STATE OF ILLINOIS

Special Provision for Open Cutting Pavement

(Revised 03/20/02)

General Specifications:

The applicant shall notify _____Resident/Field Engineer, Phone_____ or the District Permit Section, Phone; 815-434-8490 twenty-four (24) hours in advance of beginning any work covered under this permit.

A copy of the approved permit shall be present on the job site at all times the work is in progress.

The State Right-of-Way shall be left in good condition. (No advertising material shall be placed within the State Right-of-Way.)

All turf areas, that are disturbed during the course of this work shall be reconstructed to its original lines and grades and promptly seeded in accordance with Section 250 of the Standard Specifications.

Traffic shall be maintained at all times.

Whenever any portion of the work under this permit involves any obstruction or hazard to the free flow of traffic in the normal traffic lanes, plans for the proposed method of traffic control must be submitted to and approved by the District Engineer at least 72 hours (min) prior to beginning any construction operations.

The petitioner agrees to furnish the necessary traffic control devices and flagmen as required by the applicable traffic control standards for the protection of the traveling public.

All traffic control shall be in accordance with the State of Illinois Manual of Uniform Traffic Control devices, amendments thereof and the Illinois Highway Design Standards for Traffic Control. It should be noted that the standards and typical placement of devices shown in the Uniform Manual and the Design Standards are minimums. Many locations may require *additional or supplemental devices.*

Applicable Traffic Control Standards shall be applied to this permit work when required.

The applicant agrees to notify the Department of Transportation upon completion of work covered under the terms and conditions of this permit, so that a final inspection and acceptance can be conducted.

To avoid any revisions to the work completed under the highway permit, the applicant should insure the conditions and restrictions of this permit, the applicable supplemental permit specifications and permit details are fully understood.

If this work is contracted out, it will be the responsibility of the applicant to furnish the contractor with a copy of this highway permit, as the applicant will be responsible for the contractor's work.

No person, firm, corporation or institution, public or private, shall discharge or empty and type of sewage, including the effluent from septic tanks or other sewage treatment devices, or any other domestic, commercial or industrial waste, or any putrescible liquids, or cause the same to be discharged or emptied in any manner into open ditches along any public street or highway, or into and drain or drainage structure installed solely for street or highway drainage purposes.

Excavation/Removal:

Any excavation under the pavement shall be replaced with Controlled Low Strength Material. This material shall be in accordance with the "Controlled Low Strength Material" Specification as included elsewhere. The controlled low strength material shall extend 2' (min) outside the edge of pavement.

Any excavation outside the 2' (min) from edge of pavement shall be promptly replaced with like material, thoroughly compacted and constructed to its original line and grade.

All excess material shall be removed from the State Right-of-Way (including rock exposed during excavation and backfilling operations). Mounding or crowning of the backfill will not be permitted.

Excavation adjacent to the edge of pavement shall be shored to prevent caving if the distance is less than ten (10) feet plus the depth of excavation from the edge of pavement. A Sheet Pile Design shall be submitted for approval to the District Engineer prior to the start of any excavating operations.

Controlled Low Strength Material Construction Requirements:

Placement. The mix shall not be placed on frozen ground, in standing water, or during wet weather conditions. Mixing and placing shall begin only if the air temperature is 2° C (35° F) minimum and rising. At time of placement, the material temperature shall be 5° C (40° F) minimum. Mixing and placing shall stop when the air temperature is 5° C (40° F) and falling.

The mix shall be placed directly from the chute into the space to be filled. Other placement methods may be approved by the Engineer if the mix design is appropriate.

When backfilling against structures, the mix shall be placed in layers to prevent damage by lateral pressures. Side slopes shall be stepped or serrated to prevent wedging action of the backfill against the structure. Each layer shall be allowed to harden prior to placing the next layer.

When backfilling pipe culverts, the mix shall be distributed evenly on each side of the pipe culvert to prevent movement. To prevent uplift of the pipe culvert, the first layer shall stop at one-fourth the height of the culvert. After settlement of the first layer, as determined by the Engineer, the second layer shall stop at one-half the height of the culvert. After settlement of the second layer, as determined by the Engineer, the remainder of the trench shall be filled. A mix may be placed in a single layer for portland cement pipe culverts.

The mix shall not be exposed to freezing temperatures or wet weather conditions during the first 24 hours after placement.

Pavement Patching:

This work shall be in accordance with the applicable portions of Section 442 of the Standard Specifications for Road and Bridge Construction, the Pavement Patching Standard 442101-03 as included elsewhere and the Permit Details.

The patch limits shall be formed by full-depth sawing of the existing pavement in accordance with the pavement patching detail.

One of the following methods shall be used to remove the pavement:

Method A – The pavement shall be removed in one piece by lifting, or further sawed into smaller pieces and lifted out.

Method B – The pavement shall be broken into small pieces and removed mechanically by digging it out. Breaking operations shall start adjacent to the removed wedge. Sufficient care shall be taken to prevent spalling of the adjacent pavement that is to remain in place.

Saw cuts extending past the centerline of roadway or beyond patch limits into pavement that is to remain in place will not be permitted.

Concrete patches shall be doweled on each side of the patch. The type and placement of the bars shall be in accordance with Article 1006.11(b) of the Standard Specifications and Standard 442101-03. The dowel bars shall be grouted into the existing pavement with a non-shrink grout in accordance with the Article 1024.01 of the Standard Specifications.

Concrete patches shall be finished and cured in accordance with Articles 442.06 (g) (h) of the Standard Specifications.

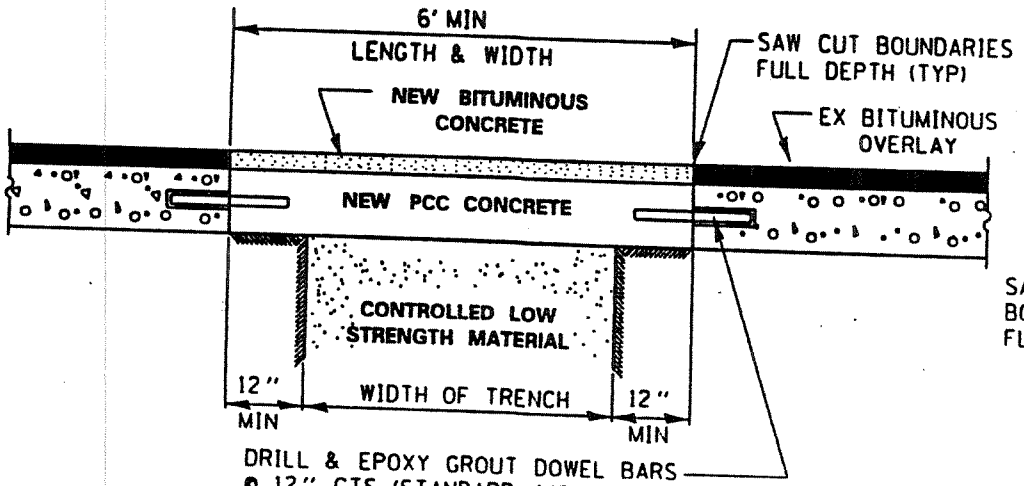
The pavement shall be patched as soon as practical. If this can not be accomplished, a temporary patch with an approved bituminous mixture will be provided immediately. Any subsequent failure of either the temporary patch or the permanent patch shall be reconstructed upon notification by the department.

Cold mix bituminous will not be allowed for the temporary patching mixture.

All saw cut extensions remaining in the pavement and shoulders after patching is completed shall be sealed in accordance with Article 420.14(a) of the Standard Specifications for *Road and Bridge Construction*.

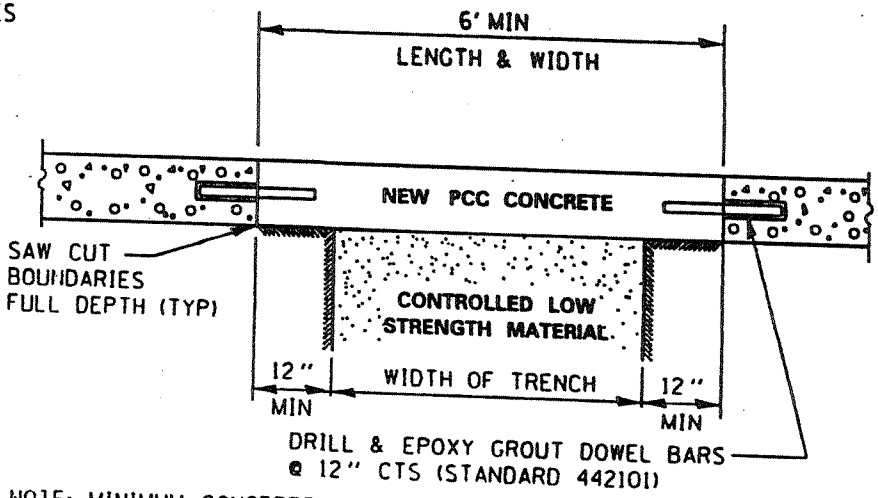
Bituminous removal and resurfacing over concrete patches shall be in accordance with Article 408 of the Standard Specifications and as noted on detail.

s/ops/des and plan tech/specials/open cutting pavementrev



NOTE: MINIMUM CONCRETE REPLACEMENT
9" OR THICKNESS OF EXISTING CONCRETE
WHICHEVER IS GREATER

W/BITUMINOUS OVERLAY



NOTE: MINIMUM CONCRETE REPLACEMENT
10" OR THICKNESS OF EXISTING CONCRETE
WHICHEVER IS GREATER

P.C.C. CONCRETE

••IMMEDIATELY AFTER THE CONCRETE HAS CURED IN ACCORDANCE W/SECTION 442, THE PATCH SHALL BE SURFACED W/BITUMINOUS CONCRETE IN ACCORDANCE W/SECTION 408

PAVEMENT REPLACEMENT DETAILS

SEE STANDARD 442101-03 FOR DETAILS NOT SHOWN

GENERAL NOTES:

PAVEMENT DAMAGED, THAT IS TO REMAIN IN PLACE, HAVING A SPALL WITH A WIDTH OR DEPTH GREATER THAN ONE INCH (1"), WILL REQUIRE A NEW SAW CUT EXTENDING THE PATCH TO REMOVE THE SPALL. (THIS PROVISION IS NOT REQUIRED IF THE PAVEMENT IS TO BE RESURFACED WITH BITUMINOUS CONCRETE).

WHENEVER A PAVEMENT OPENING IS MADE LESS THAN FOUR FEET (4') FROM THE PAVEMENT EDGE, CONSTRUCTION JOINT, CRACK ETC., THE PAVEMENT OPENING WILL BE ENLARGED TO MEET THE EDGE, JOINT OR CRACK.

CONCRETE PATCHES THAT ARE NOT TO BE OVERLAID SHALL HAVE THE SURFACE STAMPED WITH THE CURRENT YEAR, APPROXIMATELY ONE FOOT (1') FROM THE OUTER EDGE OF THE LANE.

BITUMINOUS SURFACE OR CONCRETE SHALL BE FINISHED IN A WORKMAN LIKE MANNER AND IN ACCORDANCE WITH SECTIONS 408 AND 442 OF THE STANDARD SPECIFICATIONS.

WHENEVER A SERIES OF PAVEMENT OPENINGS ARE MADE ON A BITUMINOUS SURFACED ROADWAY, IN SUCH A MANNER AS TO LEAVE LESS THAN FIVE FOOT (5') OF UNDISTURBED BITUMINOUS SURFACE BETWEEN ADJACENT OPENINGS, IT SHALL BE REQUIRED THAT THE BITUMINOUS BETWEEN THE OPENINGS BE REMOVED AND THE ENTIRE AREA RESURFACED AS ONE PATCH.

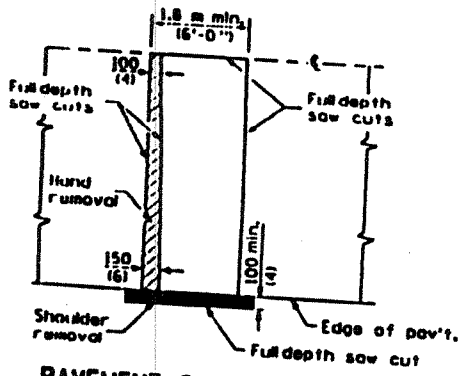
MATERIAL SPECIFICATIONS:

ALL MATERIALS SHALL BE FROM AN APPROVED I.D.O.T. PLANT OR SOURCE. INFORMATION REGARDING MATERIAL SPECIFICATIONS MAY BE OBTAINED BY CALLING THE STATE OF ILLINOIS BUREAU OF MATERIALS AT (815)434-6131.

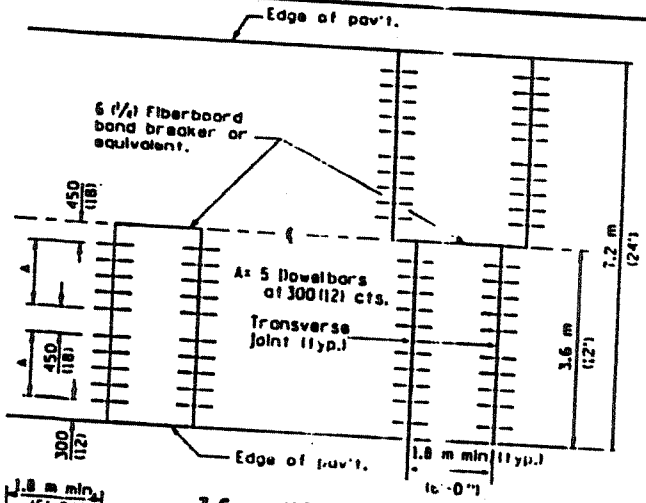
DOWEL BARS:
DOWEL BARS SHALL BE PAINTED ROUND BARS CONFORMING TO THE REQUIREMENTS OF AASHTO M227M, GRADE 70 THROUGH 80.
DOWEL BARS MAY BE PAINTED WITH "RED OXIDE" OR "ZINC CHROMATE" ONE COAT SHOP PAINT.

CONCRETE:
CEMENT - 7.5 SACKS OF TYPE I PER CUBIC YARD OR 6.0 SACKS OF TYPE III PER CUBIC YARD.
AGGREGATE - 1.5" MAXIMUM.
SLUMP - 3" MAXIMUM.
AIR ENTRAINMENT - 4 - 7 PERCENT.

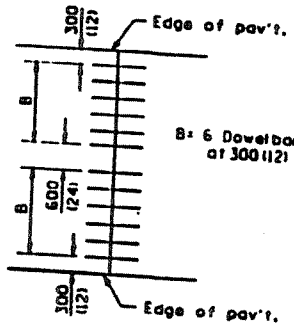
BITUMINOUS CONCRETE:
BITUMINOUS CONCRETE SHALL BE A BITUMINOUS SURFACE MIXTURE "C" (SUB - CLASS I) AND SHALL CONFORM TO THE APPLICABLE SECTIONS OF THE STANDARD SPECIFICATIONS.



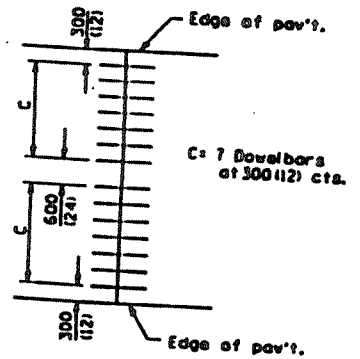
PAVEMENT SAWING DETAIL
(BITUMINOUS SHOULDER)



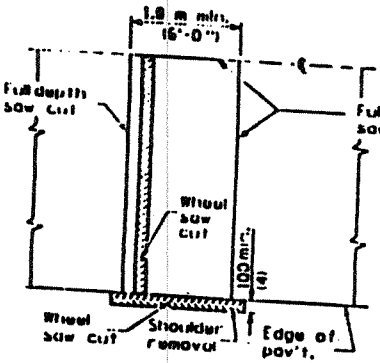
3.6 m (12') WIDE LANES



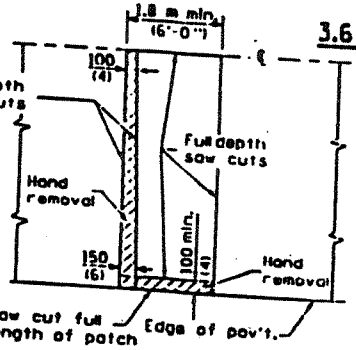
4.2 m (14') WIDE RAMP



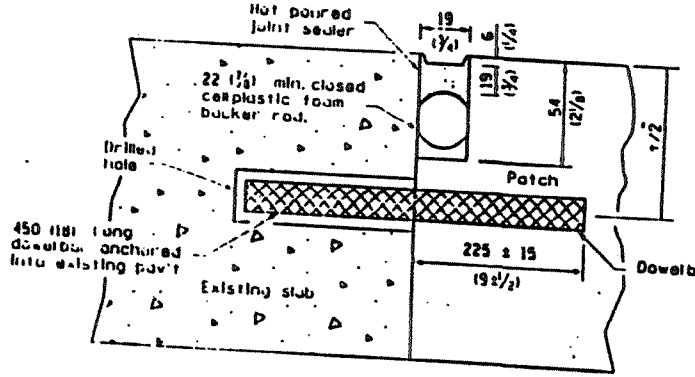
4.8 m (16') WIDE RAMP



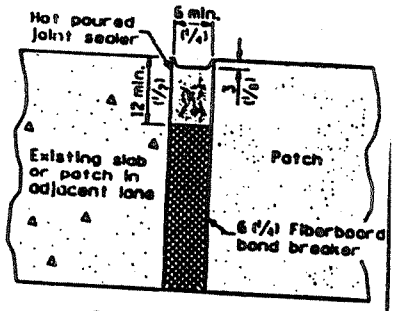
ALTERNATE SAWING DETAIL
(BITUMINOUS SHOULDER)



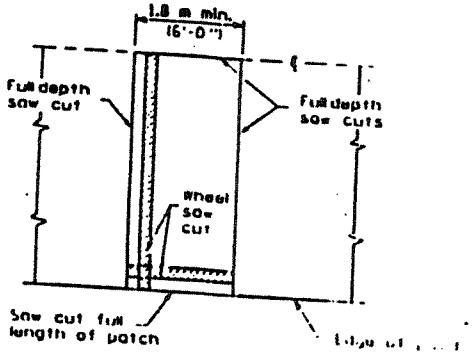
PAVEMENT SAWING DETAIL
(PCC SHOULDER)



TRANSVERSE JOINT



CENTERLINE JOINT



ALTERNATE SAWING DETAIL
(PCC SHOULDER)

TABLE OF BARS

PAVEMENT THICKNESS	DOWEL BAR DIAMETER	HOLE DIAMETER
200 or greater (8)	38 (1 1/2)	41 (1 5/8)
180 (7) to 199 (7.99)	32 (1 1/4)	35 (1 3/8)
Less than 180 (7)	25 (1)	29 (1 1/8)

NOTE

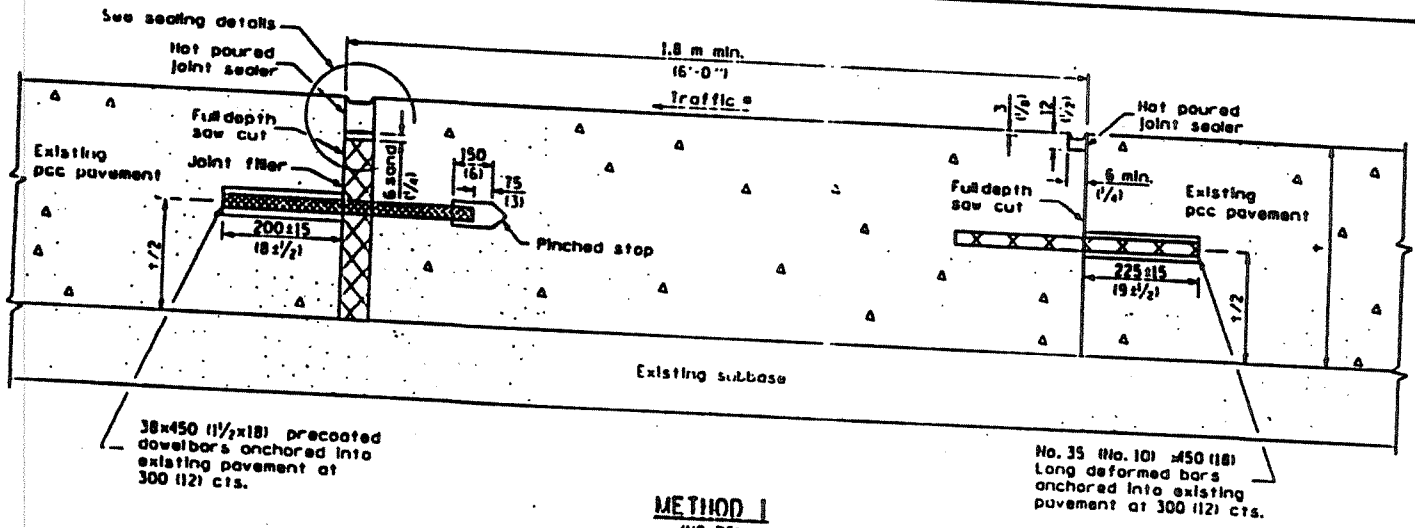
For Jointed Reinforced PCC Pavements, patches 12 m (40') or longer shall have sawed contraction joints at 12 m (40') maximum intervals and at 14 m (45') maximum intervals for Jointed PCC Pavements. All Class B patches shall be in prolongation with joints or cracks in the adjacent lane whenever possible.

All dimensions are in millimeters (inches) unless otherwise shown.

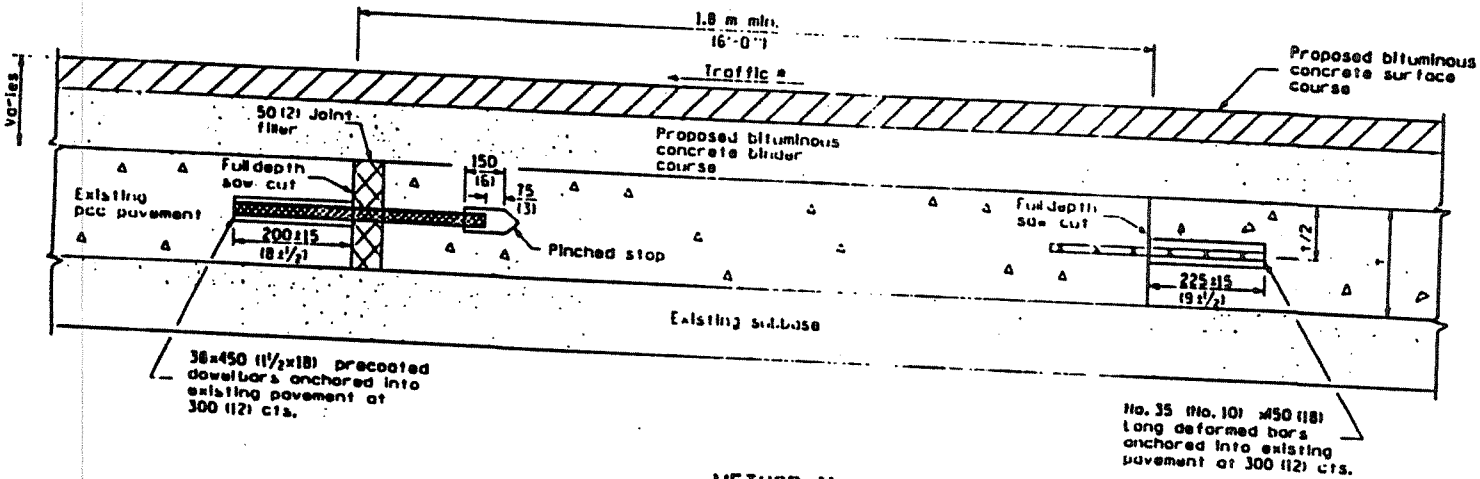
DATE	REVISIONS
11-02	Added note to sheet 2 of 2.
1-1-00	Revise NOTE. Add note to "ALT SAWING DETAIL (BITUMINOUS SHOULDER)"

CLASS B PATCHES

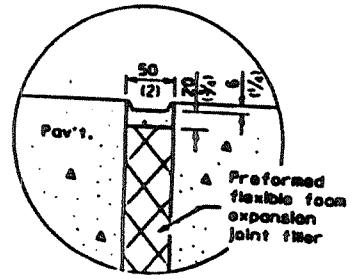
(Sheet 1 of 2)



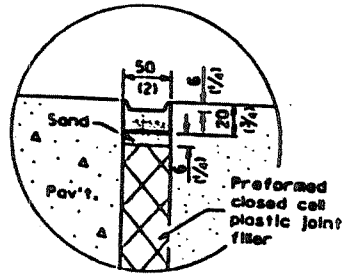
METHOD I
(NO RS)



METHOD II
(WITH RS)



SEALING DETAIL



SEALING DETAIL

* Note: When re-establishing an expansion joint on a two-lane, two-way road, reverse the orientation of the dowel bars with respect to traffic for one of the patches such that the joint will be continuous across both lanes.

All dimensions are in millimeters (inches) unless otherwise shown.

CLASS B PATCHES
(EXPANSION JOINTS)

Illinois Department of Transportation
PASSED
ENGINEER OF DESIGN AND ENVIRONMENT
APPROVED
ENGINEER OF BUREAU OF TRAFFIC
STANDARD