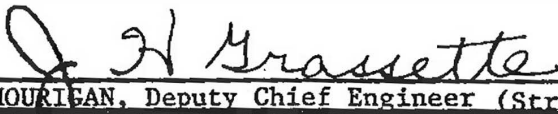


<b>TO:</b>  <b>SUPERSEDED BY EI 93-005</b> <b>EFFECTIVE 4/7/93</b>	<b>ENGINEERING INSTRUCTION</b> NEW YORK STATE DEPARTMENT OF TRANSPORTATION
<b>Distribution:</b> 31 Main Office      33 Regions      34 Special	<b>SUBJECT:</b> BRIDGE DESIGN MANUAL DESIGN CRITERIA FOR BRIDGES Subject Code: 7.35-4
<b>APPROVED:</b>  E. V. HOURIGAN, Deputy Chief Engineer (Structures)	<b>Code:</b> <u>84-40</u> <b>Date:</b> <u>8/21/84</u> <b>Supersedes:</b>

For your information and use, we are transmitting herewith the following updated rehabilitation items:

- (1) Table of Current Rehabilitation Specifications and Guidelines
- (2) Table of Current Rehabilitation Special Notes
- (3) Concrete Repair Chart

The above consists of a total of four (4) sheets, all of which are dated May 29, 1984.

CURRENT REHABILITATION SPECIFICATIONS  
AND GUIDELINES

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<u>Item No.</u>	<u>Title</u>	<u>Unit</u>	<u>Current Issuance Specifications</u>	<u>Guidelines</u>
15202.19	Removal of Substructures	C.Y.	FPRB (6/13/80)	EI 75-67(10/14/75)
15558.50	Membrane Waterproofing System	S.F.	EI 77-28(6/6/77)	EI 77-28(6/6/77)
564.10XXXX	Struct. Steel Repl. Pound	Lbs.	Add.#1 (12/9/82)	EI 76-49(7/14/76)
564.70XXXX	Struct. Steel Repl. Each	Ea.	Add.#1 (12/9/82)	EI 76-49(7/14/76)
15566.31	Weep Tubes for Structural Slabs	Ea.	EI 77-28(6/6/77)	EI 77-28(6/6/77)
15566.91-.95	Vertical Adjustment of Bridge Drainage Device - 1 thru 5	Ea.	EI 77-7(1/13/77)	
15567.60	Removal of Existing Steel Joint Systems	L.F.	EB 76-18(12/16/76)	
15567.91-.95	Vertical Adjustment of Joint Systems - 1 thru 5	L.F.	EI 77-7 (1/13/77)	
579.01	Structural Slab Specification	S.F.	Add.#1 (12/9/82)	
579.05	Reinforcing Bar Exposure	S.F.	Add.#1 (12/9/82)	
580.01	Removal of Struct. Concr.	C.Y.	Std.Specs.(1/2/81)	EI 76-28(4/8/76)
580.02	Removal of Steel Supp. Struct. Slab (w. shear conn.)	S.F.	Std.Specs.(1/2/81)	EI 76-28(4/8/76)
580.03	Removal of Steel Supp. Struct. Slab (w/o shear conn.)	S.F.	Std.Specs.(1/2/81)	EI 76-28(4/8/76)
580.04	Removal of Concr. Approach Slab	S.F.	Std.Specs.(1/2/81)	
580.11	Removal of Concr. Pylons	Ea.	Std.Specs.(1/2/81)	
580.21	Removal of Concr. from Struct. Steel Members	L.F.	Std.Specs.(1/2/81)	
581.01	Removal of Bit. Concr. Overlay (Bridge)	S.F.	Std.Specs.(1/2/81)	EI 74-111(12/12/74)
581.02	Removal of Cem. Concr. Overlay (Bridge)	S.F.	Std.Specs.(1/2/81)	EI 74-111(12/12/74)
582.01	Removal and Replacement of Struct. Concr.	C.Y.	Std.Specs.(1/2/81)	EI 75-67(10/14/75)
582.02	Removal of Struc. Concr. and Repl. w/Mortar	S.F.	Std.Specs.(1/2/81)	EI 76-15(2/3/76)

CURRENT REHABILITATION SPECIFICATIONS  
AND GUIDELINES

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<u>Item No.</u>	<u>Title</u>	<u>Unit</u>	<u>Current Issuance Specifications</u>	<u>Guidelines</u>
583.01	Shotcrete	Bags	Std.Specs(1/2/81)	EI 75-67(10/14/75)
584.01	High Density Concrete Overlay	S.F.	Add.#1 (12/9/82)	(Min.thick = 2")
584.11	Latex Modified Concrete Overlay	S.F.	Add.#1 (12/9/82)	(Min.thick = 1½")
585.01-.06	Struc. Lifting Operations Type A-F	Ea.	Std.Specs.(1/2/81)	EI 75-22(3/13/75)
586.01	Drilling and Grouting Bolts or Reinforcing Bars	L.F.	Add.#1 (12/9/82)	
586.05	Removal of Rivets and Repl. with High-Strength Bolts	Ea.	Add.#1 (12/9/82)	
586.10	Field Drill Holes in Existing Struct. Steel	Ea.	Add.#1 (12/9/82)	
587.01	Bridge Railing Removal and Disposal	L.F.	Std.Specs.(1/2/81)	
587.02	Bridge Railing Removal and Storage	L.F.	Std.Specs.(1/2/81)	
587.03	Install. of Stored Br. Rlg. (Painting Req.)	L.F.	Std.Specs.(1/2/81)	
587.04	Install. of Stored Br. Rlg. (Painting not Req.)	L.F.	Std.Specs.(1/2/81)	
15587.05	Steel Bridge Railing Replacement Clamp	Ea.	Memo (4/5/82)	
587.20	Thrie Beam Br. Rail - Attach. to Exist Br. Rail	L.F.	Memo (5/20/82)	
587.21	Thrie Beam Br. Rail - New Post Install. Mounted on Concr. Surf.	L.F.	Memo (5/20/82)	
587.22	Thrie Beam Br. Rail - New Post Install. Mounted on Steel Surf.	L.F.	Memo (5/20/82)	
589.01XXXX	Removal of Exist. Steel Pound	Lbs.	Add.#1(12/9/82)	EI 76-49(7/14/76)
589.52XXXX	Removal of Exist. Steel Each	Ea.	Add.#1(12/9/82)	EI 76-49(7/14/76)

CURRENT REHABILITATION SPECIAL NOTES

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<u>Notes</u>	<u>Where Used</u>	<u>Current Issuance</u>
61 thru 66	Use on all Rehabilitation Contracts	Std. Details for H'wy Br.
10	Use if a railroad is involved in the Contract	Std. Details for H'wy Br.
67	Use with Item 583.01	Std. Details for H'wy Br.
69	Use when Items 582.01 and 583.01 are used together	Std. Details for H'wy Br.
70	Use with Item 580.01	Std. Details for H'wy Br.
71A	Limits hammer to 25 pounds for partial removal of unsound concrete	Std. Details for H'wy Br.
71B	Limits hammer to 40 pounds for partial removal of unsound concrete	Std. Details for H'wy Br.
72 or 73	Use with Item 564.10XXXX and 564.70XXXX	Std. Details for H'wy Br.
Special Notes	Protection and Overlaying of Membrane Waterproofing for Structural Slabs	EI 77-28 (6/6/77)
Chart	General Guidelines for Concr. Removal Specs.	EI 75-67 (10/14/75)

CONCRETE REPAIR CHART

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<u>Item</u>	<u>Normal Depth of Repair</u>	<u>Desirable Max. Depth of Repair</u>	<u>Location</u>	<u>Desirable Min. Quant.</u>
582.02 Removal of Structural Concrete, Replacement with Mortar	1/2" to 2"	2" but may go to 2"-4" for localized pockets	Vertical or top horizontal surface (small areas). No roadway slab	No Minimum
583.01 Shotcrete	0" to 5"	8"-12" localized pockets only	Vertical or overhead surface (large areas)	40 to 60 bags
582.01 Removal and Replacement Structural Concrete.	2" or greater	No Limit	Vertical or top horizontal surface. No overhead.	No Minimum
580.01 Removal of Structural Concrete	Any Depth	No Limit	Use this item if concrete is not replaced or if it is to be replaced with a different volume.	No Minimum
580.02 Removal of Steel Supported Structural Slab (with Shear Connector)	Entire thickness of structural slab	No Limit	Use this item to remove structural slab only	No Minimum
580.03 Removal of Steel Supported Structural Slab (without Shear Connector)	Entire thickness of structural slab	No Limit	Use this item to remove structural slab only	No Minimum