NOTES

1. APPROX. LOCATION, LENGTH (L) AND WIDTH (W) OF EACH SPALL REPAIR ARE SHOWN ON JOINT LAYOUT DRAWINGS. EXACT LOCATION AND DIMENSIONS SHALL BE DETERMINED AND MARKED IN THE FIELD AND APPROVED AS SPECIFIED.

2. SPALLS OCCUR IN MANY SIZES AND SHAPES. REPAIR DETAILS SHOWN ARE INTENDED TO REMOVE AND REPLACE ALL DETERIORATED CONCRETE, AND TO MAINTAIN THE SIZE OF THE SPALL REPAIR TO THE MINIMUM PRACTICAL TO AVOID UNNECESSARY REMOVAL OF SOUND CONCRETE.

3. JOINT SPALLS WITH ACTUAL CAVITY WIDTHS LESS THAN 50 MM SHALL BE REPAIRED BY CLEANING AND FILLING WITH JOINT SEALANT IN LIEU OF P.C. CONCRETE.

4. WHERE SPALL REPAIRS ARE REQUIRED ON EACH SIDE OF A JOINT OR CRACK, A NON-FLEXIBLE TYPE FILLER OR INSERT SHALL BE SECURED IN ALIGNMENT WITH THE JOINT OR CRACK AFTER BREAKING OUT THE SPALLED CONCRETE THE SPALL REPAIRS SHALL BE COMPLETED ON ONE SIDE AT A TIME AS SPECIFIED.

5. AT TRIANGULAR SPALLS WHERE BOTH THE LENGTH AND WIDTH OF THE REPAIR EXCEED 300 MM, THE REPAIR SHALL BE MADE PENTAGONAL TO AVOID FEATHER EDGED CORNERS AND TO MINIMIZE SIZE OF REPAIR AREA. SAWCUTS SHALL BE MADE TO INTERSECT JOINT LINES AT APPROX. 1.57 RAD (1.05 RAD) MIN. FOR NOT LESS THAN 100 MM AS SHOWN.

6. BREAK OUT AND REMOVE PAVEMENT AND UNSOUND CONCRETE WITHIN SAWCUTS TO A DEPTH NOT LESS THAN 50 MM CLEAN EXPOSED CAVITY SURFACES AS SPECIFIED.
7. Dowels, tie-bars, or continuous reinf. exposed during preparation of spalled areas shall be removed as specified for the width of joint but not less 13 mm.

8. Where practical and at option of contractor, a 13 mm min. width groove may be sawed at existing joint lines to a point 13 mm min. below the prepared cavity surface to hold new filler inserts during concrete placement.

9. Provide joint filler to maintain existing joints and working cracks. Width of filler shall be about equal to width of existing gap at the joint or crack but not less than dimensions shown. Depth of filler shall be not less than depth of new patch material. Install filler neatly to prevent new grout or concrete from by-passing filler and entering the joint space.

10. At option of contractor, a neat bead of caulk may be applied as indicated to prevent grout or concrete from by-passing filler and entering the joint space.

11. Apply and scrub sand-cement grout bonding course on all exposed cavity surfaces except faces of joints and working cracks. Fill cavity flush with pavement surface with concrete as specified.
SECTION A-A
SPALL AT KEYED CONSTRUCTION JOINT
NO SCALE

New 13 mm min. joint filler see note 9

50 mm min. depth sawcut

SECTION B-B
SPALL AT WEAKENED PLANE OR CONTRACTION JOINT
NO SCALE

New joint sealant recessed below pavement surface 5 mm +/- 2 mm
50 mm min. depth sawcut

SECTION C-C
SPALL AT EXPANSION JOINT
NO SCALE

New 19 mm joint filler

EXIST. EXPANSION CAP
EXIST. JOINT FILLER

CAULK BEAD, SEE NOTE 10

EXIST. TIE BAR
(IN TIED JOINTS ONLY)
SEE NOTE 7

EXIST. REINFORCEMENT
(OR REINFORCED PAVEMENT)

REINFORCING (IN REINFORCED PAVEMENT) CONTINUOUS THROUGH WEAKENED PLANE JOINTS, DISCONTINUOUS AT CONTRACTION JOINTS

EXIST DOWEL AT DOWELLED CONTRACTION JOINTS. IF EXPOSED, REMOVE 13 mm min. at joint as specified. (SEE NOTE 7)
NEW JOINT SEALANT, RECESSED AS SHOWN

MATCH FILLER WIDTH

$3 \text{ mm radius at formed grooves}$

$5 \text{ mm } +/- 2 \text{ mm}$

$19 \text{ mm}$

EXIST. CONSTRUCTION, CONTRACTION, OR WEAKENED PLANE JOINT ONLY

GROOVE SHALL BE MADE
BY FORMING OR SAWING
OUT INSERTS, SEE SPEC.

EXIST. P.C.
CONCRETE

NEW P.C. CONCRETE

EXIST. P.C.
CONCRETE

NEW SEPARATING TAPE

NEW 13 mm min.
JOINT FILLER
SEE NOTE 9

DETAIL "A"

GROOVE FOR JOINT SEALANT AT SPALL REPAIR

NO SCALE

CHIP OUT & CLEAN TO SOUND CONCRETE TO AVOID FEATHER EDGING

Remove exist. conc. 50 mm min. at large popouts

SMALL POPOUT (WIDTH OR DEPTH < 50 mm):
FILL WITH SAND-CEMENT MORTAR

LARGE POPOUT (WIDTH OR DEPTH >= 50 mm):
FILL WITH P.C. CONCRETE

FLUSH CAVITY WITH PAVEMENT SURFACE

1.05 rad

CHIPPED SURFACE

EXIST. POPOUT

FILL CAVITY WITH SAND-CEMENT GROUT IMMEDIATELY
BEFORE FILLING WHEN FILL MATERIAL IS P.C. CONCRETE

TYPICAL SECTION: POPOUT REPAIR

NO SCALE