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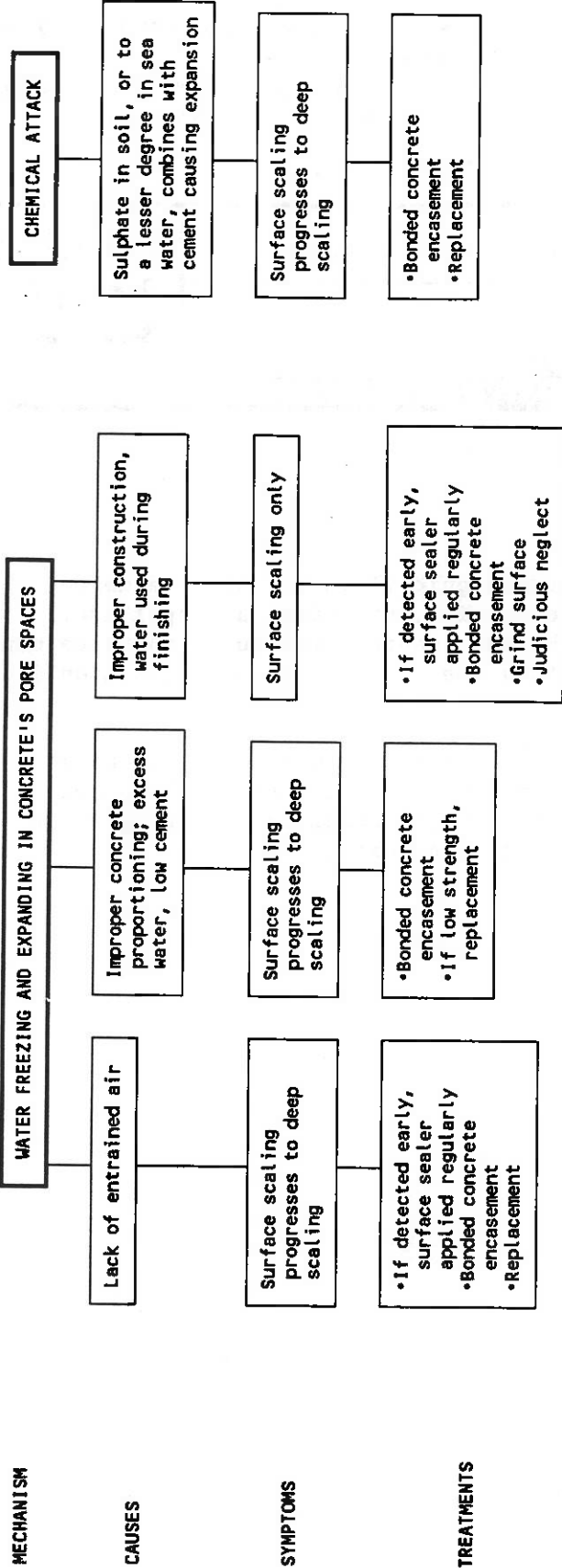
TO: SUPERSEDED BY EB 01-010 EFFECTIVE 2/6/01	<h1>ENGINEERING INSTRUCTION</h1> <p>NEW YORK STATE DEPARTMENT OF TRANSPORTATION</p>
Distribution: 30 Main Office 32 Regions 34 Special	SUBJECT: STRUCTURAL CONCRETE DISTRESS/ TREATMENT GUIDELINES Subject Code: 7.35-4
APPROVED:  ARUN M. SHEROLE, DEPUTY CHIEF ENGINEER (STRUCTURES)	Code: <u>E.I. 90-39</u> Date: <u>11/06/90</u> Supersedes:

This Engineering Instruction transmits guidelines for the evaluation and treatment of hardened concrete scaling, cracking, and spalling. These guidelines describe the mechanism, causes, symptoms, and treatments of each form of distress and identify the appropriate specification items to use in treatment.

These guidelines are a product of the Materials Bureau and are based on their experience with concrete in New York's climate. They are recommended for use in training, as a design checklist and to provide uniformity of distress description and treatment.

HARDENED CONCRETE SCALING

EXPANSIVE PRESSURES IN THE CONCRETE MORTAR RESULTING IN MORTAR DISINTEGRATION



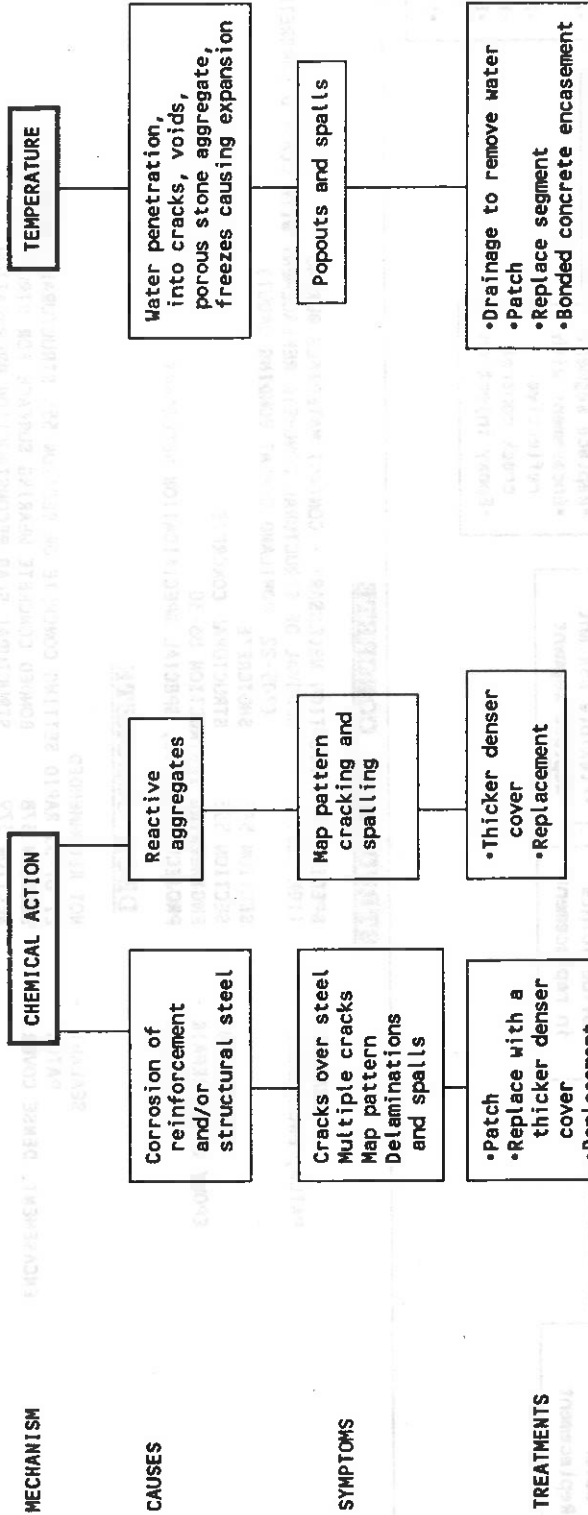
AVAILABLE SPECIFICATION ITEMS

	SEALER		STRUCTURAL CONCRETE
PATCH, ENCASEMENT	-	-	ITEM 18559.15 PROTECTIVE SEALERS FOR STRUCTURAL CONCRETE
REPLACEMENT	-	-	REMOVAL OF STRUCTURAL CONCRETE-REPLACEMENT WITH CLASS D CONCRETE (705-22 PORTLAND CEMENT BONDING GROUT)
SEALER	-	-	SECTION 583 SHOTCRETE
GRINDING ENCASEMENT	-	-	SECTION 555 STRUCTURAL CONCRETE
REPLACEMENT	-	-	DECK CONCRETE
REPLACEMENT	-	-	NOT RECOMMENDED
REPLACEMENT	-	-	ITEM 18502.5010
REPLACEMENT	-	-	SECTION 578
REPLACEMENT	-	-	SECTION 579
REPLACEMENT	-	-	SECTION 584
REPLACEMENT	-	-	ITEM 15558.50
REPLACEMENT	-	-	SECTION 555

OCTOBER 30, 1990
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HARDENED CONCRETE SPALLING

INTERNAL EXPANSIVE PRESSURES IN THE CONCRETE RESULTING IN DELAMINATION AND CONCRETE LOSS



STRUCTURAL CONCRETE

ITEM 582.06 PATCH, ENCASEMENT - REMOVAL OF STRUCTURAL CONCRETE-REPLACEMENT WITH CLASS D CONCRETE (705-22 PORTLAND CEMENT BONDING GROUT)
 SECTION 583 SHOTCRETE
 SECTION 555 STRUCTURAL CONCRETE

DECK CONCRETE

E1 87-35 RAPID SETTING CONCRETE OR SECTION 555 STRUCTURAL CONCRETE
 SECTION 578 BONDING CONCRETE WEARING SURFACE FOR STRUCTURAL SLABS
 SECTION 579 STRUCTURAL SLAB RECONSTRUCTION PREPARATION
 SECTION 584 SPECIALIZED CONCRETE OVERLAY FOR STRUCTURAL SLABS
 ITEM 15558.50 MEMBRANE WATERPROOFING SYSTEM FOR STRUCTURAL SLABS
 SECTION 555 STRUCTURAL CONCRETE

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