SEWER DATA

Elevation Datum (BCB)

1) All elevations shall be given relative to Boston City Base. The following elevations are required.
   a) Invert of building sewer and building storm drain connections at the foundation wall and at the connection to the main sewer or drain.
   b) Invert of the main sewer or drain at the connection.
   c) Basement floor and first floor of building.
   d) A firm benchmark will be shown.

Backwater Valve

2) If there will be a plumbing fixture(s) in the basement which is liable to backflow from a sewer line a backwater valve is required. Refer to the sketch in Section B-14 of the Standard Details for the proper location.

Connection Detail

3) Detail of the connection, if it is not be made to an existing wye branch on the sewer or drain, must be shown on the plans. Connection to clay, P.V.C., concrete and iron pipes will be made using an approved gasket saddle. Details are provided in Section B-12b of the Standard Details.

Sewer Slope

4) Minimum pitch is 1/4-inch per foot for building sewer connections and 1/8-inch per foot for building storm drain connections.
5) Building connections shall be bedded in 3/4" minimum crushed stone to at least half the pipe diameter.

Cleanout

6) A clean out on the portion of the building sewer and building storm drain on the owner's property at the property line is required where a building is set back from the property line. A cleanout or access structure must also be provided on the downstream end of infiltration systems.

Drain Manhole

7) Chain basins are considered to be poor engineering practice. They are not allowed in the public or private way open to public travel. If chain basins are to be built on private property, the last basin before the connection to the BWSC facilities must be a BWSC standard catch basin type with oil trap outlet. See Section B-01g of the Standard Details.

Chimney Connection

8) All chimney connections shall be encased in concrete as shown in Section B-15 of the Standard Details.

Sewer Permit

9) A sewage flow estimate is required. If the volume of sewage discharge is expected to exceed 15,000 gallons per day up to 50,000 per day, file a one time certification statement. If discharges are greater than 50,000 gallons per day and if sewer extensions are greater than 1,000 feet, an Application for a Sewer System Extension or Connection must be filed with the Massachusetts Division of Water Pollution Control (DWPC).

Storm-water Retainage

10) It is required that the project proponent assesses the use of methods to retain stormwater on the site. BWSC will not approve connections to its storm system or combined system without an assessment of on-site retainage.

Drainage Calculation (Pre/Post Calculations)

11) Drainage calculations for the runoff are needed including the storm frequency, time of concentration, peak rate of runoff, and total volume of water for all projects involving over 2,500 square feet of impervious surface.

Operations & Maintenance (O&M) Plan

For projects that include infiltration and catch basins, the developer is responsible for ensuring that all Stormwater Management systems must have an Operations and Maintenance Plan. This Plan must identify; (1) the Stormwater Management system's owner(s), (2) the party or parties responsible for operations and maintenance, (3) a schedule for inspection and maintenance and (4) list maintenance tasks required.

Oil Traps & Separator

12) Oil traps or separators are required on all building sewers and building floor drains from commercial garages, and enclosed parking areas. All oil traps must be of a type and capacity approved by the Massachusetts Water Resources Authority (MWRA). These oil traps or separators must be connected directly to the BWSC sanitary sewer system only. See Section G-01 in the Standards Details for more information.

Particle Separator

13) Oil, particle separators are required for all paved areas which will drain into a public storm drain on into a body of water. The type of separator will depend on the drainage AREA SERVED. Please note that MWRA type oil separators are not applicable for this use. See Sections B-11a and B-11 in the Standard Details.

Grease Traps (Point-of-use and Large External Units)

14) Grease traps or interceptors shall be required on sewer line for all restaurants and commercial food handling establishment. BWSC may require grease interceptor for any fixture or drain which introduces large amounts of animal or vegetable fat, oil or grease. All submission shall be made to BWSC Sewer Operation Division/Enforcement Section for review and approval.

Ten (10) Foot Separation

15) The sanitary sewer and storm drain connections shall be laid at least 10 feet apart from any new or existing water services connections.

Cut & Caps

16) All abandonment of the existing building sanitary sewer and storm drain services must be cut and capped off at the main(s) in the street. All such work must be performed by the Licensed Contractor.

Building Code

17) In accordance with the Mass. State Building Code Section 609.3 and Mass State Plumbing Code Section 2.09 Article I and definitions and BWSC storm drainage regulations, the following applies: Any area which is used to dispense fuel and is covered by a canopy or other type of roof or enclosure shall drain into an approved oil separator and then into a sanitary sewer or if not available a combined sewer. An alternative will be to keep all runoff within the fuel dispensing area and not to be drained off.

    The area shall be graded as to not allow any runoff onto surrounding areas which drain into a storm drain. Other areas including canopies of gas stations and/or fuel dispensing areas shall be drained and according to the rules of BWSC/or in the absence of a particular regulation, at the discretion of the Chief Engineer.

Dewatering Drainage Permit

18) All dewatering drainage associated with construction activities must first obtain a Dewatering Drainage Permit. Such discharges shall comply with the Boston Water and Sewer Commission, United States Environmental Protection Agency, MWRA and other appropriate agencies. Under no circumstance shall dewatering drainage be discharged into a sanitary sewer.

    NPDES Exclusion Permit

    A. Discharged collected water into a storm drain leading to an outfall shall require a NPDES Exclusion Permit and BWSC Permit.

    Discharges to Combined Sanitary System

    B. Discharged collected water into a storm drain leading to a combined sewer system or into a combined sewer shall require a MWRA Sewer Use Permit.
    In either situation it is essential to initiate the dewatering plan and associated permits prior to the site plan approval.

Sewer Manhole

19) All new sewer connections and manholes must be stationed. When possible STA 0+00 should be aligned with the corner of the property lines of the street intersection where the work is taking place.

Wye Branches

20) When sewer connections are being made to existing wye branches, the distance from a manhole must correspond to the distances shown on BWSC record plan. All existing wyes accessible from the site must be shown, to allow for field changes.

Inspection

21) BWSC has the right to inspect building sanitary sewers, building storm drains, and other private sewers, grease traps, oil-particle separators, and other appurtenances tributary to the BWSC's wastewater and storm drainage systems. Inspection points must be delineated on the site plan, along with sign off by a BWSC inspector.

Separate Sewer Connection

22) The plumbing of each building must have a separate independent sewer connection to BWSC sanitary/combined sewer system outside of the building.

Sewer Video Inspections

23) In any existing vacant building to be renovated or substantially rehabilitated, it is required that, if reused, the sewer lateral must be televised, and a new roof drain must be provided if there is no existing drain in the building.

Foundation Drain

24) For all new construction of buildings, the engineer must address the issue of the foundation drain and under drain.

Plaques

25) Proposed catch basins require a “Do Not Dump” plaque that will be purchased from BWSC at the time of the General Service Application.