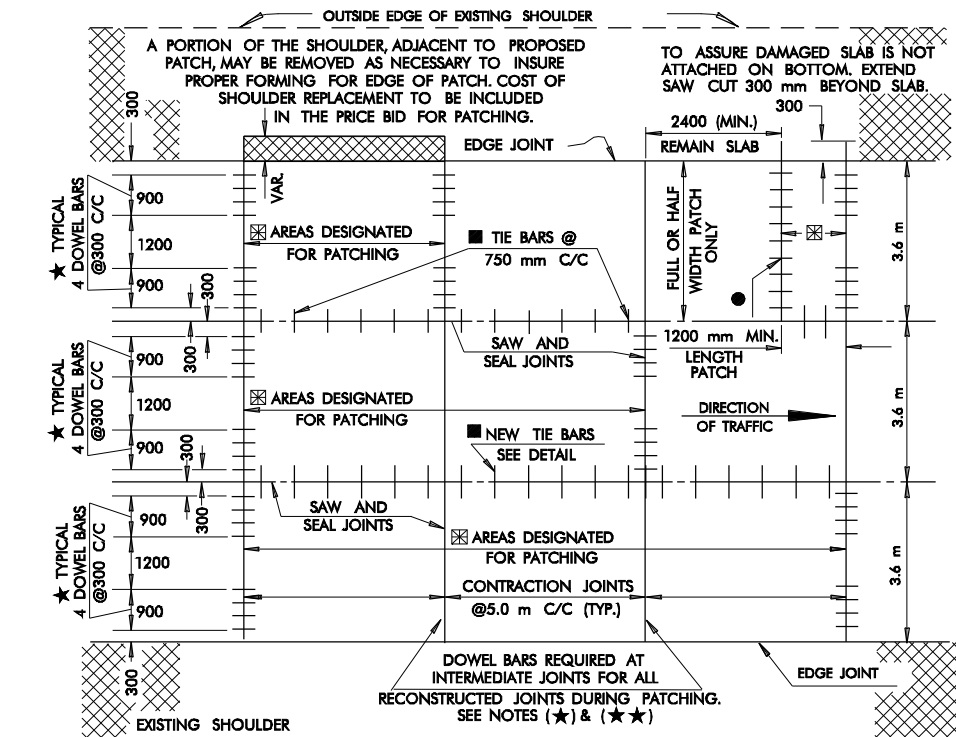


DESCRIPTION	REVISIONS	DATE
RE-ISSUE W/METRIC 1999 SPECS.		7/99



- ★ DOWEL BAR SETS (FOUR BARS AT 300 mm C/C WITH BOND BREAKER CAPS) SHALL BE USED WHEN RECONSTRUCTED FULL WIDTH JOINT FALLS WITHIN 1200 mm OF THE ORIGINAL JOINT. WHEN MORE THAN ONE RECONSTRUCTED JOINT FALLS WITHIN 1200 mm OF THE ORIGINAL JOINT (I.E., PATCH SPANS ORIGINAL JOINT), THEN THE RECONSTRUCTED FULL WIDTH JOINT NEAREST TO THE ORIGINAL JOINT WILL BE CONSTRUCTED USING THE FOUR DOWEL DESIGN PATTERN AS SHOWN THIS SHEET.
- ★★ IF PATCH EXTENDS BEYOND 1200 mm, IN BOTH DIRECTIONS, FROM AN ORIGINAL FULL WIDTH TRANSVERSE JOINT, THEN THE ORIGINAL FULL WIDTH JOINT WILL BE RECONSTRUCTED USING THE FOUR DOWEL PATTERN DESCRIBED IN NOTE (★), OR APPROVED LOAD TRANSFER DEVICES MEETING REQUIREMENTS OF SECTION 414.04 (STD. SPECS.) AND STD. DRAWINGS.
- ★★★ FULL WIDTH RECONSTRUCTED JOINTS LOCATED 1200 mm OR MORE FROM AN ORIGINAL JOINT AND NOT COVERED BY PREVIOUS TWO NOTES SHALL BE RECONSTRUCTED USING TRANSVERSE TIE BAR JOINT. SEE NOTE (★). OVERALL PATCH LENGTH SHALL NOT EXCEED 2100 mm (5.0 m JOINTED PAVEMENT) & 5.0 m (20.0 m JOINTED PAVEMENT), UNLESS OTHERWISE SHOWN ON PLANS.

FULL DEPTH PATCHING DETAIL

STEP 1 CONCRETE PATCHING

- (1) AREAS TO BE PATCHED WILL BE DESIGNATED BY THE ENGINEER.
- (2) FOR REMOVAL OF FULL DEPTH PATCHES, SAWING IS TO BE FULL DEPTH. LIFT OUT DAMAGED PAVEMENT WHENEVER PRACTICAL.
- (3) THE FLOW OF TRAFFIC MAY BE RESTRICTED TO ONE LANE DUE TO PATCHING OPERATION FOR A MAXIMUM DISTANCE OF ONE MILE.
- (4) FOR ADDITIONAL INFORMATION SEE P & P SHEETS.

STEP 2 SLAB STABILIZATION

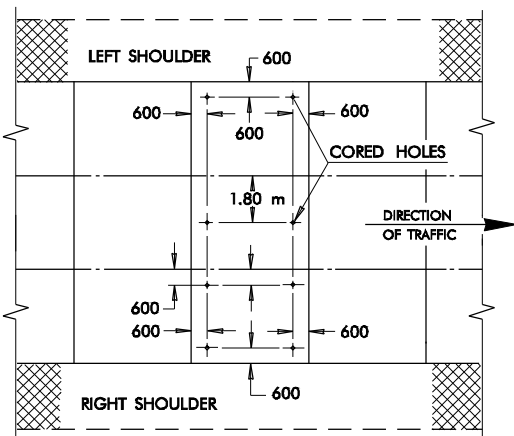
- (1) CORE 50 mm DIA. (63 mm MAX.) HOLES IN AN A MANNER APPROVED BY THE ENGINEER.
- (2) PRESSURE GROUT SLAB IN ACCORDANCE WITH PLANS OR APPLICABLE SPECIAL PROVISIONS.

STEP 3 DIAMOND GRINDING

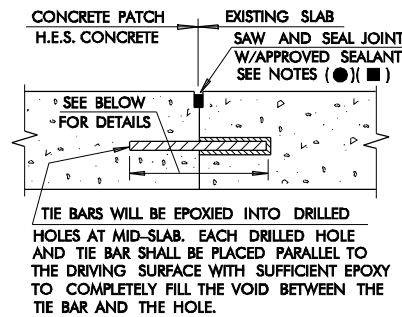
- (1) AFTER SLAB STABILIZATION & APPROPRIATE CURE TIME HAS BEEN DETERMINED, GRINDING OPERATIONS MAY BEGIN.
- (2) SEE PLANS OR APPLICABLE SPECIAL PROVISIONS.

STEP 4 JOINT REHABILITATION (INITIAL)

- (1) INITIAL CUT AND SUBSEQUENT SEALING SHALL BEGIN AT THE HIGH EDGE OF THE DRIVING LANES AND MOVE TOWARD THE LOW EDGE.
- (2) SEE SEQUENCE OF OPERATIONS FOR JOINT REHABILITATION THIS SHEET AND APPLICABLE SPECIAL PROVISIONS.

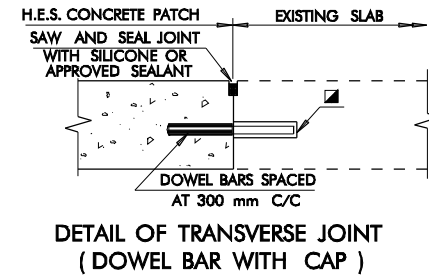


DETAIL OF UNDERSEALING



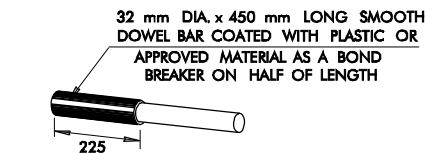
DETAIL OF TIE BAR JOINT

- LONGITUDINAL JOINT - TIE BARS - NO. 16M DEFORMED REINFORCING STEEL BARS, 360 mm LONG, SHALL BE EPOXIED INTO 19 mm DIA. (MAX.) DRILLED HOLES AT 750 mm C/C TIED LONGITUDINALLY. JOINT SHALL BE SAWED AND SEALED.
- TRANSVERSE JOINT - TIE BARS - NO. 32M DEFORMED REINFORCING STEEL BAR, 450 mm LONG, SHALL BE EPOXIED INTO 35 mm DIAMETER (MAX.) DRILLED HOLES AT 450 mm C/C FULL WIDTH, TRANSVERSE, TIED JOINTS SHALL NOT BE SAWED OR SEALED. SEE NOTE (★★★)



- DOWEL BARS SHALL BE EPOXIED (NON-CAPPED END) INTO 35 mm DIA. (MAX.) BY 220 mm DEEP DRILLED HOLES, PLACED AT MID-SLAB. DRILLED HOLES AND DOWEL BARS SHALL BE PLACED PARALLEL TO THE DRIVING SURFACE. SUFFICIENT EPOXY SHALL BE USED TO COMPLETELY FILL THE VOID BETWEEN THE DOWEL BAR AND THE HOLE.

DOWEL BAR SHALL BE COVERED WITH BOND BREAKER CAP OR APPROVED PLASTIC-LIKE MATERIAL OVER ONE HALF THE LENGTH TO INSURE BOND BETWEEN DOWEL BAR AND CONCRETE PATCH IS BROKEN. PAINT IS NOT ACCEPTABLE.



DETAIL OF DOWEL BAR WITH CAP 38 mm DIAMETER DOWELS FOR 280 mm PAVEMENTS OR THICKER.

BASE REPAIR AND PREPARATION

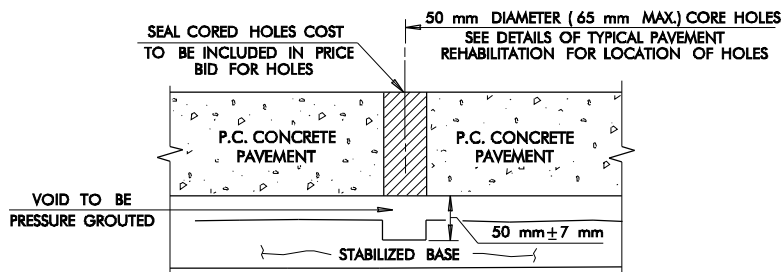
IN AREAS WHERE PATCHING IS REQUIRED, THE REMOVAL OF THE DAMAGED PAVEMENT SHALL BE PERFORMED IN A MANNER THAT WOULD MINIMIZE FURTHER DAMAGE TO THE UNDERLYING SUBBASE(S), SUBGRADE OR ADJACENT PAVEMENT(S). NO COMPENSATION WILL BE MADE TO CONTRACTOR FOR REPAIRING DAMAGE SUSTAINED DURING THE REMOVAL PROCESS.

COST OF ANY INCIDENTAL BASE REPAIR, LEVELLING OR BACKFILLING, UP TO 50 mm, WILL BE INCLUDED IN H.E.S. CONCRETE (FULL DEPTH PATCHING) PAY ITEM. INCIDENTAL REPAIR, LEVELING AND BACKFILLING MATERIAL SHALL CONSIST OF SAME MATERIAL ENCOUNTERED, CRUSHED LIMESTONE OR BY THICKENING H.E.S. FULL DEPTH PATCH.

BASE REPAIR, LEVELING AND RELATED BACKFILLING OF SUBBASE(S) OR SUBGRADE IN EXCESS OF 50 mm SHALL BE PAID FOR AS UNCLASSIFIED EXCAVATION WITH QUANTITIES COMPUTED FROM BOTTOM OF SLAB DOWNWARD TO LIMITS OF REMOVAL.

SUGGESTED SEQUENCE OF OPERATIONS FOR JOINT REHABILITATION (INITIAL AND FINAL)

- (1) SAW EXISTING LONGITUDINAL AND CONTRACTION JOINTS TO WIDTH AND DEPTH REQUIRED. SEE ROADWAY STANDARD LECS-3 FOR DETAILS.
- (2) BLOW OUT JOINT WITH COMPRESSED AIR IMMEDIATELY AFTER SAWING.
- (3) SAND BLAST JOINT, BLOW CLEAN AND IMMEDIATELY PLACE BACKER ROD.
- (4) BLOW JOINT CLEAN WITH COMPRESSED AIR AND FILL CLEAN JOINT WITH SEALANT WITHIN 2 MINUTES.
- (5) ALLOW CURING TIME FOR SILICONE SEALANT.
- (6) BID ITEM FOR JOINT REHABILITATION WILL INCLUDE SAWING, CLEANING OF JOINT, BACKER ROD, SILICONE SEALANT AND ANY INCIDENTALS REQUIRED TO COMPLETE THE WORK.



DETAIL OF PRESSURE GROUTING

GENERAL NOTES

1. ALL CONSTRUCTION AND MATERIAL REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE 1999 METRIC STANDARD SPECIFICATIONS.
2. COST OF SAWING AND REMOVAL OF PAVEMENT FOR FULL DEPTH PATCHING TO BE INCLUDED IN THE PRICE BID FOR H.E.S. CONCRETE PATCHING UNLESS OTHERWISE SHOWN ON THE PLANS.
3. A PORTION OF THE SHOULDER, ADJACENT TO PROPOSED PATCH MAY BE REMOVED AS NECESSARY TO INSURE PROPER FORMING FOR EDGE OF PATCH. COST OF SHOULDER REPLACEMENT TO BE INCLUDED IN THE PRICE BID FOR H.E.S. CONCRETE PATCHING.
4. COST OF DOWEL BARS, TIE BARS, EPOXY AND ANY INCIDENTALS REQUIRED FOR INSTALLATION TO BE INCLUDED IN THE PRICE BID FOR H. E. S. CONCRETE PATCHING.

BASIS OF PAYMENT

ITEM NO.	ITEM	UNIT
202.04(A)	UNCLASSIFIED EXCAVATION	CUBIC METER
414.06(B)	H.E.S. CONCRETE (FULL DEPTH PATCHING)	SQ. METER
419.06	CONCRETE JOINT REHABILITATION	METER
425.06	DIAMOND GRINDING CONCRETE PAVEMENT	SQ. METER
426.06(A)	CORED HOLES	EACH
426.06(B)	PORTLAND CEMENT	METRIC TON
426.06(C)	FLY ASH	METRIC TON

APPROVED BY ROADWAY ENGINEER DATE

OKLAHOMA DEPT. OF TRANSPORTATION
ROADWAY STANDARD (METRIC)
PORTLAND CEMENT CONCRETE
PAVEMENT REPAIR

1999 SPECIFICATIONS	PCPR-2	OOM
ALL DIMENSIONS ON THIS SHEET IN MILLIMETERS UNLESS OTHERWISE NOTED.		
R-118M		