To see if the Voters will adopt an ordinance entitled "An Ordinance to amend the Town Code, Chapter 225 Land Use Code, Chapter 191 Subdivision, and Chapter 175 Site Plan; by amending the land use code to adhere to state storm water permitting standards and add additional standards to address Topsham urban impaired streams"

1. Amend §225-6.

DISTURBED AREA

<u>All land areas that are stripped, graded, grubbed, filled, or excavated at any time during the site</u> <u>preparation or removing vegetation for, or construction of, a project.</u>

"Disturbed area" does not include routine maintenance, but does include re-development and new impervious areas. "Routine maintenance" is maintenance performed to maintain the original line and grade, hydraulic capacity, and original purpose of the facility. Paving impervious gravel surfaces while maintaining the original line and grade, hydraulic capacity and original purpose of the facility is considered routine maintenance. Cutting of trees, without grubbing, stump removal, disturbance or exposure of soil is not considered "disturbed area".

<u>A disturbed area continues to be considered as disturbed area if it meets the definition of "developed area" or "impervious area" following final stabilization.</u>

IMPERVIOUS SURFACE AREA

The total area of a parcel that consists of buildings and associated constructed facilities or areas that will be covered with a low-permeability material, such as asphalt or concrete, and areas such as gravel roads and unpaved parking areas that will be compacted through design or use to reduce their permeability. Common impervious areas include, but are not limited to, rooftops, walkways, patios, driveways, parking lots or storage areas, concrete or asphalt paving, gravel roads, packed earthen materials, and macadam or other surfaces which similarly impede the natural infiltration of stormwater. A natural or man-made waterbody is not considered an impervious area, but is treated as an immediate runoff surface in curve number calculations.

LOW IMPACT DEVELOPMENT ("LID")

A set of site development strategies that are designed to mimic natural hydrologic function by reducing stormwater runoff and increasing groundwater recharge and pollutant treatment. The strategies may include those set forth in f the DEP Stormwater Manual, Volume III-BMPs Technical Design Manual, and/or any other LID strategies adopted by the Topsham Planning Board.

2. §225-19. Shoreland Overlay District to read:

J. Stormwater runoff.

- (1) All new construction and development shall be designed <u>in accordance with the</u> <u>requirements of §225-34. Stormwater management and shall to</u>-minimize stormwater runoff from the site in excess of the <u>natural</u>-predevelopment conditions. Where possible, existing natural runoff control features, such as berms, swales, terraces and wooded areas, shall be retained in order to reduce runoff and encourage infiltration of stormwaters.
- (2) Stormwater runoff control systems shall be maintained <u>in accordance with the</u> requirements of §225-34 as necessary to ensure proper functioning.
- 3. §225-20. Aquifer Protection Overlay District to read:
- E. Runoff and drainage. The stormwater management provisions shall conform to the requirements of §225-34. Stormwater management. Provision shall be made for on-site recharge of stormwater runoff from impervious surfaces unless the Planning Board determines that either recharge is unfeasible because of site conditions or is undesirable because of uncontrollable risks to water quality from such recharge. Recharge shall be by surface infiltration through vegetative surface unless otherwise approved by the Planning Board. Recharge quality shall not be significantly reduced from predevelopment levels. Dry wells shall be used for control of surface runoff only if other methods of control are unfeasible. Dry wells shall not be used for disposal of any leachable materials or hazardous materials and shall not be connected to floor drains. Where dry wells or leaching basins are used, they shall be preceded by oil, grease and sediment traps.
- 4. Amend §225-34. Stormwater management by revising it to read:

§225-34. Stormwater management.

All new construction and development, whether or not served by a stormwater collection and transportation system, shall be designed by the Rational or S.C.S. Method to reflect or resemble, as nearly as possible, natural runoff conditions in terms of quantity, velocity and location. If runoff after development would exceed predevelopment natural runoff condition the off-site impact must be evaluated in terms of potential soil erosion and sedimentation, drainage capacity and land use/land cover characteristics. Appropriate methods of reducing off-site impact shall be employed. Stormwater management evaluation and designs shall be based on a twenty-four-hour, twenty-five-year recurrence interval storm. All development plans shall define maintenance requirements and identify parties responsible for maintenance of the stormwater control system. When methods of reducing stormwater impact are necessary or desirable, stormwater runoff control plans shall include:

- (1) Control methods effective both during and after construction.
- (2) Control methods compatible with upstream and downstream characteristics.
- (<u>3</u>) Documentation by the designer that increasing the volume and rate of runoff from the proposed development will not aggravate conditions downstream or upstream.

- (4) Provisions for on-site storage and gradual discharge of excessive flows or contribution toward increasing downstream capacity (e.g., by enlarging existing culverts), when the channel downstream is not able to accommodate the increased volume or rate of runoff created by the proposed development.
- (5) Consideration of the following factors:
 - (a) Impact: on site, downstream, upstream and basin-wide.
 - (b) Costs: initial, amortized, operation and maintenance.
 - (c) Intensity of rainfall.
 - (d) Timing of rainfall (e.g., falling of snow or during the spring snowmelt).
 - (e) Amount of precipitation in the basin during the five days preceding the storm in question.
 - (f) Hydrologic soil groups throughout the basin (i.e., the soil's rate of water infiltration and transmission).
 - (g) Hydrologic conditions throughout the basin (soil's moisture content humus/organic content, temperature and whether or not it is frozen).
 - (h) Vegetative cover throughout the basin (vegetation helps soil dry out after a rainfall, intercepts some precipitation during the rainfall and slows down the flow of water over the land).
 - (i) Area of land covered by impervious surfaces throughout the basin (roads, sidewalks, roofs, driveways, patios, etc.).
 - (j) Topography throughout the basin (slopes affect the rate of runoff; marshland reduces peak discharge rate by slowing down the rate of runoff).
 - (k) Size and shape of watershed (peak discharge rates are slow in long, narrow watersheds).
- A. Intent.

Recognizing that development activity increases the rate and volume of stormwater runoff by reducing the infiltrative capacity of soils and that stormwater runoff increases the potential of flooding and adds pollution to water resources, and increases erosion and sedimentation, the purpose of this

section is to encourage the management of stormwater on the land at the site of development and, to the extent practical, to do so through the use of the natural features of the site. This policy will preserve the natural drainage system, valuable topsoil, water quality, and wildlife habitat during and after construction through infiltration, detention, or retention of water falling on the site. The management of stormwater shall not constitute a threat to public health, safety and welfare and shall not degrade the quality of Topsham's surface water or groundwater below state or Town standards. It shall be the responsibility of the property owner and/or developer to adequately provide for the necessary control of storm water runoff and erosion.

B. Applicable Standards for Stormwater Management

The standards for stormwater management vary depending on the type of project and the amount of disturbed area as follows:

- (1) Post-Construction Stormwater Management Plan Subdivisions and activities subject to site plan review that involve more than one acre of disturbed area must meet the requirements for a Post-Construction Stormwater Management Plan.
- (2) Municipal Stormwater Management Plan –Subdivisions and activities subject to site plan review by the Planning Board that are not subject to the requirements for a Post-Construction Stormwater Management Plan must meet the requirements for a Municipal Stormwater Management Plan.
- C. Standards for a Post-Construction Stormwater Management Plan.
 - (1) Design Standard.

The applicant shall make adequate provision for the management of the quantity and quality of all stormwater generated by the activity through a Post-Construction Stormwater Management Plan. This Post-Construction Stormwater Management Plan shall be designed to meet the appropriate standards and requirements based on the project's scale for a stormwater permit from the Maine Department of Environmental Protection ("DEP") under its Chapter 500 Stormwater Management Rules, as may be amended from time to time ("DEP Chapter 500 Rules"). The Town's approval shall be under its municipal capacity to approve stormwater plans that are exempt from DEP review under the Town's delegated review authority.

In addition, projects located in the watershed of an urban impaired stream must comply with the requirements for chlorides management set forth in subsection E. Standards for Chlorides Management.

- (2) Additional Requirements.
 - (a) The applicant may meet the standards above either on-site or off-site, but where off-site facilities are used, the applicant must submit to the Town Planner documentation approved as to legal sufficiency by the Town's legal counsel that the applicant has a sufficient property interest in the property where the off-site facilities are located – by perpetual easement or other appropriate legal

<u>instrument – to ensure that the facilities will be able to provide post-</u> <u>construction stormwater management for the project and that the property will</u> <u>not be altered in a way that interferes with the off-site facilities.</u>

- (b) Where the applicant proposes to retain ownership of the Stormwater <u>Management Facilities shown in its Stormwater Management Plan, the</u> <u>applicant shall submit to the Town Planner documentation, approved as to legal</u> <u>sufficiency by the Town's legal counsel, that the applicant, his/her/its</u> <u>successors, heirs and assigns, shall have the legal obligation to operate, repair,</u> <u>maintain and replace the Stormwater Management Facilities. Applications</u> <u>requiring Stormwater Management Facilities that will not be dedicated to the</u> <u>Town shall enter into a Drainage Maintenance Agreement with the Town in a</u> <u>form acceptable to the Town's legal-counsel.</u>
- (c) Whenever elements of the Stormwater Management Facilities are not within the right-of-way of a public street and the facilities will not be offered to the Town for acceptance as public facilities, the Planning Board may require that perpetual easements be provided to the Town allowing access for maintenance, repair, replacement and improvement of the Stormwater Management Facilities in accordance with the approved Drainage Maintenance Agreement. If an offer of dedication is proposed, the applicant shall be responsible for the maintenance of these Stormwater Management Facilities until such time (if ever) as they are accepted by the Town.
- (d)In addition to any other applicable requirements of this ordinance, any activity
which would have required a stormwater management permit from the DEP
under 38 M.R.S.A. Sec. 420-D but that is subject to the Town's delegated review
authority shall comply with the rules adopted by DEP under 38 M.R.S.A. Sec.
420-D(1), as the same may be amended from time to time, and the applicant
shall document such compliance to the Planning Board. Where the standards or
other provisions of such stormwater rules conflict with Town ordinances, the
stricter (more protective) standard shall apply.
- (e) At the time of application, the applicant shall notify the Director of Public Works if its Stormwater Management Plan includes any Stormwater BMP(s) that will discharge to the Town's stormwater system and shall include in this notification a listing of which Stormwater BMP(s) will so discharge.
- (f) Prior to the issuance of a Certificate of Occupancy for the project, the applicant must submit an inspection report to the Code Enforcement Officer documenting that the stormwater facilities have been installed and are functioning as designed and approved and are fully operational. This inspection report must be prepared by a qualified third party inspector as defined in subsection (3)(e).
- (3) Requirement for Compliance.

Any person owning, leasing or having control over Stormwater Management Facilities required by a Post-Construction Stormwater Management Plan shall demonstrate compliance with that Plan as follows:

- (a)That person shall, at least annually, inspect, clean and maintain the StormwaterManagement Facilities, including, but not limited to, any parking areas, catchbasins, drainage swales, detention basins and ponds, pipes and relatedstructures, in accordance with all Town and state inspection, cleaning andmaintenance requirements of the approved Post-Construction StormwaterManagement Plan.
- (b) That person shall repair, or cause to be repaired, any deficiencies found during inspection of the Stormwater Management Facilities.
- (c)That person shall, on or by July 15th of every other year commencing with the
second year following occupancy, provide a completed and signed certification
to the Director of Public Works in a form provided by that Department,
certifying that the person has inspected, cleaned and maintained the
Stormwater Management Facilities, describing any deficiencies found during
inspection of the Stormwater Management Facilities and certifying that the
person has repaired any deficiencies in the Stormwater Management Facilities
noted during the annual inspection.
- (d)The required inspection(s) must be conducted by a qualified third-party
inspector employed or engaged by the responsible person if the property would
have been subject to a DEP stormwater permit. The third-party inspector shall
perform an initial inspection to determine the status of the Stormwater
Management Facilities. If the initial inspection identifies any deficiencies with
the facilities, the same third-party inspector shall re-inspect the facilities after
they have been maintained or repaired to determine if they are performing as
intended.

(e) The qualified third party inspector must meet both of the following standards:

1. The inspector must not have any ownership or financial interest in the property being inspected nor be an employee or partner of any entity having an ownership or financial interest in the property; and

2. The inspector must be on the list of approved third-party inspectors maintained by the Planning and Development Department. An individual may request to be included on the list by submitting documentation of his/her qualifications to the Planning Director. The Director shall approve third-party inspectors only if they meet the following criteria:

a. Have a college degree in an environmental science or civil engineering, or comparable expertise;

- b.Have a practical knowledge of stormwater hydrology and
stormwater management techniques, including the
maintenance requirements for Stormwater Management
Facilities; and
- c. Have the ability to determine if stormwater facilities are performing as intended.
- (f)In order to determine compliance with this section and with the Post-
Construction Stormwater Management Plan, the Director of Public Works or
his/her designee may enter upon a property at reasonable hours and after
making a good faith effort to contact the owner, occupant or agent to inspect
the Stormwater Management Facilities. Entry into a building shall only be after
actual notice to the owner, occupant or agent.
- (4) Submission Requirements.

A Post-Construction Stormwater Management Plan shall conform to the applicable submission requirements of the DEP Chapter 500 Rules. If the project is located within the watershed of an urban impaired stream, the submission must include a Chlorides Management Plan as set forth in subsection E.

The applicant shall provide the Town with an electronic version of the Post-Construction Stormwater Management Plan in a format that is compatible with the Town's requirements. Following completion of construction, the applicant shall provide the Department of Planning and Development with an updated version of the plan showing the Stormwater Management Facilities as actually constructed.

(5) Relationship to Other Provisions.

<u>Post-Construction Stormwater Management Plans are subject to the requirements of</u> <u>subsection F. Standards for Easements or Rights-of-Way; subsection G. Modification of</u> <u>the Standards and Requirements; and subsection H. Discharge of Stormwater.</u>

D. Standards for a Municipal Stormwater Management Plan.

(1) Design Standard.

The applicant shall make adequate provision for the management of the quantity and quality of all stormwater generated by the activity through a Municipal Stormwater Management Plan. This Municipal Stormwater Management Plan shall be designed to meet the "basic" standard of DEP Chapter 500 Rules and the runoff from the site LID design practices and techniques determined by the Planning Board to be appropriate to the site or other stormwater management provisions. The treatment techniques used may include those set forth in the DEP Stormwater Manual, Volume III-BMPs Technical Design Manual, and/or any other LID practices adopted by the Planning Board. The Planning Board may approve the use of other treatment techniques on a case-by-case basis based upon the recommendation of the Director of Department of Planning and Development that the proposed treatment techniques are appropriate for the site and will provide at least the same level of treatment as the specified techniques. Provisions must be made in the stormwater management plan for all stormwater treatment techniques to be maintained in perpetuity.

In addition, projects located in the watershed of an urban impaired stream must comply with the requirements for chlorides management set forth in subsection E. Standards for Chlorides Management.

(2) Additional Requirements.

- (a) The applicant may meet the standards above either on-site or off-site, but where off-site facilities are used, the applicant must submit to the Planning Director documentation approved as to legal sufficiency by the Town's legal counsel that the applicant has a sufficient property interest in the property where the off-site facilities are located - by perpetual easement or other appropriate legal instrument - to ensure that the facilities will be able to provide post-construction stormwater management for the project and that the property will not be altered in a way that interferes with the off-site facilities.
- (b)Where the applicant proposes to retain ownership of the Stormwater
Management Facilities shown in its Stormwater Management Plan, the
applicant shall submit to the Planning Director documentation, approved as to
legal sufficiency by the Town's legal counsel that the applicant, his/her/its
successors, heirs and assigns, shall have the legal obligation to operate, repair,
maintain and replace the Stormwater Management Facilities. Applications
requiring Stormwater Management Facilities that will not be dedicated to the
Town shall enter into a Drainage Maintenance Agreement with the Town in a
form acceptable to the Town's legal counsel.
- (c) Whenever elements of the Stormwater Management Facilities are not within the right-of-way of a public street and the facilities will not be offered to the Town for acceptance as public facilities, the Planning Board may require that perpetual easements be provided to the Town allowing access for maintenance, repair, replacement and improvement of the Stormwater Management Facilities in accordance with the approved Drainage Maintenance Agreement. If an offer of dedication is proposed, the applicant shall be responsible for the maintenance of these Stormwater Management Facilities until such time (if ever) as they are accepted by the Town.
- (d)In addition to any other applicable requirements of this ordinance, any activity
which would require a stormwater management permit from the DEP under 38
M.R.S.A. Sec. 420-D shall comply with the rules adopted by DEP under 38
M.R.S.A. Sec. 420-D(1), as the same may be amended from time to time, and
the applicant shall document such compliance to the Planning Board. Where
the standards or other provisions of such stormwater rules conflict with Town
ordinances, the stricter (more protective) standard shall apply.

- (e) At the time of application, the applicant shall notify the Director of Public Works if its Stormwater Management Plan includes any Stormwater BMP(s) that will discharge to the Town's stormwater system and shall include in this notification a listing of which Stormwater BMP(s) will so discharge.
- (f) If the Municipal Stormwater Management Plan includes the use of proprietary water quality treatment devices, the applicant shall provide documentation of how the proprietary devices will be maintained, including what firm will be responsible and frequency of maintenance.
- (3) Requirement for Compliance.

Any person owning, leasing or having control over Stormwater Management Facilities required by a Municipal Stormwater Management Plan shall be responsible for maintaining all Stormwater Management Facilities and BMPs so they function as designed and approved.

(4) Submission Requirements.

A General Stormwater Management Plan shall conform to the applicable submission requirements for "basic standards submissions" of the DEP Chapter 500 Rules. If the project is located within the watershed of an urban impaired stream, the submission must include a Chlorides Management Plan as set forth in subsection E.

The applicant shall provide the Town with an electronic version of the Municipal Stormwater Management Plan in a format that is compatible with the Town's requirements. Following completion of construction, the applicant shall provide the Town with an updated version of the plan showing the Stormwater Management Facilities as actually constructed.

(5) Relationship to Other Provisions.

Municipal Stormwater Management Plans are subject to the requirements of subsection <u>F. Standards for Easements or Rights-of-Way; subsection G. Modification of the</u> <u>Standards and Requirements; and subsection H. Discharge of Stormwater.</u>

E. Standards for a Chlorides Management.

Any project located within the watershed of an urban impaired stream that is subject to site plan review by the Planning Board under Chapter 175 or subdivision review under Chapter 191 must prepare a Chlorides Management Plan (CMP) in accordance with the provisions of this section. This requirement applies to any amendment to a previously approved site plan that requires Planning Board approval and any amendment to a previously approved subdivision plan that increase the number of lots.

(1) Purpose

The CMP requirement is intended to minimize the impact of chlorides from snow and ice control activities on the impaired stream by limiting the amount of impervious

surface that needs to be treated and by managing snow and ice control facilities and operations.

(2) Contents of the Chlorides Management Plan

The CMP must address the following areas:

- (a) How the project will be designed and constructed to minimize the need for the use of chlorides for snow and ice control. The plan should address how the site layout and design minimizes the amount of impervious surface and how the need for snow and ice control treatments will be reduced. This can include approaches such as limiting the area of access drives, parking, and service areas, providing areas that will be designated for limited or no snow and ice control treatment, and the use of alternative provisions for snow and ice control such as covered or heated walkways that reduce the need for the use of chlorides.
- (b)If chlorides for ice and snow removal will be stored on-site, how the project will
be designed and constructed to manage the stormwater runoff from chloride
storage areas. The plan should address how the materials will be stored to
prevent chloride contaminated runoff including the location and design of the
storage area, and provisions for stormwater management.
- (c)How the project will be designed and constructed to manage the stormwater
runoff from snow storage areas. The plan must indicate if snow will be stored
on-site and if so, designate where this will occur. The plan should address how
the snow storage area will be designed to prevent surface drainage from getting
into the storage area and how the meltwater will be handled to direct it to the
stormwater system and to avoid infiltration into the ground.
- (d)How the project will be designed and constructed to manage the stormwater
runoff from treated areas. The plan must address how stormwater will be
handled to direct it to the stormwater system and to avoid infiltration into the
ground.
- (e) How snow and ice control activities will be carried out to minimize the use of chlorides. The plan must include an operations manual that spells out who will be responsible for overseeing snow and ice control activities, requirements for the training of snow and ice control equipment operators, the provision and use of appropriate equipment for the particular site, the calibration of spreaders or other applicators, and guidance for determining the proper materials and application rates based on the site and weather conditions.
- (3) Review and Approval of the Chlorides Management Plan

The Planning Board shall review the CMP as part of the overall project review since the CMP is an integral part of the overall layout and design of the project. In its review of a CMP, the Planning Board may require the applicant to modify the proposed location of

the building on the site or the layout and design of the project on the site if necessary to meet the requirements of this section. The Planning Board shall find that all of the following standards are met to approve an application including a CMP:

- (a)The location, overall layout and design of the project will minimize the amount
of impervious surface that will require snow and ice control to the extent
reasonable with the planned use of the site.
- (b) The location and design of any chloride storage areas will minimize the potential for adverse impact on the stream from chlorides to the extent reasonable with the planned use of the site.
- (c) The location and design of any snow storage areas will minimize the potential for adverse impact on the stream from chlorides to the extent reasonable with the planned use of the site.
- (d)The overall design of the site and the stormwater management sytemsystemwill minimize the potential for the infiltration of stormwater containing
chlorides into the ground.
- (e) The operations manual will assure that snow and ice control operations, if carried out in accordance with the manual, will minimize the potential for adverse impact on the stream from chlorides to the extent reasonable with the planned use of the site.
- F. Standards for Easements or Rights-of-Way.

Drainage easements or rights-of-way containing components of the storm water runoff system lying outside of public street right-of-way lines shall conform to the following standards:

- (1) The minimum width of the easement shall be thirty (30) feet, provided that where a watercourse or retention area is wider than thirty (30) feet, the Planning Board may require a drainage right-of-way of adequate width to conform substantially to the lines of such watercourse or retention area, including additional width to provide for access. The Planning Board may reduce the width of the easement upon the positive recommendation of the Director of Public Works or his/her designee if the narrower easement will allow the stormwater facilities to be maintained or if the unique characteristics of the site make the creation of a wider easement impractical.
- (2) Where a drainage easement will contain an open channel, stream or drainageway, the easement shall be designed and landscaped to further the objectives of the Stormwater Management Plan. The natural landscape shall be retained to the extent practical as determined by the Planning Board or Code Enforcement Officer, as applicable.
- (3) Where the easement will contain a closed conduit the facility shall be constructed in accordance with the approved plan.
- G. Modification of the Standards and Requirements

- (1) The Planning Board or Planning Director where he/she is the reviewing authority may modify or waive any of the submission requirements for a Post-Construction Stormwater Management Plan or a General Stormwater Management Plan if the Planning Board or Planning Director finds that, due to the unique physical characteristics of the site or the scale of the proposed activity, the information is not required to allow the Planning Board or Planning Director to determine if the applicable stormwater management standards are met.
- (2) The Planning Board or Planning Director where he/she is the reviewing authority may approve a Post-Construction Stormwater Management Plan that does not comply with the detailed requirements of subsection C or a Municipal Stormwater Management Plan that does not comply with the detailed requirements of subsection D if the Planning Board or Planning Director finds that the proposed plan will provide the same or higher level of water quality protection than strict conformance with the applicable standard or that due to the unique physical characteristics of the site and/or the receiving waters, full conformance with the standard is not warranted to assure that the quality of the receiving waters will not be degraded.

H. Discharge of Stormwater

- (1) The volume of stormwater discharged from any parcel must be minimized to the extent practical. When stormwater must be discharged from a parcel, the preferred method is discharge into the natural drainage system. Discharge of stormwater to the Town's stormwater system shall be allowed only when on-site retention and/or discharge to the natural system is not practical or when necessary to minimize the impacts of chlorides on an urban impaired stream.
- (2) The direct connection of new or expanded Stormwater Management Facilities to a combined sewer is not permitted.

IB. Aquifer Recharge

(1) Stormwater <u>runoff_management</u> systems should be designed to facilitate aquifer recharge when it is advantageous to compensate for groundwater withdrawals. Conversely, designs should avoid recharge where groundwater effects might be harmful. Design of permanent storage facilities should consider safety, appearance, recreational use and cost and effectiveness of maintenance operations, in addition to the primary storage function. Natural overland flows and open drainage channel and swale locations should be the preferred alignments for major components of a residential drainage system. The use of enclosed components (such as underground piping) should be minimized where the existing natural systems are able to accommodate storm runoff. Energy dissipaters (to reduce high flow velocities) and other forms of outfall protection shall be employed where enclosed drains discharge onto erodible soils.

JC. Overall Design

(1) Stormwater <u>management</u> systems should be integrated into the overall Landscape Plan. Stormwater structures such as swales, basins, culverts, rip rap and headwalls shall be located and designed to blend with the natural environment. Native and wetland tolerant plants should be used to soften hard structures and add wildlife value. Stormwater systems should be considered as engineered wetland systems that have visual and ecological value.

K. Green Roofs

- (1) Green roof systems may be utilized as part of a stormwater <u>management</u> system plan if the efficacy of the system can be demonstrated using the Rational or S.C.S. Method.
- 5. §225-50. Apartment buildings and multifamily developments to read:
 - (6) Stormwater<u>management</u> and surface drainage systems shall be designed in accordance with <u>§225-34. Stormwater management</u> Chapter **191**, Subdivision of Land.
- 6. §225-60.7. Planned mixed-use developments to read:
 - (c) The Preliminary Infrastructure Plan must show the layout and preliminary design of the various infrastructure components that will serve as the core infrastructure for the site. This should address off-site infrastructure improvements where necessary. The Plan should include the proposed primary road network within the development, including network improvements identified in the Town's transportation plan as well as access into and out of the site, the public water and sewerage systems, the overall approach to stormwater management, including any mitigation activities to comply with state stormwater-the requirements of §225-34, electric, cable, and fiber optic systems, and any shared or common facilities such as parking or service areas.
- 7. §225-60.16. Additional standards for neighborhood grocery stores to read:
 - (5) The site shall be designed <u>in accordance with the provisions of §225-34.</u> <u>Stormwater management including facilities using Maine Department of</u> <u>Environmental Protection Best Management Practices for stormwater</u> management, such that all stormwater is directed to a management system on site that is designed to separate any fuels or vehicular liquids from the stormwater prior to discharge off the site.

Amendments to Chapter 175. Site Plan Review

1. Amend §175-4.1. Site location of development; stormwater permits to read as follows:

§ 175-4.1 Delegated review authority; Site location of development; stormwater permits.

Developments needing approval under Title 38 M.R.S.A. §§ 420 and 481 through 500, to the degree permitted under § 489A, shall be reviewed under the procedures of the Topsham Town Code, Chapter**175**, Site Plan Review <u>under the Town's delegated review authority</u>, and shall meet the development standards of Title 38 M.R.S.A., §§ 420 and 481 through 502, as may be amended from time to time, as well as those in the regulations of the Maine Department of Environmental Protection, including Chapters 371 through 377, and others that may be issued by the MEDEP, which are hereby adopted by reference for projects falling under this article. Projects subject to this section shall also meet the standards of the Topsham Zoning Ordinance <u>including the provisions of §225.34</u>. Stormwater <u>management</u>.^[1]Topsham will provide notice to the MEDEP upon the submission of any projects subject to this article.

2. Amend subsection B(6) in §175-5. Site plan content and application procedures to read:

(6) Erosion and sedimentation control <u>plans</u> and stormwater management plans <u>in</u> <u>conformance with §225-34. Stormwater management</u> which have been approved by the Androscoggin Valley Soil and Water Conservation District<u>or Town's designated review</u> <u>engineer</u>.

3. Amend subsection E. Surface water drainage in §175-8. Performance standards to read:

E. Surface water drainage. Adequate provision shall be made for surface drainage <u>in conformance</u> <u>with §225-34. Stormwater management</u> so that <u>management removal</u> of surface waters will not adversely affect neighboring properties, downstream water quality, soil erosion or the public storm drainage system. Whenever possible, on-site absorption of runoff waters shall be utilized to minimize discharges from the site. Green roof technologies, gray water systems and porous pavement systems may be utilized to minimize discharge from the site and provide on-site irrigation. In general, low-impact development standards as established by the Maine DEP <u>and</u> <u>defined elsewhere</u> are encouraged to mitigate on-site and off-site impacts of stormwater.

Amendments to Chapter 191. Subdivision of Land

1. Amend §191-2.1. Site location of development; stormwater permits to read as follows:

§ 191-2.1 Delegated review authority; Site location of development; stormwater permits.

Site developments needing approval under Title 38 M.R.S.A. §§ 420 and 481 through 500, to the degree permitted under § 489A, shall be reviewed under the procedures of the Topsham Town Code, Chapter **191**, Subdivision of Land <u>under the Town's delegated review authority</u>, and shall meet the development standards of Title 38 M.R.S.A., §§ 420 and 481 through 500, as may be amended from time to time, as well as those in the regulations of the Maine Department of Environmental Protection, including Chapters 371 through 377, and others that may be issued by the MEDEP, which are hereby adopted by reference for projects falling under this article. Projects subject to this section shall also meet the

standards of the Topsham Zoning Ordinance <u>including the provisions of §225-34. Stormwater</u> <u>management</u>.^[1]Topsham will provide notice to the MEDEP upon the submission of any projects subject to this article.

- 2. Amend subsection B(8) in §191-5. Preliminary plan to read:
 - (8) <u>Stormwater management. A stormwater management plan conforming to the</u> requirements of §225-34. Stormwater management Drainage. Kind, location, profile and typical cross section of all existing and proposed drainage, both within and adjacent to the subdivision.

3. Amend §191-15. Minimum construction standards for streets, sidewalks and utilities to read:

All proposed construction standards-shall meet the standards found within Chapter **185** of the Topsham Code of Ordinances and the requirements of <u>§225-34</u>. Stormwater management. Where there is conflict between the provisions of Chapter 185 and §225-34. Stormwater management, the provisions of §225-34. Stormwater management, the provisions of §225-34. Stormwater management shall apply.