



TOWN OF TEWKSBURY

DEPARTMENT OF PUBLIC WORKS
999 WHIPPLE RD
TEWKSBURY, MASSACHUSETTS 01876

Temporary and Permanent Trench Repair Specifications (For Roads Not Under a Moratorium)

Temporary Trench Patch

1. When trench work is required, saw cutting or grinding must be performed to the area of excavation and all the asphalt material must be removed, prior to work being done. Once excavation work is completed and the trench has been backfilled, contact DPW for inspection of the subgrade area at your project site. The subgrade will be inspected to ensure no damage has been caused by moisture or traffic. Several different types of subgrade compaction methods can be utilized such as vibra-tamping, jumping jack compaction and wheel rolling.
2. Upon approval of the trench a temporary asphalt patch can be applied. The temporary patch will be placed at a thickness equal to that of the existing asphalt. This temporary patch will sit for one winter season at which time a permanent patch shall be placed.
3. Dense Binder, Performance Grade (PG) 62-68 with a sieve size of ½", better known as baby binder, will be used for the temporary trench patch. Job Mix (JM) 68, conforming to requirements of MassDOT, subsection M3.11.03

Permanent Trench Patch

1. When the permanent patch is placed, at least, twelve inches on all sides of the trench, shall be milled out and removed prior to final paving. The milled depth shall be 1 ½" minimum. This procedure is called bridging and is used to reduce reflective cracking to the finish surface.
2. An inspection of the milled trench by the DPW Superintendent or its Designee must be performed prior to placing Hot Mix Asphalt.
3. The equipment for milling of pavement surface shall be a power-operated, track propelled planning machine capable of accurately and automatically establishing profile grade along each edge of the machine (within 1/8-inch more or less) by referencing from the existing pavement by means of a ski or matching shoe controlling cross slope at a given rate.
4. The milled area shall provide a smooth riding surface with a uniform textured appearance free from gouges, excessive longitudinal grooves and ridges, oil film and other imperfections, which will produce a non-uniform surface.



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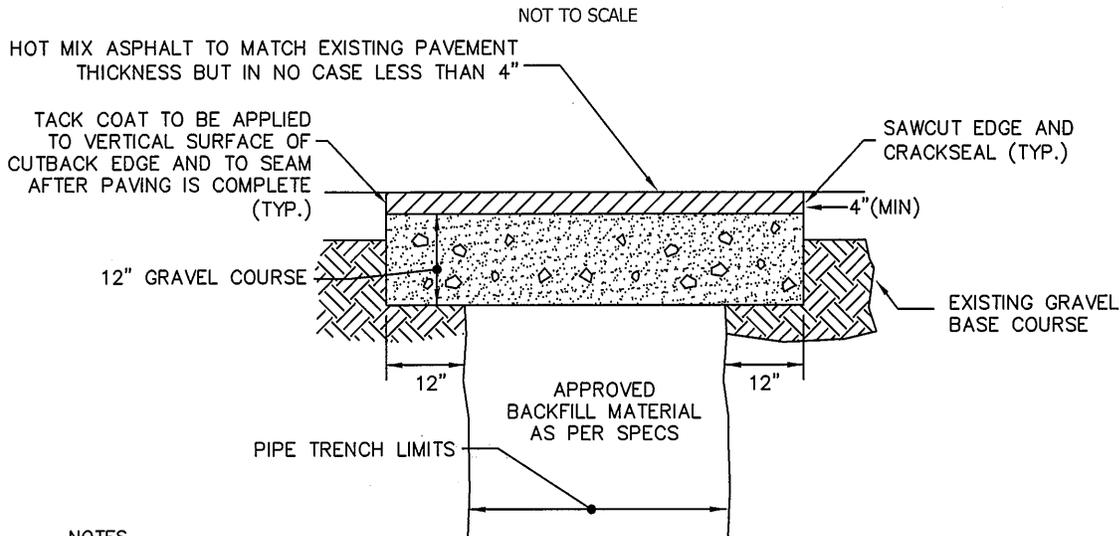
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5. Prior to paving, penetrating asphalt emulsion, tack coat shall be applied to the milled area and the trench edges for proper adhesion between the existing asphalt and the new material. Modified Top PG 86-93, JM 90, conforming to requirements of MassDOT, subsections M3.11.03, will be used as top course. Proper compaction equipment will be used to reach required compaction. After completion of the HMA trench, Polymer Modified Asphalt-Sealant PG 64-22 or PG 64-28 should be used to seal the longitudinal trench joints. This process should be completed no later than one week after the surface course has been placed.
6. Upon completion, contact DPW for final inspection. The applicant will be responsible for trench maintenance for one year or to the time of road resurfacing by DPW, whichever is shortest.

Any item not revised by this specification shall be held to the Rules and Regulations for Street and Sidewalk Openings, adopted March 23, 2004, by the Town of Tewksbury Department of Public Works.

TEWKSBURY SUPPLEMENTAL TRENCH REPAIR INFORMATION (NON-MORATORIUM ROADS)

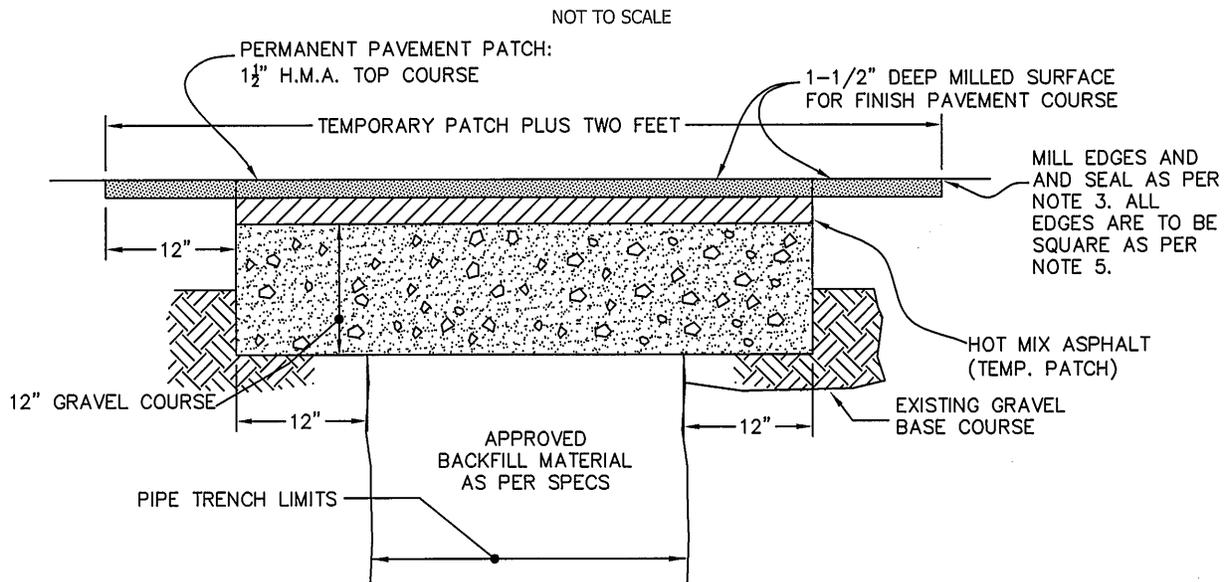
TEMPORARY TRENCH PAVEMENT PATCH DETAIL



NOTES

1. THE ROAD SURFACE SHALL BE SAWCUT TO A STRAIGHT AND VERTICAL EDGE. CARE SHALL BE TAKEN NOT TO DISTURB OR IN ANY WAY DAMAGE THE SURFACE BEYOND THE CUT EDGES.
2. EXCAVATE 1 FOOT BELOW GRADE AND 1 FOOT TO EITHER SIDE OVER THE TRENCH TO PREPARE FOR TEMPORARY TRENCH PATCH. USE GRAVEL BACKFILL TO BE PLACED IN MAXIMUM EIGHT INCH LIFTS AND COMPACTED WITH A SUITABLE MECHANICAL COMPACTOR. NO MATERIAL SHALL BE EXCAVATED FROM THE BANKS OF THE TRENCH TO BACKFILL OR FOR ANY OTHER PURPOSE. BACKFILL MATERIALS SHALL BE CLEAN, FREE OF DEBRIS AND NOT EXCESSIVELY WET OR SATURATED.
3. TEMPORARY TRENCH PATCH PAVEMENT SHALL BE PLACED WITHIN COMPLETED TRENCHES AT THE END OF EACH WORK WEEK (FRIDAY).
4. SEE SPECIFICATION SECTIONS 01063 AND 02500.

PERMANENT TRENCH PAVEMENT PATCH DETAIL



NOTES

1. IN THE EVENT THERE IS LESS THAN 2'-0" BETWEEN THE PAVEMENT TRENCH PATCH AND EDGE OF ROAD, EXTEND PATCH TO THE EDGE OF ROAD AS SPECIFIED AND AS DIRECTED BY THE ENGINEER.
2. TACK COAT SHALL BE APPLIED SO AS TO COMPLETELY COVER ALL MILLED SURFACES PRIOR TO PLACING NEW PAVEMENT.
3. ALL JOINTS BETWEEN THE EXISTING AND NEW TOP COURSE PAVEMENT SHALL BE SEALED WITH HOT POURED RUBBERIZED ASPHALT JOINT SEALANT AS SPECIFIED.
4. PERMANENT PATCH TO BE INSTALLED AFTER THE TEMPORARY PATCH HAS SAT FOR ONE FREEZE/THAW SEASON CYCLE.
5. EDGES WHERE MILLER BEGINS AND ENDS SHALL BE CUT SQUARE WITH A JACKHAMMER, CHISEL OR BY OTHER MEANS AND CLEANED OF DEBRIS.