

SEWER CONNECTION SPECIFICATIONS

- **A. MATERIALS:**

1. Pipe and Fittings: Pipe and fittings used for sewer service connections shall be SDR 35 PVC or cast iron with bell and spigot joints. Hubless pipe will not be allowed.
2. Saddle: Saddle connection shall be 'DFW/HPI FLEXIBLE SADDLE' as manufactured by HEFCO Plastics, Inc., of Bedord, Texas or approved equal.
3. Wye or Tee: Wye or Tee connection shall be PVC or cast iron with "Fernco" type connectors.
4. Size: The size of the pipe shall be as determined using the procedures outlines in Section A-02 of Appendix A of the State of Vermont Environmental Protection Rules. The minimum size for any gravity sewer connection shall be four inch.

- **B. EXCAVATION AND BACK FILL MATERIAL:**

Trenches will be excavated to the required line and grade of sufficient width to permit proper installation of pipe and appurtenances and thorough tamping of back fill material. All excavations are to be conducted in compliance with all applicable safety rules and regulations. Soft or unsuitable material existing below the required bedding shall be removed and replaced with approved material. No unsuitable material shall be used for back fill. Unsuitable back fill shall include: stones or rocks over 6" in largest dimension soft clay wet or unstable material wood or other organic matter frozen material pieces of paving or concrete

- **C. INSTALLATION OF PIPE:**

1. Sewer connections may be constructed by one of the following methods:
 - a. Installation of a wye or tee saddle connection on the sewer main. This is generally the easiest method.
 - b. Removal of a short section of the sewer main and installation of a manufactured wye or tee.
 - c. Direct connection to a precast concrete manhole using a Kor-N-Seal fitting or approved equal.
 - d. For large diameter concrete pipes, coring the main and the installation of a Kor-N-Seal fitting or approved equal.
2. Lay pipe and install fittings in accordance with manufacturer's recommendations.
3. Pipe shall be laid on a thoroughly compacted bedding of crushed gravel, pea stone or clean sand carefully graded to match the desired slope of the pipe. The bedding shall be a minimum of 6 inches in earth cuts and 12 inches in rock or ledge cuts.
4. At all times when pipe laying is not in progress or the trench is left unattended, the open ends of the pipe shall be closed by water tight expandable pipe plugs or tight fittings caps.
5. The minimum slope of the gravity sewer service connection shall be 1/4 inch per foot.

6. Clean outs shall be provided at each horizontal change in direction of the sewer service greater than 45 degrees and at intervals of not more than 100 feet. Sewer service changes in direction of greater than 45 degrees shall be made with a number of bends or less than 45 degrees or long sweeps fittings. Manholes are acceptable in lieu of clean outs.
7. No connections of roof drains, area drains, foundation drains, cellar drains or other clean water sources or any storm drains will be allowed to sewer service connections.

• **D. BACK FILL AND RESTORATION:**

1. Crushed gravel, pea stone or clean back fill material shall be placed over the pipe to an elevation 6 inches above the top of the pipe. Care shall be taken to pack the material in under the edges of the pipe while not disturbing the pipe grade.
2. Additional back fill shall consist of suitable material and be placed and compacted in 8 inch layers.
3. In lawn areas, the final 3 inches of back fill shall be clean topsoil.
4. Under roadways or driveways, the gravel base and pavement will be replaced. The gravel base to be crushed gravel matching the depth of the existing gravel, but in no case less and 12 inches.
5. All "hot mix" pavement shall match existing pavement in depth, but in no case shall the depth of the pavement be less than 3 inches. The existing pavement will be neatly cut back to a line six (6) inches (minimum) from the edge of undisturbed existing gravel base prior to patching.
6. Pavement Patching: a. After "hot mix" plants open in the spring until October 1st temporary pavement patch (cold patch), permanent pavement patch (UPM or QPR 2000), or permanent hot mix pavement shall be placed within 48 hours of the final back filling. If temporary pavement patch is used, it shall be removed and replaced with "hot mix" pavement prior to October 1st. b. After October 1st and before the hot mix plants open in the spring, permanent pavement patch (UPM or QPR 2000) shall be placed within 48 hours of the final back fill.
7. Concrete pavement removed shall be replaced in kind. The new concrete shall be placed so as to be flush with and securely tied to the existing concrete by doweling or by cleaned reinforcing rods left protruding from the existing concrete. The existing concrete pavement will be neatly cut back and removed to a line six (6) inches (minimum) back from the edge of undisturbed existing gravel base prior to patching.
8. The Contractor shall restore all areas disturbed by the work to a condition equal to or better than that existing prior to the work. This will include topsoil and seeding of lawn areas, pavement, sidewalk and curb replacement, etc.
9. All excavations in the roadway must be back filled at the end of each working day.

• **E. SAFETY AND TRAFFIC CONTROL:**

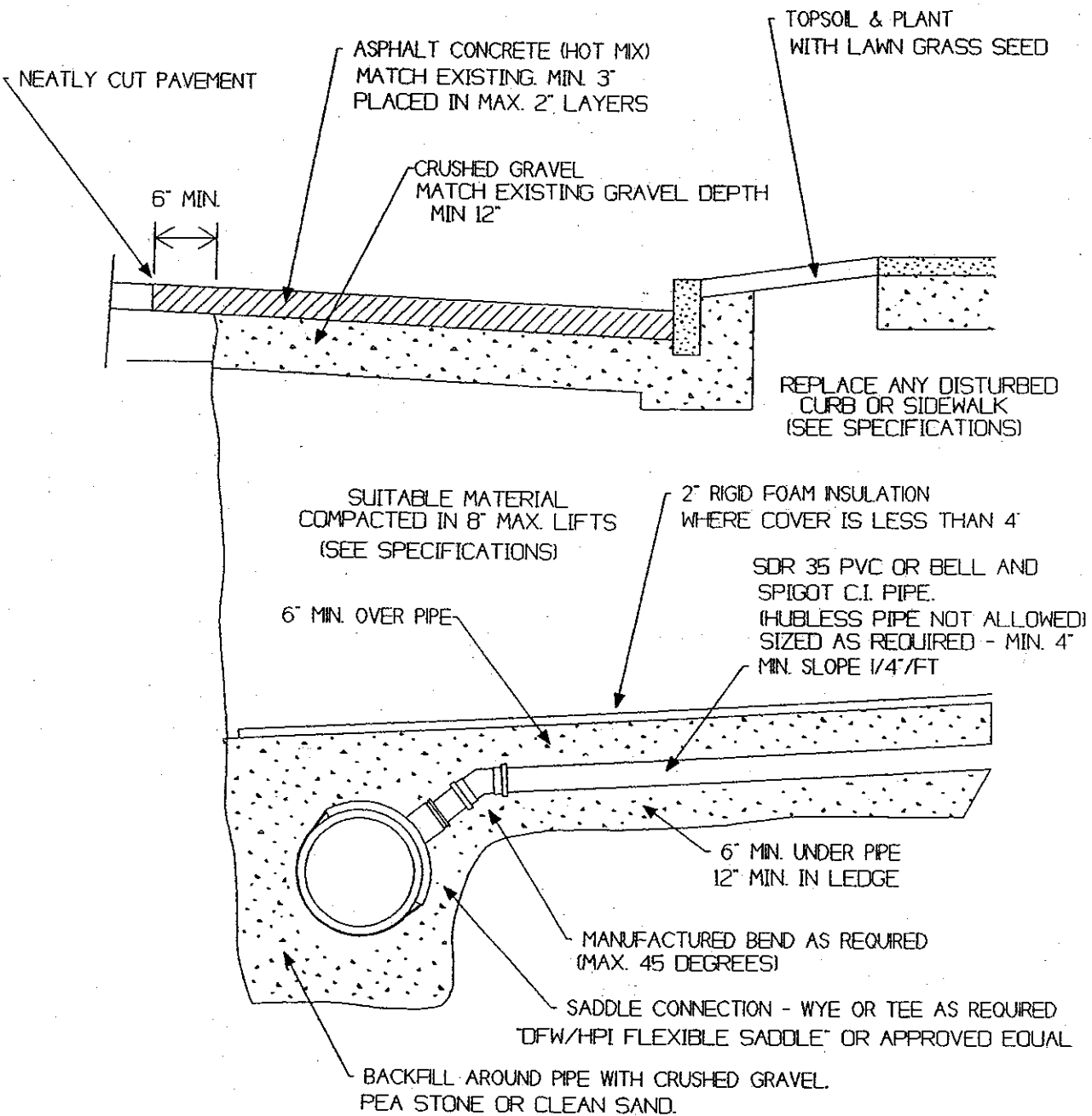
1. It is the responsibility of the Contractor to be familiar with all applicable Federal, State, Local and other safety rules and regulations and to conduct

the work at all times so as to be in compliance with those rules and regulations.

2. Traffic control is to be coordinated with the Rutland City Police Department if uniformed Rutland Police officers are required, the cost of providing them will be the responsibility of the Contractor.
3. As a minimum, one way traffic must be maintained at all times.

• **F. WORKING HOURS AND DAYS:**

1. No work will be permitted in the street or street right of way after 5:00 p.m. or sunset (whichever is earlier) or before 7:30 a.m. or sunrise (whichever is later)
2. No work will be permitted in the street or street right of way on Saturdays, Sundays or Holidays as observed by the City of Rutland.



TYPICAL SEWER CONNECTION
(NOT TO SCALE)