



# **STORMWATER MANAGEMENT POLICY**

**September 2017**

**Section I through IV-D to be included in construction documents**

University at Albany-SUNY  
Stormwater Management Policy

September 2017

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External Procedure Documents to be used in conjunction with this Policy

- Joint Stormwater Management Program Plan (SWMP)
- Post-Construction Stormwater Management Practices Procedures
- Pollution Prevention/Good Housekeeping Procedures and Best Management Practices (BMP)
- Stormwater Management SWPPP Procedures

## **STORMWATER MANAGEMENT POLICY**

### **I. GENERAL**

As defined in the Federal Clean Water Act administered by NYSDEC, the University at Albany is a publicly owned entity which owns and operates a separated storm system in an urbanized area (uptown campus). For this reason, the University is permitted by NYSDEC to discharge stormwater into the waters of New York State; the terms of which are detailed in the New York State Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Municipal Separated Storm Sewer Systems (MS4's). By permit definition, the University is a Non-Traditional MS4.

As an "MS4", the University is also responsible for overseeing all construction activity on campus which disturbs greater than one acre of land. The components of that oversight are detailed in the MS4 Permit, (Minimum Control Measures 4 and 5). This same construction activity is also regulated under the Clean Water Act, such that the University, before construction occurs must receive permit coverage, as detailed in the New York State Department of Environmental Conservation (NYSDEC) SPDES General Permit from Construction Activities, GP-0-15-002 as amended or revised.

This Policy is used in conjunction with the following documents to administer the stormwater management and permit requirements for the University:

- "Joint Stormwater Management Program (SWMP)". The SWMP is the stormwater management plan created and utilized by the MS4 members of the Stormwater Coalition of Albany County. (Policy Section III.B)
- Post-Construction Stormwater Management Practices Procedures
- Pollution Prevention/Good Housekeeping Procedures and Best Management Practices (BMP)
- Stormwater Management SWPPP Procedures

### **II. PURPOSE and INTENT**

The purpose of this policy is to provide guidance and clarity for University staff responsible for implementing the MS4 Permit and Construction Activity Permit, including Operation and Maintenance of Post-Construction Management Practices. The content of this document draws from permit language and is intended to make explicit how this particular Non-Traditional MS4, given existing administrative arrangements internal to the University, shall implement both permits. The overarching goal is to prevent stormwater pollution generated by the University from entering the local water bodies. Both permits function in tandem to address a wide variety of runoff related pollutants. Specifically, the Construction Activity Permit serves to protect against soil erosion, siltation and pollution on campus during construction activity and to reduce or maintain stormwater runoff rates and volumes generated from development or redevelopment. The MS4 Permit details a range of strategies related to such pollutants as oil and grease, bacteria, pesticides, fertilizers, and heavy metals. These strategies include public education and participation, mapping of storm infrastructure, track down of pollution sources, effective oversight of the construction activity permit, and proper management of campus operations and facilities.

### III. MS4 PERMIT-STORMWATER MANAGEMENT PROGRAM

#### A. ADMINISTRATION

1. The Stormwater Management Program for the University is administered by Facilities Management, specifically the Stormwater Management Program Coordinator (SMPC), see Appendix A. University of Albany Stormwater Program Organizational Chart.
2. The SMPC shall convene meetings with the Stormwater Management Committee on a routine basis, no less than once a year to monitor stormwater management progress on the campus, review regulatory updates, troubleshoot implementation issues, and monitor campus-wide green Infrastructure design/implementation efforts.
3. The University at Albany Uptown Campus is also a dues-paying member of the Stormwater Coalition of Albany County, a contractual commitment renewed annually, which as a shared services entity assists the University in program implementation. The Stormwater Coalition is made up of regulated MS4's residing in Albany County. There is a Board of Directors, which meets quarterly, a Working Group which meets monthly, and members routinely participate in a variety of permit compliant activities.

#### B. STORMWATER MANAGEMENT PLAN (SWMP)

1. Beginning in 2012, the Stormwater Coalition created a regulatory compliant, Stormwater Management Program (SWMP) Plan which is organized based on minimum control measures named in the MS4 Permit. The SWMP Plan conforms to the requirements of the MS4 Permit in that it includes measurable goals for each Best Management Practice (BMP) which:
  - a. -describe the BMP/measurable goal
  - b. -include time lines, schedules and milestones,
  - c. -include quantifiable goals
  - d. -describe how the covered entity will address pollutants of concern (POC)

While the SWMP Plan is a collaborative document, the listed tasks and related goals are specific for each member. The SWMP Plan functions as the guiding document for the University Stormwater Program and for the Coalition. It is on file with the Stormwater Management Program Coordinator (SWPC).

2. The organization of the SWMP Plan document is framed around Minimum Control Measures named in the MS4 Permit. Here is a general description of the Minimum Control Measures (MCMs) and related policy language pertaining to the University.

##### **MCM 1 Public Education and Outreach**

This minimum control measure includes Best Management Practices (BMPs) that focus on describing to the public the impact of stormwater discharges on local waterbodies; explaining what is or is not a stormwater discharge; describing pollutants of concern and the steps to reduce these pollutants. The administrative structure in place to manage stormwater will be described along with how and why stormwater is regulated. This MCM is performed by the Stormwater Coalition and the University.

### **MCM 2 Public Involvement/Participation**

This minimum control measure includes Best Management Practices (BMPs) that focus on involving the local campus community in the development and implementation of the Stormwater Management Program. This MCM is performed by the Stormwater Coalition and the University.

### **MCM 3 Illicit Discharge and Elimination (IDDE)**

This minimum control measure includes Best Management Practices (BMPs) that focus on the detection and elimination of illicit discharges into the campus separated storm sewer conveyance system. It is University standard practice that there is to be no discharge of sanitary sewers or illicit discharge connections into the storm sewer system.

This involves mapping and conducting an Outfall Reconnaissance inventory (ORI) survey. This is an educational effort to inform the staff and campus community about the hazards associated with the illicit discharges and the proper disposal of waste. In order to determine if there are any pollutants being discharged at the campus stormwater discharge locations, at a minimum of every three years, an ORI sampling collection is to be performed. The testing is to be performed on all outfall locations included in the inventory and any new outfalls placed into service. The outfall locations and testing results are to be reported and placed into the GIS system.

To prohibit discharges into the storm sewer system an IDDE policy has been adopted, which draws from the 2006 NYSDEC Model Local to Prohibit Illicit Discharges, Activities, and Connections to Separate Storm Sewer System.

### **MCM 4 Construction Site Runoff Control**

This minimum control measure includes Best Management Practices (BMPs) that focus on the reduction of pollutants in any stormwater runoff to the MS4 from construction activities. University oversight of construction activity must provide equivalent protection to the regulations as contained in the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activities GP-0-15-002 as amended or revised.

This includes implementation of required erosion and sediment control measures, enforcement procedures and actions to ensure compliance, site plan review, material disposals that will impact water quality, and SWPPP procedures. Measures will also include annual review of campus policy and procedures with campus staff, design consultants and contractors.

### **MCM 5 Post Construction Stormwater Management**

This minimum control measure includes Best Management Practices (BMPs) that focus on the prevention or minimization of water quality impacts from construction projects. University oversight of post-construction stormwater practices must provide equivalent protection to the regulations as contained in the NYSDEC SPDES General Permit from Stormwater Discharges from Construction activities GP-0-15-002 as amended or revised.

All post-construction practices are to be inventoried and maintained in a database consisting of maps and spread sheets that is updated when new facilities are constructed and placed into service. Maintenance of these facilities is to be performed in accordance with the operation and maintenance manuals prepared for the practice, and recorded in the database.

Green infrastructure practices are to be considered and reviewed for campus development in accordance with the NYS DEC Design Manual. Specific green infrastructure related design recommendations are included in this policy document.

Each Post-Construction stormwater practice is to be examined at a minimum once per year by the SWMC and support staff for priority for any modification or improvement needs based on location and potential for pollution impact that may result on receiving waters and the environment. Employee training in methods of pollution prevention and good housekeeping will be provided for education, and also techniques for the reduction of chemicals, fertilizers and pesticides.

Post-construction stormwater practice is to be in accordance with the “Post-Construction Stormwater Management Practices Procedures”. The procedures include requirements inspections, corrective measures, and training.

### **MCM 6 Pollution Prevention/Good Housekeeping for Municipal Operations**

This minimum control measure includes DEC Best Management Practices (BMP's) which focus on ensuring that the University facilities are maintained and related operations are performed in ways that will minimize contamination of stormwater discharges.

The University's SMPC and support staff are to perform and document, at a minimum every three years, a self-assessment audit of all operations in order to determine if there are any sources of pollution created by the operation and maintenance facilities on the campus. Each assessment will result in a determination of management practices and policies that may need to be developed and implemented to correct any deficiencies or provide for improvements in the practices.

Guidance for this MCM can be found in “Pollution Prevention/Good Housekeeping Procedures and Best Management Practices (BMP's)”. The procedures include Best Management Practices (BMP's) that are to be utilized for

### **MCM 7 Stormwater Program Management**

Stormwater management coordination between the various MS4's in the area will be performed with the Stormwater Coalition of Albany County. The University at Albany is a member of the Coalition as a non-traditional MS4, by contract, and is not represented on the Stormwater Coalition Board, but is allowed to enter opinions or concerns. The University at Albany is represented at the Coalition working group meetings by the campus stormwater program coordinator for examination and review of policies, methodology and compliance with the NYSDEC regulations.

Stormwater Program Management within the University will include coordination with the Campus Stormwater Management Committee and relevant staff as identified on the organizational chart. The Committee is led by the Campus Stormwater Program Coordinator, and will convene as needed and provide information and guidance for campus stormwater related issues, policy and procedures.

The University will file the Annual Report to the NYSDEC as either a joint or individual annual report as determined by the Stormwater Coalition of Albany County. The annual report will include data pertaining to the University and data pertaining to collaborative initiatives coordinated by the Stormwater Coalition.

**C. UNIVERSITY POLICY REGARDING THE PROHIBITION OF ILLICIT DISCHARGES, ACTIVITIES, AND CONNECTIONS TO THE UNIVERSITY SEPARATE STORM SEWER SYSTEM**

**1. Purpose/Intent.**

The purpose of this policy is to provide for the health, safety, and general welfare of the University at Albany community through the regulation of non-stormwater discharges to the municipal separate storm sewer system (MS4) to the maximum extent practicable as required by federal and state law. This policy establishes methods for controlling the introduction of pollutants into the MS4 in order to comply with requirements of the SPDES General Permit for Municipal Separate Storm Sewer Systems. The objectives of this policy are:

- (a) To meet the requirements of the SPDES General Permit for Stormwater Discharges from MS4s, Permit no. GP-0-15-003 or as amended or revised;
- (b) To regulate the contribution of pollutants to the MS4 since such systems are not designed to accept, process or discharge non-stormwater wastes;
- (c) To prohibit Illicit Connections, Activities and Discharges to the MS4;
- (d) To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this policy; and
- (e) To promote public awareness of the hazards involved in the improper discharge of trash, yard waste, lawn chemicals, pet waste, wastewater, grease, oil, petroleum products, cleaning products, paint products, hazardous waste, sediment and other pollutants into the MS4.

**2. Definitions.**

Whenever used in this policy, unless a different meaning is stated in a definition applicable to only a portion of this policy, the following terms will have meanings set forth below:

- (a) Best Management Practices (BMPs). Schedules of activities, prohibitions of practices, general good housekeeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants directly or indirectly to stormwater, receiving waters, or stormwater conveyance systems. BMPs also include treatment practices, operating procedures, and practices to control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw materials storage.
- (b) Clean Water Act. The Federal Water Pollution Control Act (33 U.S.C. § 1251 et seq.), and any subsequent amendments thereto.
- (c) Construction Activity. Activities requiring authorization under the SPDES permit for stormwater discharges from construction activity, GP-0-15-002, as amended or revised. These activities include construction projects resulting in land disturbance of one or more acres. Such activities include but are not limited to clearing and grubbing, grading, excavating, and demolition.
- (d) Department. The New York State Department of Environmental Conservation.



- (e) Design professional. New York State licensed professional engineer or licensed architect.
- (f) Hazardous Materials. Any material, including any substance, waste, or combination thereof, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to, a substantial present or potential hazard to human health, safety, property, or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.
- (g) Illicit Connections. Any drain or conveyance, whether on the surface or subsurface, which allows an illegal discharge to enter the MS4, including but not limited to:
  - (1) Any conveyances which allow any non-stormwater discharge including treated or untreated sewage, process wastewater, and wash water to enter the MS4 and any connections to the storm drain system from indoor drains and sinks, regardless of whether said drain or connection had been previously allowed, permitted, or approved by an authorized enforcement agency; or
  - (2) Any drain or conveyance connected from a commercial or industrial land use to the MS4 which has not been documented in plans, maps, or equivalent records and approved by an authorized enforcement agency.
- (h) Illicit Discharge. Any direct or indirect non-stormwater discharge to the MS4, except as exempted in Section 6 of this policy.
- (i) Industrial Activity. Activities requiring the SPDES permit for discharges from industrial activities except construction, GP-98-03, as amended or revised.
- (j) MS4. Municipal Separate Storm Sewer System.
- (k) Municipal Separate Storm Sewer System. A conveyance or system of conveyances (including roads with drainage systems, streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):
  - (1) Owned or operated by the University at Albany (University);
  - (2) Designed or used for collecting or conveying stormwater;
  - (3) Which is not a combined sewer; and
  - (4) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40CFR 122.2
- (l) Non-Stormwater Discharge. Any discharge to the MS4 that is not composed entirely of stormwater.
- (m) Person. Any individual, association, organization, partnership, firm, corporation or other entity recognized by policy and acting as either the owner or as the owner's agent.
- (n) Pollutant. Dredged spoil, filter backwash, solid waste, incinerator residue, treated or untreated sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand and industrial, municipal, agricultural waste and ballast discharged into water; which may cause or might



reasonably be expected to cause pollution of the waters of the state in contravention of the standards.

- (o) Premises. Any building, lot, parcel of land, or portion of land whether improved or unimproved including adjacent sidewalks and parking strips.
- (p) Special Conditions.
  - (1) Discharge Compliance with Water Quality Standards. The condition that applies where a University has been notified that the discharge of stormwater authorized under their MS4 permit may have caused or has the reasonable potential to cause or contribute to the violation of an applicable water quality standard. Under this condition the University must take all necessary actions to ensure future discharges do not cause or contribute to a violation of water quality standards.
  - (2) 303(d) Listed Waters. The condition in the University's MS4 permit that applies where the MS4 discharges to a 303(d) listed water. Under this condition the stormwater management program must ensure no increase of the listed pollutant of concern to the 303(d) listed water.
  - (3) Total Maximum Daily Load (TMDL) Strategy. The condition in the University's MS4 permit where a TMDL including requirements for control of stormwater discharges has been approved by EPA for a waterbody or watershed into which the MS4 discharges. If the discharge from the MS4 did not meet the TMDL stormwater allocations prior to September 10, 2003, the University was required to modify its stormwater management program to ensure that reduction of the pollutant of concern specified in the TMDL is achieved.
  - (4) The condition in the University's MS4 permit that applies if a TMDL is approved in the future by EPA for any waterbody or watershed into which an MS4 discharges. Under this condition the University must review the applicable TMDL to see if it includes requirements for control of stormwater discharges. If an MS4 is not meeting the TMDL stormwater allocations, the University must, within six (6) months of the TMDL's approval, modify its stormwater management program to ensure that reduction of the pollutant of concern specified in the TMDL is achieved.
- (q) State Pollutant Discharge Elimination System (SPDES) Stormwater Discharge Permit. A permit issued by the Department that authorizes the discharge of pollutants to waters of the state.
- (r) Stormwater. Rainwater, surface runoff, snowmelt and drainage.
- (s) Stormwater Management Program Coordinator (SMPC). An employee designated by the University to enforce this policy. The SMPC may also be designated by the University to accept and review stormwater pollution prevention plans and inspect stormwater management practices.

- (t) 303(d) List. A list of all surface waters in the state for which beneficial uses of the water (drinking, recreation, aquatic habitat, and industrial use) are impaired by pollutants, prepared periodically by the Department as required by Section 303(d) of the Clean Water Act. 303(d) listed waters are estuaries, lakes and streams that fall short of state surface water quality standards and are not expected to improve within the next two years.
- (u) Third Party Entity. Business contracted by the University that creates policies or procedures, provides services or delivery of materials that could impact the University's storm sewer system.
- (v) TMDL. Total Maximum Daily Load.
- (w) Total Maximum Daily Load. The maximum amount of a pollutant to be allowed to be released into a waterbody so as not to impair uses of the water, allocated among the sources of that pollutant.
- (x) Wastewater. Water that is not stormwater, is contaminated with pollutants and is or will be discarded.

### **3 Applicability.**

This policy shall apply to all water entering the MS4 generated on any developed and undeveloped lands unless explicitly exempted by an authorized enforcement agency.

### **4. Responsibility for Administration.**

The Stormwater Management Program Coordinator shall administer, implement, and enforce the provisions of this policy.

### **5. Severability.**

The provisions of this policy are hereby declared to be severable. If any provision, clause, sentence, or paragraph of this policy or the application thereof to any person, establishment, or circumstances shall be held invalid, such invalidity shall not affect the other provisions or application of this policy.

### **6. Discharge Prohibitions.**

#### **(a) Prohibition of Illegal Discharges.**

No person shall discharge or cause to be discharged into the MS4 any materials other than stormwater except as provided in Section 6.1.1. The commencement, conduct or continuance of any illegal discharge to the MS4 is prohibited except as described as follows:

- (1) The following discharges are exempt from discharge prohibitions established by this local policy, unless the Department or the University has determined them to be substantial contributors of pollutants: water line flushing or other potable water sources, landscape irrigation or lawn watering, existing diverted stream flows, rising ground water, uncontaminated ground water infiltration to storm drains, uncontaminated pumped ground water, foundation or footing drains, crawl space or basement sump pumps, air conditioning condensate, irrigation water, springs, water from individual car washing, natural riparian habitat or wetland flows, de-chlorinated swimming pool discharges, residential street wash water, water from firefighting activities, and any other water source not containing pollutants. Such exempt discharges shall be made in accordance with an appropriate plan for reducing pollutants.

- (2) Discharges approved in writing by the SMPC to protect life or property from imminent harm or damage, provided that, such approval shall not be construed to constitute compliance with other applicable policy and requirements, and further provided that such discharges may be permitted for a specified time period and under such conditions as the SMPC may deem appropriate to protect such life and property while reasonably maintaining the purpose and intent of this local policy.
  - (3) Dye testing in compliance with applicable state and policy is an allowable discharge, but requires a verbal notification to the SMOPC prior to the time of the test.
  - (4) The prohibition shall not apply to any discharge permitted under an SPDES permit, waiver, or waste discharge order issued to the discharger and administered under the authority of the Department, provided that the discharger is in full compliance with all requirements of the permit, waiver, or order and other applicable policy and regulations, and provided that written approval has been granted for any discharge to the MS4.
- (b) Prohibition of Illicit Connections.
- (1) The construction, use, maintenance or continued existence of illicit connections to the MS4 is prohibited.
  - (2) This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under policy or practices applicable or prevailing at the time of connection.
  - (3) A person is considered to be in violation of this local policy if the person connects a line conveying sewage to the University's MS4, or allows such a connection to continue.

#### **7. Prohibition Against Activities Contaminating Stormwater**

- (a) Activities that are subject to the requirements of this section are those types of activities that:
- (1) Cause or contribute to a violation of the University's MS4 SPDES permit.
  - (2) Cause or contribute to the University being subject to the Special Conditions as defined in Section 2 (Definitions) of this local policy.
- (b) Upon notification to a person that he or she is engaged in activities that cause or contribute to violations of the University's MS4 SPDES permit authorization, that person shall take all reasonable actions to correct such activities such that he or she no longer causes or contributes to violations of the University's MS4 SPDES permit authorization.

#### **8. Requirement to Prevent, Control, and Reduce Stormwater Pollutants by the Use of Best Management Practices.**

- (a) Best Management Practices

Where the SMPC has identified illicit discharges as defined in Section 2 or activities contaminating stormwater as defined in Section 7 the University may require implementation of Best Management Practices (BMPs) to control those illicit discharges and activities.

- (1) The owner or operator of a commercial or industrial establishment shall provide, at their own expense, reasonable protection from accidental discharge of prohibited materials or other wastes into the MS4 through the use of structural and non-structural BMPs.
- (2) Any person responsible for a property or premise, which is, or may be, the source of an illicit discharge as defined in Section 2 or an activity contaminating stormwater as defined in Section 7, may be required to implement, at said person's expense, additional structural and non-structural BMPs to reduce or eliminate the source of pollutant(s) to the MS4.
- (3) Compliance with all terms and conditions of a valid SPDES permit authorizing the discharge of stormwater associated with industrial activity, to the extent practicable, shall be deemed compliance with the provisions of this section.

**9. Suspension of Access to MS4. Illicit Discharges in Emergency Situations.**

- (a) The SMPC may, without prior notice, suspend MS4 discharge access to a person when such suspension is necessary to stop an actual or threatened discharge which presents or may present imminent and substantial danger to the environment, to the health or welfare of persons, or to the MS4. The SMPC shall notify the person of such suspension within a reasonable time thereafter in writing of the reasons for the suspension. If the violator fails to comply with a suspension order issued in an emergency, the SMPC may take such steps as deemed necessary to prevent or minimize damage to the MS4 or to minimize danger to persons.
- (b) Suspension due to the detection of illicit discharge. Any person discharging to the University's MS4 in violation of this policy may have their MS4 access terminated if such termination would abate or reduce an illicit discharge. The SMPC will notify a violator in writing of the proposed termination of its MS4 access and the reasons therefor. The violator may petition the SMPC for a reconsideration and hearing. Access may be granted by the SMPC if he/she finds that the illicit discharge has ceased and the discharger has taken steps to prevent its recurrence. Access may be denied if the SMPC determines in writing that the illicit discharge has not ceased or is likely to recur. A person commits an offense if the person reinstates MS4 access to premises terminated pursuant to this Section, without the prior approval of the SMPC.

**10. Industrial or Construction Activity Discharges.**

- (a) Any person subject to an industrial or construction activity SPDES stormwater discharge permit shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to the University prior to the allowing of discharges to the MS4.

**11. Access and Monitoring of Discharges.**

- (a) Applicability. This section applies to all facilities that the SMPC must inspect to enforce any provision of this Policy, or whenever the authorized enforcement agency has cause to believe that there exists, or potentially exists, in or upon any premises any condition which constitutes a violation of this Policy.

- (b) Access to Facilities.

- (1) The SMPC shall be permitted to enter and inspect facilities subject to regulation under this policy as often as may be necessary to determine compliance with this Policy. If a discharger has security measures in force which require proper identification and clearance before entry into its premises, the discharger shall make the necessary arrangements to allow access to the SMPC.
- (2) Facility operators shall allow the SMPC ready access to all parts of the premises for the purposes of inspection, sampling, examination and copying of records as may be required to implement this policy.
- (3) The University shall have the right to set up on any facility subject to this policy such devices as are necessary in the opinion of the SMPC to conduct monitoring and/or sampling of the facility's stormwater discharge.
- (4) The University has the right to require the facilities subject to this policy to install monitoring equipment as is reasonably necessary to determine compliance with this policy. The facility's sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the discharger at its own expense. All devices used to measure stormwater flow and quality shall be calibrated to ensure their accuracy.
- (5) Unreasonable delays in allowing the University access to a facility subject to this policy is a violation of this policy. A person who is the operator of a facility subject to this policy commits an offense if the person denies the University reasonable access to the facility for the purpose of conducting any activity authorized or required by this policy.
- (6) If the SMPC has been refused access to any part of the premises from which stormwater is discharged, and he/she is able to demonstrate probable cause to believe that there may be a violation of this policy, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program designed to verify compliance with this policy or any order issued hereunder, then the SMPC may seek issuance of a search warrant from any court of competent jurisdiction.

## **12. Notification of Spills.**

- (a) Notwithstanding other requirements of policy, as soon as any person responsible for a facility or operation, including third party entities, or responsible for emergency response for a facility or operation has information of any known or suspected release of materials which are resulting or may result in illegal discharges or pollutants discharging into the MS4, said person shall take all necessary steps to ensure the discovery, containment, and cleanup of such release. In the event of such a release of hazardous materials said person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services, the University Office of Environmental, Health and Safety, and the Stormwater Management Program Coordinator. In the event of a release of non-hazardous materials, said person shall notify the University in person or by telephone or facsimile no later than the next business day. Notifications in person or by telephone shall be confirmed by written notice addressed and mailed to the University within three business days of the telephone notice. If the discharge of prohibited materials emanates from a commercial or industrial establishment, the owner or operator of such establishment shall also retain an on-site written record

of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least three years.

Contact Information:

Environmental Health and Safety: 518-442-3495

Stormwater Management Program Coordinator: 518-442-3400.

### **13. Enforcement.**

#### **(a) Notice of Violation.**

When the University's SMPC finds that a person has violated a prohibition or failed to meet a requirement of this policy, he/she may order compliance by written notice of violation to the responsible person. Such notice may require without limitation:

- (1) The elimination of illicit connections or discharges;
- (2) That violating discharges, practices, or operations shall cease and desist;
- (3) The abatement or remediation of stormwater pollution or contamination hazards and the restoration of any affected property;
- (4) The performance of monitoring, analyses, and reporting;
- (5) Payment of a fine; and
- (6) The implementation of source control or treatment BMPs. If abatement of a violation and/or restoration of affected property is required, the notice shall set forth a deadline within which such remediation or restoration must be completed. Said notice shall further advise that, should the violator fail to remediate or restore within the established deadline, the work will be done by a designated governmental agency or a contractor and the expense thereof shall be charged to the violator.

#### **(b) Penalties**

In addition to or as an alternative to any penalty provided herein or by policy, any person who violates the provisions of this local policy shall be guilty of a violation punishable by a fine not exceeding three hundred fifty dollars (\$350); for conviction of a second offense both of which were committed within a period of five years, punishable by a fine not less than three hundred fifty dollars nor more than seven hundred dollars (\$700; and upon conviction for a third or subsequent offense all of which were committed within a period of five years, punishable by a fine not less than seven hundred dollars nor more than one thousand dollars (\$1000). Each week's continued violation shall constitute a separate additional violation.

### **14. Appeal of Notice of Violation.**

- (a) Any person receiving a Notice of Violation may appeal the determination of the SMPC to the University within 15 days of its issuance, which shall hear the appeal within 30 days after the filing of the appeal, and within five days of making its decision, file its decision in the office of Facility Management-Code Administration and mail a copy of its decision by certified mail to the discharger.

### **15. Corrective Measures After Appeal.**

- (a) If the violation has not been corrected pursuant to the requirements set forth in the Notice of Violation, or, in the event of an appeal, within 5 business days of the decision of the University upholding the decision of the SMPC, then the SMPC shall request the owner's permission for access to the subject private property to



take any and all measures reasonably necessary to abate the violation and/or restore the property.

- (b) If refused access to the subject private property, the SMPC may seek a warrant in a court of competent jurisdiction to be authorized to enter upon the property to determine whether a violation has occurred. Upon determination that a violation has occurred, the SMPC may seek a court order to take any and all measures reasonably necessary to abate the violation and/or restore the property. The cost of implementing and maintaining such measures shall be the sole responsibility of the discharger.

#### **16. Injunctive Relief.**

- (a) It shall be unlawful for any person to violate any provision or fail to comply with any of the requirements of this policy. If a person has violated or continues to violate the provisions of this policy, the SMPC may petition for a preliminary or permanent injunction restraining the person from activities which would create further violations or compelling the person to perform abatement or remediation of the violation.

#### **17. Alternative Remedies.**

- (a) Where a person has violated a provision of this Policy, he/she may be eligible for alternative remedies in lieu of a University penalty, upon recommendation of the University Attorney and concurrence of the University Code Enforcement Officer, where:
  - (1) The violation was unintentional
  - (2) The violator has no history of previous violations of this Policy.
  - (3) Environmental damage was minimal.
  - (4) Violator acted quickly to remedy violation.
  - (5) Violator cooperated in investigation and resolution.
- (b) Alternative remedies may consist of one or more of the following:
  - (1) Attendance at compliance workshops
  - (2) Storm drain stenciling or storm drain marking
  - (3) River, stream or creek cleanup activities

#### **18. Violations Deemed a Public Nuisance.**

- (a) In addition to the enforcement processes and penalties provided, any condition caused or permitted to exist in violation of any of the provisions of this policy is a threat to public health, safety, and welfare, and is declared and deemed a nuisance, and may be summarily abated or restored at the violator's expense, and/or a civil action to abate, enjoin, or otherwise compel the cessation of such nuisance may be taken.

#### **19. Remedies Not Exclusive.**

- (a) The remedies listed in this policy are not exclusive of any other remedies available under any applicable federal, state or local policy and it is within the discretion of the authorized enforcement agency to seek cumulative remedies.

#### **20. Third Party Entity**



- (a) Third party entities will be required to sign a Contracted Entity Certification Statement for work or services provided on University property. (See Appendix B)

#### **IV. CONSTRUCTION ACTIVITY PERMIT**

##### **A. ADMINISTRATION**

1. The Stormwater Management Program Coordinator (SMPC) is responsible for the implementation of the UAlbany SWMP Plan and shall review and approve all Construction Activity Storm Water Pollution Prevention Plans (SWPPPs) for all projects that require a SWPPP. All applicable projects are required to be in accordance with the University Stormwater Management Policy
2. A consultant, if used, is to prepare and sign the NOI as preparer and the consultant will sign the MS4 Permit, Third Party Certification Form.
3. The SWPPP is to be submitted to the campus Stormwater Management Program Coordinator (SMPC) for review. For final submission, a hard copy and electronic version of the SWPPP is required. Upon acceptance, the Notice of Intent (NOI) for campus funded or managed projects is to be signed by the Vice President for Finance and Business. For non-campus funded or managed projects, the NOI is to be signed by the funding agency (e.g. SUCF, DASNY).
4. The NOI is to be submitted to the NYSDEC by the above mentioned University signatories and for record keeping purposes a copy of the signed NOI is to be sent to the Stormwater Management Program Coordinator (SWMP).
5. Once the project has been permitted by NYSDEC, for record keeping purposes, a copy of the Acknowledgement Letter and SPDES permit number will be sent to the Stormwater Management Program Coordinator (SMPC) by the Vice President of Finance and Business and/or the funding agency responsible for the Construction Activity Permit (e.g. SUCF, DASNY)
6. No building permits shall be issued without an accepted SWPPP for which there is documented Construction Activity permit coverage (NYSDEC Permit No, NYSDEC Acknowledgment Letter). Upon receipt of permit documentation, the campus Stormwater Management Program Coordinator (SMPC) will provide a letter of acceptance to the University's Code Enforcement Officer.
7. Upon request, the SWPPP shall also be submitted to the NYSDEC.
8. The Stormwater Management Program Coordinator (SWMP) is to be notified prior to any SWPPP amendment for review and acceptance.

##### **B. STORMWATER POLLUTION PREVENTION PLANS**

1. General
  - (a) All construction projects that have activity that creates a site disturbance are required to obtain permit coverage and prepare a Stormwater Pollution Prevention Plan (SWPPP). For projects that are classified as recreational trails, at a minimum, the SWPPP shall contain a sediment and erosion control plan. For disturbances of one acre or more, post-construction stormwater practices will be required. Projects that disturb five (5) acres or more at any one time will require a variance from the NYS DEC. The SWPPP is to be submitted to the SMPC for review.
  - (b) The SWPPP is to be prepared in accordance with the requirements of
    1. Current New York State Stormwater Management Design Manual

2. New York State Standards and specifications for Erosion and Sedimentation Control
3. NYSDEC SPDES General Permit from Construction Activity, Permit No GP-0-15-002 as amended or revised
4. The University at Albany Stormwater Management Policy

Whenever possible, the requirements for water quality and water quality shall exceed the minimum requirements through the use of green infrastructure.

- (c) The SWPPP shall describe the erosion and sediment control practices and when required, Post-Construction Stormwater Practices that will be used and or constructed.
- (d) An operation and maintenance manual is to be prepared and submitted for post-construction stormwater practices.
- (e) The SWPPP is to remain current during the construction. At a minimum, the SWPPP shall be amended:
  - (1) whenever the current provisions prove to be ineffective in minimizing pollutants in stormwater discharges from the site;
  - (2) whenever there is a change in design, construction, or operation at the construction site that has or could have an effect on the discharge of pollutants;
  - (3) to address issues or deficiencies identified during an inspection by the qualified inspector, the stormwater program coordinator, NYSDEC or other regulatory authority.

### **C. CONSTRUCTION SITE STORMWATER CONTROL**

#### **1. Pre-Construction**

- (a) A pre-construction meeting is to be held with the contractor prior to the commencement of construction activity to review the campus procedures and requirements. In accordance with NYSDEC permit requirements, construction activity resulting in site disturbance is not to commence until five (5) business days after the NYSDEC receives the NOI, and all necessary permits have been issued.
- (b) Contractor(s) and subcontractor(s) that are to be responsible for the erosion and sediment control practices shall be identified to the University, and each contractor shall identify at least one individual that will be responsible for implementation of the SWPPP. The individual must be a qualified inspector in accordance with the requirements contained in the General Permit, and shall provide to the SMPC certification documentation of completion of a 4-hour NYSDEC endorsed training in proper erosion and sedimentation control principles.
- (c) Each contractor(s) and subcontractor(s) identified shall sign a copy of the contractor's certification statement contained in the SWPPP before they commence any construction activity.

#### **2. Inspections and Enforcement**

- (a) Inspections of construction activities shall be performed in accordance with the General Permit requirements. The University or funding agency will engage a designated representative to perform the inspections and provide reports to the

Stormwater Management Program Coordinator (SWMP) and all interested parties within 7 days.

- (b) Any deficiencies in the erosion and sedimentation control measures noted in the inspection reports shall be corrected within 24 hours of notification. Illicit discharges shall be corrected immediately and any impacts to downstream systems shall be cleaned, repaired or replaced at the contractor's expense. As needed the IDDE Policy Document will be applied.
- (c) Failure of the contractors, subcontractors, agents and/or assigns to strictly adhere to any of the permit requirements shall constitute a violation. Violations are subject to fines up to \$3,000 per day per violation. The University may also issue a stop-work order, whereby all work of any nature is to be halted on the site, including structures. The stop-work order shall remain in effect until the University confirms that the violation has been properly corrected and the project is in conformance with the permit. A stop-work order shall not be the basis for lost construction time or a request for any time extension. Should the contractor fail to perform the required work within 2 days, the University shall have the work completed and any costs incurred will be charged to the contractor. Violations are also subject to the NYSDEC policies and legal action as contained in the General Permit.

#### **D. POST-CONSTRUCTION STORMWATER MANAGEMENT**

1. In accordance with Post-Construction Stormwater Management Practices Procedures
2. Post Construction Stormwater Facilities Inventory  
The University shall maintain a complete inventory of all post construction stormwater treatment facilities that includes a listing and map of the locations of the facilities. The inventory is to be maintained by the Stormwater Management Program Coordinator (SMPC) and is to include facility identification number, name of the facility, and the type of stormwater management practice and treatment. The inventory is to be updated whenever a new facility placed into service.
3. Operations and Maintenance  
The University shall provide operation and maintenance on all post-construction stormwater practices in accordance with the "Stormwater Management Treatment Facilities – Operation and Maintenance Manual" and the Operation and Maintenance Manual prepared for each facility included in the Stormwater Pollution Prevention Plan. Operation and maintenance of the facilities are the responsibility of the Grounds Department and maintenance records are to be kept for all work performed on the facilities, and also provided to the SMPC.
4. Facility Inspections  
The SMPC shall conduct inspection of the facilities in accordance with the recommended schedule for each practice, but at a minimum of once per year. The inspections are to determine if the practice is functioning properly and meeting the design requirements. The inspections will also determine if the maintenance is effective or if any increased maintenance, repairs and upgrades are necessary. Records are to be maintained for the inspections and any recommendations made. The inspection reports are to be provided to the Director of Maintenance and Operations.

## **E. GREEN INFRASTRUCTURE POLICY-DESIGN**

### (a) Monitoring of Policy

- (1) The SMPC shall convene meetings, on a determined interval of representatives from the UAlbany departments of Facilities Management, including the Office of Health and Safety, and with the Office of Sustainability to coordinate integration of the design principles in this guidance and review compliance with the SPDES General Permit.

### (b) Content

#### 1.0 Purpose and Objectives

The University at Albany (UAlbany) is a *non-traditional MS4* pursuant to New York State Department of Environmental Conservation's SPDES General Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems, (). That permit requires UAlbany to undertake various measures during the design and construction of new facilities and the redevelopment of existing facilities to reduce the discharge of stormwater pollutants to the maximum extent practicable. The University at Albany goal is to exceed the water quality reduction and quantity to above the General Permit requirements through increased green infrastructure use. That is achieved by incorporating the principles of Low Impact Development, (LID) Better Site Design and other Green Infrastructure measures in the design of university facilities. This section establishes when these measures should be applied in the design process and the administrative coordination of the preparation and review of the design documents.

#### 2.0 Applicability

This guidance applies to all projects that will result in a land disturbance. For the purpose of this guidance, "project" refers to any building, parking lot, sidewalk, playing field or any other activity that will result in the disturbance of land with construction of impervious surfaces.

#### 3.0 Administration

3.1 Whenever a University department is undertaking the design of a new project whether it is a new facility or the redevelopment of an existing facility, it shall incorporate the design guidelines for green infrastructure set forth herein to the maximum extent practicable. A meeting is to occur with the Stormwater Management Program Coordinator to review incorporating the use of Green Infrastructure practices.

3.2 All green infrastructure facilities and stormwater control measures shall be designed in accordance with the most recent New York State Stormwater Management Design Manual.

#### 4.0 Avoiding Locating Projects in Sensitive Areas

The design of projects shall consider the existing conditions on the property and should be designed to minimize impacts on hydrologic soil groups and areas adjacent to wetlands and watercourses. Project design plans shall include a soil protection plan which identifies the areas of the various soil types on the property, hydrologic soil groups and soil erosion factors. The plan shall identify construction staging areas and soil disturbance areas. To the extent practicable

construction staging areas should be limited to previously disturbed areas or areas with compacted or poorly infiltrating soils.

#### 4.1 Design Plan Contents

To allow for proper evaluation of a proposed project, site design plans must include a site plan for the project that includes:

- a. All natural occurring watercourses and water bodies, including classification information if available,
- b. Unique geological features
- c. State and federally designated wetlands and the 100' adjacent area for NYS regulated wetlands.
- d. Locations of significant natural communities (including endangered, threatened or rare plant species; high quality forested areas)
- e. Slopes equal to or greater than 15%.
- f. 100-year floodplains.
- g. A grading plan.
- h. A tree conservation plan identifying all existing trees 12" diameter at breast height (dbh) or greater and identifying the extent of tree clearing and preservation measures.

#### 4.2 Site Design Standards.

Selection of sites and the design of facilities shall incorporate the following standards:

- a. Grading on slopes equal to or greater than **15%** should be avoided to the maximum extent practicable.
- b. Redevelopment of previously developed sites containing grades equal to or greater than 15% should be limited to the areas of the site currently covered by impervious surfaces. Grading on the remainder of the site with slopes equal to or greater than 15% should be avoided to the maximum extent practicable.
- c. New development should not be located on highly erodible soils or clay soils prone to slippage, unless an engineering study determines the suitability of the soils for construction and the limitation of potential erosion.
- d. Erodible soils are those soils with an erosion factor (K or Kw) of 0.43 or greater as determined by the most recent Natural Resources Conservation Service survey data.
- e. All construction activities, including staging areas, shall be shown on the site plan, be delineated in the field prior to commencing construction where requested and be limited to areas determined by the University.
- f. Unless there is no practicable alternative, vegetation beyond the disturbance areas set forth in Sec. 4.2(f) shall not be cleared or disturbed and all vegetation within the disturbance areas shall be replaced upon completion of construction.

- g. Construction staging areas and vehicular travel areas should not be located underneath tree canopies unless required by site conditions. The location of the staging area will be examined on a case by case basis and is to be approved by the University. Trees identified on the site plan for preservation shall be marked in the field and their tree canopy area delineated.
- h. All vegetation, with the exception of invasive species, shall be maintained on all slopes equal to or greater than 15% and for all areas within 50 feet of watercourses and drainage swales.
- i. Constructed or graded slopes may not have a slope greater than 3:1 unless an engineering report and soil stability analysis that a slope with a steeper grade has a safety factor of at least 1.5 for static loads and 1.1 for pseudostatic loads.
- j. No clearing, excavation, stockpiling of materials or placement of fill shall occur on the slide block of unstable slopes or other unstable soil areas unless it can be demonstrated that the proposed activity will not increase the load, drainage, or erosion on the slope or increase the risk of damage to people, adjacent structures, properties or natural resources.
- k. Proposed paved surfaces on soils within Hydrologic Soil Group A & B shall be constructed of pervious materials (including porous concrete, porous asphalt, and porous pavers), unless such actions conflict with existing planning principles and guidelines or otherwise directed by the University.

#### 4.3 Natural Resource Buffers

- a. Except as otherwise provided herein, natural area buffers shall be maintained in their natural state adjacent to watercourses, wetlands and areas shown on the site plan containing sensitive plant species.
- b. Minimum buffer areas shall be as follows but consideration should be made to extend the buffer in appropriate instances where topography requires a greater buffer to provide a level of protection equivalent to the distances set forth herein:
  - i. 100 feet from the boundary of any state or federally designated wetland and Indian Pond
- c. Buffer Averaging. The buffer requirements may be altered and an average buffer be used instead if it is determined that a uniform buffer will result in extraordinary practical difficulties due to the unique characteristics of the project site or the character of the buffer area varies in slope, soil types or vegetation and the resource being protected would benefit from a wider buffer in certain areas and would not be adversely impacted by a narrower buffer in other areas. To utilize buffer averaging, the following conditions should be met:
  - i. There shall be a determination that averaging shall not adversely impact the functions and values of the protected watercourses, wetlands and sensitive habitat areas.



- ii. The total area contained within the buffer after averaging shall not be less than the area that would be contained in the buffer without averaging.
  - iii. To the extent practicable, lower intensity land uses which are less likely to introduce pollutants or activity in the protected areas shall be located near the narrower buffer widths and higher intensity uses, (such as parking lots) shall be located adjacent to the widest buffer areas.
- d. Except as otherwise provided herein, buffer areas shall be left undisturbed. Buffer areas shall be shown on the site plan and kept on file in the Office of Campus Planning. The delineation of the buffer areas shall be demarcated on site both during and after construction.
- e. Allowable Buffer Area Uses.
- i. The 25 feet of the buffer area closest to the protected resource shall be left undisturbed unless a clearing plan is deemed necessary to create a view corridor.
  - ii. Within the 25 feet of the buffer area closest to the protected resource there may be constructed boardwalks to a watercourse or waterbody, footpaths parallel to the watercourse, stormwater management measures and road and utility crossings.
  - iii. Within the balance of the buffer area, there may be located constructed wetlands, hiking trails and bicycle paths constructed of pervious materials.
- f. Prohibited Buffer Area Uses and Activities. Buffer areas shall remain undisturbed without any clearing, grading, and construction or be used for the storage or stockpiling of any materials including sand, gravel or snow accumulated from snowplowing. There shall be no application of herbicides, pesticides or fertilizers in the buffer area. Where any government regulation establishes separation distances for a regulated activity, such distance shall be measured from the outer edge of the buffer area.

#### 4.4 Tree Protection.

Minimizing the removal of trees and preserving mature trees protects the environment by reducing stormwater runoff, maintaining habitat, promoting clean air and reducing heat island effects. All projects shall include a tree preservation plan that minimizes to the maximum extent practicable the removal of trees.

- a. Site disturbance. The site plan shall identify the location of all major vegetation including all trees larger than 6 inches dbh. In designing a project Facilities Management shall minimize the loss of trees by identifying the following for preservation:
- i. Trees that are significant to the site or campus due to their size, age, rarity, health, importance to the existing landscape composition or identified as memorials.
  - ii. Trees located in environmentally sensitive areas such as wetlands.



- iii. Trees that offer visual screening or noise buffers to adjoining campus uses and neighboring properties.
  - iv. Trees that shelter other trees from strong winds or are part of a continuous and mutually dependent canopy.
- b. Protection of identified trees. Where a final design plan identifies trees for preservation, the following measures shall be undertaken:
- i. If development of the project will require the disturbance of tree root zones, a certified arborist or registered landscape architect shall prepare a detailed tree protection plan which protects root zones to the maximum extent practicable, prior to the commencement of site activities.
  - ii. Contractors shall be directed to prevent damage to the trunks of trees identified for preservation. In extremely confined work zones, there shall be a protective barrier placed around the tree.
  - iii. Where disturbance of roots is necessary, excavation within the root zone shall be done with extreme care using hand tools and or an air spade to prevent unnecessary damage to adjacent fibrous root structures. Roots should be pruned using clean vertical cuts that do not fray or strip the roots.
  - iv. Trees that have had their roots pruned shall also have their canopy pruned in direct proportion to the amount of root trimming as provided in the tree protection plan.
  - v. Any trees which are removed during construction which were not previously identified in the design plan for removal shall be replaced with equivalent trees unless it is determined otherwise impractical.
- c. Nothing contained herein shall preclude UAlbany from removing trees identified for preservation, which are diseased, severely damaged, or otherwise present a threat to public health, safety or property.

## 5.0 Facility Design Standards

All new facilities on the UAlbany campus shall incorporate the design standards of this section. When there is a substantial renovation of an existing facility, these design standards shall be incorporated to the maximum extent practicable.

### 5.1 Stormwater Conveyance Design

- a. Concrete or paved gutters shall not be used in any stormwater conveyance measure unless site conditions restrict the ability to use engineered vegetated swales or bioretention methods. Vegetated swales and bioretention measures shall be placed between roads and sidewalks, and shall be designed to include safe emergency overflow provisions for large storm events.

### 5.2 Building Roof Drains

- a. For areas with hydrologic soil groups A and B and soils with an infiltration capacity of more than 0.5 inches/hour rooftop runoff shall be diverted to: a grassed or vegetated area; a rain garden; a vegetated open channel; an infiltration trench or subsurface infiltrators, a pervious

surface or a combination of the above or similar measures where practical

- b. The design of all new buildings and covered structures shall consider installation of Green Roofs. Design proposals shall include an analysis of the feasibility and cost effectiveness of a Green Roof alternative compared to a conventionally designed roof.
- c. Prior to a final decision to including a Green Roof on a building, a maintenance plan for the roof with provisions for periodic inspections shall be required to be on file with the Stormwater Management Program Coordinator. Annual reports on the maintenance of the roof shall be provided to the Stormwater Management Program Coordinator.

### 5.3 Parking Lot Design

- a. Parking lots shall be constructed of pervious materials (permeable pavers, porous asphalt, porous concrete), as much as practical or as directed by the University.
- b. In order to maximize the absorption capabilities of landscaped areas, utilities shall not be located within landscaped areas unless it can be demonstrated that avoidance of landscaped areas will result practical difficulties that outweigh the benefits of locating utilities outside landscaped areas.
- c. All parking lots shall consider, where practical, a snow storage and disposal area that provides for snow melt over a vegetated area or into a green infrastructure area where practical

### 5.4 Bicycle Parking

The University encourages bicycle use as an alternative to personal cars and the design of new and renovated facilities should include bicycle parking in proximity to the buildings as set forth in this section.

- a. All new and renovated buildings shall provide at a minimum bicycle parking spaces for 5% of the building occupancy measured at peak period.
- b. Location of Bicycle Parking Spaces
  - i The bicycle parking area must be convenient to building entrances and street access, but may not interfere with normal pedestrian and vehicle traffic. For passive security purposes, the bicycle parking shall be well-lit and clearly visible to building occupants or clearly visible from the street.
  - ii Bicyclists must not be required to travel over stairs or other obstacles to access bicycle parking.
  - iii Bicycle parking spaces should be located as close as practical from the principal building entrance and at the same grade as the sidewalk or an accessible route.
- c. Design of Bicycle Parking Spaces
  - i Required bicycle spaces must have a minimum dimension of two (2) feet in width by six (6) feet in length, with a minimum overhead vertical clearance of seven (7) feet. Each required

bicycle parking space must be accessible without moving another bicycle. There must be an aisle at least (five) 5 feet wide between each row of bicycle parking to allow room for bicycle maneuvering. Bicycle racks shall adhere to University design standards.

- ii The area devoted to bicycle parking must be surfaced as required for vehicle parking areas. Such areas shall also be covered or otherwise protected from precipitation whenever practical. Bicycle shelters shall meet current university design standards.

### 5.5 Sidewalks

Sidewalks shall be constructed of pervious materials, permeable pavers, porous asphalt, porous concrete, or similar materials as much as possible or as directed by the University

- a. Sidewalk width shall be in accordance with University standards per application requirements.
- b. Sidewalks shall be graded such that they drain to the vegetated areas away from front of buildings except in areas where the introduction of additional groundwater may be undesirable (building foundations, Hydrologic Soil Group C or D soils) or determined to be physically impracticable.
- c. Sidewalks constructed in accordance with the Americans with Disabilities Act (ADA) utilizing compliant porous pavement or an alternative porous surface are encouraged. Permeable sidewalks are strongly encouraged and may be required in lieu of impermeable sidewalks where soils are within Hydrologic Soil Group A or B, unless determined not feasible by the University
- d. Where practical and dependent upon pedestrian volume, sidewalks should only be placed on one side of the street with appropriate and safe pedestrian access provided to cross the street.
- e. A continuous permeable strip shall be located between the sidewalk and the curbside or edge of pavement. The permeable strip shall be a minimum width as determined by the University unless physical constraints preclude the design wide and shall extend for the length of the sidewalk.
- f. Where the speed limit is 15 mph or less, sidewalks should be constructed at street level to reduce the need for curbing that channelizes stormwater flow. In this circumstance, the sidewalk and edge of road shall be separated by a grass or planting strip with a minimum width as determined by the University unless physical constraints preclude the design. Bollards and protective buffers/markings shall be necessary to enhance pedestrian safety and prevent unwanted vehicular trespass.

### 5.6 Curb Design

- a. Curbs along roads, parking lots and driveways shall consider curb cuts to allow for diversion into green infrastructure practices, including

stormwater planters, bioretention areas, tree pits and filter strips. Curb cuts should incorporate trash racks to prevent trash from entering the green infrastructure measures.

#### 5.7 Landscaping and Permeable Strips

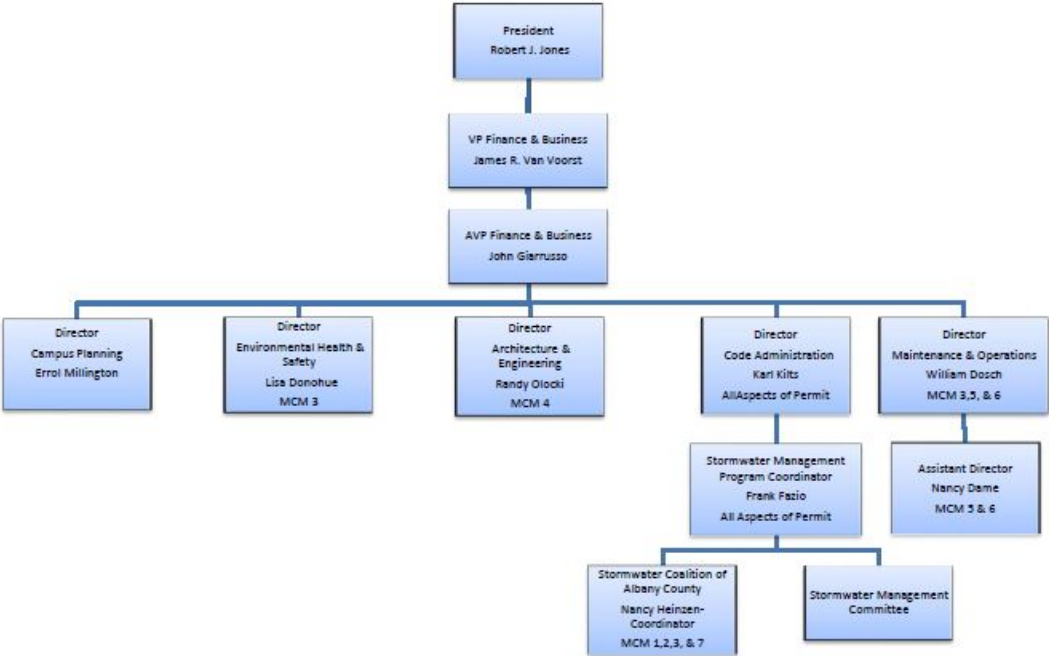
- a. Landscaped areas in a project site plan, including in parking lots, shall be lowered and incorporate curb cuts or other diversion devices to divert stormwater to the landscaped areas as part of the stormwater management plan.
- b. Permeable strips between sidewalks and roads and parking lots may be utilized as linear bioretention areas with curb cuts that divert the stormwater into the bioretention areas.
- c. Trees to be planted in the permeable strip shall be planted either individually or in groups with a minimum separation distance of 30 feet on center and a maximum separation distance of 75 feet on center. Selected trees shall be noninvasive and have an upright branching pattern with a minimum vertical clearance of 8 feet to the lowest branches at the time of planting.
- d. For non-planted permeable strips, the surface material shall be permeable based on NYSDOT material options applicable to the intended use. Design shall be such that the surface is not subject to frost heave conditions damaging the structure of the strip.
- e. When backfill is proposed beyond the planting zone within the permeable strip, the backfill shall be structural soil with a depth no less than 24 inches from finished grade. The use of recycled concrete aggregate is not permitted as backfill.
- f. Recommended plants for vegetated strips shall consist of: native meadow plantings, low herbaceous plants or no-mow ground covers, except that street trees within the planting strip shall have a 3 foot diameter/square mulch bed at their base. Permeable planting strips are encouraged within the parking lot between rows. For planted permeable strips turf grass should not be used.
- g. Parking lots should endeavor to include one tree for every 1,200 feet of impervious parking area, or as directed by the University. Sufficient permeable or infiltration areas shall be provided around the expected radius of the mature tree to provide infiltration for the tree drip area. Existing mature trees shall not be included in the calculation for minimum trees except for areas where the existing mature tree canopy extends over impervious surfaces, or as determined by the University. Tree plantings may be designed as tree pits for stormwater treatment as provided in the latest version of the New York State Stormwater Management Design Manual.
- h. Surface parking lots shall consider landscaping islands between rows in consultation with the University. These islands shall include curb cuts/wheel stops to allow entry of stormwater for treatment/infiltration. Landscaped areas shall utilize tree plantings, native vegetation, dry swales, stormwater planters, tree pits, or bioretention in center islands

between parking rows. Stormwater management features must include the following:

- ii. Trees shall have dense canopy for rainfall interception, being round, oval, or v-shaped in form.
- ii. Trees used shall be native and have proven observed salt tolerance.
- iii. The area of the parking lot subject to vehicular traffic, that also corresponds to the mature tree's canopy area, shall incorporate structural measures to prevent soil compaction and root damage. This may be accomplished by use of a soil structure specifically designed to withstand observed traffic loading.
- iv. Water must be allowed to infiltrate to the tree roots in an amount to ensure tree survival with minimal watering after the first year.
- v. Soil volume must be the amount required for the specific tree and intended function.
- vi. Trees shall be selected based on several factors, including observed local healthy tree stands in similar applications, existing and anticipated soil compaction, existing pH, planned water availability, adjacent road maintenance (salt, sand, etc), presence of overhead utilities, availability of sunlight, percolation rate, soil's ability to circulate air, and soil type.
- vii. Because paved parking lots and the cars associated with them can raise local temperatures by up to 20 degrees, trees selected near heat islands should be tolerant of these conditions.
- viii. Trees shall be selected based on best landscape practices, using the guidance document "Recommended Urban Trees: Site Assessment and Tree Selection for Stress Tolerance", as published by the Urban Horticultural Institute, Department of Horticulture, Cornell University, Ithaca, NY or other industry-accepted standards.

APPENDIX A  
Stormwater Management Organization Chart

**UNIVERSITY AT ALBANY**  
**Stormwater Management**  
**Organization Chart**



12/22/14



APPENDIX B  
Contracted Entity Certification Statement

CONTRACTED ENTITY CERTIFICATION STATEMENT

"I certify under penalty of law that I understand and agree to comply with the terms and conditions of the University at Albany Stormwater Management Policy and agree to implement any corrective actions identified by the University at Albany or a representative. I also understand that the University at Albany must comply with the terms and conditions of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater discharges from the Municipal Separate Storm Sewer Systems ("MS4s") and that it is unlawful for any person to directly or indirectly cause or contribute to a violation of water quality standards. Further, I understand that any non-compliance by University at Albany will not diminish, eliminate, or lessen my own liability."

The following services are to be provided:

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Name and title

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Address

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Phone Number

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Signature      Date