

# Town of Mashpee

## Rules and Regulations Governing the Subdivision of Land



**ADOPTED BY THE MASHPEE PLANNING BOARD**

**May 5, 2010**

UPDATED FROM THE January 21, 2004 EDITION

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## **Section I**

### **PURPOSE**

The Massachusetts Subdivision Control Law (Massachusetts General Laws Chapter 41, Sections 81K – 81GG) was 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 a Planning Board and of a (Subdivision) Board of Appeals 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 zoning ordinances or by-laws; for securing adequate provision for water, sewerage, drainage 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 city or town in which it is located and with the ways in neighboring subdivisions.

It is the intent of the Subdivision Control Law that any subdivision plan filed with the Planning Board shall receive the approval of such Board if said plan conforms to recommendation of the Board of Health and to the reasonable rules and regulations of the Planning Board pertaining to subdivisions of land; provided, however, that such Board may, when appropriate, waive, as provided for in Section 81R, such portions of the rules and regulations as is deemed advisable.

## **Section II**

### **PREAMBLE**

These Rules and Regulations Governing the Subdivision of Land in Mashpee have been adopted pursuant to sec. 81Q of Ch. 41 of the General Laws and are published to assist landowners and developers in complying with the provisions of the Subdivision Control Law (Massachusetts General Laws Ch. 41, Sec. 81K – 81GG). Reference should be made to that statute, to the Zoning Enabling Act (General Laws Ch. 40A) and to the zoning by-law of the Town of Mashpee for applicable provisions not set out in these regulations.

## Section III

### DEFINITIONS

For the purpose of these Rules and Regulations, the following words and terms herein are hereby defined or the meaning thereof is explained or limited as follows:

**Applicant** The person who applies for the approval of a plan of a subdivision and his administrators, executors, heirs, devisees, successors and assigns. The applicant or applicants must be owner or owners of all land included in the proposed subdivision.

**Board** The Planning Board of the Town of Mashpee.

**Definitive Plan** A plan of a proposed subdivision or re-subdivision prepared by a Registered Land Surveyor and Registered Engineer.

**Final Approval** Approval by the Board of a Definitive Plan of a subdivision.

**Flood Zone** An area of land designated as a special flood hazard area inundated by the 100-year flood as determined by calculation and/or as shown on a Flood Insurance Rate Map by the National Flood Insurance Program.

**Lot** An area of land in one ownership, with definite boundaries, used or available for use, as the site of one or more buildings complying with the area, frontage and other requirements of the Zoning By-laws of the Town of Mashpee.

**Low Impact Development (LID)** Term used to describe a land planning and engineering design approach to managing storm water runoff. It emphasizes conservation and use of on-site natural features to protect water quality. It implements engineered small-scale hydrologic controls to replicate the pre-development hydrologic regime of watersheds through infiltrating, filtering, storing, evaporating, and detaining runoff close to its source.

**Dead-end Street** A street with only one access which serves also as the only exit.

**Owner** The owner of record as shown by the records in the Barnstable County Registry of Deeds or Land Registry District.

**Person** An individual, two or more individuals, a partnership, association or corporation.

**Preliminary Plan** A plan of a proposed subdivision or re-subdivision of land drawn on tracing paper, or a print thereof, submitted for tentative approval, not suitable or intended to be recorded.

**Profile** A complete and accurate representation of the finished vertical profile of a road or roads to be constructed within a subdivision, drawn on profile ("gridded) drawing (not tracing) paper, and copies or prints thereof, not suitable or intended to be recorded.

**Standard Specifications** Shall mean the Commonwealth of Massachusetts Standard Specification for Highways and Bridges, latest edition

**Street** A public way laid out by the town under MGL C. 82, §21, or other authority or laid out by the state or county, which is open to travel by the general public and is on record at the Registry of Deeds, or a public or private way duly approved, or proposed to be approved, by the Planning Board under the Subdivision Control Law. For the purposes of these regulations, streets are further classified as follows:

**Minor Residential Access** A street whose sole function is to provide access to abutting properties. It serves, or is designed to serve no more than nine (9) dwelling units or nine single family lots.

**Residential Access** A street whose sole function is to provide access to abutting properties. It serves or is designed to serve at least ten (10) but no more than twenty-five (25) dwelling units or single family lots.

**Minor Collector** A street which is not intended for, nor does it have the potential for use by, through traffic. Rather it will be used solely for access to serve at least twenty five (25), but no more than one hundred (100), residential lots within the subdivision and / or to connect Minor Residential and Residential Access streets to Collector or Arterial streets.

**Collector** A street which is used primarily as access from subdivisions to the Arterial street network, or as a major connector between Arterial streets, while also providing limited access to adjacent land. (Typically a Town road.)

**Arterial** A street whose primary function is to carry through traffic from other parts of the Town and between towns, rather than provide direct land access, and which has the potential to service a substantial amount of traffic. (Typically a State or Town road.)

**Commercial** A street within a commercially zoned subdivision or development that, in the opinion of the Board, will carry significant amounts of mixed traffic from vendors, delivery vehicles and the general public and which may require increases in layout width and/or travel way widths for the intended use of the subdivision or development area.

**Industrial** A street within an industrially zoned subdivision or development site that carries or is intended to carry significant amounts of traffic such as from tractor trailer vehicles, heavy delivery vehicles or the like and which, in the opinion of the Board, may require increases in layout width and/or travel surfaces

or increases in road base and pavement to accommodate heavy loads for the intended use of the subdivision or development.

**Other** A street not otherwise defined herein that, due to its particular nature or use, requires special consideration by the Board. Such streets shall be considered only when the applicant demonstrates the need and includes in the application such details as to location, traffic demands, design, and construction that pertain to the proposed use of the street.

**Subdivision** The division of a tract of land into two or more lots, which shall include re-subdivision, 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 within the meaning of the Subdivision Control Law if, at the time when it is made, every lot within the tract so divided has frontage on (a) a public way or a way which the Town Clerk certifies is maintained and used as a public way, or (b) a way shown on a plan theretofore approved in accordance with the Subdivision Control Law, or (c) a way in existence when the Subdivision Control Law became effective in Mashpee (March 7, 1966) having, in the opinion of the Planning Board, sufficient width, suitable grades and adequate construction to provide for the needs of vehicular traffic in relation to the proposed use of the land abutting thereon or served thereby, and for the installation of municipal services to serve such land and the buildings erected or to be erected thereon. Such frontage shall be of at least such distance as is then required by the Mashpee zoning by-law 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 or other instruments adding to, taking away from, or changing the size and shape of, lots in such a manner as not to leave any lot so affected without the frontage above set forth, or the division of a tract of land on which two or more buildings were standing when the Subdivision Control Law went into effect in Mashpee into separate lots, on each of which one of such buildings remains standing, shall not constitute a subdivision. (per MGL Chapter 41, Section 81L).

**Subdivision Control Law** Sections 81K -81GG, inclusive of Chapter 41 of the General Laws, and any acts in amendment thereof, in addition thereto, or in substitution thereof.

**Tentative Approval** Approval by the Board of a Preliminary Plan of a proposed subdivision.

**Town Engineer** A Registered Professional Civil Engineer and Registered Land Surveyor designated by the Board and acting on behalf of the Town of Mashpee.

**Wetland** Any inland or coastal land defined as a wetland or resource area, including riverfront area and flood plains under Chapter 131, §40 of the General Laws (310 CMR 10) or the most recent rules and regulations of the Mashpee Conservation Commission.

## **Section IV**

### **PLAN PROCEDURES**

- A. Only those plans which constitute "subdivisions" as that term is defined in Section III require the approval of the Planning Board. However, all plans, whether "subdivisions" within the meaning of the law or not, must have either approval as a subdivision, or endorsement that they do not require approval, before they will be accepted for recording at the Registry of Deeds or registration at the Land Court.
- B. The Planning Board will consider plans at meetings only, provided the owner of the property or his representative is present. This provision applies to all plans including plans submitted as "Approval Not Required" plans, Preliminary Subdivision Plans, or Definitive Subdivision Plans.

## **Section V**

### **PROCEDURE FOR SUBMISSION OF A PLAN BELIEVED NOT TO INVOLVE A SUBDIVISION**

- A. Any person who wishes to cause to be recorded in the Registry of Deeds or with the Land Court a plan of land and who believes that his plan does not require approval under the Subdivision Control Laws, may submit his plan, application Form A, Notice of Filing an Application with the Mashpee Planning Board (Form N), and required fees (see schedule) to the Board at a regularly scheduled meeting, either in person or by a representative. Such plan shall be accompanied by the necessary evidence to show that the plan does not require approval. Said person, or at the discretion of the Board a representative of the Board, shall file with the Town Clerk, by delivery or registered mail, Form N signed by an authorized member of the Board stating the date of submission for such determination and accompanied by a copy of said application.
- B. Plans that indicate a non-conformance with any provision of the Zoning By-law will not be finally acted upon unless or until the plan has been modified to eliminate such non-conformance or a variance has been obtained from the Board of Appeals and a waiver obtained from the Planning Board, or the plan contains a statement as follows:

"No determination as to compliance with zoning requirements has been made or intended by this endorsement under MGL Chapter 41, Section 81L."
- C. The plan shall be drawn in conformance with the Rules and Regulations of the Barnstable County Registry of Deeds and/or Land Court and shall show:
  - 1. The existing and/or proposed boundary lines.

2. North point, date of survey and scale.
  3. Name of record owner and signature and stamp of a Registered Land Surveyor.
  4. Names of all abutters from the most recent tax list.
  5. Existing lines of streets, ways and easements.
  6. Whether a street is a public or private way and its name.
  7. Lot numbers, dimensions and area.
  8. Any other information necessary for the Board's determination.
  9. The zoning district in which the subject property lies.
  10. Proposed street (postal) numbers for each lot in accordance with the street number plans of the Town of Mashpee as determined by the Town Clerk.
- D. All plans with six (6) or more lots shall be referenced to Massachusetts State Plane coordinates using the North American Datum of 1983 (NAD83) and the North American Vertical Datum of 1988 (NAVD88). Whenever possible, plans with five (5) or less lots shall also be "tied into" real world State Plane coordinates using the datum specified above. To demonstrate this tie down, all features shall be stored in the Massachusetts State Plane Coordinate System and the plan location and coordinate values of at least two points shall be included in the submitted CAD file.
- E. The plans shall be drawn to a scale of 1 inch = 40 feet or such other scale approved by the Board. All plan sheets shall have perimeter dimensions of 24" x 36". All plans submitted under this section shall also be submitted by electronic CAD file in DXF (Drawing Exchange File) format. To ensure that all plans are submitted to the Town in a consistent format, the CAD file shall use the layering scheme listed in Section XVI.
- F. If the Board determines that the plan does not require approval as a subdivision, it shall, without a public hearing and within twenty-one days of submission, endorse on the plan the words "Planning Board Approval Under the Subdivision Control Law Not Required." Said plan shall be returned to the applicant and the Board shall notify the Town Clerk of its action.
- H. If the Board determines that the plan does require approval under the Subdivision Control Law, it shall, within twenty-one days of submission of said plan, so inform the applicant and return the plan. The Board shall also notify the Town Clerk of its determination.

## Section VI

### PROCEDURE FOR THE SUBMISSION AND APPROVAL OF A PRELIMINARY PLAN

- A. No plan of a subdivision of land shall be approved unless, after adequate investigation, the Board determines that the land can be used without danger to health, life or property, and that the plan is compatible with neighboring conditions. Preliminary Plans, showing the proposed subdivision in a general manner, are required for non-residential subdivisions, and shall be submitted to the Board and to the Board of Health. Preliminary Plans for residential subdivisions are not required; however, submission of such a plan will enable the applicant, the Board and other Town agencies to discuss and clarify the problems of the subdivision before costly engineering and drawings for a Definitive Plan are prepared.
- B. The applicant shall:
1. Prepare Form B and Form N in triplicate, the original and one copy to go to the Board with two copies of the Preliminary plan, and one duplicate of Form B to go to the Board of Health with one copy of the Preliminary Plan.
  2. Give written notice using Form N signed by an authorized member of the Board to the Town Clerk by delivery or registered mail, postage prepaid, that applicant has submitted such a plan.
  3. Submit the required fees (see schedule).
  4. Prepare a Preliminary Plan on suitable material to a scale of 1 inch = 40 feet or such other scale approved by the Board, with perimeter dimensions of 24" x 36", showing:
    - a. The subdivision name, if any, boundaries, north point, date, scale, legend and title "Preliminary Plan."
    - b. The name of the record owner and the applicant and the signature and stamp of the Registered Civil Engineer or Registered Land Surveyor.
    - c. The names of all abutters as determined from the most recent tax list.
    - d. The existing lines of streets, ways and easements, and any public areas within the subdivision in a general manner.
    - e. The approximate boundary lines of proposed lots with approximate areas and dimensions.
    - f. The names, approximate location and widths of adjacent streets.

- g. The proposed system of drainage including adjacent existing waterways, marshes, flood zones and wetlands in a general manner.
- h. Topography of the land based on 2' contour intervals. The topographic survey shall be certified as follows:

"I certify that this topographic survey was made (on the ground) (by aerial survey) on \_\_\_\_\_(date)."  
Signed by Registered Land Surveyor.

- i. Any site features such as buildings, ponds, streams, marshes and areas subject to seasonal flooding.
  - j. A title block in the lower right hand corner.
- C. If the applicant owns or controls un-subdivided land adjacent to that shown on the Preliminary Plan, the Board may require that the applicant submit a sketch plan showing a possible or prospective street layout for all such adjacent land. This sketch plan may be submitted separately from the Preliminary Plan. Failure to provide such a sketch in a timely manner, except for good cause, may result in disapproval of the Preliminary Plan.
- D. Approval or Disapproval of Preliminary Plan.

Within forty-five (45) days after submission of a preliminary plan, the Planning Board, and Board of Health shall notify the Town Clerk and the applicant, by certified mail, either that the plan has been approved, or that the plan has been approved with modifications suggested by each Board or agreed upon by the person submitting the plan, or that the plan has been disapproved and in the case of disapproval, each board shall state in detail its reasons therefor.

- E. Relation of Preliminary Plan to Definitive Plan and Zoning Provisions.

Approval of a Preliminary Plan does not constitute approval of a subdivision, and a Preliminary Plan may not be recorded in the Registry of Deeds. Provided that if a Definitive Plan is duly submitted within seven months from the date of submission of the Preliminary Plan, the zoning rules and regulations in effect at the time of submission of the Preliminary Plan shall govern the Definitive Plan.

## Section VII

### PROCEDURE FOR THE SUBMISSION AND APPROVAL OF A DEFINITIVE PLAN

- A. Submission of a Definitive Plan is required for residential and non-residential subdivisions. Any person who submits a Definitive Plan for the subdivision of land shall, at a regularly scheduled Board meeting, have his surveyor present and file with the Board the following:
1. Six (6) sets of prints of the Definitive Plan, dark line on white background, and three (3) sets of prints of road profile plans.  
NOTE: The applicant is not required to submit the mylar original of the Definitive Plan to the Board at the time of filing the application. It may be submitted for signature only after appropriate notice of approval is given by the Board and after the expiration of the 20 day appeal period.
  2. A copy of all plans submitted under this section shall also be submitted in a Windows-compatible electronic DXF format. The plans shall be referenced to Massachusetts State Plane coordinates using the North American Datum of 1983 (NAD83) and the North American Vertical Datum of 1988 (NAVD88). The plan submittals shall be "tied into" real world State Plane coordinates using the datum specified above. To demonstrate this tie down, all features shall be stored in the Massachusetts State Plane Coordinate System and the plan location and coordinate values of at least two points shall be included in the submitted electronic file. To ensure that all plans are submitted to the Town in a consistent format, the CAD file shall use the layering scheme listed in Section XVI.
  3. Properly executed application Form C in triplicate.
  4. Properly executed Form N to be endorsed by an authorized member of the Board
  5. Submit required fees (see fee schedule).
  6. A listing, certified by the Mashpee Assessors' Office, of the names and mailing addresses of the owners of all properties located within 300 feet of the boundary of the parcel(s) to be subdivided, as appearing in the most recent tax list, (including those in adjacent towns if appropriate) along with three (3) sets of mailing labels for all of said owners.
  7. Three (3) copies of drainage calculations including plans of pre-construction and post construction storm water conditions which show drainage sub -catchment areas and design points.

- A. The applicant shall cause to be filed by delivery or registered mail Form N endorsed by an authorized member of the Board with the Town Clerk stating the date of submission for approval of the Definitive Plan. Form N shall also describe the land to which the plan relates sufficiently for identification.
- B. At the time of filing of the Definitive Plan, the subdivider shall also file with the Board of Health one contact print of the Definitive Plan, dark line on white background. The Board of Health shall within forty-five days after filing of the plan, report to the Board in writing, approval or disapproval of said plan. If the Board of Health disapproves said plan, it shall make specific findings as to which, if any, of the lots shown on such plan cannot be used for building sites without injury to the public health, and include such specific findings and the reasons therefore in such report; and, where possible, shall make recommendations for the adjustment thereof. Failure of the Board of Health to report shall be deemed approval by the Board of Health.

Written proof of submittal to the Board of Health shall be submitted to the Planning Board prior to the time of the Public Hearing for the Definitive Plan.

- C. Before approval, modification and approval, or disapproval of the Definitive Plan is given, a public hearing shall be held by the Planning Board, notice of the time and place of which and of the subject matter, sufficient for identification, shall be given by the Planning Board at the expense of the applicant by advertisement in a newspaper of general circulation in the Town of Mashpee, once in each of two successive weeks, the first publication being not less than fourteen days before the day of such hearing, or if there is no such newspaper in the Town of Mashpee then by posting such notice in a conspicuous place in the Town Hall for a period of not less than fourteen days before the day of such hearing, and by mailing a copy of such advertisement to the applicant and to the owners of all properties located within 300 feet of the boundary of the parcel(s) to be subdivided.
- D. The Definitive Plan shall be prepared by a Registered Civil Engineer and Registered Land Surveyor, both qualified to practice in the Commonwealth of Massachusetts, and shall be clearly and legibly drawn in conformance with the Rules and Regulations of the Registers of Deeds for Barnstable County and/or the Land Court.

The scale shall be 1 inch = 40 feet or such other scale as the Board may prescribe and on sheets with perimeter dimensions of 24" x 36". If multiple sheets are used, they should be accompanied by an index sheet showing the entire subdivision. Lots shall be shown as a closed figure on at least one sheet of the plans if multiple sheets are required.

- E. The Definitive Plan shall contain the following information:
  - 1. Subdivision name, boundaries, north point, date, scale, legend, proposed names of streets (in pencil) and the zoning classification.

2. Name and address for each of the following: record owner, subdivider, registered engineer or registered land surveyor together with stamps and signatures.
3. Names and addresses of all abutters, as well as the owners of any land directly across any street from the proposed subdivision, as determined from the most recent tax list.
4. Lines must be indicated by bearings referred to the Massachusetts Coordinate System where control points on that system are available within 1000 feet of locus.
5. Existing and proposed lines of streets, ways, lots easements, and public or common areas within the subdivision.
6. Sufficient data to determine the location, direction and length of every street and way line, lot line and boundary line and to establish these lines on the ground.
7. All lots or other divisions of land are to be designated numerically and in sequence, or in case of registered land a numbering system approved by the Land Court is to be used together with proposed street (postal) numbers for each lot in accordance with the street number plans of the Town of Mashpee.
8. The plans for each project must give information satisfactory to the Board to accurately locate proposed streets as well as their accurate connection with other existing streets in the vicinity.
9. The plans must show the length and direction of streets and boundary lines, the length and radii, tangents and angles of all curves, together with the width of streets and ways.
10. The Board may require a general plot plan to a suitable scale showing the relation of the proposed subdivision to adjoining property within a radius of 1/4 mile or to the nearest existing streets on all sides.
11. Location of all permanent monuments properly identified as to whether existing or proposed.
12. Proposed layout of storm drainage, water supply and sewer systems, their appurtenances and all easements thereto.
13. Location of all swamp, marsh, wetland, flood zones and where the subdivision is adjacent to or affected by tidewater, 2' contours with mean high water in such area.

14. Topography of the land including areas outside the property limits sufficient to show the potential impacts of storm water runoff both to the site and to adjacent properties. Topography shall be to at least a 2' contour interval with a contour interval of 1' where particular local conditions dictate as well as spot grades along existing roads and pavements. Spot grades on roads shall be shown sufficient to indicate the direction of storm water flow over the pavement, road crown and gutter lines.

15. Definitive plans shall have the title block in the lower right hand corner of the drawing.

16. Lettering in a suitable place as follows:

"Approved in accordance with the Subdivision Control Law."  
Mashpee Planning Board (with five (5) lines for signatures)  
date approved \_\_\_\_\_  
date signed \_\_\_\_\_

17. Notation in a location adjacent to the Board's approval as follows:

"This plan subject to covenant dated \_\_\_\_\_ and attached hereto."

18. A certificate by the Registered Land Surveyor that the plan has been prepared in accordance with these regulations and the accuracy standard prescribed by the Massachusetts Land Court for comparable property in substantially the following form:

"I hereby certify that this plan was made in accordance with the Mashpee Subdivision Regulations, with Land Court Standards of Accuracy and that the permanent points shown on the plan are in existence on the ground."  
Date.....  
Registered Land Surveyor.....

19. Lettering in a suitable place as follows:

"This is to certify that twenty days has elapsed since the notice of approval from the Planning Board was received and recorded and that no notice of appeal has been filed in this office.

\_\_\_\_\_ Mashpee Town Clerk  
\_\_\_\_\_ Date"

20. If the plan is submitted under the cluster development exception of the Mashpee Zoning Bylaw, the formula for determining the total number of lots allowed must be shown as follows:

Total Area:	_____
Less: Water bodies and wetlands as defined under MGL C. 131, Section 40	_____
Area of existing and proposed streets, roadway rights-of-way or easements of 20 feet or more in width	_____
Overhead utility rights-of-way or easements 20 feet or more in width	_____
Total area excluded:	_____
Remaining Area:	_____
Lot Area Required by underlying zoning	_____
Number of lots permissible by underlying zoning	_____
Bonus Lots proposed:	
As per additional open space	_____
As per affordable housing units provided	_____
Total Lots Proposed	_____

21. Locus plan of the subdivision showing its relation the surrounding area at a scale of 1 inch = 2000 feet.

22. Profile/utility plans shall be drawn on plan/profile paper, 24" x 36", and shall contain at least the following:

- a. A horizontal scale of 1"= 40'.
- b. A vertical scale of 1" = 4'.
- c. Existing centerline in fine black solid line.
- d. Existing right side line in fine black long dash line.
- e. Existing left line in fine black short dash line.
- f. Proposed centerline in heavy line with grade at 50 foot intervals, points of vertical curve and tangent and at low and high points.
- g. All existing intersecting walks and driveways shown on both sides.

- h. Elevations and bench marks referred to mean sea level datum.
  - i. Rates of gradient shown as a percent to the nearest hundredth.
  - j. Size and location of existing and proposed surface drains and their appurtenances.
  - k. Cross-section of the proposed road construction including berms, shoulders and side slopes and sidewalks.
  - l. Cape Cod Berm or vertical curb, regardless of grade, except where Low Impact Development is used.
  - m. Drainage structures detailing type of basins, connecting pipes and stone backfill.
  - n. Title block in lower right hand corner.
  - o. A plan view showing baseline stationing, drainage structures and other utility lines on the same sheet as the profile. The plan and profile should be drawn one above the other as closely as possible such that centerline stationing in both views will match. Slight deviations due to street curvature are acceptable.
  - p. In addition, a Site Plan shall be submitted detailing all drainage structures, existing and proposed final grading and the direction of drainage flow.
  - q. Profile shall follow the centerline of the pavement including the pavement in a turn-around or cul-de-sac.
  - r. Other utilities such as gas, water, underground telephone, underground electric lines including proposed locations of transformers, standards or other appurtenances, sewer lines and manholes, and any other utilities proposed shall be shown on the plan view of the profile/utility plans.
23. Existing and proposed contours at a 2 foot interval or such other interval as required by Section VII (F) (14) of these regulations shall be submitted with the Definitive Plan.
24. Lots on the Definitive Plan shall be numbered the same as on the Preliminary Plan insofar as possible.

25. The definitive plan shall be accompanied by a calculation of the total tonnage of bituminous asphalt to be used for road and sidewalk construction. The tonnage shall be based on the weight per cubic foot of compacted mix for the total surface area and thickness of mix required. These amounts shall be used for comparison to weight slips to be delivered by the contractor to the project owner. Calculations shall be provided under the stamp and signature of a registered professional engineer.
- G. After submission of Definitive Plan and within 45 days thereto, the Board of Health shall:
1. Report to the Board in writing its approval or disapproval of the plan in accordance with Mass. General Law Chapter 41, Sec. 81U.
  2. In the event of disapproval, shall make specific findings as to which, if any, of the lots shown on the 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. Failure to report shall be deemed approval by the Board of Health.
  3. Shall make a copy of the report available to the applicant.
- H. The Definitive Plan filed by the applicant shall comply with:
1. The design and construction standards detailed in Sec. VIII and IX. The Board may waive or allow modifications to the design standards and required improvements of Section VIII and IX if in the judgment of the Board, such action is in the public interest and not inconsistent with the Subdivision Control Law. Applicants should be aware that any waiver may preclude or restrict the provision of municipal services. Therefore, a copy of any waiver request should be provided to the Mashpee Director of Public Works for comment to the Board prior to any waiver vote.
  2. The Zoning Bylaw of the Town of Mashpee in all respects, in addition to the conditions of the Subdivision Control Law.
- I. Before approval of a plan, the Board shall:
1. In proper cases, require the plan to show parks and/or beaches suitably located for playground or recreation purposes or for providing light and air and not unreasonable in area in relation to the area of the land being subdivided and the prospective uses of such land.
  2. Require provision for the construction of ways and the installation of municipal services by the Performance Guarantee in accordance with the rules and

regulations of the Board. The delivery of said Performance Guarantee shall be after the vote of approval but before the endorsement of approval of the plan.

3. In the case of the applicant choosing to secure the release of lots through means other than a covenant, the amount of security to be posted shall be 150% of the base cost of all construction as determined by formal estimates submitted to the Board on contractor letterhead. This amount may be varied from time to time and adjusted according to work completed and approved by the Board.
- J. The Board shall, within ninety days of submission of a plan where a Preliminary Plan was submitted, or within 135 days where a Preliminary Plan was not submitted, or such future time as is requested by the applicant in writing and agreed to by the Board:
1. Approve, modify and approve, or disapprove the plan. In event of disapproval, the Planning Board shall state in detail wherein the plan does not conform to the rules and regulations of the Board or to the recommendation of the Board of Health, and shall revoke its disapproval and approve a plan which as amended conforms to such rules and regulations or recommendations.
  2. File certificate of its action with the Town Clerk.
  3. Send notice of its action by hand delivery or registered mail, postage prepaid, to the applicant at his address stated on the application.
  4. If an extension of time is requested by the applicant in writing, approval may be granted by the Board and the Board shall forthwith file the notice of approval of an extension of time with the Town Clerk.
  5. In case of approval of the plan by the Board, after expiration of twenty days without notice of appeal to the Superior Court, the Board shall cause to be made upon the plan a written endorsement of its approval if the Performance Guarantee has been delivered.

## **Section VIII**

### DESIGN STANDARDS SUITABILITY OF STREET SYSTEM

It is the intent of these regulations that streets designed in accordance with these standards will also be compliant with the design standards of the Town of Mashpee Department of Public Works as minimum design standards for acceptance as Town ways.

No plan of a subdivision shall be approved unless the ways and streets shown on the plan comply with the following requirements:

A. Location and Alignment

1. All streets in the subdivision shall be designed so that, in the opinion of the Board, they will provide safe vehicular travel. Due consideration shall also be given by the subdivider to the attractiveness of the street layout, maintenance of existing drainage patterns to the extent practicable and the preservation of natural vistas or other important features of the area to be developed.
2. The street system shall conform to the master plan, if any, of proposed principal streets as adopted in whole or part by the Board.
3. Streets shall be continuous and in alignment with existing streets insofar as practicable.
4. Provisions shall be made for the proper projection of streets, if adjoining property is not subdivided.
5. The minimum center line radius of streets shall be one hundred feet except in cases where the Board believes a lesser radius is adequate. Greater minimum radii may be required especially for minor collector, collector, arterial, commercial or industrial streets.
6. 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, and a property line diameter of at least one hundred-twenty feet.
7. Dead end streets shall not be longer than eight hundred feet unless, in the opinion of the Board, a greater length is desirable due to topography or other local conditions.
8. Reserve strips prohibiting access to streets or adjoining property shall not be permitted, except where, in the opinion of the Board, such strips shall be in the public interest.
9. Street jogs with center line offsets of less than one hundred twenty-five feet should be avoided.
10. Streets shall be laid out so as to intersect as nearly as possible at right angles. No street shall intersect any other street at an angle of less than sixty degrees.

## B. Width

1. The minimum width of street rights-of-way shall be as follows:

Minor Residential or Residential Access streets	40 feet
Minor Collector or Collector streets	50 feet
Arterial streets, Commercial or Industrial streets	50 feet or such greater width deemed necessary by the Board for present and future vehicular travel due to the proposed use.
Other Streets	To be considered on a case by case basis.

2. Street lines at intersections shall be cut back so as to provide for a curb radius of not less than thirty-five feet except in cases where the Board considers an alternate radius necessary.
3. Roadway pavement shall be constructed for the full length of all streets within the subdivision using the following minimum widths.

Minor Residential Access Street	20 feet
Residential Access Street	20 feet
Minor Collector Street	22 feet
Collector Street	22 feet
Arterial Street	24 feet or greater
Commercial Street	22 feet or greater
Industrial Street	24 feet or greater

The Board may require greater pavement widths in any case where it is deemed necessary for public safety, where additional travel lanes are required or where on-street parking is proposed.

4. The center of pavements shall coincide with the centerline of the right of way insofar as possible but in no case shall it vary by more than four feet in either direction.
5. Where Cape Cod Berms are used, the full pavement width shall be increased by two (2) feet

## C. Grade

1. Grades of all streets shall be the reasonable minimum, but shall not be less than 1.0% nor more than 6% for Minor Collector, Collector, Arterial, Commercial or Industrial streets and dead end streets, nor more than 10% for Minor Residential Access or Residential Access streets.

2. Grades at intersections shall not be more than 2% for the first forty feet measured from the nearest exterior line of the intersecting street nor more than 4% for the next thirty feet.
3. Vertical curves are required wherever the algebraic differences in grade between center line tangents is 2% or more. Vertical curves shall be one hundred feet long for every 4% algebraic difference in grade.
4. Sight distances shall be not less than two hundred feet but in any case shall not be less than the stopping sight distances for wet pavement determined by the design speed of the roadway and the recommendations of the American Association of State Highway Transportation Officials (AASHTO).

#### D. Easements

1. Easements for utilities across lots or centered on rear or side lot lines shall be provided where necessary and shall be at least twenty feet wide.
2. Where a subdivision is traversed by a water course, drainage way, channel or stream, the Board may require that there be provided a storm water easement or drainage right-of-way of adequate width to conform substantially to the lines of such water course, drainage way, channel or stream, and to provide for construction or other necessary purposes.
3. Proof of valid regulation or restriction for the protection of any required open spaces must be provided in accord with the Mashpee Zoning By-law or any amendment or revision thereof.
4. Where slopes cannot be contained within street side lines, valid slope easements must be provided.
5. Easements shall be defined by metes and bounds and area.

## **SECTION IX**

### ROAD CONSTRUCTION STANDARDS

Each street or portion thereof necessary to serve adequately each lot within the subdivision shall be constructed to finish grade as indicated on the Definitive Plan and supplemental plans or profiles filed and approved therewith, in accordance with the following specifications:

#### A. Road Base Preparation

The entire width of the right of way shall be cleared of all stumps, brush, roots, boulders, trees, and like material not intended for preservation. All such material shall be disposed of off site.

**B. Road Foundation**

1. All materials not suitable for the road foundation shall be removed from an area ten (10) feet wider than the paved width (5 feet on each shoulder) and to a depth of at least nine (9) inches below the road base grade. Peat, silt, loam, or similar yielding materials shall be removed to a firm foundation at least five (5) feet on each shoulder or to the limits of the base of slope for all fill sections, whichever is greater.
2. All fill material which may be required within the exterior lines of the way up to the road base shall consist of clean sand, gravel or other suitable material as approved by the Board or its designee and shall be compacted to maximum feasible density by placement in lifts not to exceed eighteen (18) inches in height.

**C. Road Base**

1. Traveled ways and shoulders shall be provided with a base consisting of compacted road base material and shall conform to one of the following types:
  - a. Twelve (12) inches of Processed Gravel placed and compacted in two six inch lifts meeting the gradation requirements of the Standard Specifications, Section M1.03.1 and shall conform to the following:

Sieve Size	% Passing by Weight
3"	100
1-1/2"	70-100
3/4"	50-85
No. 4	30-60
No. 200	0-10

- b. Eight (8) inches of Dense Graded Crushed Stone meeting the gradation requirements of the Standard Specifications, Section M2.01.7 and shall conform to the following:

Sieve Size	% Passing by Weight
2"	100
1-1/2"	70-100
3/4"	50-85
No. 4	30-55
No. 50	8-24
No. 200	3-10

c. Eight (8) inches of Reclaimed Pavement Borrow meeting the gradation requirements of the Standard Specifications, Section M1.11.0 and shall conform to the following:

Sieve Size	% Passing by Weight
3"	100
1-1/2"	70-100
3/4"	50-85
No. 4	30-60
No. 50	8-24
No. 200	0-10

2. Maximum stone size shall be 2" or 3", largest dimension depending on the material chosen. Once a material has been selected, the same material shall be used throughout the project.
3. For Processed Gravel a sieve analysis shall be submitted to the Planning Board from samples taken of the material after it is brought to the job site. Testing shall be in accordance with AASTHO methods T27 and T11. The number of samples to be analyzed shall be determined by the size of the project. In no case shall the number of samples be less than three (3). Materials not meeting these specifications shall be removed from the job site and shall be replaced with materials that comply with these specifications. The Board or its designee shall have the right to require additional testing of materials at any time.
4. No paving shall be placed on road base material of any kind until it has been inspected and approved by the Board or its designee and until the applicant's engineer certifies that the material complies with the specifications listed above.
5. The Planning Board or its designee shall inspect the base construction during operation. The applicant shall submit reports of standard compaction tests conducted by a qualified materials testing engineer or firm and showing that compaction has been completed to 95% maximum dry density prior to the placement of paving materials. Road base material not meeting the compaction test shall be re-compacted until satisfactory results are obtained.

D. Road Surface

1. The road base shall be paved in two courses of Class I, Type I-1 Bituminous Concrete with the following total pavement thicknesses:
  - a. For minor residential and residential streets with up to 25 dwellings or less the total pavement thickness shall be three and one-half (3-1/2) inches with a 2-1/4" binder course and 1-1/4" wearing surface.

- b. For all minor collector, collector, commercial and industrial streets, and arterial streets, total pavement shall be four and one half inches (4-1/2) with a 3" binder course and 1-1/2" wearing surface.
2. The job mix formula shall meet the Standard Specifications, Section M3.11.03 for binder and top courses.
3. Construction methods shall meet the requirements of the Standard Specifications, Section 460, except where amended herein.
4. RS-1 tack coat shall be applied to all binder courses prior to the placement of the wearing surface except if waived by the Planning Board or its designee.
5. No paving shall be done during rainy weather, upon saturated surfaces, where water is standing, where the temperature is lower than 40°F or where frost is in the ground.
6. Where pavement is to be left without a wearing surface over the winter months and where access is required to abutting lots within the developed area, all castings such as catch basins, manholes, valve boxes shall temporarily be made flush with the binder surface to facilitate snow plowing.
7. Castings shall be brought **to** grade prior to the placement of the wearing surface by raising the casting with the use of brick, barrel block or cylindrical risers. The casting and all shim materials shall be securely mortared in place. Casting shims which only raise the grate or cover and not the entire casting shall not be used except when no other alternative is possible and only when approved by the Board.
8. Castings shall be set to finish grade and mortared in place by removing the binder around the casting for a distance of 12 inches and to a depth of 12 inches and filling the opening with cement concrete flush with the top of the binder surface.
9. Cape Cod berm shall be placed integral with the wearing surface and shall be a minimum of twelve (12) inches in width and three (3) inches high at the back edge. Berms of greater width may be required where deemed necessary in the opinion of the Board to adequately control surface runoff.
  - a. Where the binder course of mix is to be used as a temporary travel surface for more than 3 months, a temporary twelve (12) inch berm shall be installed on the binder. It shall be removed at the time the wearing surface is applied.

10.

- a. The owner's engineer shall certify to the Board in writing that the completed pavement surfaces contain the minimum thickness of bituminous asphalt shown on the approved plans.
- b. As a minimum weight slips for mix delivered to the job site shall be used to compute the tonnage of mix delivered to the amount of mix required and as approved in the definitive plan submittal.
- c. The pavement surface will not be considered as final until such computation and certification has been delivered to the Board for approval.
- d. All pavement surfaces not meeting the minimum thickness requirement shall be modified accordingly prior to final approval of construction and the modifications re-certified.
- e. At the Board's discretion, core samples may be required as proof of pavement thickness. For pavement surfaces to be approved, core samples shall be taken at the rate of one (1) for every two hundred (200) feet of road length. In no case shall the total number of core samples be less than three.

#### E. Pavement Width

The width of the finished surface shall be not less than twenty feet or other width required herein, and its center line shall coincide with the center line of the full right-of-way insofar as possible, but in no case shall it vary by more than four feet in either direction.

#### F. Shoulders and Berms

1. On each side of the finished pavement there shall be provided shoulders, not less than two feet wide, constructed of road base material, properly shaped and compacted. The slope of the shoulders away from the center line shall be no greater than two inches per foot.
2. Cape Cod berms twelve inches wide shall be installed on both sides of the roadway regardless of slope. In such cases, the road shoulders shall be moved outward an additional 12 inches from the centerline to accommodate the berm. Where berms are required, the road surface shall be expanded to minimum of twenty-two feet and the berms placed thereon.
3. Cape Cod berm may not be required for those instances where low impact street designs are utilized within projects that are designed as low impact developments and where the longitudinal slope is such that erosion of the

shoulders can be prevented. The design shall indicate how slopes are to be protected when low impact designs are proposed.

#### G. Right-of-way Clearing

The areas between the finished surface and the outer boundaries of the layout shall be cleared of all brush, stumps, debris and all trees or shrubs not suitable for retention for shade or ornamental purposes.

#### H. Cut and Fill Slopes

The slopes of any cuts and fills required in the construction of the roadway shall not be greater than two feet horizontal to one foot vertical and shall be properly seeded and protected to prevent erosion. The foot of the slope of any cut and the top of the slope of any fill shall not be nearer than four feet to the edge of the finished surface of the roadway.

#### I. Sidewalks

Sidewalks with a minimum width of 4' shall be installed on at least one side of a street. Sidewalks shall be designed to conform to the minimum dimensions and materials as shown on the design plates included herein.

#### J. Storm Water Management

1. Storm water shall be managed for all streets and roadways by the use of catch basins, manholes, pipe, culverts, headwalls, low impact design, infiltration, detention or retention facilities, sediment control, nutrient control for ground water or any combination of the above which is most compatible with particular site conditions and which conforms with other storm water requirements of the Town of Mashpee.
2. Details for the construction of storm water facilities shall be as depicted in the appropriate templates at the end of these regulations.
3. Where they are used in the design, catch basins shall be provided on both sides of the roadway at intervals of not more than 300 feet, and at low points and sags in the roadway, and at the corners of the roadway at intersecting streets.
4. Infiltration systems, bio-retention areas and other such designs shall be protected during construction by the use of hay bales, silt fence, temporary berms, sediment traps or other measures designed to prevent the buildup of sediment and failure of the system. Should any system be found to be contaminated during the construction phase by sediment for any reason, it shall be corrected before the construction is approved.

5. All drainage systems shall be designed so as to reduce the impacts of nutrients, especially nitrogen and phosphorus, to the ground water. Methods to be employed shall include, overland flow over vegetated areas, bio retention areas and swales, natural drainage patterns or other recognized means prior to conveyance to any infiltration device.
6. Drainage systems for streets shall be designed so as to provide adequate removal of runoff and to prevent pavement flooding for the 2-year, and 25-year storm events. Designs shall include adequate provision to prevent off street flooding of adjacent land and property from the 100 year storm event. Off street areas shall be provided as necessary for receiving storm water for treatment and containment. These areas shall be noted on the plans either as separate non-building lots or as defined easements.
7. Appropriate methods for determining pre-construction and post-construction storm water runoff shall be employed which takes into consideration topography, soil types, land slope and cover, impervious surfaces and other pervious surfaces and shall include calculations for the 2-year, 25-year, and 100-year storm events. All designs shall be capable of handling up to and including the 25-year storm event without overtopping, flooding of the adjacent landscape or containment areas or the backup of stormwater in piping systems. Pre-construction runoff from the site for the 100-year storm event shall not be exceeded for post-construction conditions.
8. New storm water runoff generated from the project shall not be directed to existing storm drainage facilities without proper treatment to prevent additional nutrients from entering the ground water and without fulfilling the requirements of paragraph J.7. above.
9. Test pits shall be dug at the location of all sub-surface drainage facilities to insure adequate soil conditions and depth to ground water. The bottom of all drainage systems shall be maintained at least 2' above maximum high ground water. Test pit logs shall be shown on the definitive plan.

#### K. Utilities

All electrical, telephone and other utility wires shall be placed underground in every subdivision, unless the Board determines that such placement is not feasible or is not in the best interests of the Town.

#### L. Street Monuments

Concrete monuments of at least 5"x5" cross section and at least thirty inches in length shall be set at the beginning and end of each curve and at each angle point on both sides of each street in the subdivision.

#### M. Street Signs

Street signs conforming with Town standards shall be obtained through the Department of Public Works and shall be paid for and installed by the developer for each new street prior to installation of the binder course of pavement for said street.

#### N. Shade Trees

Where feasible, shade trees twelve inches in diameter or larger shall not be removed.

#### O. Street Lighting

Street lighting shall be provided in conformance with the appropriate provisions of the lighting standards of the Mashpee Planning Board for site plans and special permits.

#### P. Inspections

1. It shall be the responsibility of the subdivider to give notice to the Planning Board or its designee when inspections are going to be requested.
2. Requests for inspections shall be given at least 48 hours prior to when the particular inspected is needed.
3. At the time of inspection, all construction requiring the inspection shall be completed but open and not backfilled. It shall be the responsibility of the subdivider to uncover any and all construction that may have been backfilled or covered prior to giving proper notice that an inspection is requested.
4. Prior to requesting inspections, all appropriate inspection fees shall be paid to the Town of Mashpee.
5. Inspections for road construction shall be made for the following:
  - a. After clearing and grubbing is complete and the sub-base has been prepared,
  - b. When drainage is installed, but prior to backfilling,
  - c. Road base material has been fine graded and rolled for paving,
  - d. Binder course and top course of pavement complete.
  - e. Job 100% complete including bounds and signs with grass well established.

Q. Entrance Permit

It shall be the responsibility of the subdivider to obtain the necessary entrance permit from the Town of Mashpee Department of Public Works for all proposed roads connecting with public ways or town ways within the Town.

## **Section X**

### PERFORMANCE GUARANTEE

- A. Before endorsement of its approval of a Definitive Plan, the Planning Board shall require that the construction of ways and the installation of municipal services be secured by one, or in part by one and in part by another, of the methods described in the following clauses 1, 2, 3 and 4 which method or combination of methods may be selected and from time to time varied by the applicant:
1. By a proper bond, sufficient in the opinion of the Planning Board to secure performance of the construction of ways and the installation of municipal services required for lots in the subdivision shown on the plan. The Planning Board may require that the applicant specify the time within which such construction shall be completed.
  2. By a deposit of money or negotiable securities, sufficient in the opinion of the Planning Board to secure performance of the construction of ways and the installation of municipal services required for lots in the subdivision shown on the plan. The Planning Board may require that the applicant specify the time within which such construction shall be completed.
  3. By a covenant, executed and duly recorded by the owner of record, running with the land, whereby such ways and services shall be provided to serve any lot before such lot may be built upon or conveyed, other than by mortgage deed; provided, that a mortgagee who acquires title to the mortgaged premises by foreclosure or otherwise and any succeeding owner of such premises or part thereof may sell any such lot, subject to that portion of the covenant which provides that no lot shall be built upon until such ways and services have been provided to serve such lot; and provided, further, that nothing herein shall be deemed to prohibit a conveyance by a single deed, subject to such covenant, of either the entire parcel of land shown on the subdivision plan or of all lots not previously released by the Planning Board. A deed of any part of the subdivision in violation hereof shall be voidable by the grantee prior to the release of the covenant but not later than three years from the date of such deed.
  4. By delivery to the Planning Board of an agreement executed after the recording of a first mortgage covering the premises shown on the plan or a portion thereof given as security for advances to be made to the applicant by the lender, which

agreement shall be executed by the applicant and the lender and shall provide for the retention by the lender of funds sufficient in the opinion of the Planning Board and otherwise due the applicant, to secure the construction of ways and the installation of municipal services. Said agreement shall also provide for a schedule of disbursements which may be made to the applicant upon completion of various stages of the work, and shall further provide that in the event the work is not completed within the time set forth by the applicant, any funds remaining undisbursed shall be available for completion.

- B. Any covenant given under the preceding paragraph and any condition required by the Board of Health or officer shall be either inscribed on the plan or contained in a separate document, referred to on the plan.
- C. The penal sum of any such bond held under clause A.1, or any deposit held under clause A.2, or any amount of funds retained pursuant to an agreement under clause A.4 shall be 150% of the base cost of all construction as required by Section VII. I. 3. Such amount or amounts may from time to time be reduced so that the amount bonded, deposited or retained continues to reflect the expected cost of work remaining to be completed.
- D. Upon the completion of the construction of ways and the installation of municipal services in accordance with the rules and regulations of the Planning Board, security for the performance of which was given by bond, deposit or covenant, or upon the performance of any covenant with respect to any lot, the applicant shall send by registered mail to the Town Clerk and the Planning Board a written statement that the said construction or installation in connection with which such bond, deposit or covenant has been given has been completed in accordance with said rules and regulations, such statement to contain the address of the applicant. If the Planning Board determines that said construction or installation has been completed, it shall release the interest of the Town in such bond and return the bond or the deposit to the person who furnished the same, or release the covenant by appropriate instrument, duly acknowledged, which may be recorded. If the Board determines that said construction or installation has not been completed, it shall specify in a notice sent by certified mail to the applicant and to the Town Clerk the details wherein said construction or installation fails to comply with its rules and regulations and upon failure so to do within forty-five days after the receipt by said Town Clerk of said statement all obligations under the bond shall cease and terminate by operation of law, any deposit shall be returned and any such covenant shall become void. In the event that said forty-five day period expires without such specification, or without the release and return of the bond or return of the deposit or release of the covenant as aforesaid, the Town Clerk shall issue a certificate to such effect, duly acknowledged, which may be recorded.
- E. Any such bond may be enforced and any such deposit may be applied by the Planning Board for the benefit of the Town, as provided in Section 81.Y of the General Laws, upon failure of the performance for which any such bond or deposit

was given to the extent of the reasonable cost to the Town of completing such construction and installation.

- F. The proceeds of any such bond or deposit shall be made available to the Town for expenditure to meet the cost and expenses of the municipality in completing the work as specified in the approved plan. If such proceeds do not exceed one hundred thousand dollars, the expenditure may be made without specific appropriation under section fifty-three of chapter forty-four; provided, however, that such expenditure is approved by the Board of Selectmen.

## **Section XI**

### WAIVERS OR VARIATIONS

A waiver or variation of the requirements of these regulations may be permitted when, in the opinion of the Board, topography or other considerations necessitate such waiver or variation.

## **Section XII**

### FORMS

As indicated in these rules and regulations, the filing of forms is required for a number of steps in the process of having plans approved. These forms may be obtained at the Planning Board Office or on the Town's web site. The following list of available forms are required for the action or approvals indicated. Unless otherwise stated in the rules and regulations, all forms shall be filed in triplicate.

Form A: Application for Endorsement of Plans Believed Not to Require Approval

For an applicant who wishes to file a plan but does not believe that said plan is a subdivision, a Form A is filed. If said plan is not a subdivision, this is the only form required.

Form B: Application for Approval of Preliminary Plan

For an applicant who wishes to receive approval of a Preliminary Plan, a Form B is filed at the time indicated in these rules and regulations.

Form C: Application for Approval of Definitive Plan

For an applicant who wishes to receive approval of a Definitive Plan, a Form C is filed at the time indicated in these rules and regulations.

Form N: Notice of Filing of Application with the Mashpee Planning Board

Pursuant to Ch. 41, Sections 81.P, 81.S and 81.T, written notice of filing of ANR, preliminary and definitive plans must be delivered by hand or sent via registered or certified mail to the Town Clerk along with a copy of the application and submitted plans.

## **Section XIII**

### **FEE SCHEDULE**

#### **A. Application Fees:**

##### **Approval Not Required Plan**

Filing fee: \$20 per lot, minimum \$100

##### **Preliminary Subdivision Plan**

Filing Fee: \$20 per lot, minimum \$200

Review Fee: \$150

##### **Definitive Subdivision Plan**

Filing Fee: \$20 per lot, minimum \$200

Review Fee: \$300 + \$15 per lot

Inspection Fee: \$250 + \$.50 / linear ft. of roadway

Re-inspection Fee: \$100 per inspection

##### **Covenant Release**

No charge if road system completed and satisfactory report filed of final construction inspection.

\$75 per request if release involves posting of other security for incomplete roads.

##### **Modifications**

Filing fees for subdivision modifications shall be the same as listed above for an original application.

Review fees and inspection fees shall be the same as listed above for an original application, but based only on that portion of a project which is proposed to be modified, except that there will be no minimum fee.

Re-inspection fees shall be the same as listed above for an original application.

B. Postage

In addition to the above fees, the applicant will be responsible for the cost of postage for mailing of required notices to the owners of all properties located within 300 feet of the boundary of the parcel(s) to be subdivided.

C. Inspections

Normal inspections covered by the basic inspection fees listed above are listed in Section VII, 13 and include drainage inspection, gravel inspection, inspection of paving binder course, inspection of paving finish course and final inspection for roadways.

The subdivider and Planning Board shall agree on any other inspection schedule and/or inspection fee which may be necessary in cases that are not specifically referenced above.

D. Re-inspections

A re-inspection fee will be charged for additional inspections beyond those listed above that are made necessary due to unsatisfactory materials or construction that lead to a failure to pass the original inspection.

E. Submission of Fees

The filing and review fees specified above shall be submitted to the Board as part of the original application for any permit. An application will be deemed to be incomplete without payment of said fees at the time of submittal.

Inspection fees specified above shall be submitted to the board within 20 calendar days following the approval of any definitive subdivision plan and prior to the Board's endorsement of any subdivision plan.

Any re-inspection fees due shall be submitted prior to the release of any roadway covenant or performance bond for road construction or other facilities covered by a subdivision approval.

## **Section XIV**

### **EMPLOYMENT OF OUTSIDE CONSULTANTS**

- A. Pursuant to the provisions of Chapter 44, Section 53G of the General Laws, the Planning Board may impose reasonable fees for the employment of outside consultants to review preliminary or definitive subdivision applications submitted for approval by the Board.

The decision to seek consultant assistance, the selection of a consultant, the establishment of a consultant fee or fee schedule and any request to the applicant for payment shall be made by majority vote of the Board at a public meeting.

Said funds shall be paid by the applicant within seven days of a request by the Board for payment and shall be deposited in a special account established by the Town Treasurer and be kept separate and apart from other monies. Failure to pay the required fees may be considered grounds for disapproval of the application.

Any excess amount in the account attributable to a specific project, including any accrued interest, at the completion of said project shall be repaid to the applicant or to the applicant's successor in interest and a final report of said account shall be made available to the applicant or to the applicant's successor in interest. Standard Town accounting and reporting procedures relative to special accounts and consistent with the provisions of Ch. 44 §53G of the General Laws shall be followed.

- B. The special account, including any accrued interest, shall be expended at the direction of the Planning Board without further appropriation; provided, however, that such funds are to be expended by it only in connection with carrying out its responsibilities under the law.

Subjects for which consultant assistance may be sought may include, but are not limited to, water quality impacts of a project, stormwater management systems, wastewater collection and treatment systems, traffic and transportation impacts, mitigation and facilities, including bicycle and pedestrian facilities, public safety, site design, wetlands delineation or other subjects relevant to the proposed project and its impacts on neighboring properties, the town or adjacent towns. Such assistance may be sought either to develop original information and reports to the Board, or to review plans, reports and other information submitted on behalf of an applicant.

- C. Selection of any consultant will be by the Board, in conformance with any applicable General Laws or regulations of the Commonwealth, and may include use of consultants retained on a continuing basis by the Board.

Any applicant may file an administrative appeal from Board's choice of consultant to the Board of Selectmen. Grounds for administrative appeal from the selection of the outside consultant to the Board of Selectmen shall be limited to claims that the consultant selected has a conflict of interest or does not possess the minimum, required qualifications, consisting either of an educational degree in or related to the field at issue, or three or more years of practice in the field at issue or a related field.

- D. The required time limits for action upon an application by the Planning Board shall be extended by the duration of the administrative appeal. In the event that no decision is made by Board of Selectmen within one month following the filing of the appeal, the selection made by the Planning Board shall stand. Such an

administrative appeal shall not preclude further judicial review, if otherwise permitted by law, on the grounds provided for in Chapter 44 §53G.

## Section XV

### DESCRIPTION OF LAYERS - GIS REQUIREMENTS

LAYER DESCRIPTION	LAYER NAME	LAYER NUMBER	COLOR
<b>Base Map</b>			
Road Centerlines	RDCLINE	1	Black
Right of Way	ROW	2	Black
Existing pavement	PVMT_EXI	3	Black
Proposed pavement	PVMT_PRO	4	Black
Easements	EASEMENT	5	Black
Sidewalks	SWALK	6	Black
Building footprints	BLDGS	7	Red
Streams and ponds	HYDRO	8	Blue
Wetlands & wet areas	WETAREA	9	Green
Driveways & parking areas	DRIV_PRK	10	Grey
Parcel boundary lines	PARCELS	11	Black
Property markers (monuments) & metes and bounds text	PROPMRK	12	Black
<b>Topography</b>			
Existing contours & spot elevations	CONT_EXI	13	Grey
Proposed contours	CONT_PRO	14	Black
<b>Utilities</b>			
Existing water system (lines & appurtenances)	WAT_EXI	15	Cyan
Proposed water system (lines & appurtenances)	WAT_PRO	16	Cyan
Public or private wellhead locations	WELLS	17	Cyan
Existing sewer system (lines & appurtenances)	SEW_EXI	18	Yellow
Proposed sewer system (lines & appurtenances)	SEW_PRO	19	Yellow
Existing drain system (lines & appurtenances)	DRN_EXI	20	Blue
Proposed drain system (lines & appurtenances)	DRN_PRO	21	Blue
Elect. system & st. lgting (lines,poles,appurt.)	ELECTRIC	22	Orange
Cable TV system (lines,poles,appurtenances)	CATV	23	Grey
Existing gas system (lines & appurtenances)	GAS_EXI	24	Magenta
Proposed gas system (lines & appurtenances)	GAS_PRO	25	Magenta
<b>Other Features</b>			
Zoning boundaries & classification text	ZONE	26	Magenta
Lot numbers/street addresses	LOT_ADD	27	Black
Fences & walls	FENCE	28	Red
Wooded areas (treelines)	WOODS	29	Green
FEMA FIRM zone boundaries & text	FLOOD	30	Cyan
Large trees (4" diameter)	TREES	31	Green

Proposed landscaping	LAND_PRO	32	Green
Coordinate locations and text	COORDS	33	Black
Notes/miscellaneous notations	NOTES	34	Black
Additional Layers: Proponents discretion on naming, however, documentation on all layer names should be provided to Mashpee.			

## **SECTION XVI**

### DESIGN TEMPLATES

- A. The design templates attached as an appendix to these Rules and Regulations depict typical standards for the design of roadways and their various components. These templates shall be considered as minimum standards to be applied to all projects requiring Planning Board site plan approval or plan approval under the Subdivision Control Law.
- B. The Board may consider modifications to these minimum standards of design when in a particular case it is in the best interest of the public to do so.
- C. Any request to waive the use of these minimum standards shall be in writing and shall be submitted to the Board at the time of application of either the Preliminary Plan or the Definitive Plan. The request shall be accompanied by an explanation as to why these minimum design standards cannot be met or should not apply.
- D. These design templates are to be used as a guide with the goal of reaching more uniformity in construction throughout the Town of Mashpee.
- E. The design templates shall be used in accordance with accepted engineering practice. Substitute materials may be used as part of general designs if they are shown to be superior for a particular application. The use of other materials or general designs shall follow the procedure for waivers as described in Section XVI.C. above.
- F. Materials may not be changed or substituted for what is shown on the Definitive Plan after the plans have been approved by the Board unless authorized by the design engineer and the change or substitution is approved by the Board.

## **Section XVII**

### VALIDITY AND REFERENCE

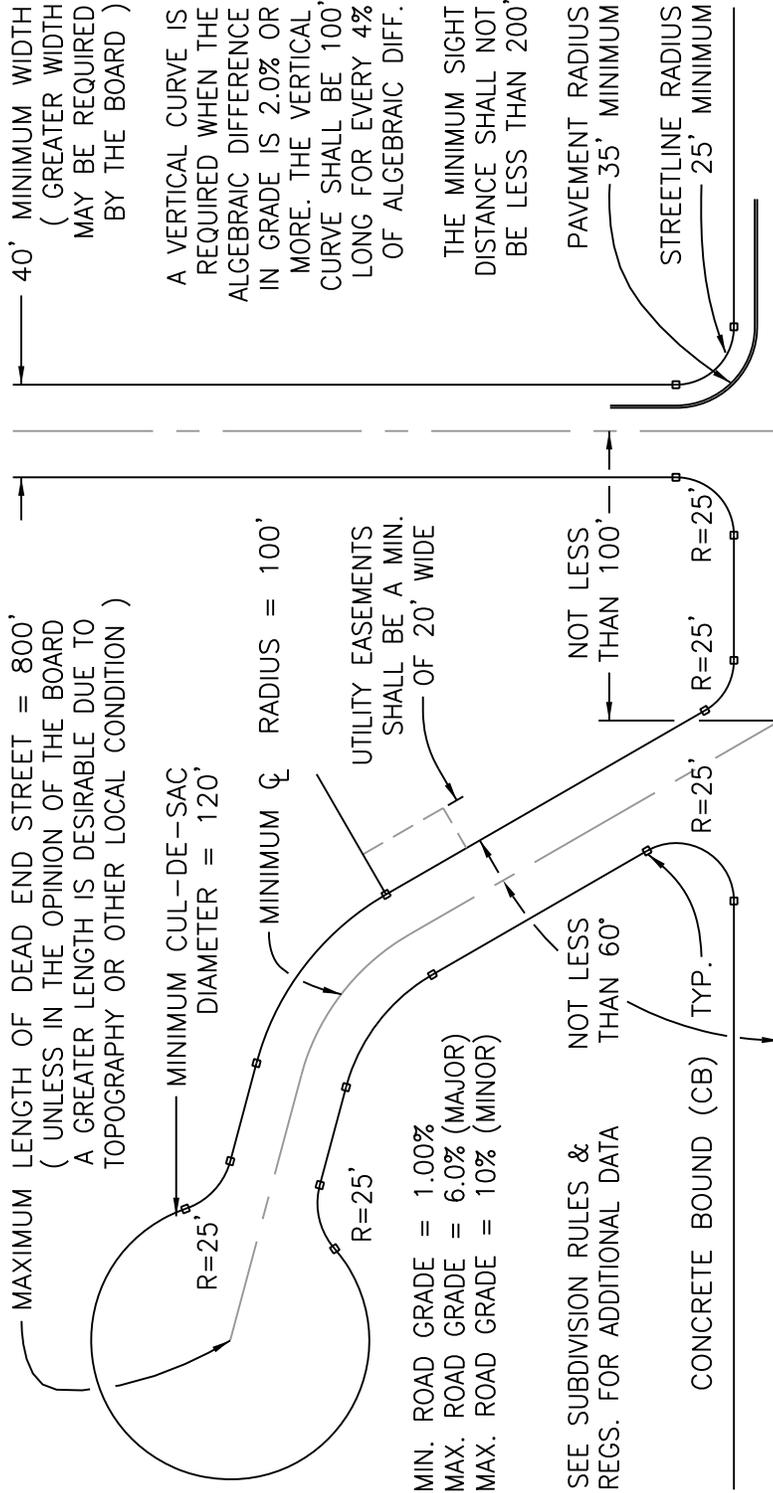
The invalidity of any section or provision of these by-laws shall not invalidate any other section or provision thereof. For matters not covered by these Rules and Regulations, reference is made to Section 81K to 81GG, inclusive of Chapter 41 of the General Laws.

# **APPENDIX**

## **DESIGN TEMPLATES**

### **Plates #1-19**





CONCRETE BOUNDS (CB) SHALL BE SET AT THE BEGINNING AND END OF EACH CURVE, AND AT EACH ANGLE POINT, ON BOTH SIDES OF THE LAYOUT. CONCRETE BOUNDS SHALL BE 5" X 5" BY 30" LONG

## STREET DESIGN STANDARDS

NOT TO SCALE

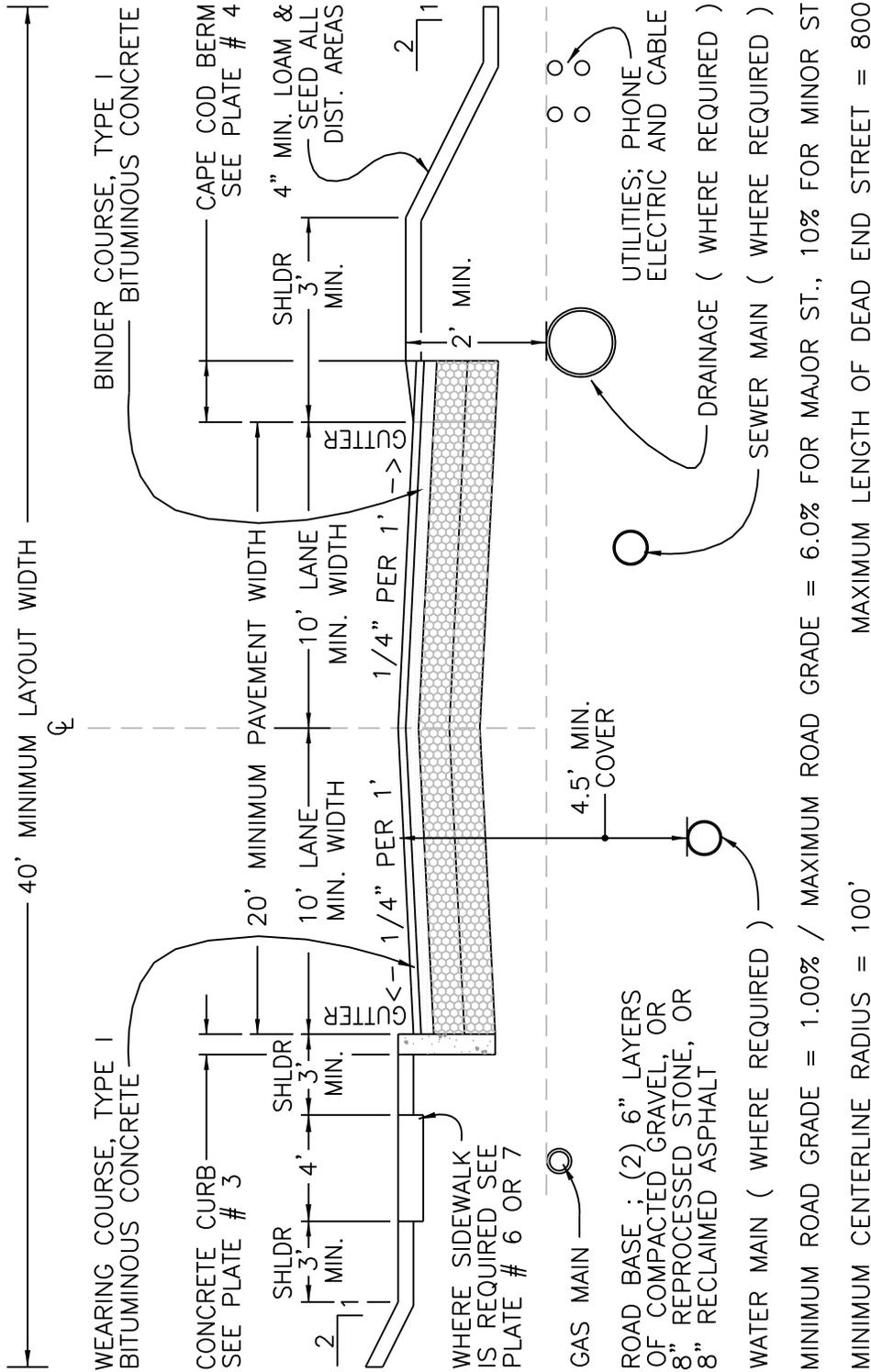
# TOWN OF MASHPEE - CONSTRUCTION STANDARD

05/2010

STREET DESIGN STDS.

PLATE # 1

NOTE: FOR "LID" ROADS USE 1/2" /' CROSS SECTION PITCH



## ROAD CROSS SECTION

NOT TO SCALE

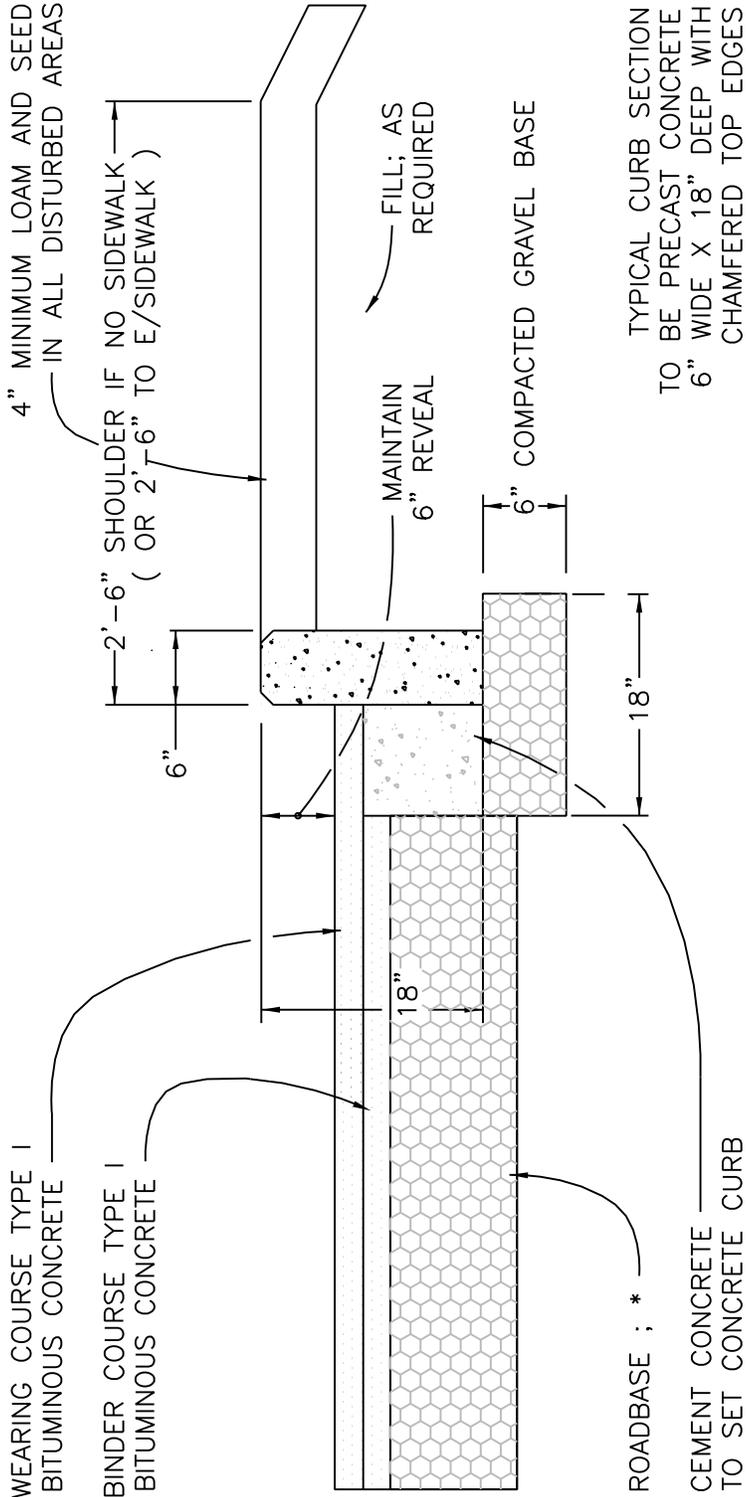
# TOWN OF MASHPEE - CONSTRUCTION STANDARD

05/2010

ROAD CROSS SECTION

PLATE # 2

PREPARED BY CHARLES L. ROWLEY & ASSOCIATES, CIVIL ENGINEERS & SURVEYORS, WEST WAREHAM, MA



REFER TO PLATE # 4 FOR CAPE COD BERM, OR PLATE # 5 FOR SLOPED GRANITE EDGING

\* REFER TO PLATE # 2, ROAD CROSS SECTION, FOR ROADBASE REQUIREMENTS.

## CEMENT CONCRETE CURB

NOT TO SCALE

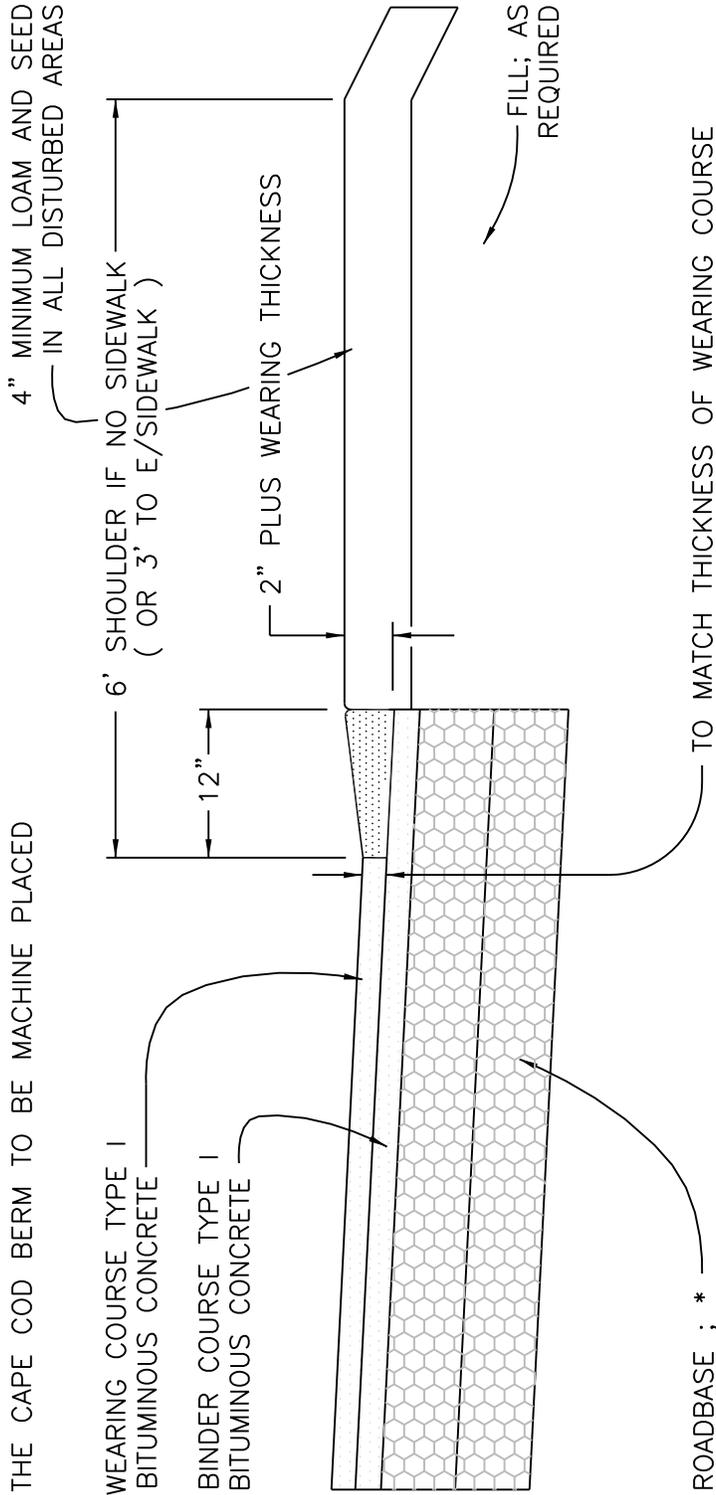
# TOWN OF MASHPEE - CONSTRUCTION STANDARD

05/2010

CEMENT CONC. CURB

PLATE # 3

PREPARED BY CHARLES L. ROWLEY & ASSOCIATES, CIVIL ENGINEERS & SURVEYORS, WEST WAREHAM, MA



REFER TO PLATE # 3 FOR CEMENT CONCRETE CURB, OR PLATE # 5 FOR SLOPED GRANITE EDGING

\* REFER TO PLATE # 2, ROAD CROSS SECTION, FOR ROADBASE REQUIREMENTS.

## CAPE COD BERM

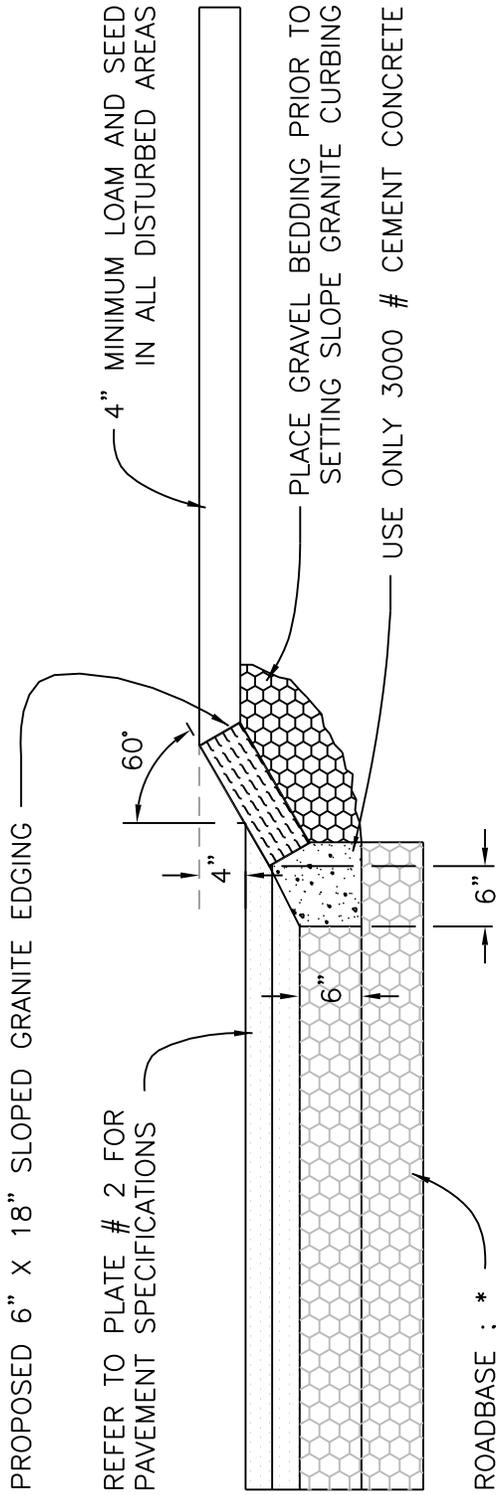
NOT TO SCALE

# TOWN OF MASHPEE - CONSTRUCTION STANDARD

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CAPE COD BERM

PLATE # 4



1. ANY DESIGNATED CEMENT CONCRETE THAT IS ACCEPTABLE TO THE DEPARTMENT UNDER 'SECTION M4' STANDARD SPECIFICATIONS. BITUMINOUS CONCRETE IS NOT TO BE USED AS A SUBSTITUTE

2. THE REVEAL IS TO BE 4" UNDER ALL CONDITIONS.

REFER TO PLATE # 4 FOR CAPE COD BERM, OR PLATE # 3 FOR CEMENT CONCRETE CURBING.

\* REFER TO PLATE # 2, ROAD CROSS SECTION, FOR ROADBASE REQUIREMENTS.

## SLOPED GRANITE CURB

NOT TO SCALE

# TOWN OF MASHPEE - CONSTRUCTION STANDARD

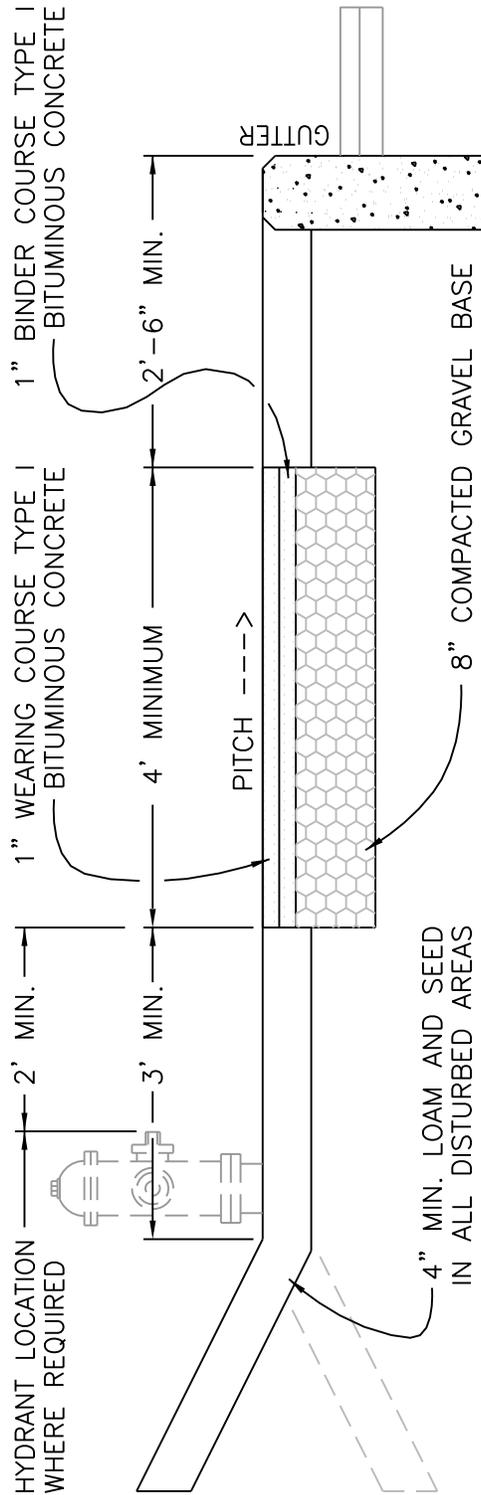
05/2010

SLOPED GRANITE CURB

PLATE # 5

PREPARED BY CHARLES L. ROWLEY & ASSOCIATES, CIVIL ENGINEERS & SURVEYORS, WEST WAREHAM, MA

1. ALL SIDEWALKS SHALL MAINTAIN A 1:50 CROSS SLOPE. PITCHED TOWARDS THE ROADWAY SURFACE.
2. USE CURB RAMPS AS REQUIRED FOR HANDICAPPED ACCESS, REFER TO PLATE # 8.
3. IF VEHICULAR LOADS ARE ANTICIPATED, USE 12" OF GRAVEL, 1 1/2" BINDER AND 2" WEARING COURSE.



REFER TO PLATE # 7 FOR CEMENT CONCRETE SIDEWALK

## BITUMINOUS CONCRETE SIDEWALK

NOT TO SCALE

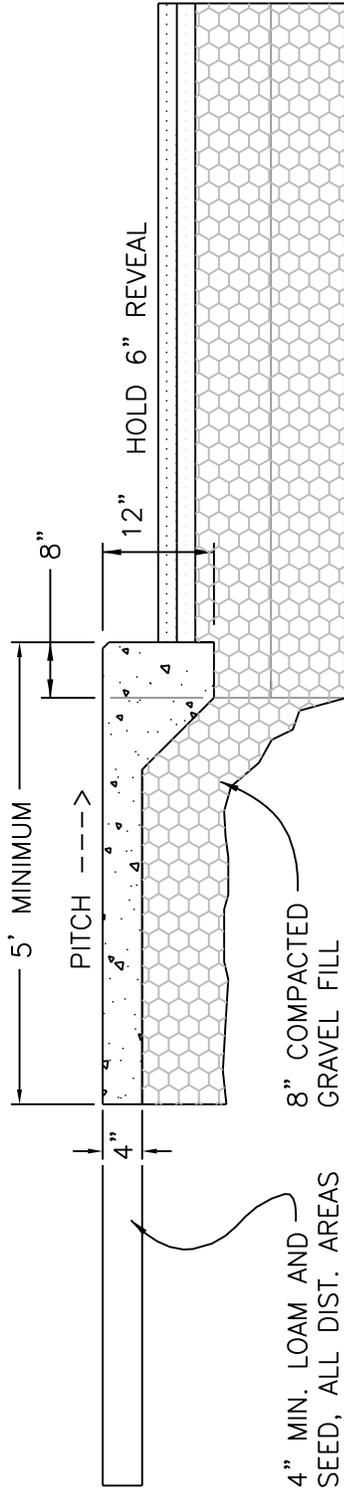
TOWN OF MASHPEE - CONSTRUCTION STANDARD

05/2010

BIT. CONC. SIDEWALK

PLATE # 6

1. ALL SIDEWALKS SHALL MAINTAIN A 1:50 CROSS SLOPE. PITCHED TOWARDS THE ROADWAY SURFACE.
2. USE CURB RAMPS AS REQUIRED FOR HANDICAPPED ACCESS, REFER TO PLATE # 8.
3. IF VEHICULAR LOADS ARE ANTICIPATED, THE CONCRETE SHALL BE INCREASED TO A DEPTH OF 6" THICK, AND # 10 WELDED WIRE FABRIC SHALL BE USED FOR REINFORCEMENT.



4. CONTROL JOINTS SHALL BE USED EVERY 5' IN THE CEMENT CONCRETE SIDEWALK.
  5. EXPANSION JOINTS SHALL BE SET AT 30' INTERVALS.
  6. CEMENT CONCRETE SIDEWALKS SHALL HAVE A LIGHT BROOM FINISH TO PROVIDE A NON-SKID SURFACE.
- REFER TO PLATE # 6 FOR BITUMINOUS CONCRETE SIDEWALK

## CEMENT CONCRETE SIDEWALK

NOT TO SCALE

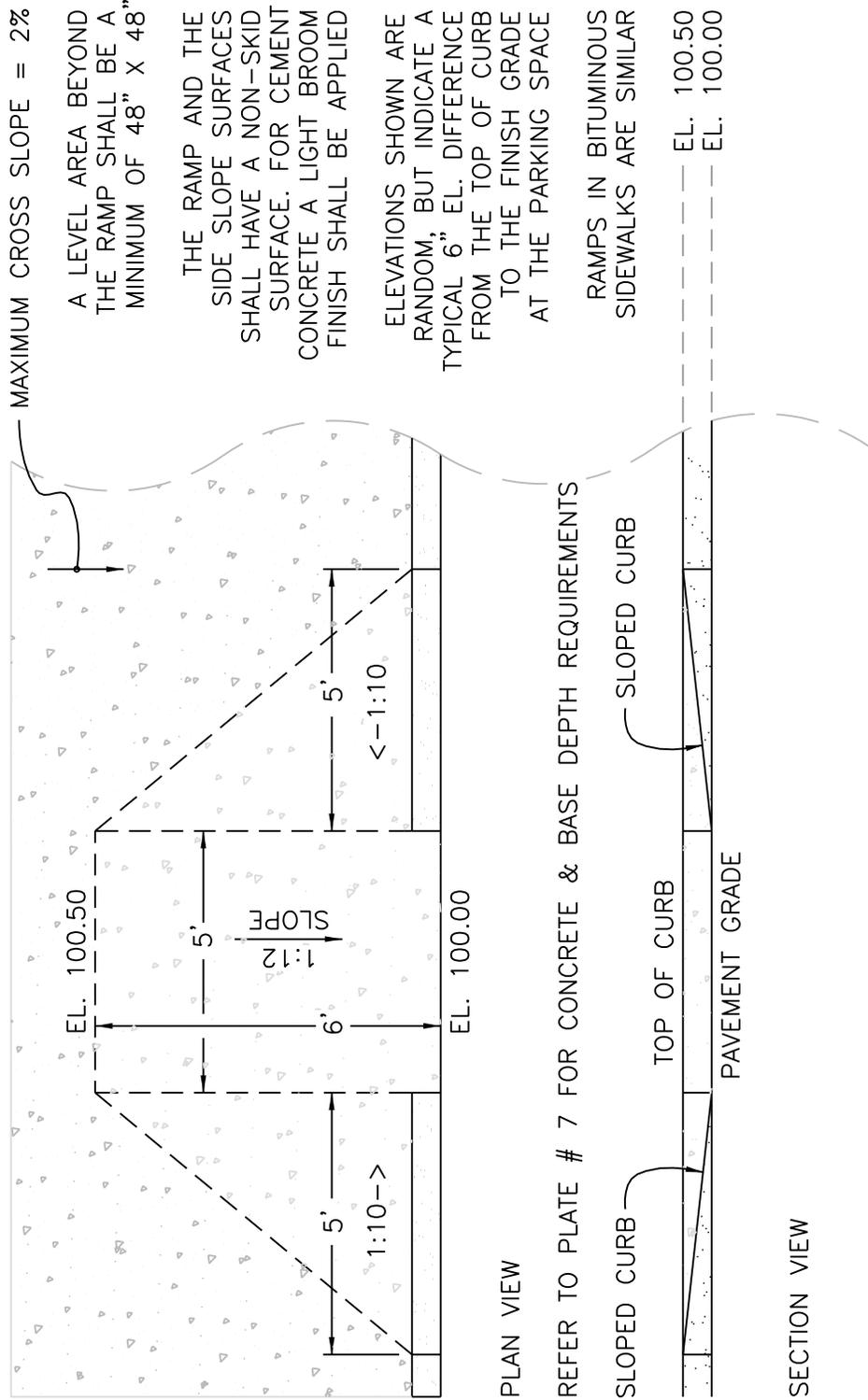
### TOWN OF MASHPEE - CONSTRUCTION STANDARD

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CEM. CONC. SIDEWALK

PLATE # 7

PREPARED BY CHARLES L. ROWLEY & ASSOCIATES, CIVIL ENGINEERS & SURVEYORS, WEST WAREHAM, MA



# HANDICAPPED ACCESS / CURB RAMP

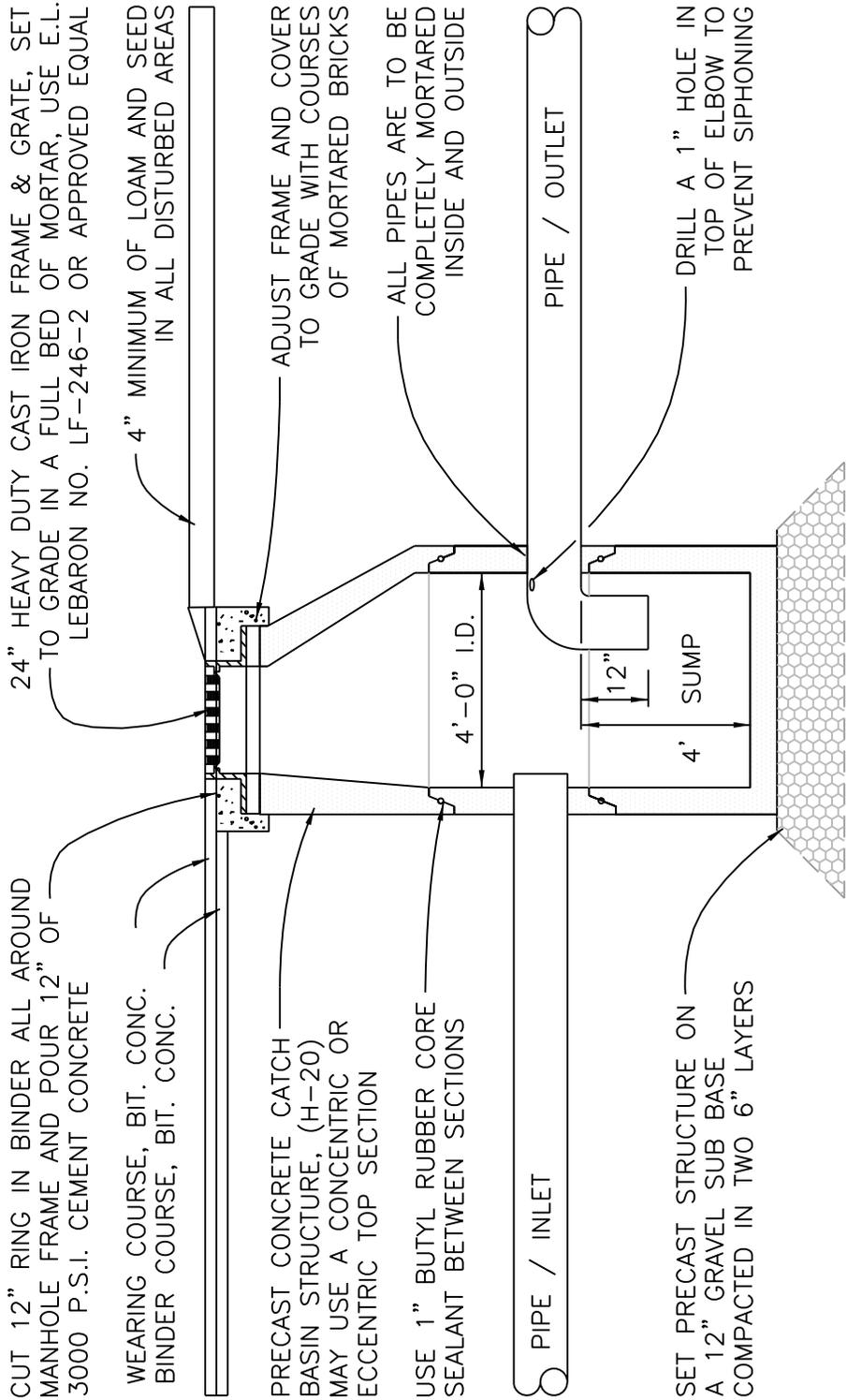
NOT TO SCALE

## TOWN OF MASHPEE - CONSTRUCTION STANDARD

05/2010

HANDICAPPED ACCESS

PLATE # 8



# HOODED CATCH BASIN

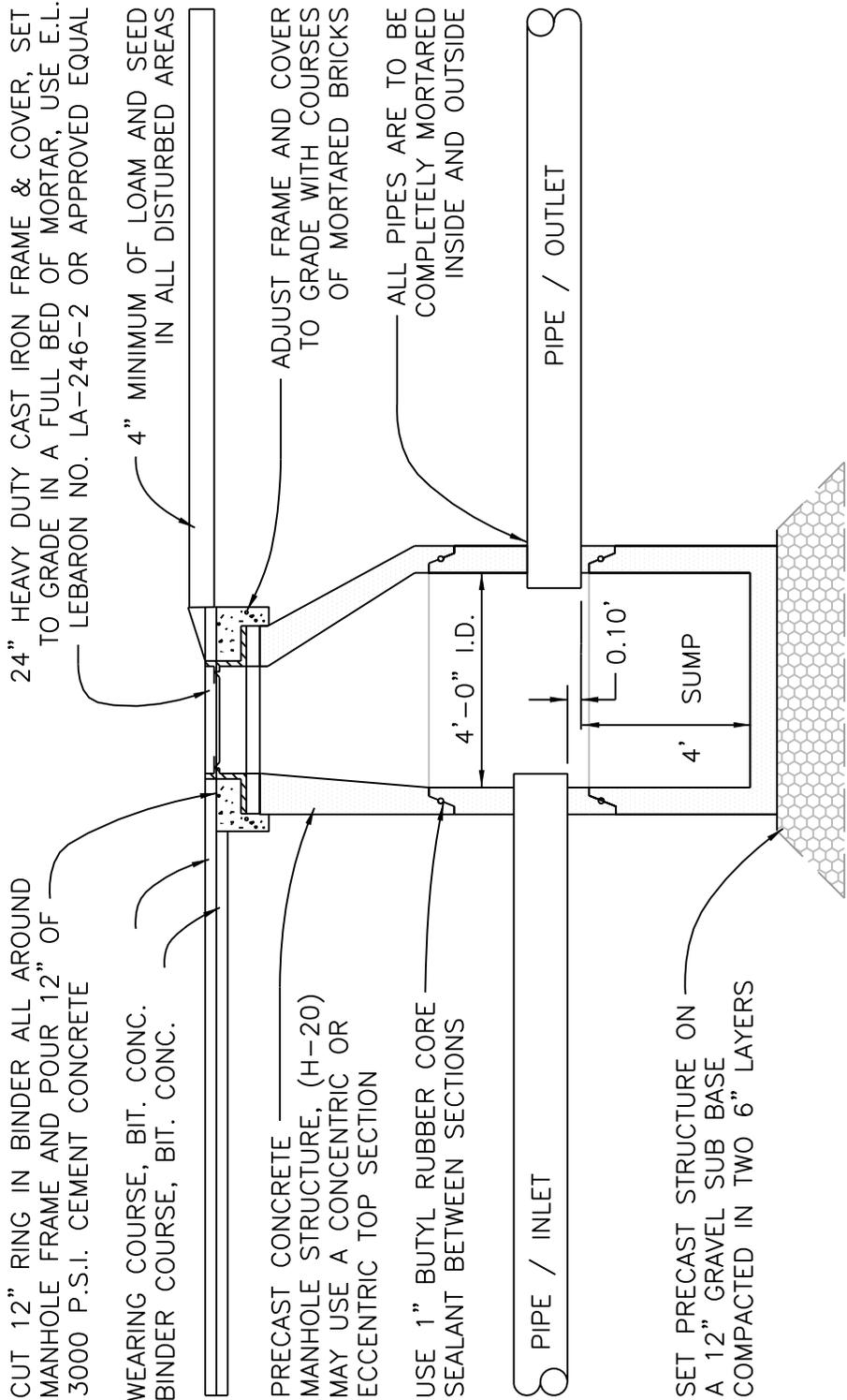
NOT TO SCALE

## TOWN OF MASHPEE - CONSTRUCTION STANDARD

02/2009

HOODED CATCH BASIN

PLATE # 9



# DRAINAGE MANHOLE

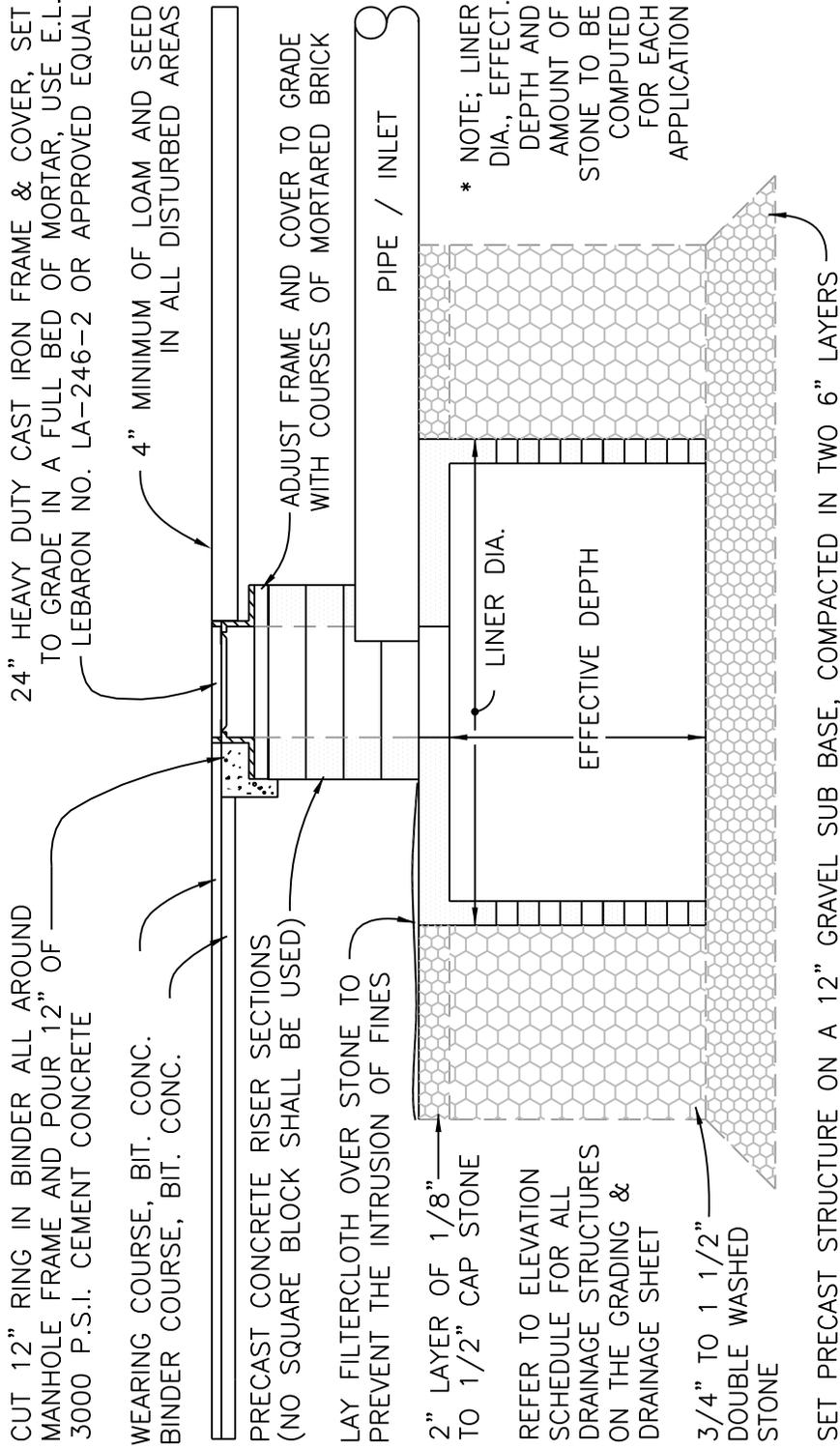
NOT TO SCALE

## TOWN OF MASHPEE - CONSTRUCTION STANDARD

05/2010

DRAINAGE MANHOLE

PLATE #10



# LEACHING PIT

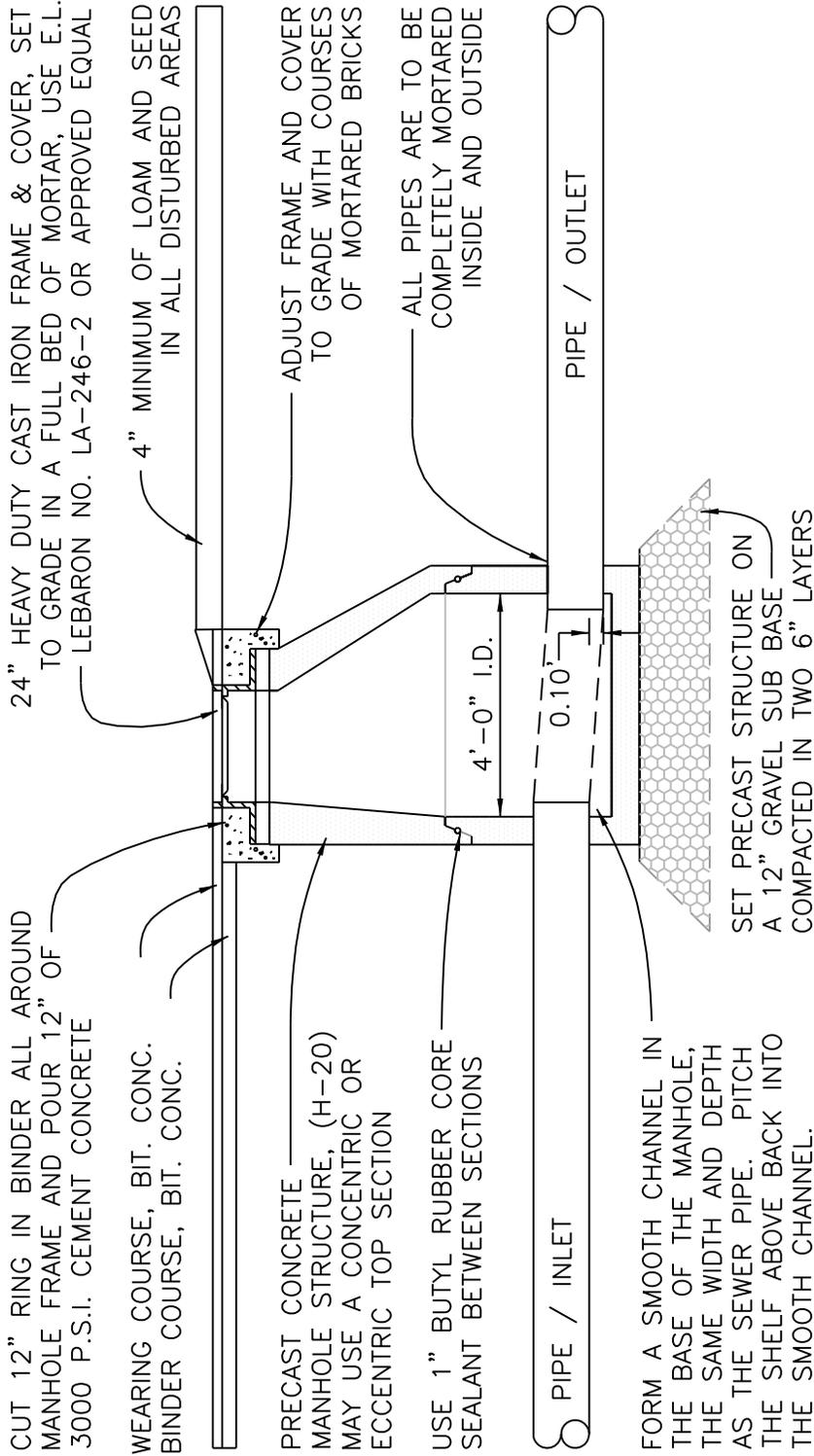
NOT TO SCALE

## TOWN OF MASHPEE - CONSTRUCTION STANDARD

05/2010

LEACHING PIT

PLATE #11



## SEWER MANHOLE

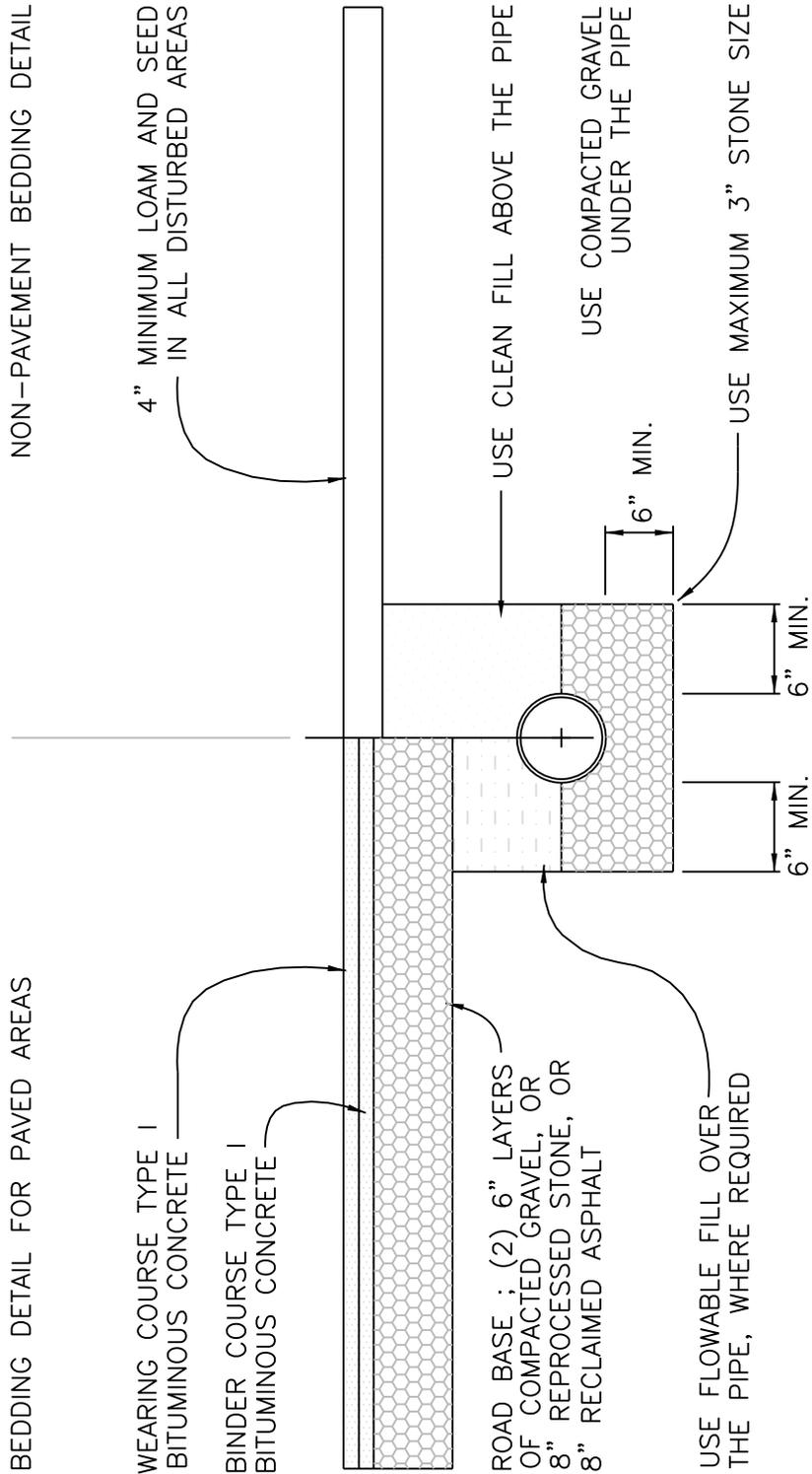
NOT TO SCALE

### TOWN OF MASHPEE - CONSTRUCTION STANDARD

05/2010

SEWER MANHOLE

PLATE #12



# PIPE BEDDING DETAIL

NOT TO SCALE

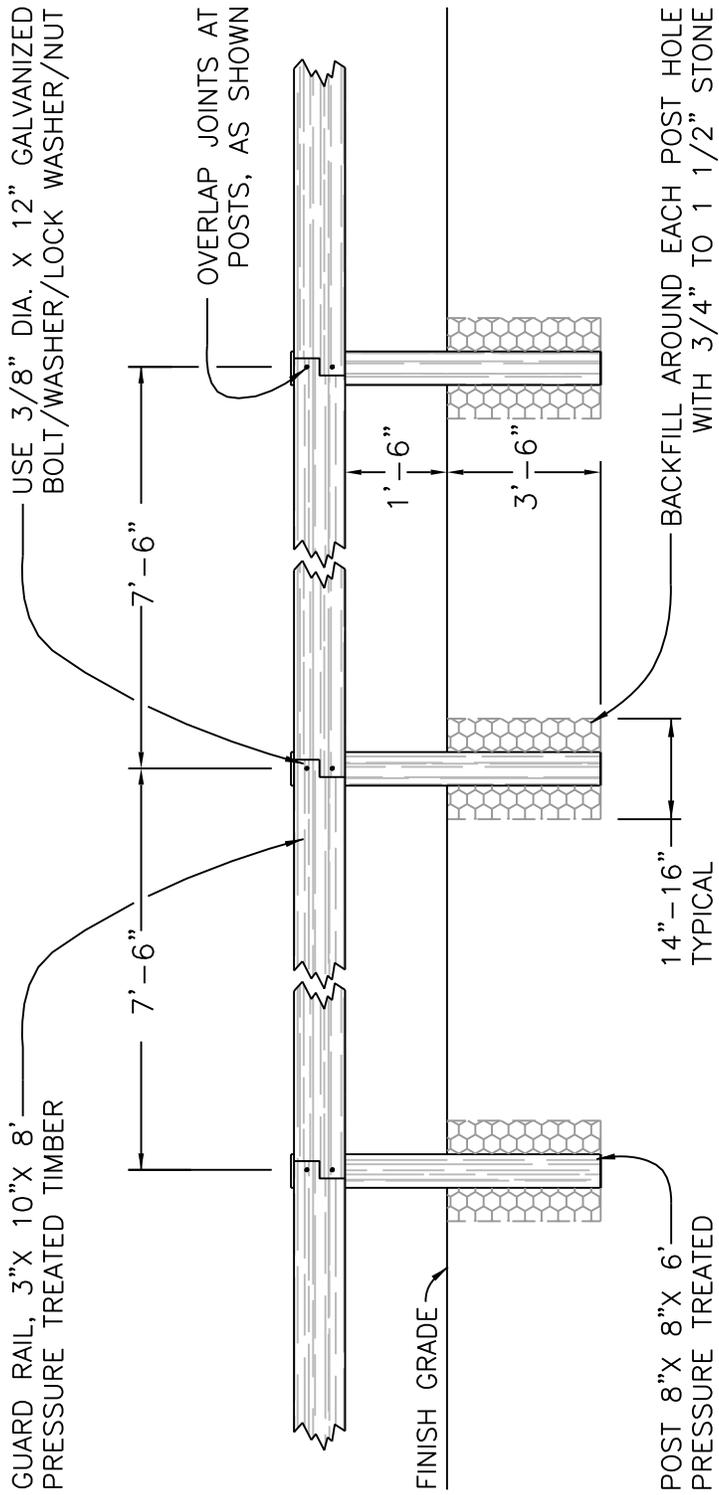
## TOWN OF MASHPEE - CONSTRUCTION STANDARD

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PIPE BEDDING DETAIL

PLATE #13

PREPARED BY CHARLES L. ROWLEY & ASSOCIATES, CIVIL ENGINEERS & SURVEYORS, WEST WAREHAM, MA



A GUARD RAIL SHALL TYPICALLY BE INSTALLED 18" BEHIND THE BACK OF THE BERM OR CURB USED

## WOOD GUARD RAIL

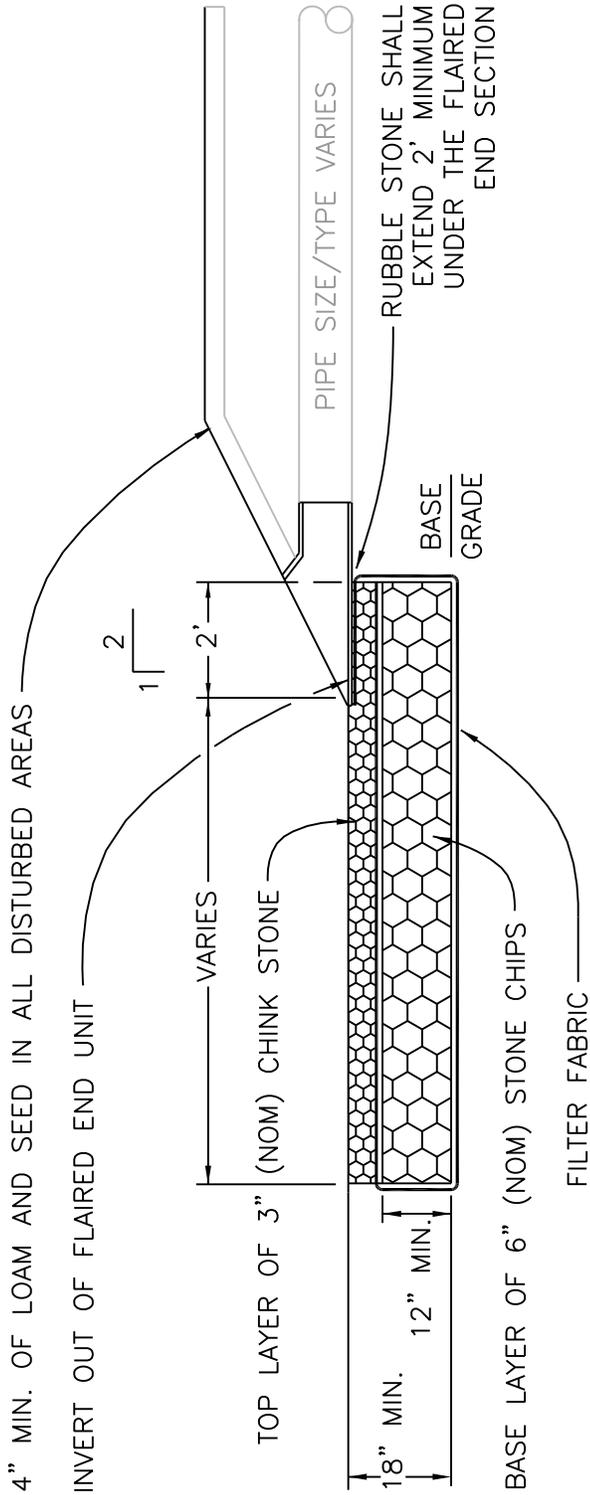
NOT TO SCALE

TOWN OF MASHPEE - CONSTRUCTION STANDARD

05/2010

WOOD GUARD RAIL

PLATE #14



1. STONE CHIPS SHALL BE WRAPPED WITH FILTER FABRIC ON THE BOTTOM, SIDES AND ENDS.
2. COVER BASE STONE WITH A 6" LAYER OF 3" CHINK STONE.
3. LENGTH, WIDTH AND DEPTH OF THE RUBBLE AREA TO BE DESIGNED FOR SPECIFIC SITE CONDITIONS.

## FLAIED END / RUBBLE AREA

NOT TO SCALE

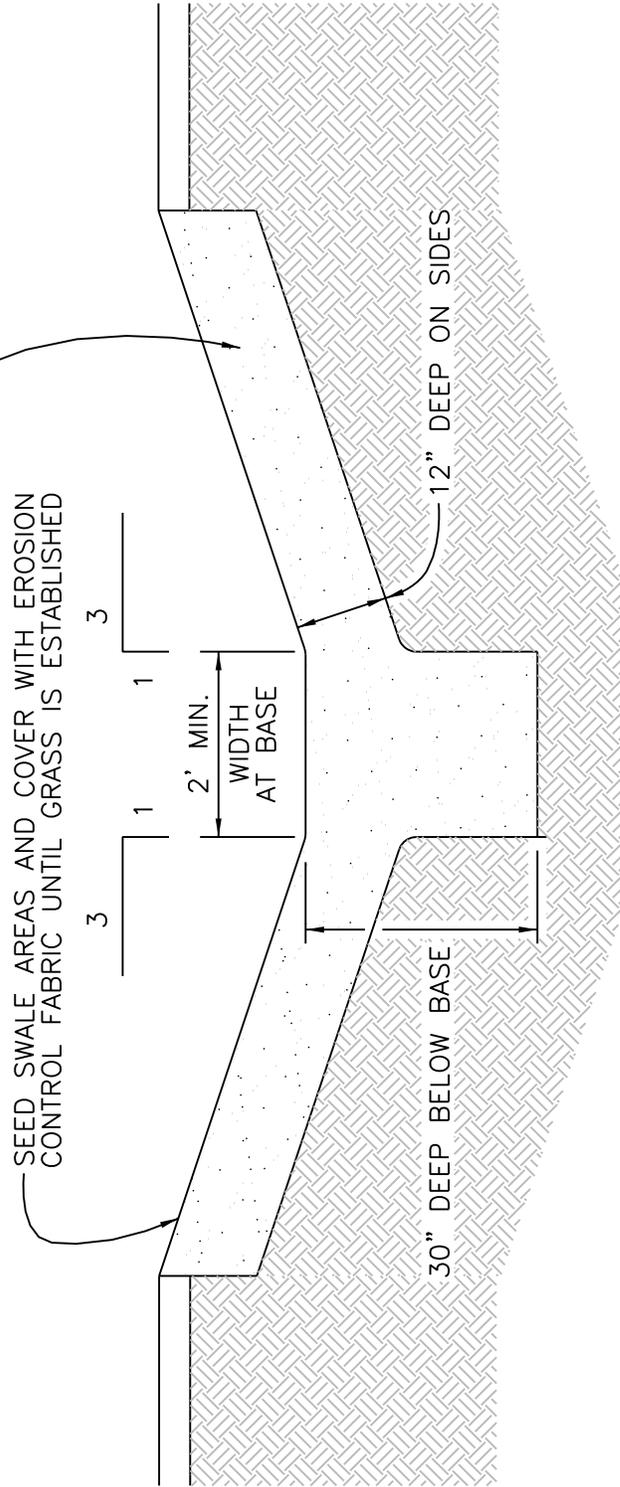
TOWN OF MASHPEE - CONSTRUCTION STANDARD

05/2010

FL. END / RUBBLE AREA

PLATE #15

PREPARE THE BOTTOM AND SIDES OF THE DRAINAGE SWALE WITH A 50/50 MIX OF SAND AND LOAM, AS SHOWN



1. THE GRASS IN AND AROUND THE GRASSY SWALE AREA SHALL NOT BE CUT SHORTER THAN 4"
2. ALL DISTURBED AREAS AROUND THE GRASSY SWALE SHALL HAVE 4" OF LOAM AND BE SEEDED.
3. SWALE WIDTH IS TO BE DETERMINED BASED ON SITE SPECIFIC CONDITIONS.

## GRASSY SWALE DETAIL

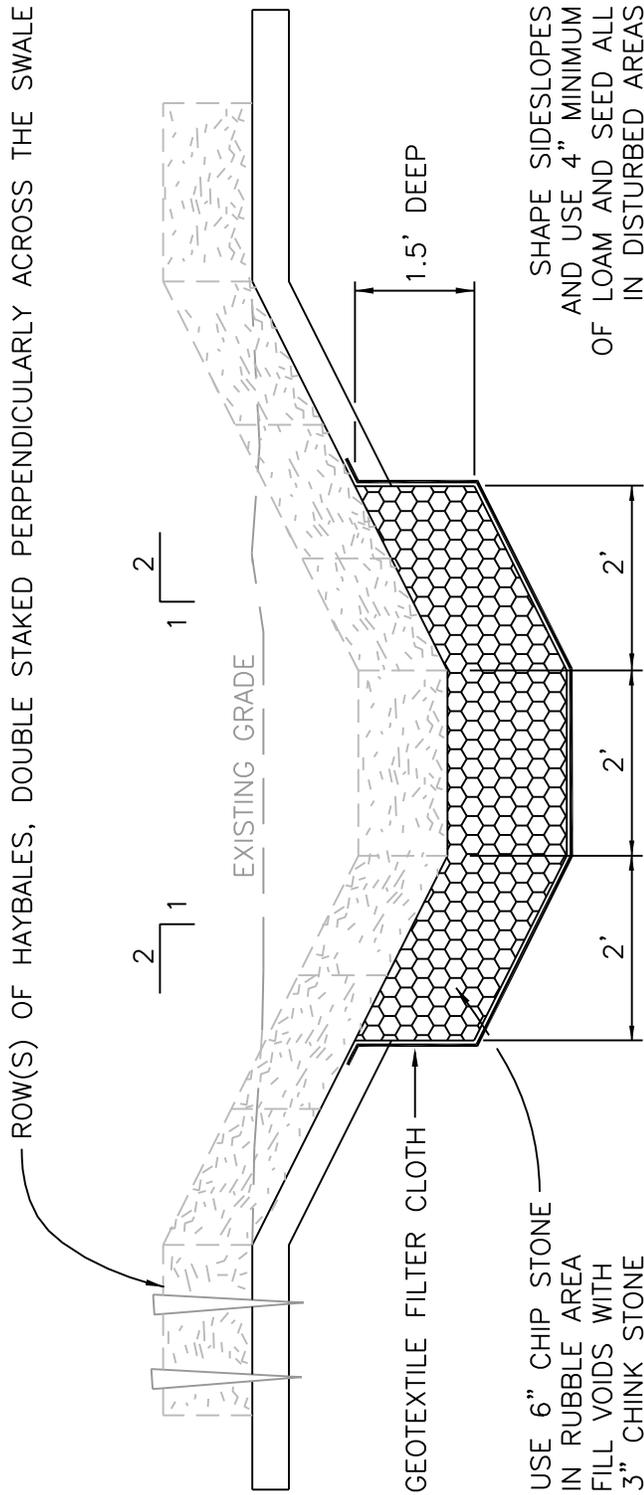
NOT TO SCALE

TOWN OF MASHPEE - CONSTRUCTION STANDARD

05/2010

GRASSY SWALE DETAIL

PLATE #16



SLOPE AND BOTTOM DIMENSIONS ARE TO BE COMPUTED TO FIT ACTUAL SITE REQUIREMENTS

HAYBALES ARE TO EXTEND 4' BEYOND THE TOP OF THE SLOPE AT EXISTING GRADE

## RUBBLE SWALE SECTION

NOT TO SCALE

### TOWN OF MASHPEE - CONSTRUCTION STANDARD

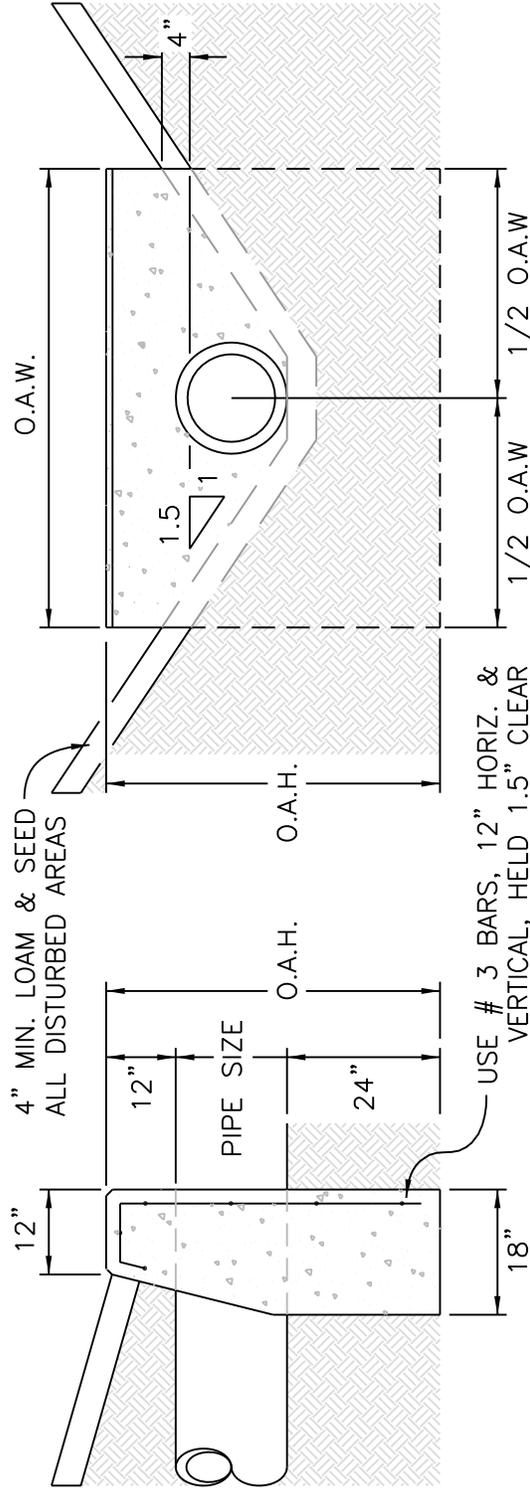
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RUBBLE SWALE SECTION

PLATE #17

PREPARED BY CHARLES L. ROWLEY & ASSOCIATES, CIVIL ENGINEERS & SURVEYORS, WEST WAREHAM, MA

1. THE CEMENT CONCRETE USED FOR HEADWALLS SHALL HAVE A MINIMUM STRENGTH OF 3000 PSI.
2. TOP EDGES OF THE HEADWALL SHALL HAVE A 1" X 1" X 45° CHAMFER ON EDGES AS SHOWN.



PIPE SIZE	12"	15"	18"	24"	30"	36"	42"	48"
O.A.H.	4'-0"	4'-3"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"
O.A.W.	5'-6"	6'-6"	7'-6"	9'-3"	10'-6"	11'-6"	12'-10"	14'-6"

## HEADWALL DETAIL

NOT TO SCALE

# TOWN OF MASHPEE - CONSTRUCTION STANDARD

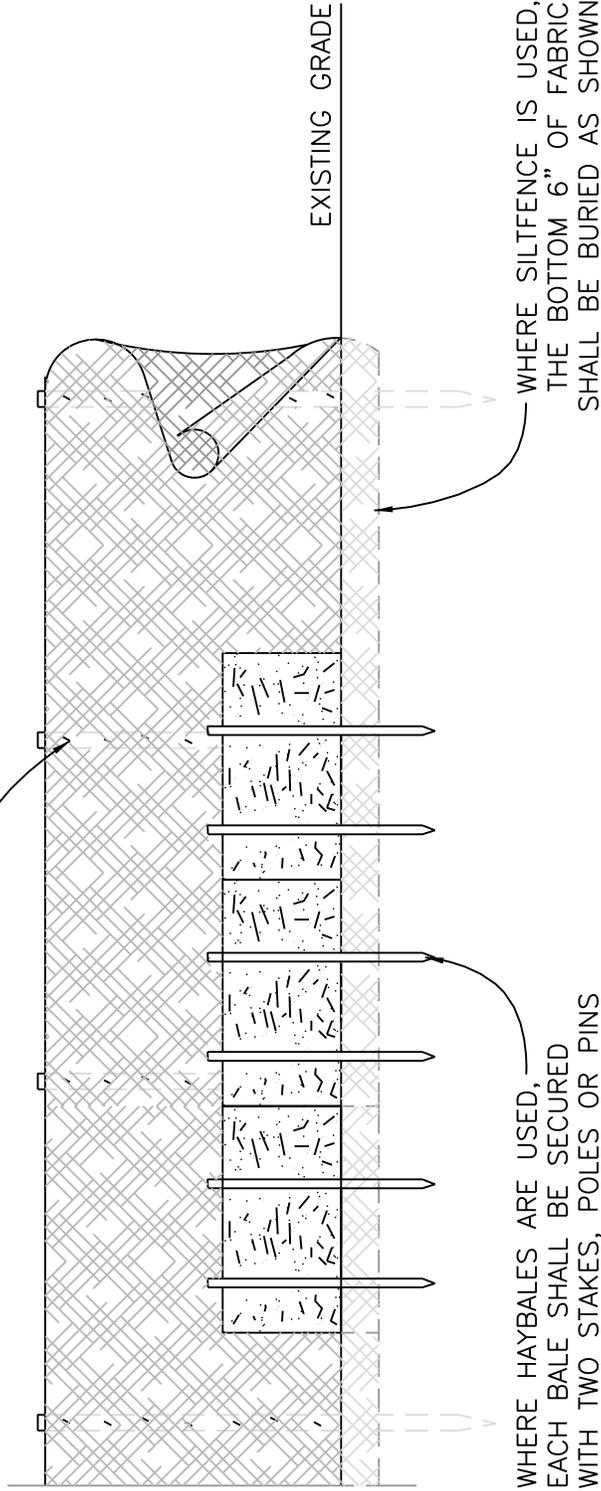
05/2010

HEADWALL DETAIL

PLATE #18

PREPARED BY CHARLES L. ROWLEY & ASSOCIATES, CIVIL ENGINEERS & SURVEYORS, WEST WAREHAM, MA

A PRE-ASSEMBLED SILTFENCE ROLL WITH BEANPOLES MAY BE USED AS SHOWN  
HAYBALE AND/OR SILTFENCE LINE ESTABLISHES LIMIT OF WORK  
BEANPOLES ARE STAPLED TO SILTFENCE



DEFER TO CONSERVATION COMMISSION ON WHICH METHOD(S) ARE USED PER INDIVIDUAL SITE CONDITIONS

# HAYBALE / SILTFENCE DETAILS

NOT TO SCALE

## TOWN OF MASHPEE - CONSTRUCTION STANDARD

05/2010

HAYBALE / SILTFENCE

PLATE #19