

# DEPARTMENT OF PUBLIC WORKS TOWN OF MILFORD, NEW HAMPSHIRE

# **APPLICATION / PERMIT FOR STREET OPENING**

	ALL CENTER" <u>Plant Damage Prever</u> 33 – MA, ME, NH, VT, I		DATE:		
DIG SAFE API	ROVED #	TOWN OF MIL	LFORD PERMIT#		
NAME/ADDRE	:SS:				
LOCATION OF	OPENING:		A-0-14-0-14-0-14-0-14-0-14-0-14-0-14-0-1		
PURPOSE OF	OPENING:				
SIZE OF OPEN	NNG:	REQUESTED DATE OF OPENING:	ESTIMATEDCLOSING DATE:		
NOTES: occurs	it will be re-opened to suitable material and to Appropriate construing Public Works at	the depth required by the To he surface will be restored to ction signs will be placed a intervals before	DAY: NIGHT:		
	Received approved drawings from Contractors:				
	n Drainage, Water Dis	work shall conform with 1 tribution, Sanitary Sewers	Town of Milford's most current and Road Construction		
FOREMAN APPROVAL		DIRECTOR	R APPROVAL		
	)	(Chief of P	PPROVAL olice or his/her designee)		
	OF PENDING WORK				

### **GENERAL PERMIT REQUIREMENTS**

Maximum length of trench to be open at one time shall not be more than one lane or 15 feet and no more than zero (0) feet left open at night. Suitable unrestricted egress to properties abutting the highway shall be maintained at all times. Two-way traffic (nights, weekends and holidays) shall be maintained at all times. Any pavement damage or open trench in paved section (traveled way) must be backfilled and temporarily patched with hot top or cold patch the same day, unless otherwise specified in the permit.

Traffic must be maintained during the performance of the work. The work shall be protected by: suitable barricades, standard and advance warning signs, flags during the day, and proper lighting at night. Uniformed special traffic officers or other certified traffic control personnel shall be provided whenever the Town deems them necessary for the protection of the public. All signs shall be kept in good repair at all times.

During the weekends and on workdays during the hours the job is inactive, a standby crew shall be available in case they are needed for the protection and maintenance of traffic. One or more telephone numbers which will reach the standby crew, shall be furnished to the following people:

- 1. The local Police Chief.
- 2. Director or General Foreman of the Department of Public Works.

Six signs, each four feet by six feet, three at each end of the active work area, shall properly advise approaching traffic of name of contractor responsible for the work and the nature of work being performed. Sign package shall conform to latest standards set forth by N.H. DOT.

Any future surface distortion along the trench lines, due to settlement or other causes attributable to the construction, shall be corrected as required during the period of one year following the acceptance of the project by the Owners.

I / We, the contractor agree to save harmless the Town of Milford, New Hampshire from any and all claims arising from the construction of the work, or from trench settlement or other deficiencies of the construction for a period of one year following the acceptance of the project by the Owners.

### GENERAL ROAD RESTORATION REQUIREMENTS

In areas where the pavement is to be excavated, it shall be neatly and uniformly saw cut with square edges by machine at each side off all trenches. Every precaution shall be used to prevent undermining of the remaining pavement utilizing sheeting as required to prevent cave-in and to protect the remaining pavement. Any undermined areas inadvertently developed shall have the projecting pavement cut square and removed. Excavation and handling of material shall be performed in a manner as will minimize the possibility of such cave-ins. Any blasting required similarly shall be cautiously performed to minimum disturbance beyond the trench limits.

All other excavation shall be performed in a manner as will produce the minimum possible width of disturbed area. Sheeting shall be used as required to prevent cave-ins.

Base Class A Crushed Gravel (as directed in New Hampshire Standard Specifications) shall be placed on properly compacted subgrade in 6 inch compacted layers and shall be equal to existing gravel course depth or a minimum of 18 inches whichever is greater. Each layer shall be compacted to a minimum of 95% of maximum dry density as determined by the Proctor Modified Method.

Bituminous concrete paving mixture shall be placed only when the proper density can be obtained. Precautions shall be taken at all times to compact the mixture before it cools too much to obtain the required density. The mixture shall not be placed on any wet surface or when weather conditions prevent its proper handling or finishing. Bituminous concrete wearing course mixture shall not be placed when the air temperature is below 45 degrees F. Bituminous concrete binder course mixture shall not be placed when air temperature is 32 degrees F.

Equipment shall consist of a self-powered paver that is capable to spreading the mixture to the thickness and width specified, true to the line, grade and crown as was existing, or otherwise approved by the engineer; sufficient smooth metal bedded haul trucks with coves to insure orderly and continuous paving operations; one or more steel wheeled roller having a weight of not less than 8 tons and not more than 12 tons; a power broom and hand tools necessary to complete the project. Other equipment may be used in addition to, or in lieu of, the specified equipment when approved by the Director of Public Works.

All edges of the adjacent pavements shall be trimmed to neat straight lines and cleaned to provide a firm, regular and clean surface to bond the new pavement prior to the placement of each layer of pavement. The previous pavement course shall be thoroughly cleaned prior to placement of the final wearing surface course and the cleaned edges of the adjacent pavement shall be coated with bituminous material to improve the bond between the old and new pavement. Care shall be exercised not to alter original street drainage.

All edges of pavement patches and all construction overlay joints shall receive a coat of emulsified asphalt with sand spread on top.

Paving on frozen ground is prohibited.

All roadways must have a complete coat of bituminous emulsion applied immediately before paving the wearing course.

Cold-planed joints must be provided at all overlay limits. The existing pavement must be removed to maximum depth (1) one inch tapering to (0) zero inches in (10) ten feet, the full width of the overlay. The equipment used shall be a power-operated rotary planing or milling machine capable of uniformly removing the existing bituminous surfaces.

Re-paint all striping within the limits of the overlay. Match existing striping location at overlay limits. All striping layouts shall be approved by the Engineer prior to performing the work. Provide temporary markings (reflectorized plastic markings, R.P.M's) as directed by the Director of Public Works if striping cannot be performed immediately after overlay work is completed.

### **3" TRENCH TEMPORARY BITUMINOUS PAVEMENT:**

#### **GENERAL:**

The Contractor shall furnish all labor and materials to place temporary paving over the trench backfill.

The Contractor shall maintain the temporary bituminous paving (trench patch) in an acceptable condition as determined by the Director of Public Works, until permanent bituminous paving is installed.

The temporary paving shall be placed after backfilling and compacting in accordance with Section 02221 of the Town of Milford General Construction Specifications and within 5 days, or as close to this period as is convenient and acceptable to the Director of Public Works after backfilling.

#### **MATERIALS:**

Temporary bituminous pavement shall consist of plant mix bituminous pavement conforming to Section 403 of

the above referenced New Hampshire Standard Specifications, Type C, Type E and Type F. Type E is to be

used for the wearing course in industrial areas. Type F is to be used in residential areas.

Crushed Gravel base shall conform to 2.1.3 of New Hampshire Standard Specifications for Road and Bridge Construction - Section 304. Bank run gravel shall conform to NHDPW& H Standard Specification 304.2.1.2.

#### **EXECUTION:**

Remove sufficient backfill material to allow placing of a minimum of 12 inches of bank run gravel base and 6 inch Class A crushed gravel thoroughly compacted, and a 3 inch thickness of bituminous concrete temporary trench paving.

Thoroughly clean surfaces of existing paving which will be bonded to temporary patch. The edge of the existing pavement shall be saw-cut to a straight bonding edge, one foot beyond the edge of disturbed pavement prior to placing the 3-inch trench temporary bituminous pavement.

Bituminous concrete temporary paving to be applied in one two inch Type C and one inch Type E course. The surface of paving will be a grade with the existing paving.

### 3" TRENCH PERMANENT BITUMINOUS PAVEMENT:

#### **GENERAL:**

The Contractor shall furnish all labor and materials to install permanent bituminous paving over the pipeline trench.

The paving is to be placed after at least 30 days has elapsed since the placing of temporary paving or sufficient time has elapsed for required compaction to occur, as determined by the Engineer. No final wearing course shall be applied until the permanent binder course has experienced one winter season of use.

#### MATERIALS:

The bituminous binder course shall be Type C and the wearing course Type E or F, as given in the New Hampshire Standard Specifications for Roads and Bridge Construction, Section 400.

### **EXECUTION:**

Saw edges of existing temporary paving to provide a one-foot minimum overlap of the final patch on undisturbed material.

Remove temporary paving and saw cut existing paving.

Reset manhole frames and covers as required.

Reset temporary paving with at least 3 inches of hot bituminous concrete, comprised of two-inch base course Type C and one inch wearing course of Type E (industrial) or F (residential.)

All surfaces are to be thoroughly cleaned to ensure good adhesion between existing surfaces and new permanent trench paving.

Roller compact final wear course to meet existing pavement surfaces exactly.

All edges of pavement patches shall receive a coat of emulsified asphalt with sand spread of top.

### 1" FULL WIDTH PERMANENT BITUMINOUS PAVEMENT - ALTERNATE

#### **GENERAL:**

The Contractor shall furnish all labor and material to install permanent bituminous paving over the full width of the roadway, curb-to-curb or shoulder-to-shoulder.

The paving is to be placed after at least 30 days have elapsed since the placing of the 3-inch trench temporary paving (to remain in place) alternative or sufficient time has elapsed for required compaction to occur as determined by the Engineer.

### MATERIALS:

The bituminous paving trench patch for base course shall be the 3-inch trench temporary bituminous paving (to remain in place) alternative as previously placed, and the wear course, Type E, per New Hampshire Standard Specification for Roads and Bridge Construction, Section 400.

#### **EXECUTION:**

Inspect temporarily paved areas and replace loose or broken paving with hot bituminous concrete patch as required. Particular attention should be paid to the edge joint for unevenness and loose paving.

Bring to grade low or settled areas of the temporary paving using hot leveling bituminous mix.

Reset new manhole frames and covers as required and adjust existing castings as necessary.

Thoroughly clean entire paved surfaces making it suitable for final overlay course.

The Contractor must provide cold-planed joints at all overlay limits as shown on the plans. The existing pavement must be removed to a maximum depth of one (1) inch tapering to zero (0) inches in ten (10) feet, for the full width of the overlay. The equipment used shall be a power-operated rotary planing or milling machine capable of uniformly removing the existing bituminous surfaces.

Apply full width (curb-to-curb or shoulder-to-shoulder) paving course consisting on one inch of Type E hot bituminous wearing course.

### **DUST CONTROL:**

Either water or calcium chloride may be used for dust control.

to perform this work in the manner pr	ch additional costs the Town may incur by reason of failure escribed above and in accordance with said plans and the penalty imposed by Chapter 249, RSA 1955, and
guaranteeing the fulfillment of the provis later instructions issued by the Director	ontinuing Surety Bond in the amount ofdollars sions, instructions and regulations prescribed above, and of Public Works during the performance of the work, and l areas for a period of one (1) year following the acceptance
	the Town of Milford, New Hampshire fully for the services of sproject to insure compliance with the terms of this permit.
I / We, the contractor, and we, the owner a	agree to the following:
will be void subject to a review of the are	freezing rain, rain, fog, or any other act of God) this permit a by the Director of Public Works. Permission to continue day basis after said review, but subject to instructions from entative.
Contractor:	Signature:
Address:	
Town/City/State/ Zip:	·
Phone:	
claims arising from the construction and its appureulation and its appureulation with the construction and its appureulation and its	ess the Town of Milford, New Hampshire from any and all tion, maintenance, and operation of the said tenances and agree to obtain permits from the Director of ture excavation for maintenance or renewal of the said ourtenances thereto within the highway limits.
I / We, the Owners, agree to assume s maintenance, operation, renewal, or ex appurtenances thereto within the highway	such additional cost as the Town may incur due to the tension of said or other limits.
further maintenance of the said reserving the right to require, in the ever	it is for the right of construction, occupancy, operation and and is by sufferance only, with the Town of future alterations, relocation or complete removal of e owners agree to perform such work promptly and at our
Owner:	Signature:
Address:	Title:
Town/City/State/Zip:	
Phone:	



# DEPARTMENT OF PUBLIC WORKS TOWN OF MILFORD, NH

## PERMIT FOR STREET OPENING

Permission for the above described construction, maintenance, and operation is granted, subject to the instructions, regulations, conditions, and agreements above. It is void and to no effect pending filing of said Surety Bond with the Director of Public Works by the contractor.

<b>PERMIT</b>	FEE	\$1	25	.00
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Date Work to Begin:	Town of Milford, New Hampshire Leo Lessard, Director Department of Public Works
Date Work to End:	By: Director of Public Works
Before Using Permit, Notify:	Leo Lessard

Distribution: Public Works Office, Water Utilities Superintendent, Milford Police Department, DPW General Foreman, Contractor and Owner.

Director of Public Works Telephone No. 603-673-1662