; and 1 foot to 3/4 foot in ledge. Slope easements or retaining walls shall be employed where slopes cannot be contained within street sidelines.

8.08 EROSION AND SEDIMENT CONTROL

The developer shall control erosion and sedimentation during construction according to the objectives, principles and design considerations set forth in RESIDENTIAL EROSION AND SEDIMENT CONTROL, published jointly by the Urban Land Institute, the American Society of Civil Engineers and the National Association of Home Builders, 1978 and according to the guidelines for SOIL AND WATER CONSERVATION IN URBANIZED AREAS OF MASSACHUSETTS published by the USDA, Soil Conservation Service, Amherst, 1975. These publications are hereby incorporated as a part of these regulations.

In addition to the requirements and objectives stated therein, the following must also be achieved:

- I) An absolute minimum of existing vegetative cover shall be disturbed during the construction period.
- 2) Only the smallest practical area of land shall be exposed at any one time during development
- 3) When land is exposed during development, the exposure shall be kept to the shortest practical period of time.
- 4) Where necessary, as determined by Planning Board, temporary vegetation and/or mulching shall be used to protect areas exposed during development
- 5) All disturbed areas shall be properly and neatly graded and shaped as soon as possible. Final grading shall include removal of all large rocks, stumps, debris, and all other deleterious materials from the finished surface.
- 6) At the toe of all cut and fill slopes in excess of ten (10) feet in height, staked baled hay or straw erosion checks shall be installed.
- 7) All disturbed areas shall be protected from potentially erosive runoff from up-slope areas by means of Diversions, Benches, and/or other acceptable means.
- 8) Cut and fills shall not endanger adjoining property:
- 9) Fill shall be placed and compacted so as to minimize sliding or erosion of the soil.
- 10) Grading shall not be done in such a way so as to divert water onto or impound water on the property of another landowner without the written consent of that landowner
- 11) Fills shall not encroach on natural watercourses or constructed channels.
- 12) During construction, necessary measures for dust control shall be

exercised. **8.09 SUPERVISION**

The developer shall provide competent supervision during the construction of the subdivision. If at any time it becomes apparent that the supervision is not satisfactory, the Board may order, in writing, the suspension of construction until such time as competent supervision is provided. This shall include necessary supervision to ensure that all temporary drainage controls, erosion and sedimentation control and such other measures as are contained in the approved definitive plan are adequately and properly maintained.

8.10 SAFETY

All precautions should be taken by the developer and his sub-contractors to observe all applicable safety requirements (ie. OSHA) and other common sense safety practices. The Board designates the Building Inspector-Zoning Agent to report all unsafe activities during the construction of the subdivision to the Planning Board.

Holes greater than five (5) feet in depth and uncovered soil piles or materials stacked in an unsafe manner shall not be allowed unless the area is adequately protected. Covered soil piles shall not be higher than five (5) feet in height.

8.11 CLEANING UP

Before the sale of any lot and a Certificate of Occupancy is issued, the entire subdivision area must be cleaned up so as to maintain a neat and orderly appearance, free from debris, excessive slopes, deep holes and other objectionable materials. All trees removed to allow for construction shall be disposed of outside of the subdivision. All stumps and boulders shall be buried within designated areas approved by the Planning Board or their agent. Such designated area, if not located off-site, shall be shown on the definitive plan. Upon completion of the work all temporary structures, surplus material and rubbish shall be removed by the developer. All areas within the street lines and areas which drain into the street lines shall be restored to permanent vegetation satisfactory to the Planning Board or agent.

Pursuant to M.G.L.c.41 s.81Q, the Hubbardston Planning Board will hold a public hearing on April 4, 2000 for the purpose of amending its Rules and Regulations governing the subdivision of land. For the purpose of amending the fee structure and general requirements, section 4, 6, 7, 8.

Section 4

4.01 Change submission fee to \$175

Section 6

6.01 1.f. Delete existing language

6.01 1.f. Any application of a definitive subdivision plan to the Planning Board shall be accompanied by a filing fee of \$200 for every lot. In addition to the filing fee, the applicant shall pay the cost of legal advertising and notification of all abutters by regular mail. Said filing fee shall be received prior to any action of the Planning Board.

6.01 1 1 Delete existing language

6.01 1.i. The Planning Board may require outside consultants and engineering review of the preliminary and definitive plans. Consultants and engineers to be specified by the Planning Board and all fees are to be paid in advance by the developer.

Section 7

7.09 D.11. Change minimum grade for lane, minor street, collector and arterial to 1%.

7.09 E. - Change lane to 22 feet to match new by-law

7.09 F. Change lane to 50 feet

7.09 G. Add 'minor streets and lanes' to the end of the first sentence.

7.09 G.4. Delete existing language

7.09 G.4. Both sides of roadway

7.09 G.5. Delete existing language

7.09 H.3. Add '**and** lane' to the end of the sentence.

7.15 A. Add The removal of **5,000** yards per lot or more shall be in accordance with the Rules and Regulations governing earth removal for the Town of Hubbardston, MA.

Section 8

8.03 D. Add '4" of processed ³/₄" - 1 %" gravel' at the end of the first paragraph.

8.04 A.1. Second sentence, "...made of reinforced concrete", add '**or High Density Polyethylene (HDPE) corrugated piping** (N-12) ADS pipe.'

Note: Tables will need to be modified.

Hubbardston Rules and Regulations
Footnotes

April 4, 2000

1. Page 5, Section 4.01 Submission
2. Page 7, Section 6.011.f and 1.i Application Procedure
3. Page 20, Section 7.09 d.11, e, f, g, 9.4, g.5 Streets and Ways
4. Page 21, Section 7.09 h.3. Pedestrians and Bicycle Paths
5. Page 23, Section 7.15 Earth Removal
6. Page 25, Section 8.03 d Preparation and Surfacing of Roadways
7. Page 25, Section 8.04 a.1 Storm Drainage Structures