# TOWN OF ESSEX RULES AND REGULATIONS RELATIVE TO SUBDIVISION CONTROL

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## SECTION 1: PURPOSE AND AUTHORITY

## <u>1.1</u> <u>PURPOSE</u>

The Rules and Regulations Governing the Subdivision of Land, Town of Essex, Massachusetts, have been enacted for the purpose of protecting the safety, convenience and welfare of the inhabitants of Essex 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 a Planning Board under the Subdivision Control Law shall be exercised with due regard for the provision of adequate access to all of the lots in a subdivision by ways that will be safe and convenient for travel; for lessening congestion in such ways and in the adjacent public ways; for reducing danger to life and limb in the operation of motor vehicles; for securing safety in the case of fire, flood, panic and other emergencies; for insuring compliance with the applicable provisions of the zoning bylaw; for securing adequate provision for water, sewage, drainage, underground utilities, and other requirements where necessary in a subdivision; and for coordinating the ways in a subdivision with each other and with the public ways in the town and with the ways in neighboring subdivisions.

## <u>1.2</u> <u>AUTHORITY</u>

Under the authority vested in the Planning Board by SECTION 81-Q of Chapter 41 of the General Laws of Massachusetts, as amended, said Board duly adopted these Rules and Regulations Governing the Subdivision of Land on August 21, 2019. Such Rules and Regulations shall be effective immediately upon transmission of certified copies thereof to the Register of Deeds and Recorder of Land Court pursuant to said SECTION 81-Q.

## 1.3 VARIATION

Strict compliance with the requirements of these Rules and Regulations may be *waived* when, in the judgment of said Board, such action is in the public interest and not inconsistent with the Subdivision Contract Law, provided that a written record of any such *waiver*, reciting the reasons therefore, shall be kept by the Board.

## <u>1.4 REFERENCE</u>

For matters not covered by these Rules and Regulations, reference is made to SECTIONS 81-K through 81GG, inclusive, of CHAPTER 41 of the General Laws, as amended, hereinafter referred to as the SUBDIVISION CONTROL LAW.

## 1.5 <u>CONFORMITY</u>

These Rules and Regulations shall be considered as revised to conform with the amendment of CHAPTER 41 of the General Laws made after January 1, 1981.

#### **SECTION 2: DEFINITIONS**

For the purposes of these RULES AND REGULATIONS, the terms and words defined in the SUBDIVISION CONTROL LAW shall have the meaning given therein, unless a contrary intention clearly appears in these definitions. The following other terms and words are defined as follows:

## **APPLICANT**

The owner of land which is the subject of an application of approval of a plan hereunder, or his agent or his representative or his assigns, provided that in the case of any such agent, representative or assign, written evidence of such status, in a form acceptable to the board, must accompany any such application.

### **BASE FLOOD ELEVATION**

The *Base Flood Elevation* shall be the level of flooding having a one percent chance of being equaled or exceeded in any given year, as designated on Federal Insurance and Mitigation Administration (FIMA), Flood Insurance Rate Maps (FIRM), if any, or in the absence of such designation, to be determined by the Planning Board based upon the best available information regarding flood hazards, including any available United States Geologic Survey (USGS), Natural Resources Conservation Service (NRCS) and United States Army Corps of Engineers (USACE) studies.

#### **BENCH MARK**

Surveyed mark made in durable object known position and elevation, as a reference point.

## BIKEWAY

Way designed to be used principally or exclusively by a bicycle or similar unpowered vehicle.

## <u>BOARD</u>

The Planning Board of the Town of Essex.

## <u>DBH</u>

Diameter at Breast Height. A standard unit of tree measurement.

#### ENGINEER OR SURVEYOR

Person registered by the Commonwealth of Massachusetts to perform professional civil engineering or land surveying services.

## <u>LOT</u>

Area of Land in one ownership with definite boundaries used, or available for use, as the site of one or more buildings. Areas endorsed by the Board upon a plan as "*not available for building purposes*" shall not be considered Lots.

## WAY MAINTAINED AND USED AS "A PUBLIC WAY"

For purposes of determining whether a proposed division of lots is a subdivision, a *way* shall be certified as used and maintained as a public way only if it meets the standards of SECTION 3.5.

## WAY IN EXISTENCE WHEN SUBDIVISION CONTROL LAW BECAME EFFECTIVE IN THE TOWN

For purposes of determining whether a proposed division of lots is a subdivision, a *way in existence* as of March 29, 1954 when subdivision law was locally adopted shall not be deemed adequate by the Board except if it meets standards in SECTION 3.5.

## WAY, PUBLIC

Any road which has been accepted as a public way pursuant to Mass. General Law, Chapter 82, plus any way established by court decree to be a public way by dedication, prescription or otherwise.

## **SUBDIVISION**

The division of a tract of land into two or more lots, including

resubdivision, and, when appropriate to the context, shall relate to the process of subdivision or the land or territory subdivided; provided that the division of a tract of land into two or more lots shall not be deemed to constitute a subdivision within the meaning of the Subdivision Control Law if, at the time when it is made, every lot within the tract so divided has frontage on:

1. A public way or a way which the Town Clerk certifies is a way maintained and Used as a public way, meeting the standards of the Board as set out in Section 3.5.

2. A way shown on a plan theretofore approved and endorsed in accordance with The Subdivision Control Law.

3. A way in existence when the Subdivision Control Law became effective in The Town meeting the standards of the Board as set out in Section 3.5.

Such frontage shall be at least such distance as is then required by zoning or other Ordinance or bylaw of the Town.

## <u>TOWN</u>

The Town of Essex.

## **UTILITIES**

Private or municipal services to be furnished within the subdivision, including telephone, cable TV, electric light and power, gas lines, sanitary sewers, stormwater drains, water pipes and appurtenances.

## **SECTION 3: GENERAL**

## 3.1 BASIC REOUIREMENT

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.

## 3.2 LIMITATION OF ONE DWELLING 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 way furnishing access to each site for such building, in the same manner as otherwise required for lots within a subdivision.

## 3.3 EFFECT OF PRIOR RECORDING

The recording of a plan of subdivision within the Town in the Essex South District Registry of Deeds prior to the effective date of the SUBDIVISION CONTROL LAW in the Town shall not exempt the land within such subdivision from the application and operation of these Rules and Regulations except as specifically exempt by SECTION 81, CHAPTER 41 of the General Laws.

## 3.4 WATER SUPPLY

The board will not approve a subdivision plan unless the applicant's engineer certifies that a water supply deemed adequate by the board will be available.

## 3.5 ACCESS ADEOUACY

## 1. General

No plan shall be endorsed as not requiring approval under the Subdivision Control Law and no subdivision plan shall be approved unless each building lot to be created by such plan has adequate access as intended under the Subdivision Control Law, Chapter 41,G.L., Section 81-K through 81-GG.

## 2. Standards of Adequacy

Standards of adequacy for streets within a subdivision are contained in other parts of the Subdivision Regulations. Ways providing access by which subdivision is reached or providing access to lots said not to be within a subdivision shall be considered adequate for creation of lots only if one or more of the following are true:

- a) approval will result in creation of two or three lots from a parcel as existing on July 1, 1985 which are served by a way which the Selectmen certify is Town maintained.
- or
  - b) there is assurance that prior to occupancy on any lots, access will be in compliance with the following standards:

	<u>Developmen</u>	t Pote	<u>ntially Served</u>
	1-10 Dwelling	Units	More units or existin large Nonresidentia
Minimum right-of-way width	44 Feet	44	Feet
Gravel foundation minimum	12 Inches	12	Inches
Surface type	3" Bit. Conc.	3"	Bit. Conc.
Surface width minimum*	16 Feet	20	Feet
Sight distance minimum	75 Feet	225	5 Feet
Maximum grade	8 Percent	8 F	Percent

or

c) the Planning Board determines, following consultation with the Police Chief, Fire Chief, and Board of Selectmen, that because of unusual circumstances, the way in fact will be sufficient to serve potential uses of land abutting on or served by the way in question, despite satisfying neither (a) nor (b) above.

'Development potentially served' may be determined based upon limitations annotated on the plan creating the lot in question or on review by the Building Inspector of the land's capacity in cases where it is not otherwise clear.

In all cases, there must be adequate provisions for utilities and drainage without reliance on Town expenditures, which have not previously been authorized by Town Meeting.

## 3. Obligations

The Board may require, as a condition of its approval of a subdivision plan, that the developer dedicate or acquire and dedicate a strip of land for the purpose of widening access ways to a width as required above, and that he either make physical improvements within such way or compensate the Town for the cost of improvements necessary to meet the standards specified above.

## SECTION 4: PLAN BELIEVED NOT TO REQUIRE APPROVAL

## 4.1 SUBMISSION AND NOTICE

Any person who wished 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** to the Board at a regularly scheduled meeting of the Board, accompanied by the necessary evidence to show that the plan does not require approval.

The plan shall be submitted by delivery at a regularly scheduled meeting of the Board or by certified mail, postage prepaid, to the Board, provided that if so mailed, the date of submission thereof shall be deemed to be the date of the Board's next regularly scheduled meeting following its receipt of the plan, or in the case of such receipt on the date of a regularly scheduled meeting of the Board, the date of receipt. In addition, written notice of such submission using **Application Form A** shall be given by the applicant to the Town Clerk by delivery or by registered mail, postage prepaid. If notice is given by delivery, the Town Clerk shall, if requested, give a written receipt to the person who delivered such notice.

A nonrefundable fee will be required for each submission in accordance with the current fee schedule.

## 4.2 CONTENTS

The original of the drawn plan and three prints shall contain the following information:

- 1. Title, boundaries, north point, date and scale.
- 2. Name and address or record owner and engineer or surveyor.
- 3. Names of all abutters as they appear in most recent tax list.
- 4. Existing lines or streets, ways, lots, easements and public or common areas.
- 5. Location of all permanent bounds identified as to whether existing or proposed.
- 6. The entire area in which the division takes place including all parcels affected by an increase or decrease.
- 7. Sufficient data to determine location, width, direction and length of every street and way line, lot line and boundary line, and to establish these lines on the ground, with areas of lots and lot numbers.
- 8. Frontage and area of any remaining adjoining land owned by the applicant.

9. Suitable space to record the action of the Board and the signature of the members of the Board.

10. Notice of any special permits/variances issued as to the land or any building thereon.

## 4.3 BOARD ACTION

If the Board determines that the plan does not require approval, it shall forthwith, without a public hearing and within 21 days of the date of its submission, in accordance with MGL CHP 41, 81P, endorse on the plan by a majority of the Board the words "*Planning Board approval under Subdivision Control Law not required*" or words of similar import with appropriate name or names signed thereto. Such endorsement shall not be withheld unless such plan shows subdivision. Said plan shall be returned to the applicant and the Board shall notify the Town Clerk of its action in writing.

If the Board determines that the plan does require approval under the Subdivision Control Law, it shall, within 21 days of the date of submission of said plan, give written notice of its determination to the Town Clerk and to the applicant. Said plan shall be returned to the applicant.

If the Board fails to act upon the plan or fails to notify the Town Clerk and the applicant of its action within 21 days after the date of its submission, it shall be deemed to have determined that approval under the Subdivision Control Law is not required, and the Board shall forthwith make such endorsement on said plan, and on its failure to do so forthwith the Town Clerk shall issue a certificate to the same effect. The plan bearing such endorsement or the plan and such certificate, as the case may be, shall be delivered by the Board, or in the case of the certificate, by the Town Clerk, to the applicant.

## 4.4 ADMINISTRATION

One print of the plan shall be retained in the files of the Board and the second print, with a notation of its action, shall be filed by the Board with the Building Inspector Copies shall also be filed with the Assessor.

## SECTION 5: PROCEDURES FOR THE SUBMISSION AND APPROVAL OF PLANS

## 5.1 PRELIMINARY PLAN

1. *General:* A Preliminary Plan of a subdivision may be submitted by the Applicant to the Board of Health and to the Board for discussion and approval by the Board. The submission of such a Preliminary Plan will enable the subdivider, the Board, and other municipal agencies to discuss and clarify items of concern with such subdivision before a Definitive Plan is prepared. Therefore, it is strongly recommended that a Preliminary Plan be filed in every case.

2. *Submission:* If such review and approval are desired, a properly executed Application in the form of **Form B** shall be filed with the Preliminary Plan to the Board. The Preliminary Plan shall be submitted by delivery at a regularly Scheduled meeting of the Board or by certified mail, postage prepaid, to the Board, provided that if so mailed, the date of submission thereof shall be deemed to be the date of the Board's next regularly scheduled meeting following the receipt of the Preliminary Plan, or in the case of such receipt on the date of a regularly scheduled meeting of the Board, the date of receipt. In addition, written notice of such submission using an addition application in the form of **Form B** shall be given by the applicant to the Town Clerk by delivery or by certified mail, postage prepaid. If notice is given by delivery, the Town Clerk shall, if requested, give a written receipt to the person who delivered such notice.

A nonrefundable fee is required for each submission in accordance with the current fee schedule.

**3**. *Contents:* The Preliminary Plan shall be provided on paper 24 inches by 36 inches at a scale of  $1^{"} = 100^{"}$  and ten (10) prints shall be filed at the office of the Board. Said Preliminary Plan shall show sufficient information about the subdivision to form a clear basis for discussion and for the preparation of the Definitive Plan. Such information shall include the following:

- a) Cover page with drawing index and locus map.
- b) Proposed subdivision name or identifying title, boundaries, north point, date, scale, legend and title 'Preliminary Plan', and block for approval.
- c) Name and address of record owner or owners, applicant, engineer, or surveyor or other designer of preliminary layout, including professional stamp.
- d) Names of all abutters as they appear in most recent local tax list, including names of owners of land separated from the subdivision only by a street.
- e) Existing and proposed streets, sidewalks, ways, lots, easements and public or common areas within the subdivision.
- f) Existing and proposed easements and rights-of-way appurtenant to the land.
- g) Names, location and approximate widths of adjacent streets to the Subdivision.
- h) Preliminary boundary lines of all proposed lots or divisions of land with their approximate areas and dimensions. Lots to be numbered in sequence.

- i) Topography of the land at a 2 foot contour interval. USGS data and NRCS soil maps may be utilized, including major existing and proposed site features such as stone walls, fences, structures, crushed stone, paved areas, large trees, rock ridges and outcroppings, wooded areas, ditches, wetlands, swamps and waterbodies.
- j) Proposed preliminary overland and subsurface piped drainage system including outfall locations, adjacent to or within the proposed subdivision.
- k) Zoning classification, if applicable, of all land shown on the plan, including overlay zoning such as floodplain, watershed or aquifer districts.

During discussion of the Preliminary Plan, information required for the Definitive Plan and the financial arrangements will be identified.

4. *Action by the Board:* The\_Preliminary Plan will be reviewed by the Board and within Sixty (60) Days after the date of the submission, the Board shall approve, approve with modifications suggested by the Board and agreed upon by the Applicant, or disapprove the Preliminary Plan. Disapproval by the Board will be accompanied by a detailed statement of reasons for the action.

Notice of its action must be given by the Board to the Applicant and the Town Clerk within **Sixty (60) Days** of the date of submission.

# 5.2 RELATION OF PRELIMINARY TO DEFINITIVE PLAN (G.L. CHAPTER 41, SECTION 81-O, CHAPTER 40A, SECTION SIX

Approval of a Preliminary Plan does not constitute approval of a subdivision, and a Preliminary Plan cannot be recorded in the Registry of Deeds. If a Definitive Plan is duly submitted within seven months from the date of submission of the Preliminary Plan, and if the Definitive Plan is duly approved by the Board, the Subdivision Rules and Regulations in effect at the time of submission of the Preliminary Plan shall govern approval of the Definitive Plan. If the Definitive Plan is so approved, the zoning provisions in effect at the time of the submission of the Preliminary Plan shall govern the land shown on the plan for eight years from the date of the Board's endorsement of the subdivision plan.

## SECTION 6: DEFINITIVE SUBDIVISION PLAN

## 6.1 APPLICATION PROCEDURE

**1. Required Material**: Any person who desires approval of a Definitive Plan of a subdivision shall submit (in accordance with Paragraph Two of this Section 6.1) to the Board the following, with the drawings consolidated onto a single sheet or on separate sheets (such material hereinafter collectively called the "Definitive Plan Submissions"):

a) Ten paper prints 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)Ten copies of a cover sheet including a sheet index and a locus plan of the subdivision at  $1^{"} = 800$ ', showing the location of the site, proposed roads and their relations to the surrounding area, and identifying any zoning district or overlay districts applicable to the site.

c) Ten prints of street plans and profiles of every proposed street. Include identification of roadway materials, curbing and drainage structures.

d) Ten prints 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.

e) A properly executed application of Form D.

f) A non-refundable fee for every 150-feet of frontage created within the Subdivision.in accordance with the current fee schedule.

g) Drainage calculations certified by the engineer who prepared them.

h) Evidence of ownership and, if requested by the Board, traverse notes, language or any easements, covenants or added restrictions applying or proposed to apply to the area being subdivided, rights and easements obtained for utilities or drainage or access outside of the subdivision, description of erosion control methods to be employed, and cross sections of proposed streets at critical locations showing existing and proposed grade for the width of the right-of-way plus twenty-five (25) feet on each side.

i) If necessary, in order to determine compliance with the requirements or Intent of these rules and regulations, the Board may require specialized Engineering or environmental analyses to be performed at the expense of the applicant. Any outside consultants shall be employed in accordance with the guidelines set forth in MGL Chapter 44, Section 53G, Employment of outside consultants. j) 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, verified by a representative of the Board of Assessors.

k) A Construction Plan for the subdivision road and associated drainage and utilities.

1) 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.

#### 2. Manner of Submission and Determination of Submission Date

The Definitive Plan Package shall be submitted by delivery at a regularly scheduled meeting of the Board or by certified mail, postage prepaid, to the Board, provided that if so mailed, the date of submission of the Definitive Plan shall be deemed to be the date of the Board's next regularly scheduled meeting following the receipt of the Definitive Plan Submission, or in the case of such receipt on the date of a regularly scheduled meeting of the Board, the date of receipt.

#### 3. Additional Submissions

1. For modifications to the Definitive Plan Submissions pursuant to Paragraph Two of this Section 6.1, written notice of such submission using an additional application in the form of **Form D** shall be given by the applicant to the Town Clerk by delivery or by certified mail, postage prepaid. If notice is given by delivery, the Town Clerk shall, if requested, give a written receipt to the person who delivered such notice. Further, within ten (10) days of such submission, the applicant shall file one (1) copy each of the Modified Definitive Plan Submissions with the following officers, agencies and boards for their review and recommendation, together with a new checklist for comments by the reviewing entity in the form of **Form E** hereto:

Board of Selectmen	Board of Health
Department of Public Works	<b>Conservation Commission</b>
Chief of Police	Fire Chief

2. With respect to such transmittals, the applicant shall request and the reviewing entity shall provide a written acknowledgement of receipt, in a form acceptable to the Board, and the applicant shall forthwith file such acknowledgements of receipt with the Board for its records.

3.Failure to complete all transmittals as required herein or to provide written acknowledgements evidencing the same to the Board shall constitute grounds for disapproving a Definitive Plan. 4. Except for the Board of Health which shall report to the Board within forty- five (45) days after receipt of the Definitive Plan Submissions, all other officers, agencies and boards receiving a Definitive Plan for review shall, within thirty-five (35) days after receipt of such plan, report to the Board, in writing, their findings and recommendations. Such report may be submitted in the form of **Form F**, or by written report. Failure of any officer, agency or board to make a report to the Board within thirty-five (35) days after receipt of the Definitive Plan shall be recorded in the minutes of the Board as "no comment" by such reviewing entity.

5. Any report submitted to the Board by a reviewing officer, agency or board shall be considered by the Board in making its decision of Definitive Plan. The Board may also request any officer, agency or board to jointly review the Definitive Plan with the Board and/or to provide information regarding the Definitive Plan at the public hearing.

6. All pertinent information relative to the report of any reviewing officer, agency or board shall be filed with the records of the Board.

7. The Board shall assure that a copy of any report submitted to the Board by any reviewing officer, agency or board with respect to a Definitive Plan shall be sent to the applicant. The Board shall, whenever possible, submit a copy of such report to the applicant before the public hearing on the Definitive Plan. In all cases, the Board shall submit a copy of any such report to the applicant before taking final action of the Definitive Plan.

## 6.2 DEFINITIVE PLAN CONTENTS

The Definitive Plan shall be prepared by a Registered Land Surveyor and, if required, a Civil Engineer, registered in the commonwealth of Massachusetts, in a form acceptable to the Essex South District Registry of Deeds. It shall contain the following:

1 .Cover sheet including a sheet index and locus plan of the subdivision at 1"=800', showing the location of the site and identifying any zoning districts or overlay districts applicable to the site.

2. Subdivision name, north point, legend, date, annotation of revision dates and contents, and scale.

3. Name and address of record owner and of Applicant, stamp and signature of Registered Land Surveyor and of any other professionals engaged in the design. In each case certifying that elements of the plan for which they are responsible have been prepared in accordance with these Rules and Regulations;

4.Location and names of all abutters as they appear on the most recent tax list including property owners on the opposite side of any streets abutting the subdivision;

5. Existing and proposed lines of streets, ways, lots, easements, and public or common areas within the subdivision. The proposed names of proposed streets shall be shown in pencil until the Board has approved such names;

- 6. Sufficient data to readily determine the location, direction, and length of every existing and proposed street, way, easement, lot and boundary line, and to establish those lines on the ground:
- 7. The area of each lot;
- 8. Lot numbers shown enclosed in a circle and street numbers enclosed in a square.
- 9. Location of all permanent monuments, properly identified as to whether existing or proposed;
- 10. Location, names and present widths of streets bounding, approaching or within reasonable proximity of the subdivision, and designation whether public or private.
- 11. Existing and proposed watercourses, wetlands and ponds;
- 12. Precise boundaries of any zoning district insofar as the boundaries touch on the Subdivision;
- 13. 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 watercourse or other body of water. Calculations shall utilize TR55, unless the Board agrees to some other method, using a ten (10) year storm frequency for street drainage and a fifty (50) year storm frequency for cross culverts. Cross sections of each drainage swale 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 sewage 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.

Stormwater generated by the subdivision must be self-contained. If stormwater 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 from the Department of Public Works that such discharge is permitted.

- 14. Suitable space for endorsement by the Town Clerk and by the Planning Board with spaces for annotating date of approval and date of endorsement.
- 15. Location of Base Flood elevation if encountered within 100 feet of sub-division

## 6.3 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, drawn showing the following data:

- 1. Subdivision name, owner's name and address, boundary lines of ways, north point, scale, date, annotation or revision dates and contents, and as on the Definitive Plan:
- 2. Name and address of person preparing the plan together with his Massachusetts registration certificate number as land surveyor or engineer;
- 3. The plan shall show bearings and distances, radii and arcs, central angle and tangent distances on all curves with stationing on the centerline;
- 4. The profile shall show the existing ground on the center line in a solid black line, the existing right side in a short dash line and the existing left side in a long dash line; the proposed grade shall be shown in a heavy black line with the elevation shown at each fifty (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 centerline;

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 widths 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;

## 6.4 CONSTRUCTION PLAN CONTENTS

The Construction Plan shall be on a single sheet, 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, scale, and Planning Board file number in the lower right-hand corner.
- 2. At two (2) foot contour intervals, existing topography and proposed topography including streets, drainage, and other required improvements.
- 3. Location of tree cover and individual trees over 12" diameter at breast height, existing structures including fences and walls, existing water supplies and on site disposal systems, wetlands, and the boundary of the Flood Plain Overlay District.
- 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 Street Plans and Profiles.

## 6.5 REVIEW PROCEDURES

1. **Board of Health**: The Board of Health shall within 45 days of the date of submission of a Definitive Plan report to the Board in writing with signatures of a majority of its members its approval or disapproval of the plan, as required by Section 81U, Chapter 41, G.L. If the Board of Health disapproves said plan, it shall make specific findings as to which, if any, of the lots shown on such plan cannot be used for building sites without injury to the public health, and include such specific findings and the reasons therefore in such report, and where possible, shall make recommendations for the adjustment thereof. In the event of any such disapproval by the Board of Health, approval of the plan by the Board shall only be given provided that the applicant documents having reviewed his plan with the Board of Health, and only on condition that the lots or land disapproved by the Board of Health shall not be built upon without prior consent of the Board of Health. The Board shall endorse on such condition, specifying the lots or land as to which the condition applies.

2. *Conservation Commission:* The applicant shall document prior to Board approval of the Definitive Plan either that the Conservation Commission has determined that the Wetlands Protection Act is not applicable to the proposed layout and construct showing on the Definitive Plan or that a Notice of Intent with the Commission. Concurrent review by the Conservation Commission and Planning Board is recommended, to be exercised at the applicant's option. Applicant approval shall be contingent upon receipt of an Order of Conditions.

**3.** *Public Hearing*: The Board will not approve a Definitive Plan 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 the laws of the Commonwealth.

**4.** Specialized Engineering or Environmental Analyses: If necessary, in order to determine compliance with the requirements or intent of these rules and regulations, the Board may require specialized engineering or environmental analyses to be performed at the expense of the applicant. Any outside consultants shall be employed in accordance with the guidelines set forth in MGL Chapter 44, Section 53G, Employment of outside consultants.

## 6.6 ACTION BY THE PLANNING BOARD

**1.** *Decision:* After the public hearing, the Board in due course will approve, modify and approve, or disapprove the Definitive Plan submitted. Criteria for action by the Board shall include, without limitation, the following:

a) Completeness and technical adequacy of all submissions;

b) Determination that development at the 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;

c) Conformity with the Board's design and construction standards;

d) Conformity with all applicable zoning requirements;

e) Consistency with the purposes of the Subdivision Control Law, and these Rules and Regulations.

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, all in accordance with the laws of the Commonwealth.

**2.** *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 it's approval of the plan, the applicant shall provide assurances as set out below.

The applicant shall either file a surety company performance bond or a deposit of money or negotiable securities in an amount determined by the Board to be sufficient to cover the cost of all or any part of the improvements as shown on the Definitive Plan as specified in the design and construction standards not covered by a covenant below. Such bond or security, if filed or deposited, shall be approve as to form and manner of execution by the Town Counsel and as to sureties by the Town Accountant and shall be contingent on the completion of such improvements within three years of the date of the bond. The form of the bond shall be as required by the Board. At the discretion of the Board, a time extension may be granted for a period not to exceed one (1) year, provided that such an extension may be conditioned upon an increase in the amount of such bond or security as determined by the Board.

Alternatively, the owner, at the Board's request, shall 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 other structures erected or placed on, or application for a building permit made with respect to, and such lot until:

a) The streets shown on the subdivision plan and the streets and any side-walks, bikeways, walkways, or footpaths required by the Board shown on the plans and profiles have been brought to subgrade throughout in accordance with the requirements of these Rules and Regulations, including the installation of required catch basins, drains, culverts and other drainage facilities;

b) Facilities for water in accordance with the requirements of the Department of Public Works have been installed throughout the streets shown on the plan;

c) The subdivision plan, bearing the Board's signed endorsement thereon, and a signed copy of such agreement have been recorded in the Essex South District Registry of Deeds or with the Recorder of the Land Court and receipt provided thereof;

d) 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;

e) The owner has recorded in the Essex South District 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 clauses (a) to (d) inclusive of 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 a 1-1/2" binder 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.

**3.***Copies of Documents:* Following plan approval, endorsement, and re- cording, the applicant shall provide the Board with one polyester film reproducible and five prints of the Definitive Plan and one copy of final covenants and restrictions, noting book, page number, and date of recording for each; and one polyester film reproducible and five prints of the Street Plans and Profiles. One copy of the Definitive Plan shall be transmitted to the Inspector of Buildings by the Planning Board.

## 4. Release of Performance Guarantee:

a) Upon completion of improvements required by these Rules and Regulations, the applicant may request 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 Board and to the Town Clerk. Release will be granted only following written approval by the Board and any other town officials concerned with the work performed. Copies of release from covenants or agreements regarding building or use and occupancy permits shall be sent by the Board to the Inspector of Buildings.

b) *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 such interim facilities as temporary turn- arounds.

c) *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 c. 41, G.L., section 81-U, 11<sup>th</sup> paragraph).

The Board shall retain security in an amount equal to at least 10% (ten percent) of the total cost of improvements until the integrity of road pavement and drainage has been verified following a full winter in place, and an amount equal to at least 5% (five percent) of the total cost until vegetation has been established, and the fee has be conveyed to the Town or three years have elapsed since completion of the improvements.

d) *Refusal of Release*. If the 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 this regulation.

e) *Rescission*. Failure of the applicant to record the Definitive Plan within six months of its endorsement, to comply with the construction schedule incorporated into the performance agreement, or to initiate construction of improvements or sell lots in a subdivision or portion thereof *within five years of the approval* of the Definitive Plan, or to comply with all applicable zoning or other ordinance or bylaw and requirements of the Conservation Commission under the Wetland Protection Act, or unauthorized departure from any agreements made or plans submitted, whether or not at the direction of other public agencies, shall constitute reason for the Board to consider rescission of such approval, in accordance with the requirements and procedures of Section 81W, ch. 41, G.L.

### 5. Ways and Easements

a) *Acceptance of Streets or Footpaths*. Approval by the Board of a Definitive Plan shall not constitute the laying out or acceptance of by the Town of any streets, bikeways, or footpaths within a subdivision.

b) *Ownership of Ways and Easements*. The owner on whose behalf the Definitive Plan was submitted shall retain title to the fee of each street, path, or easement in or appurtenant to the subdivision until conveyed to the Town or other parties, and shall maintain and repair the roads and drainage facilities in a manner satisfactory to the Board during that period. Notation that fee is to be retained shall be placed on the Definitive Plan.

Prior to final release of security, the owner on whose behalf the Definitive Plan was submitted shall submit all necessary documentation for approval of the street by the Board, including plans in form acceptable to the Essex South District Registry of Deeds, legal description, easements, list of owners and mortgagees of lots having rights in the street, and any grants of rights necessary.

c) *Completion Within Three Years*. The Board may decline to approve any plan unless the applicant agrees to complete the ways shown thereon and install the public utilities aforesaid within three years of the date of approval. If the ways in any subdivision are not complete and the utilities aforesaid are not installed within the time so agreed to by the applicant or so required by the Board, the Board's approval of the Definitive Plan shall lapse, and no such way shall thereafter be laid out, constructed, completed or opened for public use unless and until a new application and Definitive Plan in accordance with the then in effect Rules and Regulations is filed with and approved by the Board.

d) *As Built Plans*. Upon completion of construction, and before release of the performance guarantee, the applicant shall have prepared and submitted As- Built Plans at the same scale as the street plans, which shall indicate the actual location of all of the following:

- (1) street lines;
- (2) traveled way edges;
- (3) path locations;
- (4) permanent monuments;
- (5) location and inverts of the required utilities and drainage;
- (6) locations of any other underground or above ground utilities, such as electricity, telephone lines, and street lighting.

The accuracy of such As-Built Plans shall be certified by a Massachusetts Registered Land Surveyor or Massachusetts Registered Professional Engineer retained by the applicant and approved by the Planning Board Engineer.

## SECTION 7: GENERAL REQUIREMENTS AND DESIGN STANDARDS FOR ALL SUBDIVISION PLANS

## 7.1 GENERAL

- 1. All standards in this Section shall be considered minimum standards and may be varied from or waived where the Board considers that alternate conditions will serve substantially the same objective. A written explanation of all waivers shall be maintained in the files, with the reasons therefor.
- **2.** Design and construction shall reduce, to the extent possible, the following features:
  - a) volume of cut and fill;
  - b) area over which existing vegetation will be disturbed, especially if within 100 feet of a river, wetland or waterbody or in areas having a slope of more than 15%;
  - c) number of trees removed having a 12" (dbh) diameter breast height;
  - d) extent of waterways altered or relocated;
  - e) dimensions of paved areas (including streets) except as necessary for safety and convenience, especially in aquifer/recharge areas;

Design shall emphasize, to the extent possible, the following:

- a) use of collector streets to minimize traffic on streets providing house frontages;
- b) visual prominence of natural features of the landscape;
- c) maintenance within the subdivision of runoff and vegetative cover equivalent to conditions before development.
- **3.** Lots, buildings and structures incorporated within subdivisions shall comply with the Town zoning bylaw then in effect.

#### 4. 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 a storm water easement or drainage rightof-way of adequate width and proper side slope as determined by the Town Department of Public Works 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 be less than twenty feet (20') or the side slope be steeper than two (2) horizontal on one (1) vertical.

Access easements or parcels connecting 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 requirement.

### 5. 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 all other dwelling units, and ten (10) per cent of the land area. 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 potential subdivisions.

#### 6. **Protection of Natural Features**

All natural features, such as trees, wooded areas, water courses, scenic points, historic spots, shall be preserved as much as possible. Any clearance, backfilling, cutting, thinning or other disturbance to trees twelve inches (12") or over in diameter measured four feet (4') above finished ground level (dbh), located within the minimum front setback distance, or other natural vegetation shall be prohibited unless deemed both proper by the Board and not in conflict or contradiction to the intent of Paragraph 3(c) of this §7.1. Any such proposed clearance shall be shown on the plan and written reasons therefore may be requested by the Board. Tree wells, or retaining wall should be installed when and as requested by the Town Department of Public Works for suitable grading around trees. Tree wells or retaining walls shall be designed in accordance with the standards of the International Society of Arboriculture (ISA).

## 7. Lot Drainage

Lots shall be prepared and graded consistent with drainage so that stormwater does not exit the site at a volume or velocity greater than the pre-existing condition in accordance with EPA National Pollution Discharge Elimination System (NPDES) standards and regulations. If provision is necessary to carry drainage to or across a lot, an easement or drainage right-of-way of a minimum width of twenty (20') and maximum 2:1 side slope shall be provided.

## 8. Land Not Suitable for Housing

Land susceptible to flooding and land not suitable for housing or street development and land which may be hazardous to life, health or property shall not be accepted as part of a subdivision for residential purposes, but may be used, with the approval of the Board, for parks, playgrounds or other open space uses as determined by the Board of Health. Such land shall be labeled 'Not a Buildable Lot' on the plans.

## 9. Utilities

All required utilities exclusive of transformers shall be placed underground at the time of initial construction. Required utilities shall include water, sewer, storm drainage, telephone, electricity, gas, street lights, and cable TV unless otherwise specified by the Board.

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 mains the full length of streets and to the exterior limits of the subdivision at such slope depth and size which will accommodate extension.

Fire hydrants and street lighting shall be installed as required by the Board.

Connections for sanitary sewer, storm drain, water, gas, electric and telephone service shall be constructed and stub provided within each lot whether or not there is a building thereon, except that the Board may waive such requirement, in whole or in part for any purpose for which, if in the opinion of the Board, such connections shall not be required.

**10.** All streets, sidewalks, bikeways, walkways, water mains, sanitary sewer, storm drains, other utility pipes, hydrants, drains, basins, culverts and other related infrastructure 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.

#### 11. Additional Requirements

Street trees, esplanades and open green spaces may be required at the discretion of the Board. Where such improvements are required, they shall be incorporated in the final plan and executed by the applicant as construction of the subdivision progresses.

#### 12. Extension

Reasonable provision shall be made for extension of pavements and utilities to adjoining properties, including installation of water gates and manholes, if necessary. The applicant shall not deny others connection to the utilities provided they pay all cost of such connection.

#### 13. 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 zoning and subdivision requirements of such municipality. That a legally adequate performance bond has been duly posted and that such access is adequately improved to handle prospective traffic.

#### 14. Sediment Control

In order to reduce erosion accompanying the installation of ways, utilities and drainage, and the resultant pollution of streams, wetlands and natural drainage areas, the applicant shall submit a sediment control plan, including control methods such as compost socks, straw wattles, inlet protection, berms, dikes, detention ponds, mulching and temporary seeding or sodding.

#### 15. Resubdivision

Resubdivision of all or part of land covered by an existing plan shall be governed by the current Rules and Regulations in force. Such resubdivision shall show clearly the areas being re-plotted and the file number of all previous plans of these same areas, together with filing dates.

## 7.2 STREETS AND WAYS

### 1. General

The arrangement, character, extent, width, grade, and location of all streets shall be considered in their relation to existing or planned streets, to topographical conditions, to public convenience and safety, and their appropriate relation to the proposed use of the land to be served by such streets. Also the arrangement of streets in a subdivision shall provide for the continuation of the principal streets in adjoining areas for extension should adjoining land be subdivided.

Residential street system shall be designed to be compatible with existing streets, and to rationalize traffic patterns within the new subdivision.

The street plan shall accommodate existing street alignments which enter or border the tract.

Single-family residences should not front on streets on which future high-traffic volumes are expected.

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

- a) Where existing lots of record abut on arterial streets;
- b) In subdivisions which front on an existing arterial; and
- c) 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 local planning board and highway department.
- d) For subdivisions over 10 lots, a study shall be submitted estimating the effect of the increase traffic flow will have in relation to the way(s) giving access to the subdivision and the inhabitants of the subdivision.

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

## 2) Street Location and Alignment

- a) All streets in the subdivision shall be so designated that, in the opinion of the Board, they will provide safe vehicular travel while discouraging movement of through traffic.
- b) Where a subdivision abuts or contains an existing or arterial street, the Board may require marginal access streets, reverse frontage with

screen planting contained in a non-access reservation along the rear property line, deep lots with rear service streets, or such other treatment as may be necessary for adequate protection of residential properties and to afford separation of through and local traffic.

- c) Where a subdivision borders on or contains a railroad right-of-way, the Board may require a street approximately parallel to and on each side of such right-of-way, at a distance suitable for the appropriate use of the intervening land, as for park purposes in residential districts, or for commercial or industrial purposes in appropriate districts. Such distances shall also be determined with due regard for approach grades and future grade separations.
- d) Visibility from centerline of a street shall never be less than 75 feet.
- e) Street jogs with centerline offsets of less than 125 feet shall not be permitted.
- f) Streets shall be designed to intersect as nearly as possible at right angles and no street shall intersect any other street at less than 60 degrees. The center lines of no more than two streets shall intersect any one point.
- g) Property lines at intersections shall be rounded with a minimum radius of ten feet or of a greater radius where the Board may deem necessary. The Board may permit cut-offs or chords in place of rounded corners.
- h) Half-streets shall be prohibited, except where essential to the reasonable development of the subdivision in conformity with the other requirements of these Rules and Regulations, and where the Board finds it will be practicable to require the dedication of the other half when the adjoining property is subdivided. Wherever a half-street is adjacent to a tract to be subdivided, the other half of the street shall be plotted within such tract.
- i) Every dead-end street (whether a cul-de-sac, teardrop or other variation) shall not exceed 1,200 feet in length.
- j) Every dead-end street shall have a turnaround designed to accommodate vehicles
- k) A circular turnaround shall have an outside roadway diameter of at least 100 feet.

#### 3. Names of Subdivision and Streets

- a) The name of the subdivision shall not duplicate or approximate the name of any other subdivision within the town.
- b) No street name shall be used which will duplicate or be confused with any street name already in use.
- c) Street names shall be subject to the approval of the Board.

#### 4 Table of Geometric and Other Standards for Streets

- a) Streets
  - 1) Minimum width of right of way 44 feet.
    - 2) Minimum width of pavement:
      - (a) Urban -24 feet.
      - (b) Rural -20 feet.
    - 3) Maximum grade eight percent (8%).
    - 4) Maximum grade at intersections three percent (3%) within 50 feet of intersections.
    - 5) Minimum angle of intersections -60 degrees ( $60^{\circ}$ ).
    - 6) Width of shoulders:
      - (a) Urban -10 feet.
      - (b) Rural -12 feet.
    - 7) Minimum centerline radii on curves -200 feet.
    - 8) Minimum tangent length between reverse curves -100 feet.
  - 9) Minimum road base 12 inches of compacted gravel beyond design width of the pavement.
  - 10) Bituminous paving, where used minimum 3 inches.
  - 11) Road crown, minimum one-fourth inch per foot.

#### b) *Sidewalks, where required*:

- 1) Minimum width five feet.
- 2) Base course, gravel -8 inches.
- 3) Surface -2 and one-half  $(2\frac{1}{2})$  inches of bituminous hot-top.

#### c) Dead-end Streets:

- 1. Width of right of way -44 feet.
- 2. Length not more than 1,200 feet.
- 3. Diameter of turn-around at enclosed end:
  - (a) Property line, minimum 125 feet.
    - (b) Pavement, minimum -100 feet.
- d) *Property line radii at intersection*: Minimum 10 feet.

### e) *Curb radii at intersections*:

- 1. Ninety degree intersections -30 feet.
- 2. Less than 90 degree intersections -30 feet.
- f) *Street in Cut and Fill*: Slide slopes not steeper than three feet horizontal and one foot vertical, graded, loamed, six inches compacted, and seeded as required.
- g) *Adequate Drainage of Streets*: All streets shall be provided with adequate drainage facilities to provide for the removal of storm water to prevent flooding of the pavement and erosion of adjacent surfaces.
- h) *Street Curbs and Gutters, at Discretion of Planning Board.* Where curb and gutter are not required, stabilized shoulders and proper drainage shall be the responsibility of the subdivider in compliance with Town and NPEDS requirements.
- i) *Esplanade Area, Topsoil, Seeding.* Upon completion of development of any lot all esplanade or planting strip areas at sides of streets shall receive at least six inches of compacted good topsoil or loam, free of stones over one inch in diameter, clay and other unsuitable materials. Base material shall be removed prior to placement of topsoil.
- j) *Seeding.* Planting strips shall be seeded with first quality lawn seed, free of dirt, debris and weed seeds.

- k) Material Requirements
  - 1. Gravel: shall conform to §M103.0 Type C of the MASSDOT Standard Specifications for Highways and Bridges current edition, and be compacted to the 95% of the maximum density as defined by ASTM 1557, Method D.
  - 2. Bituminous Material: aggregates for bituminous pavement shall conform to the requirements as outlined in §§M2.01.0 through M2.01.7 of the MASSDOT Standard Specifications for Highways and Bridges, current edition and bitumen shall conform to the requirements of §M3.00.00 and §M3.01.0 of the the MASSDOT Standard Specifications for Highways and Bridges current edition.
- Other Construction Requirements. Unless otherwise stated herein, construction shall conform to the requirements of the MASSDOT "Standards Specifications for Highways and Bridges" current edition as amended.

### 5. Street Drainage

Street drainage utilizing curbs and gutters shall be designed to keep the velocity of the flow of water in the gutter below levels which are hazardous to pedestrian safety.

Street drainage utilizing roadside swales shall be designed to be freeflowing but not to the extent that the flow would erode the swales.

### 6. Curbing

Curbing shall be installed where required by the Board, and may consist of granite, Portland cement or other materials.

Curbs and gutters will be required when they are necessary for the maintenance of the pavement and the prevention of pavement edge raveling.

Curb and gutter may be eliminated along certain roadways when drainage is provided in swales which are designed to reduce the rate of run-off, restore and/or supply needed water to vegetation in the street right-of-way and in accordance with NPDES standards.

#### 7. Pedestrian and Bicycle Circulation Systems

Sidewalks shall be placed parallel to the roadway(s) providing direct access to:

- a) Commercial/retail facilities;
- b) Schools:

- c) Public recreational facilities;
- d) Other Roadways incorporating sidewalks;
- e) Subdivision over 10 lots; and
- f) Elsewhere in accordance with the pedestrian circulation system as necessary.

Sidewalk design, including but not limited to, cross-slope, thickness, joints and material composition shall be approved by the Town Department of Public Works.

Pedestrian-vehicular separation shall be considered where possible. Design solutions which achieve this separation shall receive priority consideration.

Walkways connecting existing trails should be created wherever reasonable and developed in new locations.

When located within right-of-way, paths or sidewalks shall be located at or near the outside of the layout but varied in horizontal location to minimize disturbance of land vegetation.

Public bikeways or walkways may be required by the Board to provide circulation or access to schools, recreational areas, shops, transportation or community facilities, or for other reasons. These ways may or may not be part of the normal sidewalk provisions, and they may or may not be part of any lot. They shall be designed with a minimum 10 foot right-of-way, 6-8 foot width, maximum gradient of 5% except for short segments, and a minimum centerline radius of 25 feet.

## 2. Trees

Street trees of nursery stock conforming to the Standards of the American Association of Nurserymen, of a species approved by the Board, 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, which 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 approximately at seventy-five foot (75') intervals; shall be at least twelve feet (12') in height; 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, unless otherwise required by the Board; 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 to insure their survival.

The applicant will be liable for all trees so planted as to their erectness and good health after planting and until the release of the performance guarantee provided for pursuant to §6.6-2.

Except as otherwise provided, all cut banks shall be planted with low growing shrubs or vines and mulched to a minimum depth of four inches (4") or seeded with a deep-rooted perennial grass to prevent erosion.

Other landscaping along ways may be required by the Board.

## 7.3 DRAINAGE

#### 1. 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 run-off along streets at intervals reasonably related to the extent and grade of the area being drained. To the maximum extent feasible, storm water shall be recharged rather than piped to surface water. Peak stream flows and run-off at the boundaries of the development in a twenty (20) 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, drainage shall feature swales, detention ponds and multi-use areas, in accordance with the Massachusetts Stormwater Handbook. Open drainage systems as described in this publication may be required for recharge of aquifers and recharge areas provided that run-off is not seriously polluted. Open drainage featuring grassed areas will be preferred over piped conveyance. A retention pond in which there is always some water will be preferred as more attractive and useful than a detention basin.

## 2. Design Basis

Storm drains and retention basins shall be based on a 10-year frequency storm, and culverts shall be based on a 50-year frequency storm, with consideration given to damage avoidance for a 100-year storm.

#### 3. Design Method

Design shall utilize TR55 and NOAA Atlas 14 for Rainfall Data unless alternative methods or sources are approved by the Planning Board. 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 on ground surfaces. All undeveloped tributary areas shall be assumed to be fully developed in accordance with the Zoning Bylaw.

## 4. Storm Sewers

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 conforming to MASSDOT specifications for Class III pipe, or such higher class as may be required by depth of cover, which shall be not less than twenty-four (24) inches.

### 5. Structures

Generally, catch basins will be required on both sides of the roadway on continuous grade 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 pre-cast concrete units. Manhole covers and grates shall be cast iron and in conformance with MASSDOT Specifications, designed and placed so as to cause no hazard to bicycles.

### 6. Connections

Connections shall be made with any existing drains in adjacent streets or easements which prove 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 subdivisions as required to properly dispose of all drainage from said subdivision in a manner determined to be proper by the Board.

## 7. Flood Hazard Avoidance

Any subdivision located in any part within the Flood-plain District established under the Zoning Bylaw shall comply with the following:

- a) 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.
- b) All public utilities and facilities, such as sewer, gas, electrical, and water systems shall be located and constructed to minimize or eliminate flood damage.
- c) Drainage systems shall be designed in consideration of possible flooding to the Base Flood Elevation.

## 7.4 UTILITIES

#### 1. Water System

- a) Within the water service district, water service including fire hydrants shall be provided at the expense of the owner of the subdivision.
- b) The minimum water-main permitted shall be eight-inch and shall be installed in accordance with Town of Essex Department of Public Works requirements and oversight, the expense to be borne by the owner of the subdivision.
- c) If the Town Department of Public Works standards require a larger water main than eight-inch in any instance, the Board may require installation of mains meeting such standards. In such instances the owner of the subdivision shall be responsible for the difference in cost between an eight-inch main and the larger main required.

### 2. Sanitary Sewage System

- a) *Design.* Sewage systems and related equipment shall be designed by a registered professional engineer in full compliance with the applicable laws of the Commonwealth of Massachusetts and shall be approved by the Board and the Board of Health.
- b) *Connection with Public Sewage Systems*. Where a public sanitary line is located within 1,000 feet of a proposed subdivision at its nearest point, the owner, on whose behalf the Definitive Plan was submitted, shall connect with such sanitary sewer line with a main not less than eight inches in diameter if sewer access is allowed by the Essex Department of Public Works.
- c) Lot-size and Private Disposal System. Individual or private sewerage systems may be permitted in subdivisions located beyond reach of the proposed town sewerage systems or where it is economically infeasible to install public sewage disposal systems; provided that the minimum lot size is 40,000 square feet or more; and further provided that the design of the proposed system is approved by the Board and the Board of Health gives all approvals, waivers, variances and the like required under the laws of the Commonwealth of Massachusetts.

## 3. Standards for Sewage Disposal Systems

Construction of all sewage disposal systems shall conform to the requirements of Title V of the Massachusetts Environment Code.

## 7.5 BLOCKS

The length, width and shape of blocks shall be determined with due regard to:

- a) Provision of adequate building sites suitable to the special needs of the type of use contemplated.
- b) Zoning requirements as to lot size, dimensions and density.
- c) Needs for convenient access, circulation, control, and safety of street traffic.
- d) Limitations and opportunities of topography.
- Block lengths shall not exceed 1,500 feet or be less than 600 feet and no block shall be less than 300 feet in width for residential use. This restriction shall not apply in a rural district provided that each lot in each block measures not less than two acres in area.

## <u>7.6</u> LOTS

- 1. Lot dimensions and building set-back lines shall meet the requirements of the zoning bylaw for the district or districts in which the subdivision is located.
- 2. Depth and width of properties reserved or laid out for all purposes shall be adequate to provide for the off-street service and parking facilities for vehicles required by the type of use and development contemplated.
- **3.** Corner lots shall be increased in size wherever necessary in order that any structure to be placed thereon shall conform to the minimum set-back line of each street as required by the zoning bylaw.
- **4.** The subdividing of the land shall be such as to provide that all lots shall front upon a public street.
- 5. Double frontage lots and reverse frontage lots shall be avoided except where essential to provide separation of residential development from traffic arteries or to overcome specific disadvantages of topography and orientation. A planting screen easement of at least ten (10) feet, across which there shall be no right of access, shall be provided along the line of lots abutting such a traffic artery or other disadvantageous use.

- 6. Side lot lines shall be substantially at right angles or radial to street lines.
- 7. If a tract of land is subdivided into larger parcels than ordinary building lots, such parcels shall be so arranged as to allow the accommodation of future streets and logical future resubdivisions.

## 7.7 MONUMENTS

Monuments shall be installed at all street intersections, at all points of change in direction or curvature of streets and at other points where, in the opinion of the Board, permanent monuments are necessary. Such monuments shall conform to the standard specifications. No permanent monuments shall be installed until all construction which would destroy or disturb the monuments is completed.

## FORM A

## APPLICATION FOR ENDORSEMENT OF PLAN BELIEVED NOT TO REQUIRE APPROVAL

Three copies of this form, filled out and signed, should be included with the original and three copies of the plan in question.\* (Please type or print information in blanks below.)

Date of Submission:\_\_\_\_\_(See Section 4.1)

To the Planning Board: The undersigned, believing that the accompanying plan o constitute a subdivision within the meaning of the Subdiv determination and endorsement that Planning Board appro-	vision Control Law, herewith submits sa	id plan for a
Name of Applicant:		
Address:		
Phone:		
Name of Surveyor:		
Address:		
Deed of Property recorded in Essex South District Regist	ry of Deeds	
Book No.	Page No	
List and Board of Appeals decisions pertaining to this site		
Signature of Address:	Owner:	
PLANNING BOARD APPROVAL UNDER THE S	UBDIVISION CONTROL LAW NOT RE	EQUIRED
Signed:		
Signed:		20

## FORM B

## **APPLICATION FOR APPROVAL OF PRELIMARY PLAN**

Two copies of this form along with two copies of Form C, filled out and signed, should be included with the original and ten copies of the preliminary plan.\* (Please type or print information in blanks below.)

Date of Submission: \_\_\_\_\_\_ (see Section 5.2)

To the Planning Board: The undersigned herewith submits the accompanying Preliminary Plan of property located in the Town of Essex for approval as a subdivision under the requirements of the Subdivision Control law and the Rules and Regulations Governing the Subdivision of Land in the Town of Essex.

Name of Proposed Subdivision		
Name of Applicant:		
Address:		
Name of Owner of Land:		
Address:		
Name of Engineer or Surveyor:		
Address:		
Deed of property recorded in Essex South District Reg	gistry of Deeds Book No:Page	e No
Approximate acreage in subdivision:	Number of lots:	
Location and Description of Property:		
Signature of Ov	wner:	
Address:		
Votes For Approval Votes For Approval wi	th ModificationsVotes Against A	Approval:
Signed:	Action Taken:	
Signed:	for the Essex Planning Board	20 (Date of Vote)

## FORM C

## ABUTTERS LIST

Two copies of this form must be included with Forms B and D. The list of abutters must be checked by a representative of the Board of Assessors before being submitted to the Planning Board. (Please type or print information in blanks below.)

Essex, Massachusetts

20

To the Planning Board:

The undersigned, believing that the following list of names includes all abutters\* to the subdivision named below, has checked this list with a representative of the Board of Assessors.

\*Including property owners across roads from land in question.

Name of Abutter	<u>Mailing Address of Abutter</u>
	· · ·
Name of Applicant:	
Signature of Representative of Board of Assessors	
Signature of Representative of Doard of Assessors	
Name of Subdivision	
Date:	

## FORM D APPLICATION FOR APPROVAL OF DEFINITIVE PLAN

Two copies of this form along with two copies of Form C, filled out and signed, to be included with the original and ten copies of the definitive plan.\* (Please type or print information in blanks below)

Date of Submission:	(See Section 6.1)
for approval as a subdivision	omits the accompanying Definitive Plan of property located in the Town of Essex under the requirements of the Subdivision Control Law and the Rules and abdivision of Land in the Town of Essex.
Name of Proposed Subdivisio	n
Name of Applicant:	
Name of Owner of Land:	
Address:	
Name of Engineer or Surveyo	r:
Address:	
Deed of property recorded in	Essex South District Registry of Deeds
Book No:	Page No
Approximate acreage in subdi	vision:Number of lots:
Location and Description of P	Property:
	Signature of Owner:
	Address:
Votes For Approval	Votes For Approval with ModificationsVotes Against Approval
Signed:	Action Taken:
Signed:	for the Essex Planning Board 20

## FORM E

#### **Essex Planning Board**

Date:

**TO**:

- □ Board of Health
- **Department of Public Works**
- □ Conservation Commission
- □ Chief of Police
- □ Fire Chief

In accordance with Section 6.1 of the Planning Board's Subdivision Rules and Regulations, this attached Definitive Plan has been submitted to your agency for review and recommendations.

Please provided comments and recommendations on the attached form (Form F), or in a written report, and submit to the Planning Board no later than 35 days (45 with respect to the Board of Health) of date of submission to Planning Board.

Applicant

## FORM F

TO;	ESSEX PLANNING BOARD
FROM:	
DATE:	
SUBJECT:	Comments and recommendations regarding the definitive subdivision plan entitled "
	" and dated
The undersigne	d recommends:
Approval	Approval with modifications Disapproval
	amed subdivision plan insofar as its/his area of jurisdiction is concerned. The reasons for this n are as follows:

Name of Officer, Agency or Board

*Note:* The Planning Board will take into consideration any recommendations made hereon before taking final action on the definitive subdivision plan. Lack of a timely report by an Officer, Agency, or Board will be recorded in the minutes of the Planning Board as 'No Comment'.

## **Essex Subdivision Rules and Regulations:**

*Revised, Adopted and Approved* October 16, 2019