

TOWN OF BARNSTABLE

STREET EXCAVATION RULES AND REGULATIONS

AUTHORITY: SCOPE AND APPLICABILITY

The Town Manager acting by virtue of the authority granted by Chapter II, Article VIII, Section 2 General Ordinances of the Town of Barnstable hereby adopts and makes the rules and regulations governing excavation and construction within the layout of a public way or public place controlled and maintained by the Town of Barnstable.

SECTION 1.00: PURPOSES

While public ways are established and maintained for the purpose of facilitating communication and safe and unrestricted travel of persons and vehicles of various types from one place to another within the Town, property owners and public utilities may be granted authority to utilize portions of a public way for certain other bona fide purposes such as access to their property and the installation and maintenance of utility services and related appurtenances. The rules and regulations set forth herein establish controls and standard procedures for permitted excavation, construction, and reconstruction within the layout of public ways and other public places in order to prevent unnecessary or unacceptable interference with their intended use and to protect the significant investment made by the Town in improving and preserving public property.

SECTION 2.00: DEFINITIONS

For the purpose of these rules and regulations the words and phrases used herein shall have the following meanings except in those instances where the text clearly indicates a different meaning.

Applicant

Any person, firm, partnership, association, corporation, company, or organization of any kind, including public utilities, licensed to undertake excavation, within the layout of a public way who applies for a permit to excavate or in any way make a change to existing conditions within the layout of a public way or in a public place within the Town.

Department

Town of Barnstable Department of Public Works

Engineering Division

Engineering Division of the Town of Barnstable, Department of Public Works.

Excavation

Any opening in the surface within the layout of a public way or public place within the town made in any manner whatsoever, either planned or in an emergency, or any disturbance of non-paved areas to a depth greater than 1 foot when done by means other than by hand digging for exploratory purposes except an opening in a lawful structure below the surface of said locations the top of which is flush with the adjoining surface and is so constructed as to permit frequent openings without injury or damage to said locations.

Layout of Public Way

The land encompassing a public way that has been laid out on a plan showing the boundaries and measurements and accepted by the legislative body of the town or the county for purposes of easement of passage and dedicated to public use or is otherwise recognized by the Town of Barnstable as being a public way.

Licensed Contractor

Any person, firm, partnership, association, corporation municipal or private, company, or organization of any kind, including public utilities, who is qualified and has appropriate equipment to do the type of work described herein, and has been granted a license to do such work within the Town by the Town of Barnstable, Department of Public Works.

Newly Constructed, Reconstructed or Repaved

Any road, bike path or other hard surfaced area which has been newly constructed, reconstructed, or sealed within the last five years preceding the date of application for permit.

Permittee

Any person, firm, partnership, association, corporation, company, or organization of any kind, including public utilities, who has been granted a permit to undertake excavation or in any way disturb existing conditions within the layout of a public way or in a public place within the Town.

Public Place

Any parking lot, park, square, traffic circle, recreation facility, plaza, or any other property, other than as defined as a public way, owned or controlled by the town and dedicated to public use.

Public Way

Any highway, street, road, land, sidewalk, bike path, rotary or traffic island within the layout of a way accepted by the legislative body of the Town or of Barnstable County for easement of passage and dedicated to public use or is otherwise recognized by Town of Barnstable as being a public way.

Public Utility

Any private company or corporation, municipal corporation, or political subdivision of the Commonwealth that provides electric, water, gas, telephone, sewer, natural gas, or cable television.

Substructure

Any pipe, pipeline, sleeve, tube, main, conduit, tunnel, duct, service, trap, vent, vault, manhole, meter, gauge, regulator, valve, conduit, wire, tower, pole, guy wire, pole line anchor, cable, wire, junction box, and/or any other material, structure, or object of any kind or character, whether enumerated herein or not, which is or may be lawfully constructed, left placed, or maintained in, upon, along, across, or under any public way or public place.

Superintendent

The Superintendent of the Department of Public Works of the Town of Barnstable. The Superintendent may delegate from time to time certain duties described in these rules and regulations to designees who will act on the Superintendent's behalf.

Town

The Town of Barnstable.

Town Manager

The chief administrative officer of the Town of Barnstable. The Town manager may delegate from time to time certain duties described in these rules and regulations to designees who will act on the Manager's behalf.

Working Day

Monday through Friday, exclusive of legal holidays, between the hours of 7:00 a.m. and 4:00 p.m.

SECTION 3.00 LEGAL REQUIREMENTS

All construction and/or installation within the limits of Town roads and rights of way require a permit signed by the Superintendent before any work can be performed. Included, but not limited to, are the following types of operation:

- A. To construct, repair, install, and/or maintain sanitary sewers, storm drains, water mains and appurtenance, or direct buried cables, gas mains, telephone and electrical cables or conduits and service connections thereto, roadways, driveways, pavement extensions, manholes, inlets, catch basins, fire hydrants, sidewalks, curbs or steps.
- B. To erect and maintain poles, wire, guys, cables, and overhead structures where excavation is required.
- C. Any other construction operations, other than Town contracted projects, which may cause abnormal wear to or deface or damage existing structures, pavement, curbs, sidewalks bike paths or vegetation areas.
- D. The issuance of a permit to an applicant to perform any of the above operations does not relieve the applicant in any way from complying with rules, regulation, laws, and acts or other local, regional, State or Federal departments or agencies.
- E. Applicants, if not the licensed contractor intending to do the work, shall identify on the permit application the name of the contractor or subcontractor who would do the work. No Permittee, contractor, or subcontractor shall perform work unless

it is licensed to do so by the Engineering Division and has an up to date performance bond on file with the Town.

SECTION 4.00 PERMIT APPLICATION REQUIREMENTS

The following requirements are established under the purview of these regulations.

4.10 Permit Procedures

No person shall make any excavation in any public way or place without first obtaining a permit granted for the specific work issued by the Superintendent; except as otherwise provided in these rules.

A. Filing Application. An application for permit must be filed with the Department's Engineering Division at least five (5) days (Saturdays, Sundays and Holidays excluded) prior to any planned excavation. Standard application forms for this permit may be secured from the Engineering Division. Each application form shall be completely filled in, signed, and mailed or delivered to the Engineering Division, Department of Public Works, 382 Falmouth Road, Hyannis, MA. 02601. The applicant shall provide an explanation of the proposed work on the application and a dimensioned sketch or diagram either in the space provided on the application or on a separate sheet attached to the application. The sketch/diagram shall show the location of the work to be done in relation to the outstanding features of the road such as property lines, intersections, pavement lines, sidewalks, trees drainage structures, and utility poles (by number) and shall also show the nature and extent of the work proposed. The completed application form shall contain the Dig-Safe Identification Number that is issued by that Agency upon notification of proposed activity. (It shall be noted that water, sewer and cable TV substructure locations must be arranged for separately)

B. Disclosure of Methods and Materials. The applicant will be required to disclose the methods and materials proposed to be used on unusual or complex projects. In the event the Permittee discovers that additional work or repairs not identified in the original permit must be performed at the same location, the Permittee must apply to the Department for a permit amendment to authorize the additional work.

C. Requirement for Plans and Specifications. When applications are made for permits involving work of major scope, they must include duplicate sets of complete available plans and specifications. The plans shall be detailed so that the exact location of

various parts of the work, the risk of injury to road users, and the possibility of damage to trees, road structures, and private property may be readily determined.

When it appears that the work proposed in an application does not conform to Town regulations and standards or may cause substantial or needless damage to a road, or create excessive disturbance to traffic, or create exceptionally dangerous conditions not commensurate with the benefits to the Applicant the requested permit will be denied. The Applicant shall be informed of such rejection and the reasons for the decision.

The Superintendent may refuse to issue a permit to any Applicant when, in the Department's opinion, work performed under a previous permit issued to the applicant was not properly executed, or when said Applicant has failed to reimburse the Town for recoverable charges billed under terms governing the previous permit.

4.20 Emergency Permits

Nothing in these regulations shall be construed to prevent the making of such excavations as may be necessary for the preservation of life or property, or for making emergency repairs, provided that the Utility or person making the excavation applies to the Town for such a permit on the first working day after such work in commenced. The application shall contain a written statement of the conditions which necessitated the work. Contractors performing emergency work must have a Certificate of Insurance on file with the Department prior to performing any-work within public places. If, in the judgment of the Superintendent, traffic conditions, the safety or inconvenience of the traveling public, or the public interest require that the excavation be permitted to eliminate the emergency situation work the Superintendent shall have full power to require that an adequately sized crew of men be employed by the Permittee so that the excavation work will be completed in a safe manner and the shortest possible time.

4.30 Issuance of Permits

A permit shall be issued for a period not exceeding one (1) year. If the permitted project has not begun within one year a new permit must be applied for. A permit will only be issued after:

A. Completion of all aspects of the application for the permit.

- B. Receipt of surety and proof of insurance in the required amounts.
- C. Payment of fees as required by the Superintendent.
- D. Payment for permanent repair costs, if applicable.

A permit must be signed by the Superintendent, or the Superintendent's designee, before it becomes valid. Approved permits will be issued within five (5) working days after completion of the requirements of Section 4.30 a, b, c, and d. The Permittee is prohibited from performing any portion of the work until the above mentioned items have been complied with and the Permittee has provided the Engineering Division with written notice, at least twenty-four (24) hours in advance of the commencing of the actual work. The Permittee shall notify the Engineering Division, in writing of the completion of the project within two (2) days following completion of all work.

4.40 Hold Harmless Condition

The Applicant shall agree as a condition governing the issuance of a permit that they will hold harmless the Town, the Town Manager, the Superintendent, and/or their agents from any and all claims and actions whatsoever arising, from the exercising of said permit.

4.50 Certificate of Completion

Upon receipt of written notification of the completion of a project as required in Section 4.30, the Superintendent will have the site inspected and if it is agreed that all aspects of the project are indeed complete, a Certificate of Completion will be issued the Permittee stating that the project has been completed in accordance with the requirements of the permit.

If the project does not meet all criteria specified in the permit regarding the completeness of the project, a notice will be issued to the Permittee outlining those things that still need to be done in order to complete the project.

4.60 Revocation of Permits

Any permit issued by the Town under this regulation is revocable immediately upon written notification to the Permittee. Written notification shall be considered to have been given when it has been mailed by certified mail to the address provided on the permit application and shall be effective as of the date of mailing.

SECTION 5.00 FINANCIAL REQUIREMENTS

The following requirements are established under the purview of these regulations:

5.10 Schedule of Fees

The Department of Public Works shall levy charges and fees based on the most current schedule of fees approved by the Town Manager. The fees shall be charged for obtaining contractor licenses; excavation or construction permits, and for infrared patch treatments contracted for by the Town. The Superintendent may waive the payment of fees in those instances when it is determined that doing so is in the public interest.

5.20 Bonds

Prior to the issuance of a permit, the applicant shall deposit with the Department a satisfactory bond in the name of the Town of Barnstable from a surety company authorized to do business in the Commonwealth of Massachusetts or alternatively a certified check payable to the Town of Barnstable in an amount and form as shall be determined by the Superintendent. The bond shall be conditioned substantially that the Permittee shall guarantee the faithful and satisfactory performance of the work in all respects, and shall replace or restore that portion of any public place in which said applicant, their employees or agents shall disturb. The amount of the bond shall be computed on the basis of cost estimated by the Superintendent to be sufficient to make proper restoration or repairs and shall be established separately for each permit so that the Town will be protected against loss in the event of the failure of the permit holder to complete the work or make required repairs or restoration of damages involving work or encroachment authorized by the permit. The Superintendent shall advise the applicant as to the amount of the bond required immediately upon preliminary approval of the application. All bonds shall be written so as to allow the Town without further recourse, to instruct the Department to perform work deemed necessary by the Superintendent to correct any deficiencies and all costs incurred by the Town shall be applied against the bond if they are not recovered within thirty (30) days following the Permittee's receipt of a bill from the Town. Town, State and Federal agencies are exempt from this requirement when they are the permit applicant.

5.30 Insurance Requirements

An applicant who is to do the work shall provide the Department prior to issuance of a final permit, Certificates of Insurance coverage for Owned and Non-owned Automobile, Commercial General Liability, and Workers' Compensation insurance. All are to be issued by Insurers authorized to issue such insurance in Massachusetts and acceptable to the Town of Barnstable.

The Permittee shall supply at the time of filing of the application Certificates of Insurance from his Insurer confirming present coverage in the following insurance categories:

A. Workmen's Compensation - statutory limits as provided by Massachusetts General Laws, Chapter 152 with minimum limit of Employers Liability of \$1,000,000.

B. Commercial General Liability Insurance Covering the Premises, Operations, Completed Operations, Contractual Hazards that may be presented by the work to be done, in an of \$1,000,00 each Occurrence Limit, a \$3,000,000 Products-Completed Operations Aggregate Limit and a \$2,000,000 General Aggregate Limit. Property damage insurance shall be in the amount not less than Five Hundred Thousand (\$500,000) Dollars for each accident and not less than One Million Dollars (\$1,000,000) aggregate.

C. Owned and Non-Owned Automobile Liability Insurance in an amount not less than \$1,000,000 Combined Single Limit. The aforementioned coverages shall remain in full force and effect throughout the period of the permit. Similar insurance coverage shall be provided by any Sub-contractor of the Permittee to cover their operations with the same minimum limits as required of the Permittee.

The Superintendent may require increased limits of liability. The period of insurance coverage must extend through the guaranteed period of the permit. Cancellation of insurance coverages automatically cancels the permit.

5.40 Fines

A. Performing Non-Emergency Work without a Permit. Any person, or partnership, association, corporation, political/legal subdivision, or organization of any kind including utility companies who perform non-emergency excavation work without a permit or who continues to perform excavation work of any kind after a permit

has expired, shall be fined \$200 a day until a permit or permit extension has been approved.

B. Failure to Obtain Permit within One-Day following Emergency Work. Any person who performs emergency work and fails to apply for a permit within one (1) working day following start of the work shall be fined \$200 a day until a permit has been applied for and approved.

C. Unjustified Emergencies. Anyone who performs work without a permit on the basis that it is an emergency and subsequent documentation as required in these regulations fails to justify the emergency, shall be fined \$200 a day from the day the work commenced until a permit has been applied for and approved.

All repairs shall be done in accordance with the requirements outlined in the Performance Standards appended to these regulations and made a part hereof and the Specifications of the Department of Public Works.

SECTION 6.00 NOTIFICATIONS OF UTILITIES

Before an application for Permits is initiated, the applicant or their contractor must contact Dig Safe and all other appropriate utilities and Town agencies. Proof of that notification must be provided with the application for permit.

SECTION 7.00 CONTRACTOR LICENSING PROCEDURES

All contractors wishing to perform excavation work in public ways and places within the Town (not including State-controlled areas) must be licensed to do such work by the Department. Contractors seeking such licenses should request application forms from the Engineering Division of the Department of Public Works. The completed application certified as to authenticity/validity, shall then be filed with the Engineering Division together with the following items:

A. A copy of a valid construction supervisor's license issued by the Commonwealth of Massachusetts, Department of Public Safety

B. A valid certificate of insurance pursuant to the requirements of Section 5.30 of these regulations

C. An application fee pursuant to the requirements of Section 5.10 of these regulations

SECTION 8.00 PERFORMANCE STANDARDS FOR EXCAVATION/CONSTRUCTION WITHIN PUBLIC WAY AND PLACES

8.10 Work Safeguards

A. General Requirements. The Permittee shall be responsible for the safety of the public and property from the time work is started the end of his guarantee period.

B. Traffic Protection. The Permittee shall maintain safe passage for two lanes of vehicle traffic whenever possible at all public intersections as well as safe crossings for pedestrians at intervals of not more than three hundred (300) feet. If an excavation is made across a public way, it shall be made in sections to assure maximum safe passage for vehicles and pedestrians. If the way is not wide enough to hold excavated material for temporary storage, the material shall be immediately removed from the location.

C. Routing of Traffic. The Permittee shall take appropriate measures to assure that during the performance of the excavation, so far as practicable, normal traffic conditions shall be maintained at all times so as to cause as little inconvenience as possible to the occupants of the abutting property and to the general public. Upon receipt of approval from the Superintendent and the Chief of Police, a Permittee may close off streets and walks to all traffic for a period of time prescribed by the Superintendent if in the Superintendent's opinion, it is necessary. When the Superintendent or the Chief of Police deems it necessary, the Permittee shall engage a police officer or police officers to maintain traffic control and public safety of a project.

D. Traffic Control Devices. The Permittee shall furnish and install necessary traffic control devices to insure the safe and expeditious movement of vehicular and pedestrian traffic through the construction area. Traffic control devices include among others signs, warning lights, cones, barricades and hand signaling devices. All such devices shall be in accordance with the provisions of "Massachusetts Manual on Uniform Traffic Control Devices for Streets and Highways. Additional devices may be required by the Superintendent and/or Chief of Police. Detour signs shall clearly mark the alternate route and shall be of sufficient number and clarity of instruction to avoid confusion. Any warning device that is to be left in place after sunset and prior to sunrise shall be equipped with a functioning warning light.

E. Access to Vital Structures. The excavation work shall be performed so as not to interfere with access to fire hydrants, fire stations, fire escapes, water gates, underground vaults, catch basins, or any other vital public necessity as designated by the Superintendent or designee.

F. Noise. The Permittee shall conduct and perform excavation work in such a manner as to avoid unnecessary inconvenience and annoyance to the general public and occupants of neighboring property. Except in the case of an emergency, no work shall be performed between the hours of 7:00 p.m. and 7:00 a.m.

G. Erosion Control. The Permittee shall take whatever precautions are necessary to insure that run off will not create erosion and siltation problems. In particular, the Permittee shall protect drainage structures from siltation by whatever means are necessary, including but not limited to; the piling of excavated materials with impervious membrane, and the installation of hay bales or filter fabric fences. In the event that drainage facilities do become damaged by siltation, the Permittee will be required to clean or replace damaged drainage structures as determined by the Department, at the expense of the Permittee.

8.20 Driveways

A. Construction. Driveway entrances onto public ways shall be constructed or reconstructed according to the conditions existing in the immediate area and shall where possible have a positive pitch to the street and a minimum of 3" of Type I asphalt in the area of the drive located within the public way. Driveway entrances in areas which have concrete sidewalks shall have a minimum thickness of eight (8) inches of Portland cement concrete with 6" x 6", Number 8 wire reinforcing placed on six (6) inches of 3/4" dense grade material. All openings shall be bituminous concrete or cement concrete extending for a minimum of ten (10) feet back from the existing roadway pavement. If openings are to be constructed through existing sidewalks, the requirements as stated above will extend through the full width of sidewalk or for ten (10) feet whichever is greater. In addition, all sidewalk construction will comply with the standards set forth in the "Rules and Regulation of the Architectural Barriers Board" of The Commonwealth of Massachusetts and the "Americans with Disabilities Act".

B. Location. Driveways shall not enter onto roadways on small radius curves and shall be positioned so as to provide maximum sight distance and safety. Tree removal will be permitted only when an adequate driveway entrance cannot be established in a location where such removal could be avoided.

C. Abandoned Entrances. Abandoned entrances shall be reconstructed to match the existing surrounding area to include the installation of granite curbing where applicable. Entrances to be abandoned will be so noted on the plans submitted with the application.

D. Wheelchair Ramps. Existing wheelchair ramps which are damaged or removed shall be reconstructed of Portland cement concrete or bituminous concrete with appropriate curb edges in accordance with specifications and details available from the Engineering Division.

8.30 Sidewalks and Bike paths

The following shall apply to all sidewalks and bike paths owned or maintained by the Town.

A. Pavement Restoration. Full width pavement restoration shall be required for all sidewalk and bike path excavations.

B. Bituminous Concrete Sidewalks and Bike paths. Sidewalks and bike paths constructed of this material shall be repaired using the specifications required for roadway backfilling and patching, with the exception that the existing base may be reused if the material is suitable in the opinion of the Superintendent. The thickness of the bituminous material will be a minimum of two (2) inches in one course.

C. Concrete Sidewalks. Sidewalks constructed of concrete shall be repaired by making a new concrete section or sections through which the trench passes. Preformed expansion joints, when deemed necessary, will be installed against buildings, walls, steps, foundations or existing concrete sections. Specifications and details are available from the Engineering Division.

D. Brick Sidewalks. Sidewalks constructed of brick shall be repaired in accordance with specifications and details available from the Engineering Division.

These regulations will apply to all sidewalks and bike paths owned or maintained by the Town.

8.30 Curbs and Berms

The following shall apply to all curbs and berms owned or maintained by the Town:

A. Precast Concrete and Granite Curbs. Concrete or granite curbing which in any way is damaged shall be replaced with granite curbing unless otherwise approved by the Superintendent and shall conform to standards, specifications and details available from Engineering Division.

B. Bituminous Curbs and Berms. Existing bituminous curbs and berms which are damaged shall be replaced in a manner which matches the cross-section of existing surrounding curbs and berms unless otherwise directed by the Superintendent. Installation shall be in accordance with standards, specifications and details available from the Engineering Division.

C. Poured Concrete Curb. The use of poured in place concrete curb is prohibited without specific written approval of the Superintendent.

D. Disposition of Existing Granite Curb. All salvageable granite curb recovered from a public way shall be delivered to the Department of Public Works Highway Division located at 382 Falmouth Road (Route 28), Hyannis, Massachusetts.

8.40 Protection of Property

A. Vital Structures. All excavation work shall be performed and conducted so as not to interfere with access to fire hydrants, fire stations, police stations, fire escapes, catch basins, or any other vital public necessity as designated by the Superintendent.

B. Adjoining Property. The Permittee shall at all times and at the Permittee's own expense preserve and protect from injury the adjoining property by providing proper foundations and by taking such other precautions as may be necessary for the purpose. The Permittee shall, at The Permittee's own expense, shore up and protect buildings, trees, walls, fences or other property likely to be damaged during the progress of the excavation work and shall be responsible for all damage to public or private property or roads resulting from its failure to property protect and carry out said work. All protective work carried out or deemed necessary to protect buildings, foundations and the like must be approved by the Town Building Inspector.

C. Dust and Cleanup. During and upon completion of work, all public ways shall be thoroughly cleaned, at the Permittee's expense, of all rubbish, excess earth, rock and other debris. The Permittee shall take necessary precautions to prevent and avoid dust and to keep gutters free and unobstructed for the full depth of the adjacent curb.

D. Catch Basins. The Permittee shall keep all catch basins clear and serviceable. The Permittee shall make provisions to take care of all surface/ground water, muck, silt, residue, or other run-off pumped or removed from the excavations and shall be responsible for any damages resulting from the Permittee's failure to so provide.

E. Utilities, Sewers and Drains. The Permittee shall in accordance with Massachusetts General Laws, give proper and timely notice to public utilities before making any excavation in a public way. The Permittee shall not interfere with any utility. If it becomes necessary to relocate an existing utility, this shall be done by its owner and the cost of such work shall be paid for by the Permittee. The Permittee shall inform itself as to the existence and location of all underground facilities and protect the same against damage. The Permittee shall adequately support and protect by timbers, sheeting, shoring, etc. all pipes, conduits, poles, wires, cables or other appurtenance which may be, in any way, affected by the excavation work, and do everything necessary to support, sustain and protect those facilities under, over, along or across the proposed work area. In the event any of said pipes, conduits, poles, wires, cables or appurtenance are damaged, and for this purpose pipe coatings or outer encasements or similar type protective devices are to be considered as part of a substructure, such damage shall be repaired by the agency or persons owning them and the cost of such repairs paid for by the Permittee. The Permittee shall be responsible for any damage done to any public or private property by reason of the breaking of any water, sewer, drains or gas pipes, wire, conduits or other such similar type appurtenance.

F. Monuments. The Permittee shall engage the services of a Registered Land Surveyor to reset any survey boundary monuments disturbed during the course of work. All disturbed monuments shall be reset within 30 days of the completion of construction activities. The Registered Land Surveyor shall certify in writing to the Superintendent that the monuments have been properly placed.

G. Trees. The Permittee shall not remove, even temporarily, any trees or shrubs which exist within the public right of way without first obtaining permission from the Town Tree Warden. Every effort shall be made to protect tree root systems by tunneling, boring, or hand excavation where necessary. In the event that a tree or a shrub is damaged, destroyed or is authorized for removal, the Permittee shall replace the tree or shrub at his/her expense. The species, size and place of relocation shall be determined by the Tree Warden. In addition, if three (3) or more trees are involved in a permit all chipable material including branches and slash up to four (4) inches in diameter shall be reduced to chips and delivered to the Department of Public Works, Highway Division, located at 382 Falmouth Road (Route 28), Hyannis. All tree stumps and debris resulting from such work will be removed from the work site at Permittee's expense.

H. Scenic Roads. On roads which have been designated as "Scenic Roads", the tearing down, displacing or destruction of stone walls, cutting or removal of trees and the

repair, maintenance and reconstruction or paving work done within the right of way, including the construction of new driveways or alterations of those existing, insofar as they affect stone walls or trees within the right of way, shall require the written approval of the Planning Board in accordance with Article XLI, Chapter III of the Town's General Ordinances. (A copy of the Scenic Way Listing is available through the Engineering Division)

I. Traffic Signs. No traffic regulating, warning, directional or street signs shall be removed from the area or relocated therein unless so indicated on the plans or unless so indicated by the Superintendent. Signs shall be removed and replaced as directed by the Superintendent.

J. Violations. Any condition at the work site which, in the opinion of the Superintendent, the Police Department, Fire Department or Building Inspector adversely affects the safety of the public or property shall be immediately corrected by the Permittee. If the Permittee fails to take corrective action the Department of Public Works will take whatever action is deemed necessary to correct the problem and the Permittee shall be charged for the cost of the correction. Repeated violation shall result in revocation of the permit and if applicable the loss of the contractors or subcontractors certification.

8.50 Breaking through Pavement, Backfilling, and Patching

A. Breaking through Pavement

1. Approved cutting of bituminous pavement surface prior to excavations is required in order to confine pavement damage to the limits of the trench. Pavement will be saw cut unless otherwise approved by the Superintendent.

2. Sections of bituminous or cement concrete sidewalks shall be removed to the nearest score line or approved saw cut edge.

3. Unstable pavement shall be removed over cave-outs and over breaks and the subgrade shall be treated as the main trench.

4. Pavement edges shall be trimmed to a vertical face and neatly aligned parallel with the center line of the trench.

5. Cut-outs outside of the trench lines must be regular and aligned parallel and/or perpendicular to the center line of the trench.

6. Trenches and excavations shall be braced and sheathed when necessary as required to comply with OSHA specifications:

7. Road surface openings shall be restricted for a period of five (5) years after a new "permanent surface" is laid, except in cases of extreme emergency. When in the opinion of the Superintendent an extreme emergency does not exist, driving, dry boring, coring or jacking methods may be used to accomplish the installation subject to the approval of the Superintendent. Extreme care must be taken to protect existing underground utilities at all times.

8. When excavation is permitted in roads resurfaced within the past three (3) years, the Permittee must install a bituminous concrete patch the full width of the roadway and at least thirty (30) feet beyond the affected area with one (1) inch of dense graded bituminous concrete unless otherwise authorized by the Superintendent: Utility companies placing utilities in a shallow trench (0' to 5') in depth and narrow trenches (1' to 3') in width may in certain instances be exempt from the bituminous concrete patch at the discretion of the Superintendent. The existing paved surface shall be grooved to accept the new overlay at its lineal limits.

B. Backfilling

The excavation in the road must be filled and resurfaced during the same day it is opened unless otherwise allowed by the Superintendent or his/her designee. The trench shall be backfilled with clean gravel in no more than six (6) inch mechanically tamped layers. Excavated material may be used if determined suitable by the Superintendent, to within ten (10) inches of the finished grade with approved material and then six (6) inches of three quarter (3/4) inch dense graded material shall be placed and compacted into the trench and the remaining four (4") inches shall be filled with the bituminous concrete patch. The road surface shall be precut to avoid damaging surfaces surrounding the trench. The backfill and dense graded material in the trench must be mechanically tamped to 95% of maximum dry density as determined by the Modified Procter Test in accordance with ASTM-1557 method.

C. Patches/Repairs

1. Permanent Patching. The permanent patching bituminous concrete base and top shall be laid and rolled two (2) courses and shall be done within six months of the initiation of excavation. The binder (base course) shall be two and one-half (2-1/2) inches in compacted thickness and the top course shall be one and one-half (1-1/2")

inches in compacted thickness. The minimum total thickness of both courses, measured after rolling shall be four (4) inches. The base course of the permanent pavement shall be placed, carefully raked and thoroughly rolled to the required thickness. Before placing the base course of the pavement, the edges of the original pavement surface shall be cleaned of all dirt, dust and debris and then receive an application of approved asphalt emulsion so that the new pavement material may be properly bonded to the old. The joint between the old and new pavement at the road surface intersection will then have an application of asphalt emulsion of at least one (1) foot in width applied to it. The permanent paving shall not overlap the existing pavement and will not have to be applied with a mechanical spreader unless otherwise directed. The Permittee shall furnish, place, grade and compact Bituminous Concrete Pavement of Class I Type 1-1 as shown and specified in the latest Massachusetts Department of Public Works Standard Specifications for Highways and Bridges. The Permittee shall maintain permanent patches for a period of eighteen months or until infrared patching treatment takes place and within 24 hours of notification by the Town shall fill with similar material any depression or holes that may occur as to maintain the surface in a safe and satisfactory condition.

2. Infra-red Patch Treatment. Between six months and eighteen months after the permanent patch is placed, the patch shall be heated up utilizing an infrared machine, and the patch surface reconstructed and blended with the existing surrounding pavement. The result shall be a smooth rideable service. During the process additional bituminous concrete material will be added as required. The infrared equipment used must be approved by the Superintendent. This work will be contracted for by the Department and paid for from part of the fees levied as part of the permit process.

3. Temporary Patches. Under certain conditions, the Superintendent may authorize the installation of a temporary patch. Temporary patches shall preferably be hot Class I Type I- I bituminous concrete but may be substituted for with cold mix if hot mix is unavailable and the substitution is authorized by the Superintendent. The patch shall be laid and compacted in two (2) courses to a minimum of four inches total of compacted thickness to a finished grade matching the existing road surface. Temporary patches shall be removed and replaced with permanent patches within 120 days following placement of the temporary patch. The Permittee shall continuously maintain temporary patches and within 8 hours of notification by the Town fill with similar material any depressions and holes that may occur so as to maintain the surface in a safe and satisfactory condition.

D. Pavement Overlay

Under certain circumstances a one (1") inch thick bituminous overlay for the full section of the road, and extending thirty (30) feet beyond the area affected by the road patch may be required. Generally, this will be required when the patch was made on a road that was resurfaced in the last five (5) years or when a patch is fairly extensive. Where overlays are required they will be noted on the permit.

E. Testing

If required by the Superintendent the applicant will engage at no cost to the Town a certified testing company acceptable to the Department, to sample and test materials and/or compaction. Any deficiencies will be corrected by the applicant. Testing and sampling may include but will not be limited to compaction tests, soil sieve analysis, bituminous concrete density tests, pavement coring's and nuclear density testing.

F. Trenches

Unless a shorter length is specified by the Superintendent the maximum length of open trench permissible at any one time shall be limited to no more than three hundred (300) feet. No greater length shall be open for pavement removal, excavation, construction or backfilling without written permission of the Superintendent.

G. Restoration of Pavement Markings

All permanent pavement markings, crosswalks, traffic center lines etc., which are obliterated or damaged during construction shall be repainted by or under the direction of the Department at the expense of the Permittee.

H. Lawn Surfaces and Plantings

All grassed surfaces which are disturbed shall be replaced with six (6) inches of screened loam, limed, fertilized and reseeded with a good quality perennial lawn seed or sodded. Likewise any areas containing plantings shall be restored to their original condition with the same or similar plantings. Special care shall be taken to insure the areas are re-landscaped to meet the conditions which existed before the excavation. The Permittee shall water and otherwise maintain grass and other vegetation and shall guarantee its survival for a period of 12 months.

I. Shoulders

Shoulders which are disturbed shall be (reconstructed to previously existing grade and regardless of its prior existing condition, shall be loamed with six (6) inches of loam, limed, fertilized and seeded with good quality perennial lawn seed.