

# TOWN OF ANDOVER, MASSACHUSETTS

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DEPARTMENT OF MUNICIPAL SERVICES  
WATER TREATMENT PLANT  
397 LOWELL STREET 01810 -4416

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## TOWN OF ANDOVER STREET OPENING REQUIREMENTS

A Street Opening Permit must be obtained from the Town Engineer's office for any excavation within the layout of a Town street, including sidewalk or shoulder areas.

### Permit Requirements:

The petitioner must complete the following items before a permit will be issued:

- A. Premark the work area as required by the "Dig Safe Law", Massachusetts General Laws Chapter 82, Section 40.
- B. Contact Dig Safe and obtain a Dig Safe # at least 72 hours in advance of the excavation start date, exclusive of Saturdays, Sundays and legal holidays. Also contact the Town Engineers Office at 978-623-8350 at least 72 hours in advance of the excavation start date, exclusive of Saturdays, Sundays and legal holidays to request a markout of water, sewer and drain lines in the area.
- C. A performance bond for a minimum of \$ 5,000.00 must be submitted or a current bond must be on file with the Town Engineers Office. The Bond must remain in effect for a period of at least one year. On larger jobs such as main line installations or extensions, the Director of Municipal Services or his agent will establish the amount of said bond.
- D. A Certificate of Insurance must be submitted with the following coverage requirements:
  1. Comprehensive General Liability:

Bodily Injury	Minimum coverage
Each Person	\$ 500,000
Each Accident	\$ 500,000
Property Damage	
Each Accident	\$ 100,000
Aggregate	\$ 300,000
  2. Workers Compensation Insurance as required by Law.
  3. The Town of Andover as additionally insured must be included on the policy.
- E. A fee of \$ 60.00 is required for all Street Opening Permits, including emergency excavations. This fee must be paid at the time the permit is issued.
- F. Obtain a separate **Trench Permit** for any proposed trench excavation in excess of three feet in depth, pursuant to Massachusetts General Law, Chapter 82A, Section 1 and 520 CMR 7.00 et seq. (as amended). A fee of \$25 is required for a Trench Permit.

The original Bond and original Certificate of Insurance must be submitted to the Town Engineers Office before a permit can be issued. No permit will be issued before the bond or insurance is in effect. The contractor business information including agent name, address, business phone as well as an emergency contact phone numbers shall be provided on the permit for use in the event of an emergency. Copies of the permit shall be given to the Fire Department and Police Department after obtaining the permit from the Engineering Office.

**Work Notification:**

The Director of Municipal Services or his agent shall be notified 24 hours before the actual start of any excavation and 24 hrs before resuming work after a break in the project.

**Moratorium:**

Permits for any non-emergency excavations are prohibited on any road that has been resurfaced within the past 5 years.

**Winter shutdown period:**

Permits will not be issued for any non-emergency work during the winter period from December 1 to April 1 of the following year. This period is subject to change by the Director of Municipal Services.

**Excavation and Restoration:**

**General:**

All work and materials shall be in conformance with the current edition of the Massachusetts Department of Transportation Highway Division “Standard Specifications for Highways and Bridges” and any supplemental specifications, as they pertain to street utility excavations and repairs unless modified herein. In locations where allowed by the Director of Municipal Services, a trenchless utility installation method may be used rather than an open cut method, and in some instances this method may be a strict requirement instead of an open cut method.

**Signs and Public Safety:**

Provisions shall be made for the safety and protection of vehicles and pedestrians at all times during the construction period. All signs and warning devices shall be according to the latest edition of the Manual on Uniform Traffic Control Devices (MUTDC). If the Police Department determines that a police officer or officers are needed to insure the safety of the public during construction, the cost shall be borne by the permit holder. The work shall be conducted so as to maintain at least one lane of traffic at all times. If the work will require a complete closure, prior approval must be obtained from the Andover Police Department. The Andover Safety Officer will determine the detour route and necessary signage to be placed in advance.

**Cutting by Mechanical Means:**

All road surfaces shall be cut by an approved mechanical means before any excavation is started to insure against unnecessary damage to the pavement.

**Excavation:**

Excavation shall be done in a safe manner so as to create a minimum amount of obstruction to pedestrian or vehicular traffic. Contractor operations shall be in accordance with OSHA trench safety requirements.

### **Backfilling Trenches:**

Suitable material that is free of stones larger than 6 inches, any organic matter or other unsuitable material, shall be used and placed in six-inch layers and thoroughly compacted to 95% of the maximum dry density by mechanical means. In roadway areas, the top of the trench shall be backfilled with twelve inches of approved gravel, placed in two layers and compacted by mechanical means to 95%. Any areas where the existing pavement has been undermined shall be cut back and removed before backfilling.

### **Temporary Trench Patch:**

All trenches shall be resurfaced with a temporary patch that is flush with the surrounding pavement, at the end of each working day with a minimum thickness of **3"** of hot-mix asphalt. This should be allowed to remain for a period of one year and be maintained by the permit holder. Any settlement or unsatisfactory areas shall be immediately repaired when notified. No permanent resurfacing shall be done without permission from the Director of Municipal Services or his agent. He shall be the sole agent to determine whether the trench is ready for permanent resurfacing. The contractor shall be required to thoroughly clean all road surfaces at the end of each day.

### **Permanent Trench Resurfacing:**

- A. All trenches shall be cut back 1' on each side of the original cut by an approved mechanical means and the pavement removed, including the temporary patch.
- B. Four inches of Hot Mix Asphalt placed in two layers of 2 ½" binder and 1 ½" top and rolled with a powered roller having a weight of five tons or more. Existing pavements thicker than 4" shall be replaced to an equal thickness using materials as similar as possible to the existing (concrete or cobblestone with concrete, crushed stone with Hot Mix Asphalt etc.).
- C. Before placing Hot Mix Asphalt, all pavement edges shall be thoroughly cleaned and all joints shall be satisfactorily emulsified and again after placing top course of Hot Mix Asphalt, all joints shall be emulsified and sanded using screened sand.
- D. The contractor shall maintain pavement during the guarantee period of one year from the date of permanent resurfacing.

### **Sidewalks and Driveways:**

Any sidewalk that is disturbed shall be removed and replaced to its entire width. Sidewalks being replaced or extended shall have a minimum width of 5 feet. All structures shall be raised at the permit holder's expense. The Town shall specify the grade at which the new sidewalk or driveway is to be replaced, and the cost of raising or lowering the grade shall be borne by the permit holder. The limit of any driveway apron replacement shall be reviewed with the Town's agent and shall generally be from the edge of the traveled way to the rear edge of the sidewalk or the layout line. Sidewalk cross slopes shall be 1.5% including sidewalks through driveways. Curbs shall be restored completely to match existing curbing

- A. **Hot Mix Asphalt sidewalks and driveway aprons:** 3" of Hot Mix Asphalt placed in two layers of 2" binder and 1" top on 8" of well-compacted gravel. Roller to be five tons or more. All joints in sidewalks and driveways are to be emulsified and sanded.
- B. **Cement concrete sidewalks and driveway aprons:** Cement concrete shall be a 4" thick monolithic pour, 4000 lbs., with ¾" stone, 6 x 6 10/10 wire mesh, air entrained with an expansion joint every 30 feet using approved expansion joint material on 8" of well-compacted gravel. Driveway aprons shall be the same as sidewalks except thickness of concrete must be 6" inches. All sidewalks and drives shall be sprayed with an approved curing compound and protected against drying too rapidly. Cement concrete sidewalks shall not be poured after October 1<sup>st</sup> unless approved by the Director of Municipal Services.

## **Trenchless Utility Installation Requirements:**

In locations where trenchless utility installations are to be used instead of an open cut across a road or driveway, a directional drilling method, which includes a drilling and tracking system, as approved by the Director of Municipal Services, shall be employed. Pneumatic boring or "punching" method is prohibited, unless otherwise approved by the Director of Municipal Services.

## **Special Requirements:**

### **Backfilling and Paving:**

Special backfilling and paving may be required in addition to the above specifications where ordered by the Director of Municipal Services. Special requirements may include, but are not limited to the following:

- A. **CDF Backfilling:** Trenches shall be backfilled to within four inches of the existing pavement surface with Controlled Density Fill (CDF), Type 2E, Flowable (Excavatable) conforming to Subsection M4.08.0 of the MDPW Standard Specifications for Highways and Bridges referenced above. Steel plates may be necessary to cover the CDF until it has reached suitable strength to support traffic, at which time the plates shall be removed and Permanent Resurfacing of 4 inches of Hot Mix Asphalt (2.5" binder & 1.5" top) shall be placed and compacted as specified above.
- B. **Infra-red Surface Treatment:** After the Permanent Trench Resurfacing has been completed as specified above, the entire trench surface shall be finished using an approved infra-red heater to soften the pavement to depth of two or more inches. The area to be treated shall extend one foot outside each side of the trench to blend with the existing pavement.
- C. **Full width overlay:** After the Permanent Trench Resurfacing has been completed as specified above, a 1 ¼" thick, curb to curb, Hot Mix Asphalt overlay may be required on main line utility extensions or main replacement projects as determined by the Director of Municipal Services. Adjustment of all valve boxes and road castings shall be included. Cold milling shall be completed as needed to maintain the curb reveal and to match the elevation of adjoining roadways and driveways.

### **As-Built Plans:**

Upon completion of any water, drain or sewer main extension or replacement, an as-built plan, prepared by a Professional Land Surveyor, meeting the satisfaction of the Town Engineer, shall be submitted within 30 days of completion of the main installation.