

TO: SUPERSEDED BY EI 88-024 EFFECTIVE 10/6/88	<h2 style="text-align: center;">ENGINEERING INSTRUCTION</h2> <p style="text-align: center;">NEW YORK STATE DEPARTMENT OF TRANSPORTATION</p> SUBJECT: CONCRETE COLLARS FOR PIPE EXTENSIONS Subject Code: 7.27-1-603
Distribution: 30 Main Office 32 Regions 34 Special	Code: EI 85-23 Date: 4-10-85
APPROVED: <div style="text-align: center;"><i>M. T. Z...</i></div> <hr/> M. TEGZA, Civil Engineer V, Final Plan Review Bureau	Supersedes: EI 81-24

We are transmitting herewith Item 15603.7721 through Item 15603.7727. These are new pay items for concrete collars for pipe extensions and replace Items 15603.7712, 15603.7713, 15603.7760 and 15603.7761 which were issued by Engineering Instruction 81-24. There is no change in the specification requirements. We have just expanded the number of size groups from 2 to 7 and combined round and oblate shapes in the same items. This change is the result of a request that we create a broader range to make field changes more equitable. This new arrangement should also result in more representative bid prices.

For pipe to pipe extensions, the Final Plan Review Bureau will continue to insert the attached Special Note, titled CONCRETE COLLARS for use with pay item 603.77 CONCRETE COLLARS.

The new items for concrete collars for pipe extensions will become effective with the letting of August 29, 1985.

PREL	FINAL
DESIGN	ISSUANCE
RECEIVED	
FACILITIES DIVISION	
APR 1 1985	

CONCRETE COLLARS FOR PIPE EXTENSIONS

Description. This work shall consist of constructing concrete pipe collars for extending pipe from headwalls and other structures as shown on the plans and as indicated by the Engineer. The drilling, positioning and grouting of the dowel bars shall be as indicated herein.

Materials. Materials for constructing pipe collars shall meet the following requirements:

Portland Cement Concrete.....	Section 501 , Structural Concrete Class A
Dowels.....	Section 556, Reinforcing Steel for Concrete Structures except Grade 40 may be used
Concrete Repair Material.....	701-04
Grout.....	701-05, Concrete Grouting Material

Construction Details. Holes shall be drilled into the existing headwall, structure, etc. with equipment and in a manner approved by the Engineer. The Contractor's drilling method and equipment shall not damage the existing structure. The holes are to be surface dry and clean of all material for the full depth before placing the grout. The grouting material shall be mixed and placed in accordance with the manufacturer's instructions. The holes shall be filled with enough grout so that when the dowels are inserted full depth the grout will completely fill the void and ooze out allowing it to be struck off flush with the existing surface. The dowels shall be worked back and forth to insure complete coverage with the grout and to drive out entrapped air. The final horizontal and concentric position of the dowel may be set with wedges or concrete chips.

Concrete shall be placed in accordance with the requirements of Section 555, Structural Concrete.

When extending concrete pipe from older installations with new pipe requiring elastomeric gaskets, a smooth flow line surface must be obtained. All annular depressions and gaps in the bottom half of the periphery are to be filled with concrete repair material as indicated in the plans.

The butting joint area shall be so finished that the interior pipe surface shall be smooth and even for all joints.

Method of Measurement. The quantity to be measured shall be the number of concrete collars incorporated into the work in accordance with the plans and specifications.

15603.77

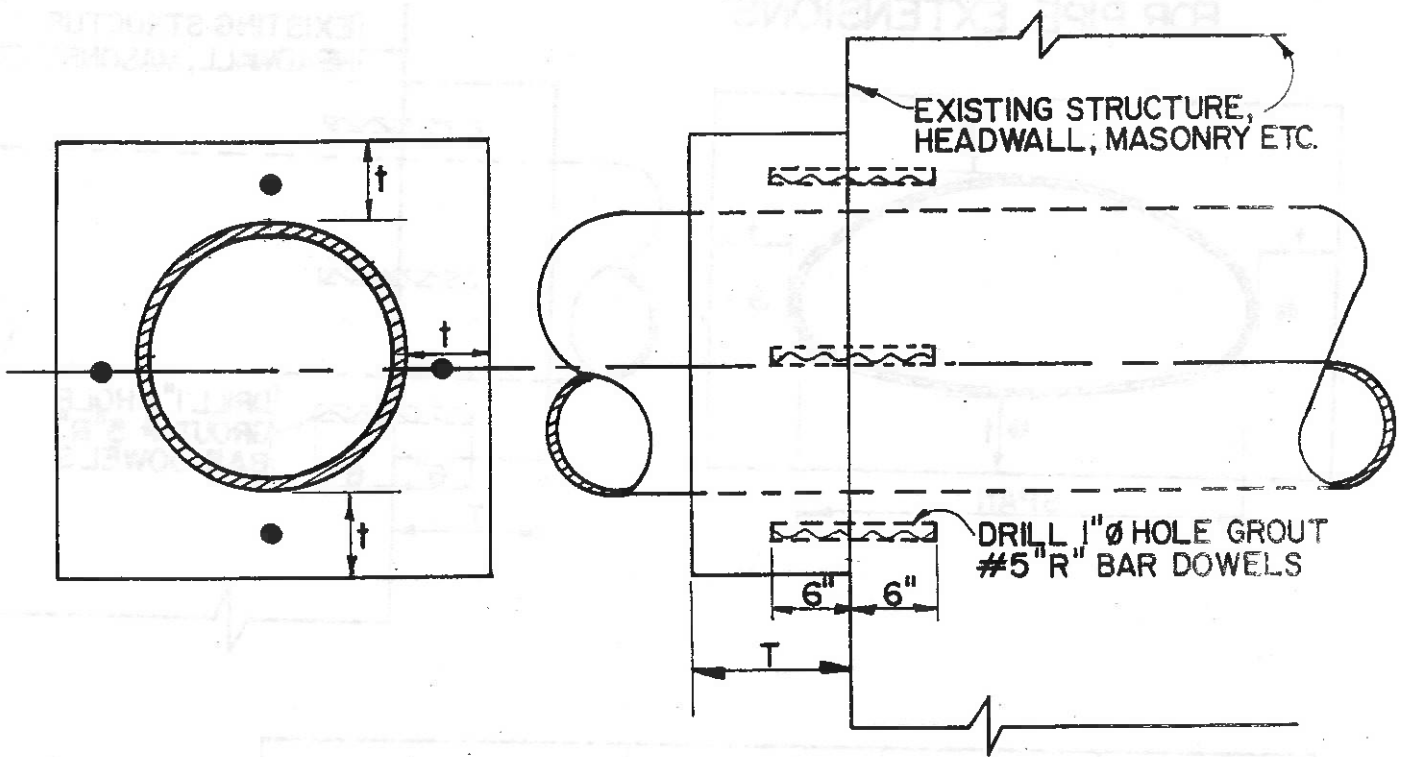
CONCRETE COLLARS FOR PIPE EXTENSIONS (Cont'd.)

Basis of Payment. The unit price bid shall include the cost of furnishing all labor, materials and equipment to satisfactorily complete the work.

Payment will be made under:

<u>Item No.</u>	<u>Item</u>	<u>Pay Unit</u>
15603.7721	Concrete Collars for Pipe Extensions (Inside diameter or span through 19")	Each
15603.7722	Concrete Collars for Pipe Extensions (Inside Diameter or span 20" through 29")	Each
15603.7723	Concrete Collars for Pipe Extensions (Inside Diameter or span 30" through 39")	Each
15603.7724	Concrete Collars for Pipe Extensions (Inside Diameter or span 40" through 49")	Each
15603.7725	Concrete Collars for Pipe Extensions (Inside Diameter or span 50" through 59")	Each
15603.7726	Concrete Collars for Pipe Extensions (Inside Diameter or span 60" through 69")	Each
15603.7727	Concrete Collars for Pipe Extensions (Inside Diameter or span 70" through 79")	Each

CONCRETE COLLARS FOR PIPE EXTENSIONS

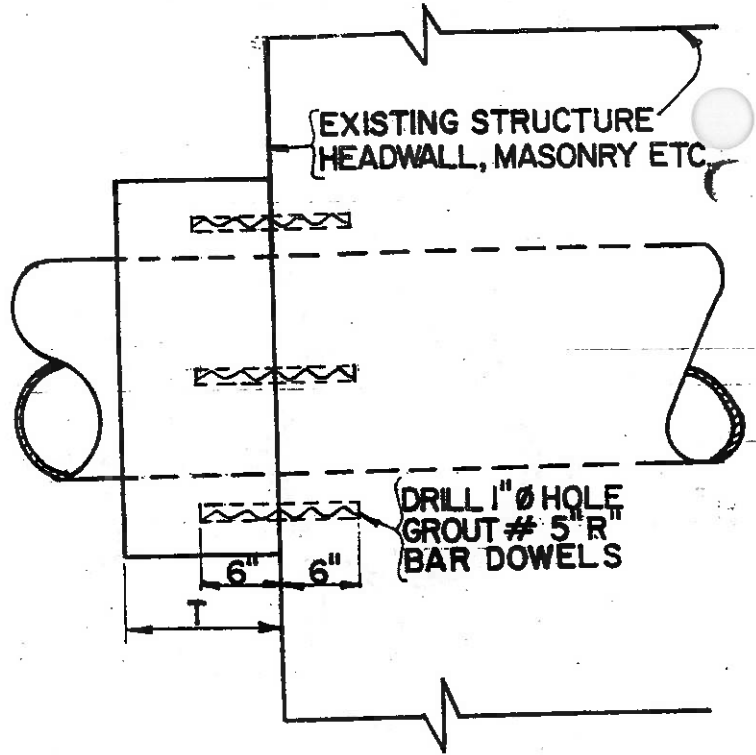
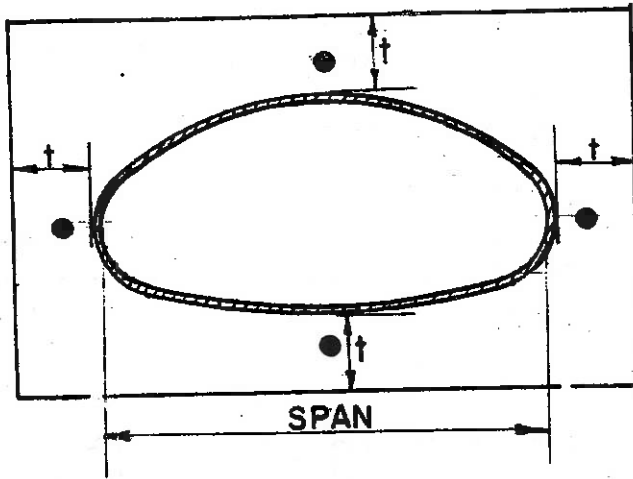


INSIDE DIA. INCHES	"t" INCHES	"T" INCHES	NO. DOWELS REQUIRED *
THRU 19"	9	12	4
20 - 29"	9	12	4
30" - 39"	9	12	6
40" - 49"	9	12	8
50" - 59"	12	18	8
60" - 69"	12	18	8
70" - 79"	12	18	10

* SPACE EVENLY AROUND PIPE AS INDICATED.

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CONCRETE COLLARS FOR PIPE EXTENSIONS



SPAN INCHES	"t" INCHES	"T" INCHES	NO. DOWELS REQUIRED *
THRU 19	9	12	4
20" - 29"	9	12	4
30" - 39"	9	12	6
40" - 49"	9	12	8
50" - 59"	12	18	8
60" - 69"	12	18	8
70" - 79"	12	18	10

* SPACE EVENLY AROUND PIPE AS INDICATED .

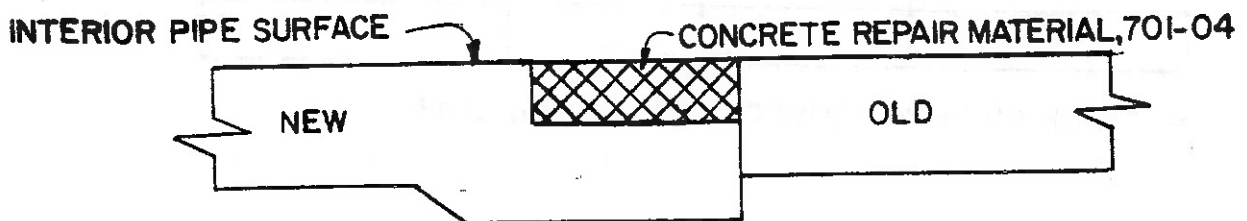
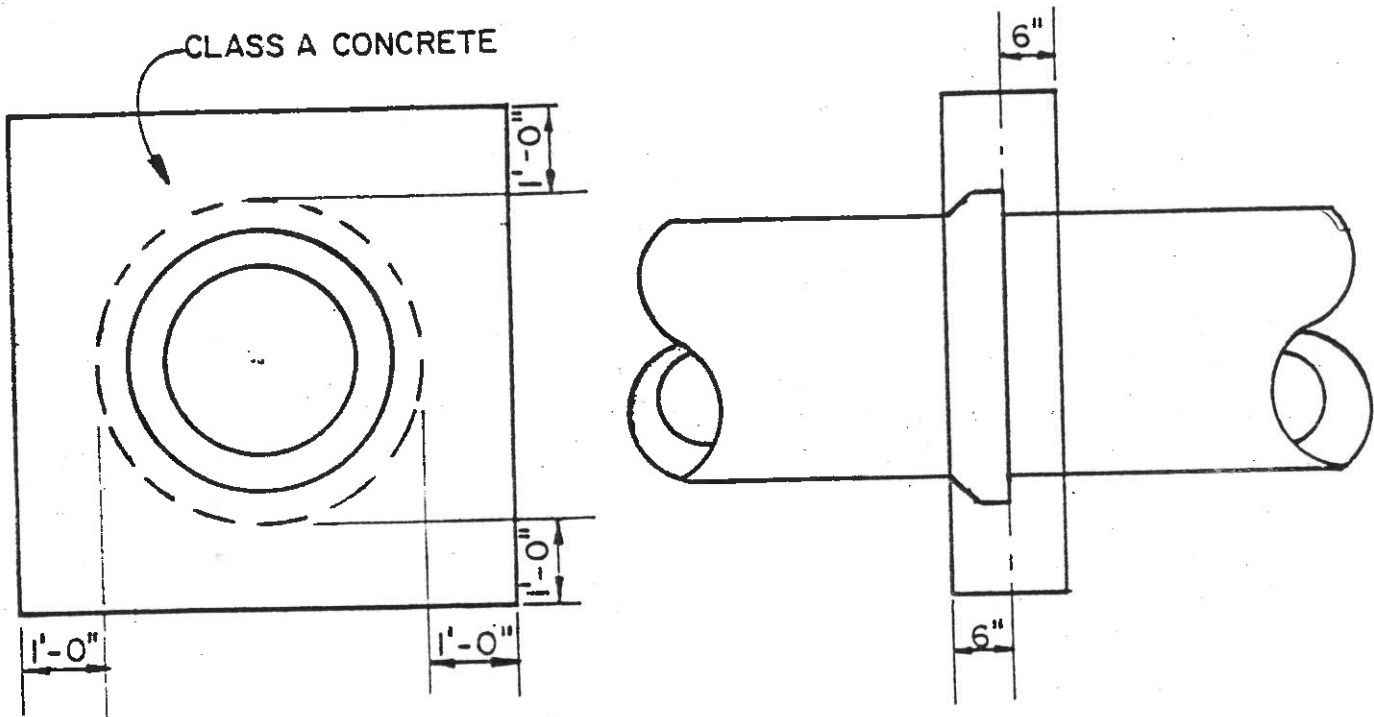


FIGURE 2

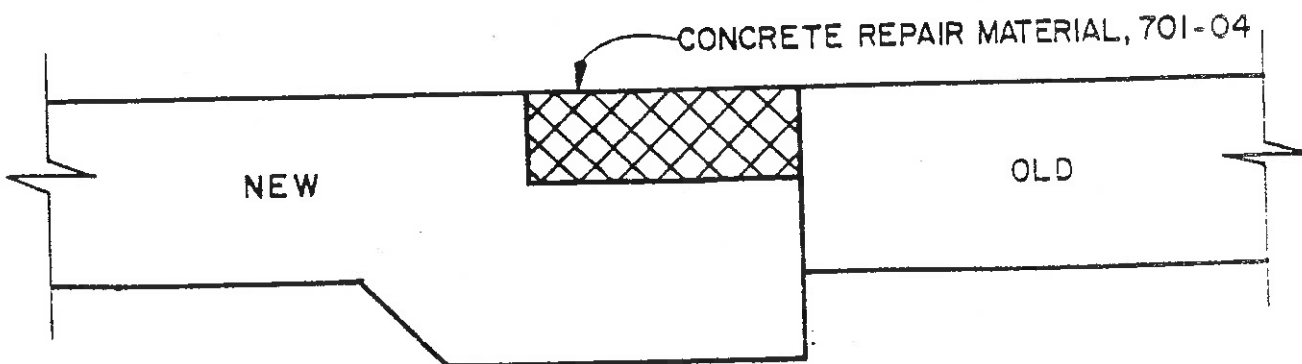
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CONCRETE COLLARS

ADD THE FOLLOWING TO 603-3 CONSTRUCTION DETAILS OF THE STANDARD SPECIFICATIONS OF JANUARY 2, 1985:



DETAIL A



DETAIL B