1. This information provides guidelines for storm drainage, including drainage materials. Temporary facilities and controls are covered in other parts of these standards or are available from the Facilities Management (FM) project representative.

2. FM project representative, Public Safety Office, and Environmental Health and Safety Office shall approve selection of materials, means, and methods. Unless otherwise approved, design intent requires means and methods that provide minimal disruption to adjacent building activities and operations.

3. When working on or adjacent to occupied buildings, require means and methods that protect occupants from exposure to noise, dust, fumes, traffic, and other hazards.

4. Storm water management varies in north and south campus. Consult State code and information provided by the FM project representative.

5. Obtain approval from the FM project representative and Outdoor Maintenance in situations where pipes are not continuous (as in bio-filtration) and for use of oil separation filters.


7. Storm water retention tank facilities require 7’ clear height access throughout for cleaning.

8. Storm drain pipe:
   a. Run all drain pipe to storm drain system.
   b. Schedule 40 PVC with bell-and-spigot rubber gasketed joints for all applications except under driveways or roadways. Schedule 80 PVC required under driveways and roadways.
   c. Perforated drain pipe: Schedule 40 PVC with factory drilled holes. No corrugated flexible pipe.
   d. Culverts: Smooth-core corrugated polyethylene pipe.
   e. Cross drains under pathways (mini-culverts): Use 6” or 8” diameter pipe when possible; for ease of cleaning 4” diameter minimum.
   f. Pipe fittings and pipes manufactured by a single source.

9. Geotextile fabric:

10. Catch basins/manholes:
    a. Type 1 and Type 2 catch basins, frames and grates: Conform to WSDOT Standard Plans.
    b. Types 1, 2, 3 and 4 manholes, covers and ladders: Conform to WSDOT Standard Plans.

11. For small drainage applications, use either:
    a. Schedule 40 PVC, minimum 4” diameter, solvent welded joints.
    b. Perforated drain, Schedule 40 PVC, minimum 4” diameter. Place in drain rock and Geotextile fabric.
12. Fittings:
   a. Use only 45 degree fittings throughout.
   b. DO NOT USE 90 degree ells.
   c. Provide cleanouts and wyes at transition from vertical-to-horizontal, at not more than 100' apart horizontal, and have no more than four 45 degree fittings between cleanouts.
   d. Cleanout plug receivers to be Schedule 80 PVC female threaded adaptors. In paved areas, use a flush brass plug with a recessed square drive with a minimum of 12"x12"x6" concrete surround. In grass areas, use a flush Schedule 80 PVC plug with a recessed square drive.

End