

Framingham Planning Board

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Article 30 Motion

Article 30: Amend the Framingham Zoning By-law – Special Permit for Land Disturbance and Stormwater Management

I move that Town Meeting vote to amend the Framingham Zoning By-Law with deleted, changed, or amended items in “red-line” format (new text is underlined and deleted text is stricken through) by: (1) adding new definitions to Section I.E. related to the Land Disturbance and Stormwater Management By-Law; and (2) further deleting the existing Section V.F. Land Disturbance By-Law and replacing it with a new Section V.F. Land Disturbance and Stormwater Management By-Law, with background information as attached.

Sponsor: Planning Board

Background Information and Final Language

Section V.F Special Permit Land Disturbance and Stormwater Management – Framingham Zoning By-Law Fall Special Town Meeting

September 22, 2016, revised documentation placed on the back table on October 19, 2016

The Earth Removal and Earth Control were established in 2004. Over the years, the existing Earth Removal/Earth Control/Land Disturbance By-Law has been amended. Below is a brief review of the Earth Removal/Earth Control/Land Disturbance By-Law changes that have occurred since 2004.

- Annual Town Meeting – April 24, 2007, Article 22
 - Section IV.H.2 Earth Removal (deleted)
 - Section IV.H.3 Erosion Control (deleted)
 - Section IV.H.4 Land Clearing (deleted)
 - Section IV.H.2 Land Disturbance
- Special Town Meeting – January 12, 2005, Articles 10 and 11
 - Section IV.H.3 (editing)
 - Section IV.H.2 (editing)

- Annual Town Meeting – April 27, 2004, Articles 34 and 35
 - Section IV.H.3 Erosion Control
 - Section IV.H.2 Earth Removal

On Thursday, October 13, 2016 the Planning Board voted 5-0-0 to recommend favorable action for the Land Disturbance and Stormwater Management By-Law for Fall Special Town Meeting.

The following sections of this document contain three editions of the Land Disturbance and Stormwater Management By-Law.

Section One is a marked up edition showing the comparison between the existing Section I.E Definitions and V.F Land Disturbance and the proposed revisions to the Land Disturbance and Stormwater Management By-Law that will replace the existing language. New wording is underlined and language to be deleted has been stricken.

Section Two is a comparison as to what was shown in the Fall Special Town Meeting Warrant with revisions made since the printing of the Warrant. Language that was added since the printing of the warrant is underlined and language that was deleted is stricken out.

Section Three is a clean edition of the proposed language to be voted upon at Fall Special Town Meeting.

SECTION ONE: EXISTING SECTION V.F LAND DISTURBANCE VS. PROPOSED SECTION V.F LAND DISTURBANCE AND STORMWATER MANAGEMENT

SECTION I.E DEFINITIONS

Best Management Practice (BMP): The use of structural, nonstructural, or vegetative measures designed to reduce erosion, control the movement of sedimentation, decrease peak storm material discharge, and/or improve the quality of stormwater runoff as well as maintain natural hydrology as described in the Massachusetts Department of Environmental Protection’s Stormwater Management Handbook and any other applicable local regulations.

Disturbed Area: Disturbance to an area and/or soils where the existing condition has been or is proposed to be altered.

Erosion: A condition in which the earth’s surface, including vegetation, soil or rock fragment, is detached and moved away by the action of water, wind, ice, gravity or other natural environmental means.

Fill: Any Fill used in connection with a project shall be clean Fill and shall not contain any hazardous waste material, trash, refuse, rubbish, or debris, including but not limited to lumber, bricks, plaster, wire, lath, paper, cardboard, pipe, asphalt, concrete, tires, ashes, refrigerators, motor vehicles, or parts of any of the foregoing.

Low Impact Development (LID): A system and/or practice that uses and/or mimics natural processes that result in the infiltration, evapotranspiration, and/or use of stormwater and precipitation in order to protect water quality while maintaining the natural hydrology of a site. Surface flows and groundwater recharge are the key aspects of LID that consider quantity as well as quality. LID is often referenced as “green infrastructure” and the management of wet weather flows that employ these processes and refers to the patchwork of natural areas that provide habitat, flood protection, cleaner air and water. Both LID and green infrastructure practices aim to preserve, restore, and create green space using soils, vegetation, and/or

rainwater harvest techniques. Examples of LID and green infrastructure include but are not limited to the following: bioretention facilities, rain gardens, vegetated rooftops, rain barrels, and permeable pavements.

SECTION V.F. Land Disturbance and Stormwater Management

1. Purpose and Intent

The purpose of the Land Disturbance and Stormwater Management (LDSM) By-Law is to provide a thorough review of construction, development, and/or redevelopment projects that have the potential to adversely impact natural resources, man-made structures, abutting properties and/or the Town's infrastructure. Projects subject to the LDSM By-Law shall be designed so as not to impact water quality, or surface flows; shall protect all properties, storm drainage systems, public roadways, natural water bodies from potential flooding, overloading, and/or clogging resulting from development; and shall not cause any significant alteration to topography or significant clearing of land. Moreover, projects shall be designed so as not to create adverse conditions during or after construction that would alter and/or destroy aquatic or wildlife habitat, and/or cause environmental degradation.

This By-Law shall provide review and oversight of the following, as applicable:

- a. Stormwater Management (Section V.F.3.a)
- b. Topographical Alterations (Section V.F.3.b)
- c. Tree Removal (Section V.F.3.c)
- d. Earth Removal and Fill (Section V.F.3.d)

The intent of the LDSM By-Law is to ensure that development projects incorporate and utilize Best Management Practices (BMP) and Low Impact Development (LID) techniques to the maximum extent feasible. All development and/or redevelopment projects shall be designed to ensure the following:

- a. Protection of surface and groundwater resources, wetlands, and vernal pools;
- b. Infiltration, recharge, and on-site management of stormwater on-site;
- c. Management of erosion, stormwater runoff, and sedimentation through BMPs and LID techniques;
- d. Minimization of alteration to the natural topography to the maximum extent possible;
- e. Control and proper site management of construction waste such as discarded building material; concrete truck washout; limiting on-site idling, fueling, and maintenance of construction equipment/vehicles; chemicals; litter; and sanitary waste during and post-construction;
- f. Compliance that exceeds the regulations set forth in federal, state, and local statutes and those regulations that relate to stormwater discharge and management and include but are not limited to the following: the Massachusetts Department of Environmental Protection (MassDEP) Stormwater Management Standards. The revised Stormwater Management Standards have been incorporated in the Wetlands Protection Act Regulations, 310 CMR 10.05(6)(k) and the Water Quality Certification Regulations, 314 CMR 9.06(6)(a); Massachusetts Stormwater Handbook (<http://www.mass.gov/eea/agencies/massdep/water/regulations/massachusetts-stormwater-handbook.html>), as amended; the NPDES Municipal Separate Storm Sewer System (MS4) regulations; and local regulations set forth by the Department of Public Works (DPW); and

- g. Protection of local hydrologic conditions, sensitive areas of land and water, natural areas and topographical features, and unique topography, in addition to the protection of wells and wetlands on-site and abutting properties.

a. Purpose

~~The purpose of this by law is to protect natural resources including but not limited to land, water, wetlands, trees and vegetation, wildlife, and scenic vistas and historic resources and to prevent or minimize the negative impacts of Erosion, Sedimentation, Clearing, Earth Removal and Fill, Earth Moving and Stormwater Runoff both on and off of the project site.~~

b. Definitions

~~**Best Management Practice (BMP):** A structural, nonstructural, or vegetative measure which reduces Erosion, Sediment, peak storm discharge, and/or improves the quality of Stormwater Runoff as described in the Stormwater Management Handbook and any other applicable local regulations.~~

~~**Clearing:** Removal or causing to be removed or destroyed, through either direct or indirect actions, trees six inches (6") in diameter or larger at four and a half feet (4 ½') above the ground (DBH) and shrubs at four feet (4') tall or taller. Actions considered to be Clearing include, but are not limited to: causing irreversible damage to roots or trunks; destroying the structural integrity of vegetation; and/or any Filling, excavation, grading, or trenching in the root area of a tree which has the potential to cause irreversible damage.~~

~~**Diameter Breast Height (DBH):** The diameter of the trunk of a tree four and a half feet (4 ½') above the existing grade at the base of the tree.~~

~~**Disturbed Area:** An area, man-made or natural, where the existing condition has been or is proposed to be altered.~~

~~**Earth Fill:** The addition of earth materials to a Lot or parcel, including but not limited to, sand, gravel, stone, soil, loam, sod, clay and mineral products.~~

~~**Earth Moving:** The addition, removal or relocation of earth materials within the boundaries of a Lot or parcel, including but not limited to, sand, gravel, stone, soil, loam, sod, clay and mineral products.~~

~~**Earth Removal:** The removal of earth materials from a Lot or parcel, including but not limited to, sand, gravel, stone, soil, loam, sod, clay and mineral products.~~

~~**Erosion:** A condition in which the earth's surface, including vegetation, soil or rock fragment, is detached and moved away by the action of water, wind, ice, gravity or other natural means.~~

~~**Fill:** Any Fill used in connection with this project shall be clean Fill and may not contain any trash, refuse, rubbish, or debris, including but not limited to lumber, bricks, plaster, wire, lath, paper, cardboard, pipe, asphalt, concrete, tires, ashes, refrigerators, motor vehicles, or parts of any of the foregoing.~~

~~**Hazardous Tree:** A tree with a structural defect or disease, or that impedes safe sight distance or traffic flow, or otherwise currently poses a threat to life or property as verified by a certified arborist or Town Tree Warden.~~

~~**Landscaping:** Improvements made to a Lot or parcel through treatment of the ground surface with planting materials including but not limited to trees, shrubs, grass, ground cover or other growing horticultural material, as well as wood chips, stone or decorative rock.~~

~~**Lot:** For the purposes of this Land Disturbance By Law, Lot shall be defined as an area of land in one ownership, with definite boundaries ascertainable by recorded deed or recorded plan and not divided by a public street or public way, including land under the control of the same person and land under the ownership of related or jointly owned entities, in existence as of the effective date of this Land Disturbance By Law.~~

~~**Sediment:** Solid material, whether mineral or organic, that is in suspension, is transported or has been moved from its site of origin by Erosion.~~

~~**Significant Forest Community:** Unfragmented forests including forest types that provide habitat for rare species, unusual ecological processes, highly diverse forest communities, rare forest types, and those forest types which maintain connections between similar or different habitat areas.~~

~~**Slope:** Any elevation change across a horizontal distance of one hundred feet, as measured perpendicular to the contour line. For Lots lacking a horizontal distance of one hundred feet, the Slope will be calculated as any elevation change across a horizontal distance of fifty feet, as measured perpendicular to the contour line.~~

~~**Soil Disturbance:** Clearing, grading, regrading, excavation, stockpiling or Filling of six inches or more.~~

~~**Specimen Tree:** A native, introduced or naturalized tree which is important because of its impact on community character, its significance in the historic or cultural landscape or its value in enhancing the effects of wildlife habitat. Any tree with a diameter of eighteen inches at DBH or larger is presumed to be a Specimen Tree. Trees that have a small height at maturity or are slow growing, such as Flowering Dogwood or American Holly, with a diameter of six inches at two feet above the ground or larger are presumed to be considered Specimen Trees.~~

~~**Stabilization:** The elimination and prevention of Erosion.~~

~~**Stormwater Management Handbook:** “Stormwater Management Handbook,” prepared by the Massachusetts Department of Environmental Protection and the Massachusetts Office of Coastal Zone Management as the same may be from time to time revised.~~

~~**Stormwater Runoff:** Water from precipitation or snow melt that does not evaporate or infiltrate into the ground.~~

2. Applicability and Procedure

a. Land Use Activities Requiring Review

The LDSM By-Law shall apply to the following construction, development, and/or redevelopment projects:

- i. The disturbance of land area equal to or greater than one acre;
- ii. The disturbance of land as part of a larger common plan of development with a total disturbance area equal to or greater than one acre;
- iii. The clearing of land that results in 50 percent or more of the lot being cleared of trees. Lots with an area of 20,000sf or less shall be exempt from this requirement; and/or
- iv. Construction, development, and/or redevelopment activities that occur within a 30’ buffer of Moderate Slopes or on Moderate Slopes as defined in Section IV.E.3.e.

b. Land Use Activities Exempt from Review

The following construction, development and/or redevelopment projects shall be exempt from the LDSM By-Law, but not exempt from other laws, regulations, and by-law of the Town:

- i. Any normal maintenance of Town owned public lands, ways, and/or appurtenances.
- ii. Redevelopment activities that are exclusively limited to maintenance and improvement of existing roadways, (including widening less than a single lane, adding shoulders, correcting substandard intersections, improving existing water, sewer or drainage systems, and repaving projects).
- iii. Activities undertaken in connection with an existing public athletic field; the management of Town-owned park or cemetery; or the management and operation of a golf course.

- iv. Work in connection with an agricultural use classified under M.G.L. c. 61A, including: planting, cultivating harvesting, and/or the raising and/or caring of animals; agricultural operations in accordance with an approved Natural Resource Conservation Service Agricultural Plan; agricultural uses on parcels of land of more than five acres as specified in M.G.L. c. 40A, Section 3; and/or the harvesting of trees on a property classified and good standing under M.G.L. c. 61 and in accordance with a forest management plan or cutting plan as set forth in M.G.L. c. 61, Section 1.
- v. Activities conducted in accordance with a Forest Stewardship Plan approved by the Massachusetts Department of Conservation and Recreation.
- vi. Temporary work relative to emergency storm events or emergency repairs to any utilities (gas, water, sewer, electric, telephone, etc.), including situations that pose an immediate danger to life and/or property.
- vii. Construction of utilities (gas, water, sewer, electric, telephone, etc.) other than drainage, which will not alter terrain, ground cover, or drainage patterns.

c. Minimum Standards

The LDSM By-Law shall serve as the minimum standards for activities that fall under LDSM review. Applicants are expected to exceed these minimum standards through the use of BMPs, LID techniques, increased vegetation, the preservation of land, and/or development within previously disturbed areas. Furthermore, previously developed sites shall be expected to exceed existing conditions, in addition to minimum federal, state, and local standards for stormwater management, erosion, infiltration, sedimentation, and Total Suspended Solids (TSS).

d. Permit Granting Authority and Permit Procedure

The Planning Board shall be the SPGA for the LDSM By-Law. All applications subject to the LDSM By-Law shall follow the special permit procedures for an application submittal pursuant to Section VI.E, herein.

e. Non-Avoidance by Phasing or Segmentation

A construction, development and/or redevelopment project shall not be phased and/or segmented in such a manner so as to avoid compliance with the LDSM By-Law. The Planning Board shall not approve any application for construction, development, and/or redevelopment, where individual parcels and/or multiple parcels of land are held in common ownership (including ownership by related or jointly controlled persons or entities) with the intent to segment project phases. All phases of a project shall be considered as part of a single development project if located either on a single parcel or contiguous parcels of land that have been in the same common ownership at any time subsequent to the date of adoption of this Section V.F Land Disturbance and Stormwater Management.

- i. Any project permitted under the Framingham Subdivision Rules and Regulations, which was not subject to review under the LDSM By-Law at the time it was permitted, shall be subject to review if at a later date such project is expanded and triggers any of requirements set forth in Section V.F.2.a. All phases of a project shall be considered to be a single development project.

f. Submittal Requirements

Applications for LDSM shall submit plan sets and supporting documentation in accordance with the requirements set forth in Article 24: Land Disturbance and Stormwater Management Documentation Submittal of the Framingham Planning Board Rules & Regulations.

g. Waivers

Strict compliance with the LDSM By-Law is required to the greatest extent feasible. The Planning Board may grant waivers for Land Disturbance and Stormwater Management Documentation Submittal and/or design standards, by a four-fifths vote, where such action is not inconsistent with the purposes of the LDSM By-Law or the other associated Regulations.

e. Applicability

(1) Land Disturbance Permit

~~This By Law shall apply to any proposed Land Disturbance activity on all existing Lots and new Lots created by plan as follows:~~

- ~~(a) Any Soil Disturbance greater than 4,000 square feet on an existing or proposed Slope of more than fifteen percent (15%);~~
- ~~(b) Any Earth Removal or Earth Fill of more than 400 cubic yards;~~
- ~~(c) Any Earth Moving activity of more than 1,000 cubic yards;~~
- ~~(d) Any Clearing of more than fifty percent (50%) of the Lot's area or more than 40,000 square feet, whichever square footage is less, but not including Lots with an area of 10,000 square feet or less.~~

(2) Exemptions

~~The provisions of this by law shall not apply to the following activities:~~

- ~~(a) Construction of walkways, patios, driveways, gardens, Landscaping, walls, swimming pools, or replacement of wells or septic systems on Lots having an existing dwelling providing the activity is on an existing or proposed Slope of fifteen percent (15%) or less;~~
- ~~(b) Construction, reconstruction, maintenance or resurfacing of any public way or the installation of drainage structures or utilities within roadway layouts and easements, provided the activity is undertaken by the Town of Framingham, or the stockpiling of sand, gravel, stone, soil and salt at facilities operated by the Town of Framingham;~~
- ~~(c) Activities undertaken in connection with the refurbishing of an existing athletic field, or with the management of town owned park, or with the management of privately owned lands held by non-profit conservation organizations, or in connection with the management and operation of golf courses;~~
- ~~(d) Activities undertaken in connection with any existing sand and gravel operation or similar enterprise where such activity is allowed by zoning, but shall not include expanded operations;~~
- ~~(e) Work in connection with an agricultural use directly related to planting, cultivating or harvesting or the raising or care of animals, or conducted in accordance with an approved Natural Resource Conservation Service Agricultural Plan, or agricultural uses on parcels of land of more than five acres as specified in M.G.L. Ch. 40A, §3, or harvesting of trees on property under M.G.L. Ch. 61 approved by a State Forester;~~
- ~~(f) Activities in accordance with the terms of an Order of Conditions issued by the Conservation Commission pursuant to M.G.L. Ch. 131 §40, or Framingham Wetlands Protection By Law, Article V, §18 of the Framingham General By Laws or mosquito control projects under the jurisdiction of the United States Army Corps of Engineers, except for land disturbance activities on uplands adjacent to a wetland resource area;~~
- ~~(g) Removal of Hazardous Trees, as defined herein;~~
- ~~(h) Removal of a tree following a tree removal public hearing, pursuant to the Public Shade Tree Act M.G.L. Ch. 87, when required;~~

~~(i) Routine maintenance of vegetation, removal of dead or diseased limbs and/or trees necessary to maintain the health of cultivated plants, containment of invasive or noxious weeds and/or vines in accordance with a Department of Environmental Management (DEM) approved Forest Management Activities, or Conservation Commission Order of Conditions, or remediation of an identified fire or health hazard or threat to public safety or property;~~

~~(j) Non-commercial cutting for fuel, provided that clear cutting does not occur as provided herein.~~

~~(3) Non-Avoidance of Provisions of By Law~~

~~The provisions of this By Law shall apply to all Lots in existence on (May 2, 2007). Any segmentation or phasing of a development, or the subdivision or division of land subsequent to the effective date of this By Law, unless otherwise exempted by law, shall be subject to and must comply with the provisions herein. All thresholds established in Section(c) of this By Law shall be calculated based upon the Lot(s) in existence as of the effective date of this By Law. The Planning Board shall not approve any Land Disturbance application if the land or parcels of land were deemed one Lot on the effective date of this By Law or at any time subsequent thereto, except after considering the compliance of the entire Lot with the provisions of this By Law.~~

d. Special Permit Application and Procedure

~~The Planning Board shall be the SPGA for the issuance of a Special Permit for Land Disturbance. Such special permit application shall be submitted, considered, and issued only in accordance with the provisions of this Section and M.G.L. Ch. 40A, § 9. Prior to filing an Application for Special Permit for Land Disturbance, potential Applicants are strongly encouraged to meet in a pre-application conference with the Planning Board to discuss the review process.~~

~~(1) Any person who desires a Land Disturbance Special Permit shall submit a plan prepared and stamped by a Professional Engineer and a Professional Land Surveyor each registered in the Commonwealth of Massachusetts, at a scale of one inch equals twenty feet (1"=20') showing:~~

~~(a) North arrow, scale, and date;~~

~~(b) Locus map showing the parcel in relation to the surrounding properties;~~

~~(c) Name of record owner(s) of land shown on the plan;~~

~~(d) Boundaries and existing and proposed topography of the property, including contours at a 2-foot interval, using (National Geodetic Vertical Datum 1929) NGVD29 as it may be updated from time to time and specifying NGVD29 on all elevation drawings, specifically indicating the areas on which the activity is proposed to occur, and clearly noting if the activity is on an area greater than 4,000 square feet or on Slopes 15% or greater;~~

~~(e) The size and location of all existing and proposed buildings, structures, utilities, roads, driveways, parking areas, and areas of cut and fill on the site and the location of all structures on abutting properties within 100 feet of the property lines of the parcel;~~

~~(f) Property lines, easements and/or other legal rights within the property lines;~~

~~(g) All wetlands and wetland resource areas as defined in M.G.L. Ch. 131, §40, and the Framingham Wetlands Protection Bylaw, Article V, §18 of the General By laws, drainage patterns, and watershed boundaries. Also include a delineation of the 100-year floodplain and all bodies of water, including vernal pools, streams, ponds, and coastal waters within 125 feet of the project site/limit of work and the delineation of a 30-foot no-cut/no alteration zone;~~

~~(h) Submission of a scaled landscape plan that delineates on a single sheet the existing vegetation both on the Lot and in the right-of-way, the vegetation to be removed or relocated, the re-vegetation and the limit of work. The limit of work shall include all building, parking, and vehicular use areas, and any grading associated with the proposed development. Include a planting plan to ensure permanent re-vegetation of the site except for Disturbed Areas that will be covered by gravel, hardscape or a building or structure. If applicable, include:~~

- (i) ~~Upland vegetational communities, including trees, shrub layer, ground cover and herbaceous vegetation;~~
 - (ii) ~~Size and height of trees, of Specimen Trees and/or significant forest communities;~~
 - (iii) ~~Location of any rare and endangered species as mapped by the Massachusetts Natural Heritage Program;~~
 - (i) ~~The location of any proposed stockpile locations;~~
 - (j) ~~Detailed drawings and design calculations of all temporary and permanent stormwater management and Erosion and Sediment control structures and devices;~~
- (2) ~~Applications for a Land Disturbance Special Permit must be accompanied by a narrative containing the following elements:~~
- (a) ~~A narrative description of the methods to be employed and the means proposed to provide Erosion and Sedimentation control, to protect groundwater, to control dust and to protect abutting properties and/or adjacent areas;~~
 - (b) ~~A description of the project's phases as they relate to land disturbance, including a tabulated sequence of construction and a construction schedule which must include the inspection and maintenance of Erosion Control Measures for the project throughout the construction period and the timing of vegetation Clearing, transplanting or replacement in relation to other construction activities;~~
 - (c) ~~A description of BMP as they relate to Erosion control to be employed as the standard of performance in development of the project site;~~
 - (d) ~~A narrative description of pre and post construction Stormwater Runoff Analysis showing that Stormwater Runoff will be controlled as required by the Findings and Conditions of Approval, accompanied by design calculations using generally accepted analytical tools;~~
 - (e) ~~Information on predominant soil types and Erosion potential on the site from the Natural Resource Conservation Service;~~
 - (f) ~~A detailed description of the type of Fill to be used on site;~~
 - (g) ~~A narrative documenting the species and quantities of Specimen Trees and/or other vegetation to be removed or relocated within the project area;~~
 - (h) ~~If applicable, include a statement prepared by a certified arborist for the proposed relocation of any existing Specimen Tree explaining how said tree is to be relocated and maintained.~~
- (3) ~~Photographs of the site prior to disturbance shall accompany the application.~~
- (4) ~~Based upon the size or character of the project including the scope of activity, area of disturbance and the percent slopes on which the work is to occur, the Planning Board may require additional information or may waive some or all of the requirements of the Land Disturbance application.~~
- (5) ~~The Planning Board, at its sole discretion, may determine that a proposed project's size, scale, complexity or potential impact warrants the use of outside consultants. Such consultants shall provide comment upon the project in plan review, impact analysis, inspection or other technical or legal assistance necessary to ensure compliance with all relevant laws and regulations. Such assistance may include, but shall not be limited to, analyzing an application, providing legal counsel for decisions and covenants, and monitoring or inspecting a project or site during construction or post construction for compliance with the Board's decisions or regulations. Such consultants shall be selected and retained by the Planning Board, with the actual and reasonable costs for their services to be paid by the applicant in accordance with Article 16 of the Planning Board Rules and Regulations.~~
- (6) ~~The applicant shall make all requests for waivers in writing. The Planning Board may require the applicant to submit supporting technical information and documentation to demonstrate why such waivers should be granted. The Planning Board's decision to grant or deny waivers shall be in writing and shall set forth the reasons for the grant or denial.~~

3. Land Disturbance and Stormwater Management Guidance

a. Stormwater Management

Stormwater Management and erosion control shall exceed the regulations set forth in federal, and state statutes and regulations promulgated thereunder that related to stormwater discharge and management and include but are not limited to the following: the Massachusetts Department of Environmental Protection (MassDEP) Stormwater Management Standards; Massachusetts Stormwater Handbook (<http://www.mass.gov/eea/agencies/massdep/water/regulations/Massachusetts-stormwater-handbook.html>) as amended; the NPDES Municipal Separated Storm Sewer System (MS4) Permit and regulations; and local regulations set forth by the Department of Public Works (DPW).

- i. Any permitted topographical alterations, tree removal, earth removal/fill, and/or site improvements associated with the LDSM By-Law shall incorporate LID techniques and BMPs to the greatest extent feasible. Such features may include rain gardens, rain water harvesting, green roofs, curb breaks, native/hybrid plantings, etc.
- ii. Stormwater shall not be directed towards sensitive areas, wetlands, habitats, or be permitted to sheet flow causing erosion and sedimentation movement.
- iii. Whenever possible, all buildings, roadways, parking lots/areas, detention/retention facilities, and other site improvements shall be located in previously developed, cleared, disturbed, and/or improved areas before an applicant proposes to disturb an area that presents existing natural topography.
- iv. Natural hydrology and water quality shall be maintained during and post construction.
- v. Projects that alter natural stormwater and drainage systems shall replicate natural conditions with respect to infiltration, evapotranspiration, and stormwater runoff.
- vi. The use of hay bales are not permitted for erosion and sediment control. Erosion and sediment controls should be consistent with the Town's construction standards.
- vii. Under certain circumstances where on-site options for stormwater mitigation are limited, infeasible, and/or where off-site options provide better protection, the Planning Board may allow the applicant to contribute to the implementation of off-site stormwater mitigation or to contribute to a Town of Framingham Stormwater Mitigation Fund in lieu of an on-site stormwater BMPs. This may be allowed at the discretion of the Planning Board only where a net public benefit is clearly demonstrated and documented by meeting or exceeding the purpose and intent of the LDSM By-Law.
- viii. Projects that propose dewatering shall submit a dewatering plan for review to the Conservation Commission, the Department of Public Works, and the Planning Board, and shall be accompanied by a detailed description of the methods proposed to mitigate impacts.
- ix. Projects shall be designed to disturb the minimal amount of land possible and to manage the maximum amount of stormwater on-site.

b. Topographical Alterations

- i. Where possible, development shall not occur on those areas defined as Moderate Slope (Section IV.E.3.e) or within 30' of a Moderate Slope buffer. If development is proposed within an area identified as Moderate Slope or within the 30' Moderate Slope buffer, then the

applicant shall submit a geotechnical report, prepared by a professional geotechnical engineer. The Planning Board and the Department of Public Works (DPW) shall review submitted document to ensure such topographical alternation will not adversely impact direct abutters, structures, and/or the stability of the land.

- ii. Any development that is authorized to occur on an identified Moderate Slope (Section IV.E.3.e) and/or within the 30' Moderate Slope buffer shall preserve existing vegetation to the greatest extent feasible.
- iii. Topographical alteration shall not occur within 10' of a vegetated buffer to ensure the protection of the root zone or within 10' of a front and/or rear setback (Section IV.E.3.e).
- iv. In the event that topographical alternation within land identified as Moderate Slope (Section IV.E.3.e) and/or within the 30' Moderate Slope buffer then the applicant shall mitigate all impacts that result in stormwater runoff, erosion, and/or the movement of sedimentation through BMPs and LID techniques. The Applicant shall further establish a vegetated berm to prevent negative impacts to abutting properties and/or roadways.
- v. The applicant may be required to mitigate topographical alternations as outlined in Section V.F.3.a.vii, herein.

c. Tree Removal

- i. The removal of trees shall not be permitted within the side/rear setbacks as defined in Section IV.E.2., unless identified by the Town's Tree Warden to be hazardous and/or diseased. The Applicant shall retain trees greater than 10" caliper within the front yard setback, as set forth in Section IV.E.2. Furthermore, trees may be removed for the construction of a driveway or subdivision roadway, but such removal shall be at the minimum width as required by the Department of Public Works (DPW), Fire Department, and Police Department.
- ii. All trees that are 8" or greater in caliper that are removed shall be replaced. The total number of replacement trees shall be as follows: 1 tree per caliper per inch of a deciduous tree and 1 tree per inch of height for an evergreen tree. Replacement trees shall be a minimum 3" caliper for deciduous trees and 5' tall for evergreen trees.
- iii. If the applicant can demonstrate that the required number of replacement trees cannot be properly placed on-site, then the applicant may offer the Town an equal number of trees comparable in size to the Department of Public Works and/or the Parks and Recreation Department to be planted at their discretion elsewhere in Town.
- iv. During construction the drip line of the designated tree to be saved post-construction shall serve as the protection boundary. The applicant shall install a barrier around this area.
- v. Land clearance shall be prohibited within 125' of a designated open space parcel of land that is protected by an Agricultural Preservation Restriction (APR) or a Conservation Restriction (CR).

d. Earth Removal and Fill

- i. Earth removal shall be limited to areas that have been previously disturbed and/or impervious. Where earth removal is required in an area that has not previously been disturbed then the applicant shall submit a geotechnical report, prepared by a professional geotechnical engineer.

- ii. Soil removed from the property shall be stockpiled and reused on-site where possible. Such stockpiles shall be seeded and/or covered, and protected with erosion controls around the base of the pile, until such soils are needed.
- iii. When new fill is required to be brought onto the site, the use of clean fill shall only be permitted. Prior to fill being brought onto site, the applicant shall provide a written notarized affidavit to the Planning Board, Department of Public Works (DPW), and the Conservation Commission that includes the name of the company, the location where the fill is coming from, the type of fill, and any additional information to certify that all fill is clean.

4. Findings and Conditions of Approval

Project review pursuant to the LDSM By-Law shall be based on the information provided in the LDSM Development Impact Report, the LDSM Site Plan, and a Long Term LDSM Plan. The Planning Board shall render written findings prior to granting an approval or disapproval of the application. Such findings shall pertain to the entire proposed project that is subject to review. The Planning Board may modify the site plan or project as a condition of its approval, which may include either on-site or off-site mitigation measures to offset any negative impacts created by the project.

a. Filing and Document Review

- i. All documents and plans required in Section V.F herein have been submitted in accordance with these regulations and Town standards.

b. Federal, state, and local regulations

- i. A minimum compliance with all applicable federal, state, and local regulations and guidelines, including but not limited to, the most current edition of the MassDEP Stormwater Management Standards, the Massachusetts Stormwater Handbook, the NPDES MS4 permit; and Department of Public Works (DPW) regulations related to stormwater/erosion/etc.

c. Site Management and Control

- i. Building envelopes for structures, driveways, wastewater disposal, lawn areas, and utility work shall be designed and delineated in a manner to limit erosion, land disturbance, and stormwater runoff to the greatest extent possible.
- ii. The site shall contain designated areas for temporary uses such as the parking of construction vehicles, trailers, and/or stockpiling of equipment and materials.
- iii. All waste products, grubbed stumps, slash, construction materials, etc., shall be lawfully disposed of and shall not be incorporated into the project site with the exception of the reduction of stumps and slash to mulch.
- iv. During construction, temporary erosion and sedimentation control measures shall be employed in accordance with the approved plan and the BMP until a disturbed area is permanently stabilized.
- v. Permanent erosion control and vegetative measures are in accordance with the BMP and LID techniques.
- vi. Dust control measures are used throughout construction.

- vii. Throughout the duration of construction, a gravel apron of at least fifteen feet wide and at least twenty-five feet long is required at any site access from a paved public way to prevent unstable material from being transported onto the roadway by vehicle tires.
- d. Control of Stormwater Runoff
 - i. Whenever possible, the natural topography of a site shall be preserved so as to reduce unnecessary erosion, land disturbance, stormwater runoff, and/or to preserve natural drainage patterns and infiltration on the site.
 - ii. The project as designed does not increase the rate, concentration, and/or velocity of runoff from the site.
 - iii. There will be no adverse impact to abutting properties from any change in volume of stormwater runoff resulting from land disturbance activities including but not limited to erosion, silting, flooding, sedimentation, subsidence or impacts to wetland, groundwater resources, septic systems, wells, and/or lack of long term maintenance of the BMP and LID techniques.
 - iv. There will be no adverse impacts to groundwater resources in terms of quantity or quality.
- e. Protection of Natural Features and Vegetation
 - i. Endangered species and wildlife habitats and corridors, natural landscape features, and scenic vistas and views shall be protected to the maximum extent feasible. Buildings, structures, and/or parking facilities are sited away from the crest of hills in a manner so as not to detract from the site's scenic qualities.
 - ii. Open space, native trees, and specimen trees are preserved to the greatest extent feasible in the site's design and development placing priority on the retention of an existing tree, existing stands of trees, trees at the site perimeter, and contiguous vegetation with adjacent sites (particularly existing sites protected through conservation restrictions).
 - iii. Forested areas, wetlands, waterbodies, critical wildlife habitat areas and Moderate Slopes as defined in Section IV.E.3.e, herein are preserved to the maximum extent feasible.
 - iv. The applicant shall demonstrated that all vegetation that shall be retained will be surrounded by temporary protective fencing or other measures before any Land Clearing or grading occurs, and shall be maintained as such until all construction and site work is completed and all construction equipment and debris is removed from the site.
 - v. Grading shall be designed to maintain the area around the trunks of trees so that the ground level is not raised over the root area.
 - vi. Requirements shall be met for screening of the adjoining premises or screening from the street by walls, fences, plantings, and/or other devices to mitigate adverse impacts of the project.
- f. Protection of Historic Resources
 - i. Reasonable measures shall be employed to protect historic, unique topographical, and archaeological resources including, but not limited to, historic landscape features both above and below ground, buildings, structures, objects, stone walls, foundations, designed landscapes and gardens.

e. Findings and Conditions of Approval

The Board shall not approve any application for a Land Disturbance Special Permit unless it finds that, where applicable, the following requirements shall be met:

(1) Site Management and Control

- ~~(a) Building envelopes for structures, driveways, wastewater disposal, lawn areas and utility work are designed and delineated in a manner to limit land disturbance to the greatest extent possible;~~
- ~~(b) Suitable areas are designated for temporary uses such as the parking of construction vehicles, trailers and stockpiling of equipment and materials;~~
- ~~(c) All waste products, grubbed stumps, slash, construction materials, etc., shall be lawfully disposed of and shall not be in any manner incorporated into the project site with the exception of the reduction of stumps and slash to mulch;~~
- ~~(d) During construction, temporary Erosion and Sedimentation control measures are employed in accordance with the approved plan and the BMP until a Disturbed Area is permanently stabilized;~~
- ~~(e) Permanent Erosion control and vegetative measures are in accordance with the BMP;~~
- ~~(f) The duration of disturbance is set forth in a written timetable;~~
- ~~(g) Dust control is used throughout construction;~~
- ~~(h) Throughout the duration of construction, a gravel apron of at least fifteen feet wide and at least twenty five feet long is required at any site access from a paved public way to prevent unstable material from being transported onto the roadway by vehicle tires.~~

(2) Control of Stormwater Runoff

- ~~(a) Whenever possible, the natural topography of a site is preserved so as to reduce unnecessary land disturbance and to preserve natural drainage patterns on the site;~~
- ~~(b) The project does not increase the rate, concentration or velocity of runoff from the site, and the project shall minimize the volume increase of runoff from the site to adjoining properties;~~
- ~~(c) There is no adverse impact to abutting properties from any change in volume of Stormwater Runoff resulting from land disturbance activities including but not limited to Erosion, silting, flooding, Sedimentation, subsidence or impacts to wetland, groundwater resources, septic systems or wells;~~
- ~~(d) There is no adverse impact to groundwater resources in terms of quantity or quality.~~

(3) Protection of Natural Features and Vegetation

- ~~(a) Endangered species and wildlife habitats and corridors, natural landscape features, and scenic vistas and views are protected to the maximum extent feasible. Buildings, structures or parking facilities are sited away from the crest of hills in a manner not to detract from the site's scenic qualities;~~
- ~~(b) Open space and Specimen Trees are preserved in the site's design and development, giving priority to retention of existing stands of trees, trees at the site perimeter, and contiguous vegetation with adjacent sites (particularly existing sites protected through conservation restrictions);~~
- ~~(c) Forested areas are preserved to the maximum extent feasible if they are associated with significant forest communities as defined herein; wetlands, waterbodies and their buffers; critical wildlife habitat areas; and Slopes over 15%;~~
- ~~(d) During Clearing and/or construction activities, all vegetation to be retained will be surrounded by temporary protective fencing or other measures before any Clearing or grading occurs, and maintained until all construction and site work is completed and all construction equipment and debris is removed from the site;~~
- ~~(e) Where the site is not proposed to be covered with gravel, hardscape or a building or structure, a planting plan to ensure permanent re-vegetation of the site, including but not limited to providing a loam depth of not less than six inches for areas to be planted, has been provided by means of adequate revegetation techniques;~~

~~(f) Existing grade will be maintained around trees such that the ground level is not raised over the root area.~~

~~(4) Protection of Historic Resources~~

~~(a) Reasonable measures are employed to protect historic resources including but not limited to historic landscape features both above and below ground, buildings, structures, objects, stone walls, foundations, designed landscapes and gardens.~~

5. Additional Requirements, Conditions, Limitations and Safeguards

The Planning Board may impose additional requirements, conditions, limitations, and/or safeguards in granting approval of an application which shall be incorporated in writing as part of the Decision.

a. Long Term LDSM Plan

- i. Submission of the covenant; homeowners' association documents; condominium Master Deed; property deed; and/or Declaration of Trust documents as applicable, which shall provide reference to the Long Term LDSM Plan for all permanent erosion control and stormwater management measures as conditioned by the Planning Board.
- ii. The Applicant/landowner shall notify the Planning Board when the initial BMPs for erosion, land disturbance, and stormwater management measures have been installed in accordance with the Long Term LDSM Plan.

b. Construction Maintenance Bond

- i. Prior to the issuance of a building permit, the Applicant shall provide a Construction Performance Bond in the amount of \$5,000.00 or equal to 20 percent, whichever amount is greater, of the expected values of the BMPs for erosion control and stormwater management during construction of the project. The Planning Board shall hold such Construction Performance Bond until the issuance of a use and occupancy permit from the Building Department.

c. Construction Procedure

- i. No land disturbance activities shall begin prior to the written approval by the Planning Board Administrator, Department of Public Works (Town Engineer), and the Conservation Commission Administrator.
- ii. Maintenance of BMPs for erosion control, land disturbance, and/or stormwater management during construction shall be maintained in good order and in compliance with the NPDES Construction General Permit (if applicable).

d. Post-Construction Review

A special permit for LDSM shall not close until a final inspection and approval of the site being stabilized and restored in accordance with the approved plan of the Planning Board and the LDSM Performance Bond has been placed by the Applicant/landowner.

- i. Removal of all non-permanent BMPs for erosion control, land disturbance, and/or stormwater management.
- ii. Onsite improvements such as landscaping, parking lots, driveways and roadways, sidewalks and trails, and all BMP and LID techniques have been installed and fully functioning.

e. LDSM Performance Bond

- i. The Applicant and/or landowner shall provide a LDSM Performance Bond prior to the issuance of a use and occupancy permit. The total amount of the bond shall equal \$5,000.00 or 20 percent, whichever is greater for the total amount of the BMPs and LID techniques installed on-site for erosion control and stormwater management.
- ii. The Applicant and/or landowner shall submit an annual maintenance report to the Planning Board and the Department of Public Works for the purposes of monitoring such BMPs.
- iii. Such LDSM Performance Bond shall be returned after five years. At the end of every two years, the Applicant can request 50 percent of the Bond be returned.

~~f. Additional Requirements, Conditions, Limitations and Safeguards~~

~~In granting approval of an application the Planning Board may impose additional requirements, conditions, limitations and safeguards which shall be in writing and shall be a part of such approval. Such conditions may include but are not limited to:~~

- ~~(1) Controls on the location and type of access to the site during all site activity;~~
- ~~(2) Controls on the number of vehicles that arrive or depart during the morning and/or evening peak hours during all site activity (including controls on the maximum number of vehicles which may use the off-street parking areas during said periods);~~
- ~~(3) Conditions to minimize off-site impacts on traffic and environmental quality during site activity;~~
- ~~(4) Requirements for screening from adjoining premises or from the street by walls, fences, plantings or other devices to mitigate adverse impacts;~~
- ~~(5) Conditions to mitigate adverse impacts to the neighborhood and abutters, including but not limited to adverse impacts caused by noise, dust, fumes, odors, lighting, headlight glare, hours of operation or snow storage;~~
- ~~(6) Compliance with all applicable federal, state and local regulations and guidelines, including but not limited to the Stormwater Management Handbook as it may be amended;~~
- ~~(7) Submission of a response from the Massachusetts Historical Commission (MHC) and the Framingham Historical Commission regarding the potential for archaeological or historical resources on the site, as may be applicable;~~
- ~~(8) Submission of homeowner's or condominium documents which shall provide for the long term operation and maintenance of all permanent erosion control and stormwater management measures;~~
- ~~(9) Requirement of a cash performance guarantee to ensure compliance with these requirements. With the approval of the Board, the applicant may substitute an irrevocable letter of credit or performance bond from a bond company or financial institution acceptable to the Town of Framingham in lieu of the cash performance guarantee. Any performance bond or letter of credit shall be executed and maintained by a financial institution, surety, or Guarantee Company qualified to do business in the Commonwealth of Massachusetts.~~
- ~~(10) Requirement to record the Special Permit decision with the Registry of Deeds or Registry District of the Land Court prior to commencement of any land disturbing activity authorized under this Special Permit, the applicant shall submit to the Planning Board written proof of such recording.~~
- ~~(11) Submission in writing of the name and contact information of the person who is responsible at all times for the land disturbing activity that is the subject of the application. Said person shall ensure that the approved activity takes place in accordance with the application, plan and special permit requirements. The applicant, when other than the owner(s), and the owner(s) of land will be responsible for conditions which are required as part of a favorable decision for issuance of the Special Permit.~~

6. The Planning Board may deny a Land Disturbance and Stormwater Management Special Permit if it determines that:

- a. The requirements of Section V.F herein are not met, or
- b. The project violates or circumvents other provisions of the Zoning By-Law or regulation, or
- c. The project received a variance issued by the Zoning Board of Appeals from the requirements of Section V.F. herein without first receiving a favorable recommendation from the Planning Board.

7. Enforcement

- a. To the extent permitted by state law, or if authorized by the owner or other party in control of the property, the Department of Inspectional Services, the Planning Board, Department of Public Works, and/or Town designee may enter upon privately owned property for the purpose of performing their duties under the LDSM By-Law and associated permits and may make or cause to be made inspections, surveys, or sampling as the Planning Board, Department of Public Works, and/or Town designee deems reasonably necessary.
- b. When the Department of Inspectional Services, the Planning Board, Department of Public Works, and/or Town designee determines that an activity is not being carried out in accordance with the requirements of the LDSM By-Law, it shall issue a written notice of violation to the owner of the property. Persons receiving a notice of violation may be required to:
 - i. Halt all construction activities until there is compliance. A “stop work order” will be in effect until the Department of Inspectional Services, the Planning Board, Department of Public Works, and/or Town designee confirms that the activity is in compliance and the violation has been satisfactorily addressed.
 - ii. Maintain, install or perform additional erosion and sedimentation control measures;
 - iii. Monitor, analyze, and report to the Department of Inspectional Services, the Planning Board, Department of Public Works, and/or Town designee; and/or
 - iv. Remediate erosion and sedimentation resulting directly or indirectly from the activity.

Failure to address a notice of violation in the time specified therein may result in penalties in accordance with the enforcement measures authorized in the LDSM By-Law.

- c. Penalty. Any person, who violates any provision of the LDSM By-Law or permit issued thereunder, may be punished by a fine. Each day or part thereof that such violation occurs or continues shall constitute a separate offense, and each provision of the bylaw, regulations or permits violated, shall constitute a separate offense.
- d. Non-Criminal Disposition. As an alternative to criminal prosecution or civil action, the Town may elect to utilize the non-criminal disposition procedure set forth in M.G.L. c. 40, Section 21D in which case the Department of Inspectional Services, the Planning Board, Department of Public Works, and/or Town designee shall be the enforcing person. Each day or part thereof that such violation occurs or continues shall constitute a separate offense, and each provision of the bylaw, regulations or permits violated, shall constitute a separate offense.

SECTION TWO WARRANT LANGUAGE VS. REVISIONS SINCE THE PRINTING OF THE WARRANT

SECTION I.E DEFINITIONS

Best Management Practice (BMP): The use of structural, nonstructural, or vegetative measures designed to reduce erosion, control the movement of sedimentation, decrease peak storm material discharge, and/or improve the quality of stormwater runoff as well as maintain natural hydrology as described in the Massachusetts Department of Environmental Protection's Stormwater Management Handbook and any other applicable local regulations.

Disturbed Area: Disturbance to an area and/or soils where the existing condition has been or is proposed to be altered.

Erosion: A condition in which the earth's surface, including vegetation, soil or rock fragment, is detached and moved away by the action of water, wind, ice, gravity or other natural environmental means.

Fill: Any Fill used in connection with a project shall be clean Fill and shall not contain any hazardous waste material, trash, refuse, rubbish, or debris, including but not limited to lumber, bricks, plaster, wire, lath, paper, cardboard, pipe, asphalt, concrete, tires, ashes, refrigerators, motor vehicles, or parts of any of the foregoing.

Low Impact Development (LID): A system and/or practice that uses and/or mimics natural processes that result in the infiltration, evapotranspiration, and/or use of stormwater and precipitation in order to protect water quality while maintaining the natural hydrology of a site. Surface flows and groundwater recharge are the key aspects of LID that consider quantity as well as quality. LID is often referenced as "green infrastructure" and the management of wet weather flows that employ these processes and refers to the patchwork of natural areas that provide habitat, flood protection, cleaner air and water. Both LID and green infrastructure practices aim to preserve, restore, and create green space using soils, vegetation, and/or rainwater harvest techniques. Examples of LID and green infrastructure include but are not limited to the following: bioretention facilities, rain gardens, vegetated rooftops, rain barrels, and permeable pavements.

SECTION V.F. Land Disturbance and Stormwater Management

1. Purpose and Intent

The purpose of the Land Disturbance and Stormwater Management (LDSM) By-Law is to provide a thorough review of construction, development, and/or redevelopment projects that have the potential to adversely impact natural resources, man-made structures, abutting properties and/or the Town's infrastructure. Projects subject to the LDSM By-Law shall be designed so as not to impact water quality, or surface flows; shall protect all properties, storm drainage systems, public roadways, natural water bodies from potential flooding, overloading, and/or clogging resulting from development; and shall not cause any significant alteration to topography or significant clearing of land. Moreover, projects shall be designed so as not to create adverse conditions during or after construction that would alter and/or destroy aquatic or wildlife habitat, and/or cause environmental degradation.

This By-Law shall provide review and oversight of the following, as applicable:

- a. Stormwater Management (Section V.F.3.a)
- b. Topographical Alterations (Section V.F.3.b)
- c. Tree Removal (Section V.F.3.c)

d. Earth Removal and Fill (Section V.F.3.d)

The intent of the LDSM By-Law is to ensure that development projects incorporate and utilize Best Management Practices (BMP) and Low Impact Development (LID) techniques to the maximum extent feasible. All development and/or redevelopment projects shall be designed to ensure the following:

- a. Protection of surface and groundwater resources, wetlands, and vernal pools;
- b. Infiltration, recharge, and on-site management of stormwater on-site;
- c. Management of erosion, stormwater runoff, and sedimentation through BMPs and LID techniques;
- d. Minimization of alteration to the natural topography to the maximum extent possible;
- e. Control and proper site management of construction waste such as discarded building material; concrete truck washout; limiting on-site idling, fueling, and maintenance of construction equipment/vehicles; chemicals; litter; and sanitary waste during and post-construction;
- f. Compliance that exceeds the regulations set forth in federal, state, and local statutes and those regulations that relate to stormwater discharge and management and include but are not limited to the following: the Massachusetts Department of Environmental Protection (MassDEP) Stormwater Management Standards. The revised Stormwater Management Standards have been incorporated in the Wetlands Protection Act Regulations, 310 CMR 10.05(6)(k) and the Water Quality Certification Regulations, 314 CMR 9.06(6)(a); ~~(INSERT CITATION);~~ Massachusetts Stormwater Handbook (<http://www.mass.gov/eea/agencies/massdep/water/regulations/massachusetts-stormwater-handbook.html>), ~~(INSERT CITATION);~~ as amended; the NPDES Municipal Separate Storm Sewer System (MS4) regulations; and local regulations set forth by the Department of Public Works (DPW); and
- g. Protection of local hydrologic conditions, sensitive areas of land and water, natural areas and topographical features, and unique topography, in addition to the protection of wells and wetlands on-site and abutting properties.

2. Applicability and Procedure

a. Land Use Activities Requiring Review

The LDSM By-Law shall apply to the following construction, development, and/or redevelopment projects:

- i. The disturbance of land area equal to or greater than one acre;
- ii. The disturbance of land as part of a larger common plan of development with a total disturbance area equal to or greater than one acre;
- iii. The clearing of land that results in 50 percent or more of the lot being cleared of trees. ~~vegetation~~ Hlots with an area of ~~40,000sf~~ 20,000sf or less shall be exempt from this requirement; and/or
- iv. Construction, development, and/or redevelopment activities that occur within a 30' buffer of Moderate Slopes or on Moderate Slopes as defined in Section IV.E.3.e.

b. Land Use Activities Exempt from Review

The following construction, development and/or redevelopment projects shall be exempt from the LDSM By-Law, but not exempt from other laws, regulations, and by-law of the Town:

- i. Any normal maintenance of Town owned public lands, ways, and/or appurtenances.
- ii. Redevelopment activities that are exclusively limited to maintenance and improvement of existing roadways, (including widening less than a single lane, adding shoulders, correcting substandard intersections, improving existing water, sewer or drainage systems, and repaving projects).
- iii. Activities undertaken in connection with an existing public athletic field; the management of Town-owned park or cemetery; or the management and operation of a golf course.
- iv. Work in connection with an agricultural use classified under M.G.L. c. 61A, including: planting, cultivating harvesting, and/or the raising and/or caring of animals; agricultural operations in accordance with an approved Natural Resource Conservation Service Agricultural Plan; agricultural uses on parcels of land of more than five acres as specified in M.G.L. c. 40A, Section 3; and/or the harvesting of trees on a property classified and good standing under M.G.L. c. 61 and in accordance with a forest management plan or cutting plan as set forth in M.G.L. c. 61, Section 1.
- v. Activities conducted in accordance with a Forest Stewardship Plan approved by the Massachusetts Department of Conservation and Recreation.
- vi. Temporary work relative to emergency storm events or emergency repairs to any utilities (gas, water, sewer, electric, telephone, etc.), including situations that pose an immediate danger to life and/or property.
- vii. Construction of utilities (gas, water, sewer, electric, telephone, etc.) other than drainage, which will not alter terrain, ground cover, or drainage patterns.

c. Minimum Standards

The LDSM By-Law shall serve as the minimum standards for activities that fall under LDSM review. Applicants are expected to exceed these minimum standards through the use of BMPs, LID techniques, increased vegetation, the preservation of land, and/or development within previously disturbed areas. Furthermore, previously developed sites shall be expected to exceed existing conditions, in addition to minimum federal, state, and local standards for stormwater management, erosion, infiltration, sedimentation, and Total Suspended Solids (TSS).

d. Permit Granting Authority and Permit Procedure

The Planning Board shall be the SPGA for the LDSM By-Law. All applications subject to the LDSM By-Law shall follow the special permit procedures for an application submittal pursuant to Section VI.E, herein.

e. Non-Avoidance by Phasing or Segmentation

A construction, development and/or redevelopment project shall not be phased and/or segmented in such a manner so as to avoid compliance with the LDSM By-Law. The Planning Board shall not approve any application for construction, development, and/or redevelopment, where individual parcels and/or multiple parcels of land are held in common ownership (including ownership by related or jointly controlled persons or entities) with the intent to segment project phases. All phases of a project shall be considered as part of a single development project if located either on a single parcel or contiguous parcels of land that have been in the same common ownership at any time subsequent to the date of adoption of this Section V.F Land Disturbance and Stormwater Management.

- i. Any project permitted under the Framingham Subdivision Rules and Regulations, which was not subject to review under the LDSM By-Law at the time it was permitted, shall be subject to review if at a later date such project is expanded and triggers any of requirements set forth in Section V.F.2.a. All phases of a project shall be considered to be a single development project.

f. Submittal Requirements

Applications for LDSM shall submit plan sets and supporting documentation in accordance with the requirements set forth in Article 24: Land Disturbance and Stormwater Management Documentation Submittal of the Framingham Planning Board Rules & Regulations.

g. Waivers

Strict compliance with the LDSM By-Law is required to the greatest extent feasible. The Planning Board may grant waivers for Land Disturbance and Stormwater Management Documentation Submittal and/or design standards, by a four-fifths vote, where such action is not inconsistent with the purposes of the LDSM By-Law or the other associated Regulations.

3. Land Disturbance and Stormwater Management Guidance

a. Stormwater Management

Stormwater Management and erosion control shall exceed the regulations set forth in federal, and state statutes and regulations promulgated thereunder that related to stormwater discharge and management and include but are not limited to the following: the Massachusetts Department of Environmental Protection (MassDEP) Stormwater Management Standards; Massachusetts Stormwater Handbook (<http://www.mass.gov/eea/agencies/massdep/water/regulations/Massachusetts-stormwater-handbook.html>) as amended; the NPDES Municipal Separated Storm Sewer System (MS4) Permit and regulations; and local regulations set forth by the Department of Public Works (DPW).

- i. Any permitted topographical alterations, tree removal, earth removal/fill, and/or site improvements associated with the LDSM By-Law shall incorporate LID techniques and BMPs to the greatest extent feasible. Such features may include rain gardens, rain water harvesting, green roofs, curb breaks, native/hybrid plantings, etc.
- ii. Stormwater shall not be directed towards sensitive areas, wetlands, habitats, or be permitted to sheet flow causing erosion and sedimentation movement.
- iii. Whenever possible, all buildings, roadways, parking lots/areas, detention/retention facilities, and other site improvements shall be located in previously developed, cleared, disturbed, and/or improved areas before an applicant proposes to disturb an area that presents existing natural topography.
- iv. Natural hydrology and water quality shall be maintained during and post construction.
- v. Projects that alter natural stormwater and drainage systems shall replicate natural conditions with respect to infiltration, evapotranspiration, and stormwater runoff.
- vi. The use of hay bales are not permitted for erosion and sediment control. Erosion and sediment controls should be consistent with the Town's construction standards.
- vii. Under certain circumstances where on-site options for stormwater mitigation are limited, infeasible, and/or where off-site options provide better protection, the Planning Board may

allow the applicant to contribute to the implementation of off-site stormwater mitigation or to contribute to a Town of Framingham Stormwater Mitigation Fund in lieu of an on-site stormwater BMPs best management practices. This may be allowed at the discretion of the Planning Board only where a net public benefit is clearly demonstrated and documented by meeting or exceeding the purpose and intent of the LDSM By-Law.

- viii. Projects that propose dewatering shall submit a dewatering plan for review to the Conservation Commission, the Department of Public Works, and the Planning Board, and shall be accompanied by a detailed description of the methods proposed to mitigate impacts.
- ix. Projects shall be designed to disturb the minimal amount of land possible and to manage the maximum amount of stormwater on-site.

b. Topographical Alterations

- i. Where possible, development shall not occur on those areas defined as Moderate Slope (Section IV.E.3.e) or within 30' of a Moderate Slope buffer. If development is proposed within an area identified as Moderate Slope or within the 30' Moderate Slope buffer, then the applicant shall submit a geotechnical report, prepared by a professional geotechnical engineer. The Planning Board and the Department of Public Works (DPW) shall review submitted document to ensure such topographical alternation will not adversely impact direct abutters, structures, and/or the stability of the land.
- ii. Any development that is authorized to occur on an identified Moderate Slope (Section IV.E.3.e) and/or within the 30' Moderate Slope buffer shall preserve existing vegetation to the greatest extent feasible.
- iii. Topographical alteration shall not occur within 10' of a vegetated buffer to ensure the protection of the root zone or within 10' of a front and/or rear setback (Section IV.E.3.e).
- iv. In the event that topographical alternation within land identified as Moderate Slope (Section IV.E.3.e) and/or within the 30' Moderate Slope buffer then the applicant shall mitigate all impacts that result in stormwater runoff, erosion, and/or the movement of sedimentation through BMPs and LID techniques. The Applicant shall further establish a vegetated berm to prevent negative impacts to abutting properties and/or roadways.
- v. The applicant may be required to mitigate topographical alternations as outlined in Section V.F.3.a.vii, herein.

c. Tree Removal

- i. The removal of trees shall not be permitted within the ~~front and side/rear~~ setbacks as defined in Section IV.E.2., unless identified by the Town's Tree Warden to be hazardous and/or diseased. The Applicant shall retain trees greater than 10" caliper within the front yard setback, as set forth in Section IV.E.2. Furthermore, trees may be removed for the construction of a driveway or subdivision roadway, but such removal shall be at the minimum width as required by the Department of Public Works (DPW), Fire Department, and Police Department.
- ii. All trees that are 8" or greater in caliper that are removed shall be replaced. The total number of replacement trees shall be as follows: 1 tree per caliper per inch of a deciduous tree and 1 tree per inch of height for an evergreen tree. Replacement trees shall be a minimum 3" caliper for deciduous trees and 5' tall for evergreen trees.

- iii. If the applicant can demonstrate that the required number of replacement trees cannot be properly placed on-site, then the applicant may offer the Town an equal number of trees comparable in size to the Department of Public Works and/or the Parks and Recreation Department to be planted at their discretion elsewhere in Town.
- iv. During construction the drip line of the designated tree to be saved post-construction shall serve as the protection boundary. The applicant shall install a barrier around this area.
- v. Land clearance shall be prohibited within 125' of a designated open space parcel of land that is protected by an Agricultural Preservation Restriction (APR) or a Conservation Restriction (CR).

d. Earth Removal and Fill

- i. Earth removal shall be limited to areas that have been previously disturbed and/or impervious. Where earth removal is required in an area that has not previously been disturbed then the applicant shall submit a geotechnical report, prepared by a professional geotechnical engineer.
- ii. Soil removed from the property shall be stockpiled and reused on-site where possible. Such stockpiles shall be seeded and/or covered, and protected with erosion controls around the base of the pile, until such soils are needed.
- iii. When new fill is required to be brought onto the site, the use of clean fill shall only be permitted. Prior to fill being brought onto site, the applicant shall provide a written notarized affidavit to the Planning Board, Department of Public Works (DPW), and the Conservation Commission that includes the name of the company, the location where the fill is coming from, the type of fill, and any additional information to certify that all fill is clean.

4. Findings and Conditions of Approval

Project review pursuant to the LDSM By-Law shall be based on the information provided in the LDSM Development Impact Report, the LDSM Site Plan, and a Long Term LDSM Plan. The Planning Board shall render written findings prior to granting an approval or disapproval of the application. Such findings shall pertain to the entire proposed project that is subject to review. The Planning Board may modify the site plan or project as a condition of its approval, which may include either on-site or off-site mitigation measures to offset any negative impacts created by the project.

a. Filing and Document Review

- i. All documents and plans required in Section V.F herein have been submitted in accordance with these regulations and Town standards.

b. Federal, state, and local regulations

- i. A minimum compliance with all applicable federal, state, and local regulations and guidelines, including but not limited to, the most current edition of the MassDEP Stormwater Management Standards, the Massachusetts Stormwater Handbook, the NPDES MS4 permit; and Department of Public Works (DPW) regulations related to stormwater/erosion/etc.

c. Site Management and Control

- i. Building envelopes for structures, driveways, wastewater disposal, lawn areas, and utility work shall be ~~have been~~ designed and delineated in a manner to limit erosion, land disturbance, and stormwater runoff to the greatest extent possible.
- ii. The site shall contains designated areas for temporary uses such as the parking of construction vehicles, trailers, and/or stockpiling of equipment and materials.
- iii. All waste products, grubbed stumps, slash, construction materials, etc., shall be lawfully disposed of and shall not be incorporated into the project site with the exception of the reduction of stumps and slash to mulch.
- iv. During construction, temporary erosion and sedimentation control measures shall be employed in accordance with the approved plan and the BMP until a disturbed area is permanently stabilized.
- v. Permanent erosion control and vegetative measures are in accordance with the BMP and LID techniques.
- vi. Dust control measures are used throughout construction.
- vii. Throughout the duration of construction, a gravel apron of at least fifteen feet wide and at least twenty-five feet long is required at any site access from a paved public way to prevent unstable material from being transported onto the roadway by vehicle tires.

d. Control of Stormwater Runoff

- i. Whenever possible, the natural topography of a site shall be ~~has been~~ preserved so as to reduce unnecessary erosion, land disturbance, stormwater runoff, and/or to preserve natural drainage patterns and infiltration on the site.
- ii. The project as designed does not increase the rate, concentration, and/or velocity of runoff from the site.
- iii. There will be no adverse impact to abutting properties from any change in volume of stormwater runoff resulting from land disturbance activities including but not limited to erosion, silting, flooding, sedimentation, subsidence or impacts to wetland, groundwater resources, septic systems, wells, and/or lack of long term maintenance of the BMP and LID techniques.
- iv. There will be no adverse impacts to groundwater resources in terms of quantity or quality.

e. Protection of Natural Features and Vegetation

- i. Endangered species and wildlife habitats and corridors, natural landscape features, and scenic vistas and views shall be ~~are~~ protected to the maximum extent feasible. Buildings, structures, and/or parking facilities are sited away from the crest of hills in a manner so as not to detract from the site's scenic qualities.
- ii. Open space, native trees, and specimen trees are preserved to the greatest extent feasible in the site's design and development placing priority on the retention of an existing tree, existing stands of trees, trees at the site perimeter, and contiguous vegetation with adjacent sites (particularly existing sites protected through conservation restrictions).

- iii. Forested areas, wetlands, waterbodies, critical wildlife habitat areas and Moderate Slopes as defined in Section IV.E.3.e, herein are preserved to the maximum extent feasible.
 - iv. The applicant shall ~~had~~ demonstrated that all vegetation that shall be retained will be surrounded by temporary protective fencing or other measures before any Land Clearing or grading occurs, and shall be maintained as such until all construction and site work is completed and all construction equipment and debris is removed from the site.
 - v. Grading shall be ~~has been~~ designed to maintain the area around the trunks of trees so that the ground level is not raised over the root area.
 - vi. Requirements shall be ~~are~~ met for screening of the adjoining premises or screening from the street by walls, fences, plantings, and/or other devices to mitigate adverse impacts of the project.
- f. Protection of Historic Resources
- i. Reasonable measures shall be ~~are~~ employed to protect historic, unique topographical, and archaeological resources including, but not limited to, historic landscape features both above and below ground, buildings, structures, objects, stone walls, foundations, designed landscapes and gardens.

5. Additional Requirements, Conditions, Limitations and Safeguards

The Planning Board may impose additional requirements, conditions, limitations, and/or safeguards in granting approval of an application which shall be incorporated in writing as part of the Decision.

- a. Long Term LDSM Plan
 - i. Submission of the covenant; homeowners' association documents; condominium Master Deed; property deed; and/or Declaration of Trust documents as applicable, which shall provide reference to the Long Term LDSM Plan for all permanent erosion control and stormwater management measures as conditioned by the Planning Board.
 - ii. The Applicant/landowner shall notify the Planning Board when the initial BMPs for erosion, land disturbance, and stormwater management measures have been installed in accordance with the Long Term LDSM Plan.
- b. Construction Maintenance Bond
 - i. Prior to the issuance of a building permit, the Applicant shall provide a Construction Performance Bond in the amount of \$5,000.00 or equal to 20 percent, whichever amount is greater, of the expected values of the BMPs for erosion control and stormwater management during construction of the project. The Planning Board shall hold such Construction Performance Bond until the issuance of a use and occupancy permit from the Building Department.
- c. Construction Procedure
 - i. No land disturbance activities shall begin prior to the written approval by the Planning Board Administrator, Department of Public Works (Town Engineer), and the Conservation Commission Administrator.

- ii. Maintenance of BMPs for erosion control, land disturbance, and/or stormwater management during construction shall be maintained in good order and in compliance with the NPDES Construction General Permit (if applicable).
- d. Post-Construction Review

A special permit for LDSM shall not close until a final inspection and approval of the site being stabilized and restored in accordance with the approved plan of the Planning Board and the LDSM Performance Bond has been placed by the Applicant/landowner.

 - i. Removal of all non-permanent BMPs for erosion control, land disturbance, and/or stormwater management.
 - ii. Onsite improvements such as landscaping, parking lots, driveways and roadways, sidewalks and trails, and all BMP and LID techniques have been installed and fully functioning.
- e. LDSM Performance Bond
 - i. The Applicant and/or landowner shall provide a LDSM Performance Bond prior to the issuance of a use and occupancy permit. The total amount of the bond shall equal \$5,000.00 or 20 percent, whichever is greater for the total amount of the BMPs and LID techniques installed on-site for erosion control and stormwater management.
 - ii. The Applicant and/or landowner shall submit an annual maintenance report to the Planning Board and the Department of Public Works for the purposes of monitoring such BMPs.
 - iii. Such LDSM Performance Bond shall be returned after five years. At the end of every two years, the Applicant can request 50 percent of the Bond be returned.

6. The Planning Board may deny a Land Disturbance and Stormwater Management Special Permit if it determines that:

- a. The requirements of Section V.F herein are not met, or
- b. The project violates or circumvents other provisions of the Zoning By-Law or regulation, or
- c. The project received a variance issued by the Zoning Board of Appeals from the requirements of Section V.F. herein without first receiving a favorable recommendation from the Planning Board.

7. Enforcement

- a. To the extent permitted by state law, or if authorized by the owner or other party in control of the property, the Department of Inspectional Services, the Planning Board, Department of Public Works, and/or Town designee may enter upon privately owned property for the purpose of performing their duties under the LDSM By-Law and associated permits and may make or cause to be made inspections, surveys, or sampling as the Planning Board, Department of Public Works, and/or Town designee deems reasonably necessary.
- b. When the Department of Inspectional Services, the Planning Board, Department of Public Works, and/or Town designee determines that an activity is not being carried out in accordance with the requirements of the LDSM By-Law, it shall issue a written notice of violation to the owner of the property. Persons receiving a notice of violation may be required to:
 - i. Halt all construction activities until there is compliance. A “stop work order” will be in effect until the Department of Inspectional Services, the Planning Board, Department of Public Works, and/or Town designee confirms that the activity is in compliance and the violation has been satisfactorily addressed.

- ii. Maintain, install or perform additional erosion and sedimentation control measures;
- iii. Monitor, analyze, and report to the Department of Inspectional Services, the Planning Board, Department of Public Works, and/or Town designee; and/or
- iv. Remediate erosion and sedimentation resulting directly or indirectly from the activity.

Failure to address a notice of violation in the time specified therein may result in penalties in accordance with the enforcement measures authorized in the LDSM By-Law.

- c. Penalty. Any person, who violates any provision of the LDSM By-Law or permit issued thereunder, may be punished by a fine. Each day or part thereof that such violation occurs or continues shall constitute a separate offense, and each provision of the bylaw, regulations or permits violated, shall constitute a separate offense.
- d. Non-Criminal Disposition. As an alternative to criminal prosecution or civil action, the Town may elect to utilize the non-criminal disposition procedure set forth in M.G.L. c. 40, Section 21D in which case the Department of Inspectional Services, the Planning Board, Department of Public Works, and/or Town designee shall be the enforcing person. Each day or part thereof that such violation occurs or continues shall constitute a separate offense, and each provision of the bylaw, regulations or permits violated, shall constitute a separate offense.

SECTION THREE: CLEAN EDITION

SECTION I.E DEFINITIONS

Best Management Practice (BMP): The use of structural, nonstructural, or vegetative measures designed to reduce erosion, control the movement of sedimentation, decrease peak storm material discharge, and/or improve the quality of stormwater runoff as well as maintain natural hydrology as described in the Massachusetts Department of Environmental Protection’s Stormwater Management Handbook and any other applicable local regulations.

Disturbed Area: Disturbance to an area and/or soils where the existing condition has been or is proposed to be altered.

Erosion: A condition in which the earth’s surface, including vegetation, soil or rock fragment, is detached and moved away by the action of water, wind, ice, gravity or other natural environmental means.

Fill: Any Fill used in connection with a project shall be clean Fill and shall not contain any hazardous waste material, trash, refuse, rubbish, or debris, including but not limited to lumber, bricks, plaster, wire, lath, paper, cardboard, pipe, asphalt, concrete, tires, ashes, refrigerators, motor vehicles, or parts of any of the foregoing.

Low Impact Development (LID): A system and/or practice that uses and/or mimics natural processes that result in the infiltration, evapotranspiration, and/or use of stormwater and precipitation in order to protect water quality while maintaining the natural hydrology of a site. Surface flows and groundwater recharge are the key aspects of LID that consider quantity as well as quality. LID is often referenced as “green infrastructure” and the management of wet weather flows that employ these processes and refers to the patchwork of natural areas that provide habitat, flood protection, cleaner air and water. Both LID and green infrastructure practices aim to preserve, restore, and create green space using soils, vegetation, and/or rainwater harvest techniques. Examples of LID and green infrastructure include but are not limited to the following: bioretention facilities, rain gardens, vegetated rooftops, rain barrels, and permeable pavements.

SECTION V.F. Land Disturbance and Stormwater Management

1. Purpose and Intent

The purpose of the Land Disturbance and Stormwater Management (LDSM) By-Law is to provide a thorough review of construction, development, and/or redevelopment projects that have the potential to adversely impact natural resources, man-made structures, abutting properties and/or the Town’s infrastructure. Projects subject to the LDSM By-Law shall be designed so as not to impact water quality, or surface flows; shall protect all properties, storm drainage systems, public roadways, natural water bodies from potential flooding, overloading, and/or clogging resulting from development; and shall not cause any significant alteration to topography or significant clearing of land. Moreover, projects shall be designed so as not to create adverse conditions during or after construction that would alter and/or destroy aquatic or wildlife habitat, and/or cause environmental degradation.

This By-Law shall provide review and oversight of the following, as applicable:

- a. Stormwater Management (Section V.F.3.a)
- b. Topographical Alterations (Section V.F.3.b)
- c. Tree Removal (Section V.F.3.c)
- d. Earth Removal and Fill (Section V.F.3.d)

The intent of the LDSM By-Law is to ensure that development projects incorporate and utilize Best Management Practices (BMP) and Low Impact Development (LID) techniques to the maximum extent feasible. All development and/or redevelopment projects shall be designed to ensure the following:

- a. Protection of surface and groundwater resources, wetlands, and vernal pools;
- b. Infiltration, recharge, and on-site management of stormwater on-site;
- c. Management of erosion, stormwater runoff, and sedimentation through BMPs and LID techniques;
- d. Minimization of alteration to the natural topography to the maximum extent possible;
- e. Control and proper site management of construction waste such as discarded building material; concrete truck washout; limiting on-site idling, fueling, and maintenance of construction equipment/vehicles; chemicals; litter; and sanitary waste during and post-construction;
- f. Compliance that exceeds the regulations set forth in federal, state, and local statutes and those regulations that relate to stormwater discharge and management and include but are not limited to the following: the Massachusetts Department of Environmental Protection (MassDEP) Stormwater Management Standards. The revised Stormwater Management Standards have been incorporated in the Wetlands Protection Act Regulations, 310 CMR 10.05(6)(k) and the Water Quality Certification Regulations, 314 CMR 9.06(6)(a); Massachusetts Stormwater Handbook (<http://www.mass.gov/eea/agencies/massdep/water/regulations/massachusetts-stormwater-handbook.html>), as amended; the NPDES Municipal Separate Storm Sewer System (MS4) regulations; and local regulations set forth by the Department of Public Works (DPW); and
- g. Protection of local hydrologic conditions, sensitive areas of land and water, natural areas and topographical features, and unique topography, in addition to the protection of wells and wetlands on-site and abutting properties.

2. Applicability and Procedure

a. Land Use Activities Requiring Review

The LDSM By-Law shall apply to the following construction, development, and/or redevelopment projects:

- i. The disturbance of land area equal to or greater than one acre;
- ii. The disturbance of land as part of a larger common plan of development with a total disturbance area equal to or greater than one acre;
- iii. The clearing of land that results in 50 percent or more of the lot being cleared of trees. Lots with an area of 20,000sf or less shall be exempt from this requirement; and/or
- iv. Construction, development, and/or redevelopment activities that occur within a 30' buffer of Moderate Slopes or on Moderate Slopes as defined in Section IV.E.3.e.

b. Land Use Activities Exempt from Review

The following construction, development and/or redevelopment projects shall be exempt from the LDSM By-Law, but not exempt from other laws, regulations, and by-law of the Town:

- i. Any normal maintenance of Town owned public lands, ways, and/or appurtenances.
- ii. Redevelopment activities that are exclusively limited to maintenance and improvement of existing roadways, (including widening less than a single lane, adding shoulders, correcting

substandard intersections, improving existing water, sewer or drainage systems, and repaving projects).

- iii. Activities undertaken in connection with an existing public athletic field; the management of Town-owned park or cemetery; or the management and operation of a golf course.
- iv. Work in connection with an agricultural use classified under M.G.L. c. 61A, including: planting, cultivating harvesting, and/or the raising and/or caring of animals; agricultural operations in accordance with an approved Natural Resource Conservation Service Agricultural Plan; agricultural uses on parcels of land of more than five acres as specified in M.G.L. c. 40A, Section 3; and/or the harvesting of trees on a property classified and good standing under M.G.L. c. 61 and in accordance with a forest management plan or cutting plan as set forth in M.G.L. c. 61, Section 1.
- v. Activities conducted in accordance with a Forest Stewardship Plan approved by the Massachusetts Department of Conservation and Recreation.
- vi. Temporary work relative to emergency storm events or emergency repairs to any utilities (gas, water, sewer, electric, telephone, etc.), including situations that pose an immediate danger to life and/or property.
- vii. Construction of utilities (gas, water, sewer, electric, telephone, etc.) other than drainage, which will not alter terrain, ground cover, or drainage patterns.

c. Minimum Standards

The LDSM By-Law shall serve as the minimum standards for activities that fall under LDSM review. Applicants are expected to exceed these minimum standards through the use of BMPs, LID techniques, increased vegetation, the preservation of land, and/or development within previously disturbed areas. Furthermore, previously developed sites shall be expected to exceed existing conditions, in addition to minimum federal, state, and local standards for stormwater management, erosion, infiltration, sedimentation, and Total Suspended Solids (TSS).

d. Permit Granting Authority and Permit Procedure

The Planning Board shall be the SPGA for the LDSM By-Law. All applications subject to the LDSM By-Law shall follow the special permit procedures for an application submittal pursuant to Section VI.E, herein.

e. Non-Avoidance by Phasing or Segmentation

A construction, development and/or redevelopment project shall not be phased and/or segmented in such a manner so as to avoid compliance with the LDSM By-Law. The Planning Board shall not approve any application for construction, development, and/or redevelopment, where individual parcels and/or multiple parcels of land are held in common ownership (including ownership by related or jointly controlled persons or entities) with the intent to segment project phases. All phases of a project shall be considered as part of a single development project if located either on a single parcel or contiguous parcels of land that have been in the same common ownership at any time subsequent to the date of adoption of this Section V.F Land Disturbance and Stormwater Management.

- i. Any project permitted under the Framingham Subdivision Rules and Regulations, which was not subject to review under the LDSM By-Law at the time it was permitted, shall be subject to review if at a later date such project is expanded and triggers any of requirements set forth

in Section V.F.2.a. All phases of a project shall be considered to be a single development project.

f. Submittal Requirements

Applications for LDSM shall submit plan sets and supporting documentation in accordance with the requirements set forth in Article 24: Land Disturbance and Stormwater Management Documentation Submittal of the Framingham Planning Board Rules & Regulations.

g. Waivers

Strict compliance with the LDSM By-Law is required to the greatest extent feasible. The Planning Board may grant waivers for Land Disturbance and Stormwater Management Documentation Submittal and/or design standards, by a four-fifths vote, where such action is not inconsistent with the purposes of the LDSM By-Law or the other associated Regulations.

3. Land Disturbance and Stormwater Management Guidance

a. Stormwater Management

Stormwater Management and erosion control shall exceed the regulations set forth in federal, and state statutes and regulations promulgated thereunder that related to stormwater discharge and management and include but are not limited to the following: the Massachusetts Department of Environmental Protection (MassDEP) Stormwater Management Standards; Massachusetts Stormwater Handbook (<http://www.mass.gov/eea/agencies/massdep/water/regulations/Massachusetts-stormwater-handbook.html>) as amended; the NPDES Municipal Separated Storm Sewer System (MS4) Permit and regulations; and local regulations set forth by the Department of Public Works (DPW).

- i. Any permitted topographical alterations, tree removal, earth removal/fill, and/or site improvements associated with the LDSM By-Law shall incorporate LID techniques and BMPs to the greatest extent feasible. Such features may include rain gardens, rain water harvesting, green roofs, curb breaks, native/hybrid plantings, etc.
- ii. Stormwater shall not be directed towards sensitive areas, wetlands, habitats, or be permitted to sheet flow causing erosion and sedimentation movement.
- iii. Whenever possible, all buildings, roadways, parking lots/areas, detention/retention facilities, and other site improvements shall be located in previously developed, cleared, disturbed, and/or improved areas before an applicant proposes to disturb an area that presents existing natural topography.
- iv. Natural hydrology and water quality shall be maintained during and post construction.
- v. Projects that alter natural stormwater and drainage systems shall replicate natural conditions with respect to infiltration, evapotranspiration, and stormwater runoff.
- vi. The use of hay bales are not permitted for erosion and sediment control. Erosion and sediment controls should be consistent with the Town's construction standards.
- vii. Under certain circumstances where on-site options for stormwater mitigation are limited, infeasible, and/or where off-site options provide better protection, the Planning Board may allow the applicant to contribute to the implementation of off-site stormwater mitigation or to contribute to a Town of Framingham Stormwater Mitigation Fund in lieu of an on-site stormwater BMPs. This may be allowed at the discretion of the Planning Board only where a

net public benefit is clearly demonstrated and documented by meeting or exceeding the purpose and intent of the LDSM By-Law.

- viii. Projects that propose dewatering shall submit a dewatering plan for review to the Conservation Commission, the Department of Public Works, and the Planning Board, and shall be accompanied by a detailed description of the methods proposed to mitigate impacts.
- ix. Projects shall be designed to disturb the minimal amount of land possible and to manage the maximum amount of stormwater on-site.

b. Topographical Alterations

- i. Where possible, development shall not occur on those areas defined as Moderate Slope (Section IV.E.3.e) or within 30' of a Moderate Slope buffer. If development is proposed within an area identified as Moderate Slope or within the 30' Moderate Slope buffer, then the applicant shall submit a geotechnical report, prepared by a professional geotechnical engineer. The Planning Board and the Department of Public Works (DPW) shall review submitted document to ensure such topographical alternation will not adversely impact direct abutters, structures, and/or the stability of the land.
- ii. Any development that is authorized to occur on an identified Moderate Slope (Section IV.E.3.e) and/or within the 30' Moderate Slope buffer shall preserve existing vegetation to the greatest extent feasible.
- iii. Topographical alteration shall not occur within 10' of a vegetated buffer to ensure the protection of the root zone or within 10' of a front and/or rear setback (Section IV.E.3.e).
- iv. In the event that topographical alternation within land identified as Moderate Slope (Section IV.E.3.e) and/or within the 30' Moderate Slope buffer then the applicant shall mitigate all impacts that result in stormwater runoff, erosion, and/or the movement of sedimentation through BMPs and LID techniques. The Applicant shall further establish a vegetated berm to prevent negative impacts to abutting properties and/or roadways.
- v. The applicant may be required to mitigate topographical alternations as outlined in Section V.F.3.a.vii, herein.

c. Tree Removal

- i. The removal of trees shall not be permitted within the side/rear setbacks as defined in Section IV.E.2., unless identified by the Town's Tree Warden to be hazardous and/or diseased. The Applicant shall retain trees greater than 10" caliper within the front yard setback, as set forth in Section IV.E.2. Furthermore, trees may be removed for the construction of a driveway or subdivision roadway, but such removal shall be at the minimum width as required by the Department of Public Works (DPW), Fire Department, and Police Department.
- ii. All trees that are 8" or greater in caliper that are removed shall be replaced. The total number of replacement trees shall be as follows: 1 tree per caliper per inch of a deciduous tree and 1 tree per inch of height for an evergreen tree. Replacement trees shall be a minimum 3" caliper for deciduous trees and 5' tall for evergreen trees.
- iii. If the applicant can demonstrate that the required number of replacement trees cannot be properly placed on-site, then the applicant may offer the Town an equal number of trees

comparable in size to the Department of Public Works and/or the Parks and Recreation Department to be planted at their discretion elsewhere in Town.

- iv. During construction the drip line of the designated tree to be saved post-construction shall serve as the protection boundary. The applicant shall install a barrier around this area.
- v. Land clearance shall be prohibited within 125' of a designated open space parcel of land that is protected by an Agricultural Preservation Restriction (APR) or a Conservation Restriction (CR).

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- i. Building envelopes for structures, driveways, wastewater disposal, lawn areas, and utility work shall be designed and delineated in a manner to limit erosion, land disturbance, and stormwater runoff to the greatest extent possible.

- ii. The site shall contain designated areas for temporary uses such as the parking of construction vehicles, trailers, and/or stockpiling of equipment and materials.
 - iii. All waste products, grubbed stumps, slash, construction materials, etc., shall be lawfully disposed of and shall not be incorporated into the project site with the exception of the reduction of stumps and slash to mulch.
 - iv. During construction, temporary erosion and sedimentation control measures shall be employed in accordance with the approved plan and the BMP until a disturbed area is permanently stabilized.
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 - vi. Dust control measures are used throughout construction.
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- i. Whenever possible, the natural topography of a site shall be preserved so as to reduce unnecessary erosion, land disturbance, stormwater runoff, and/or to preserve natural drainage patterns and infiltration on the site.
 - ii. The project as designed does not increase the rate, concentration, and/or velocity of runoff from the site.
 - iii. There will be no adverse impact to abutting properties from any change in volume of stormwater runoff resulting from land disturbance activities including but not limited to erosion, silting, flooding, sedimentation, subsidence or impacts to wetland, groundwater resources, septic systems, wells, and/or lack of long term maintenance of the BMP and LID techniques.
 - iv. There will be no adverse impacts to groundwater resources in terms of quantity or quality.
- e. Protection of Natural Features and Vegetation
- i. Endangered species and wildlife habitats and corridors, natural landscape features, and scenic vistas and views shall be protected to the maximum extent feasible. Buildings, structures, and/or parking facilities are sited away from the crest of hills in a manner so as not to detract from the site's scenic qualities.
 - ii. Open space, native trees, and specimen trees are preserved to the greatest extent feasible in the site's design and development placing priority on the retention of an existing tree, existing stands of trees, trees at the site perimeter, and contiguous vegetation with adjacent sites (particularly existing sites protected through conservation restrictions).
 - iii. Forested areas, wetlands, waterbodies, critical wildlife habitat areas and Moderate Slopes as defined in Section IV.E.3.e, herein are preserved to the maximum extent feasible.
 - iv. The applicant shall demonstrated that all vegetation that shall be retained will be surrounded by temporary protective fencing or other measures before any Land Clearing or grading

occurs, and shall be maintained as such until all construction and site work is completed and all construction equipment and debris is removed from the site.

- v. Grading shall be designed to maintain the area around the trunks of trees so that the ground level is not raised over the root area.
 - vi. Requirements shall be met for screening of the adjoining premises or screening from the street by walls, fences, plantings, and/or other devices to mitigate adverse impacts of the project.
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- i. Reasonable measures shall be employed to protect historic, unique topographical, and archaeological resources including, but not limited to, historic landscape features both above and below ground, buildings, structures, objects, stone walls, foundations, designed landscapes and gardens.

5. Additional Requirements, Conditions, Limitations and Safeguards

The Planning Board may impose additional requirements, conditions, limitations, and/or safeguards in granting approval of an application which shall be incorporated in writing as part of the Decision.

- a. Long Term LDSM Plan
 - i. Submission of the covenant; homeowners' association documents; condominium Master Deed; property deed; and/or Declaration of Trust documents as applicable, which shall provide reference to the Long Term LDSM Plan for all permanent erosion control and stormwater management measures as conditioned by the Planning Board.
 - ii. The Applicant/landowner shall notify the Planning Board when the initial BMPs for erosion, land disturbance, and stormwater management measures have been installed in accordance with the Long Term LDSM Plan.
- b. Construction Maintenance Bond
 - i. Prior to the issuance of a building permit, the Applicant shall provide a Construction Performance Bond in the amount of \$5,000.00 or equal to 20 percent, whichever amount is greater, of the expected values of the BMPs for erosion control and stormwater management during construction of the project. The Planning Board shall hold such Construction Performance Bond until the issuance of a use and occupancy permit from the Building Department.
- c. Construction Procedure
 - i. No land disturbance activities shall begin prior to the written approval by the Planning Board Administrator, Department of Public Works (Town Engineer), and the Conservation Commission Administrator.
 - ii. Maintenance of BMPs for erosion control, land disturbance, and/or stormwater management during construction shall be maintained in good order and in compliance with the NPDES Construction General Permit (if applicable).
- d. Post-Construction Review

A special permit for LDSM shall not close until a final inspection and approval of the site being

stabilized and restored in accordance with the approved plan of the Planning Board and the LDSM Performance Bond has been placed by the Applicant/landowner.

- i. Removal of all non-permanent BMPs for erosion control, land disturbance, and/or stormwater management.
 - ii. Onsite improvements such as landscaping, parking lots, driveways and roadways, sidewalks and trails, and all BMP and LID techniques have been installed and fully functioning.
- e. LDSM Performance Bond
- i. The Applicant and/or landowner shall provide a LDSM Performance Bond prior to the issuance of a use and occupancy permit. The total amount of the bond shall equal \$5,000.00 or 20 percent, whichever is greater for the total amount of the BMPs and LID techniques installed on-site for erosion control and stormwater management.
 - ii. The Applicant and/or landowner shall submit an annual maintenance report to the Planning Board and the Department of Public Works for the purposes of monitoring such BMPs.
 - iii. Such LDSM Performance Bond shall be returned after five years. At the end of every two years, the Applicant can request 50 percent of the Bond be returned.

6. The Planning Board may deny a Land Disturbance and Stormwater Management Special Permit if it determines that:

- a. The requirements of Section V.F herein are not met, or
- b. The project violates or circumvents other provisions of the Zoning By-Law or regulation, or
- c. The project received a variance issued by the Zoning Board of Appeals from the requirements of Section V.F. herein without first receiving a favorable recommendation from the Planning Board.

7. Enforcement

- a. To the extent permitted by state law, or if authorized by the owner or other party in control of the property, the Department of Inspectional Services, the Planning Board, Department of Public Works, and/or Town designee may enter upon privately owned property for the purpose of performing their duties under the LDSM By-Law and associated permits and may make or cause to be made inspections, surveys, or sampling as the Planning Board, Department of Public Works, and/or Town designee deems reasonably necessary.
- b. When the Department of Inspectional Services, the Planning Board, Department of Public Works, and/or Town designee determines that an activity is not being carried out in accordance with the requirements of the LDSM By-Law, it shall issue a written notice of violation to the owner of the property. Persons receiving a notice of violation may be required to:
 - i. Halt all construction activities until there is compliance. A “stop work order” will be in effect until the Department of Inspectional Services, the Planning Board, Department of Public Works, and/or Town designee confirms that the activity is in compliance and the violation has been satisfactorily addressed.
 - ii. Maintain, install or perform additional erosion and sedimentation control measures;
 - iii. Monitor, analyze, and report to the Department of Inspectional Services, the Planning Board, Department of Public Works, and/or Town designee; and/or
 - iv. Remediate erosion and sedimentation resulting directly or indirectly from the activity.

Failure to address a notice of violation in the time specified therein may result in penalties in accordance with the enforcement measures authorized in the LDSM By-Law.

- c. **Penalty.** Any person, who violates any provision of the LDSM By-Law or permit issued thereunder, may be punished by a fine. Each day or part thereof that such violation occurs or continues shall constitute a separate offense, and each provision of the bylaw, regulations or permits violated, shall constitute a separate offense.
- d. **Non-Criminal Disposition.** As an alternative to criminal prosecution or civil action, the Town may elect to utilize the non-criminal disposition procedure set forth in M.G.L. c. 40, Section 21D in which case the Department of Inspectional Services, the Planning Board, Department of Public Works, and/or Town designee shall be the enforcing person. Each day or part thereof that such violation occurs or continues shall constitute a separate offense, and each provision of the bylaw, regulations or permits violated, shall constitute a separate offense.