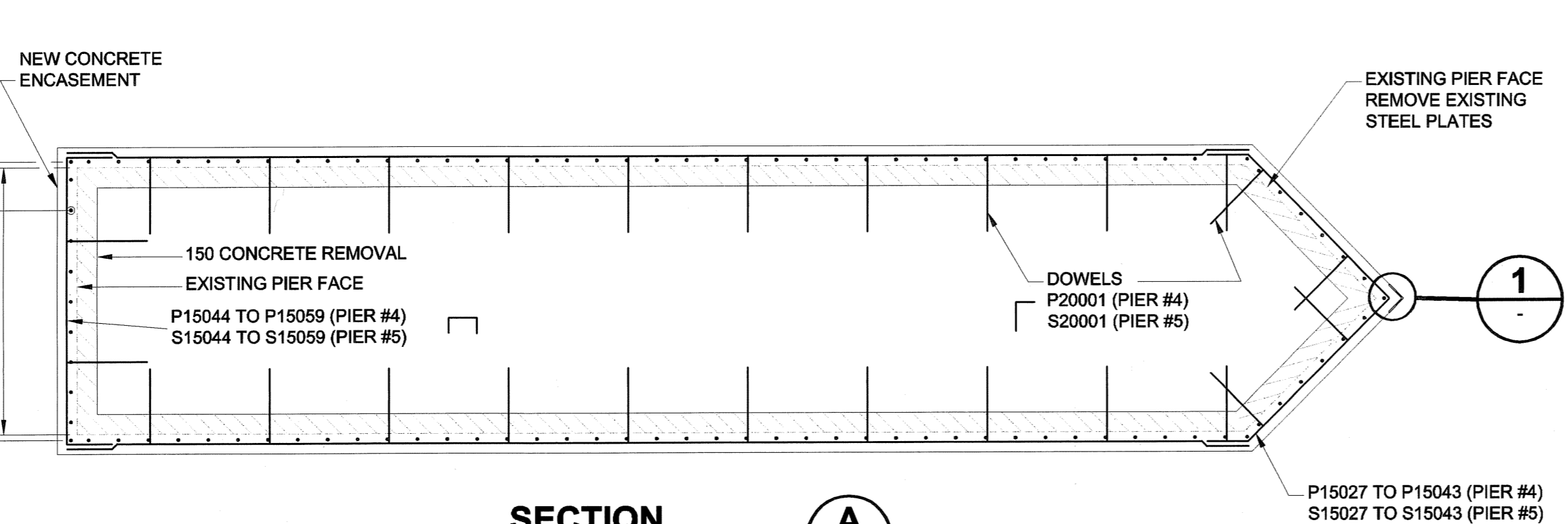
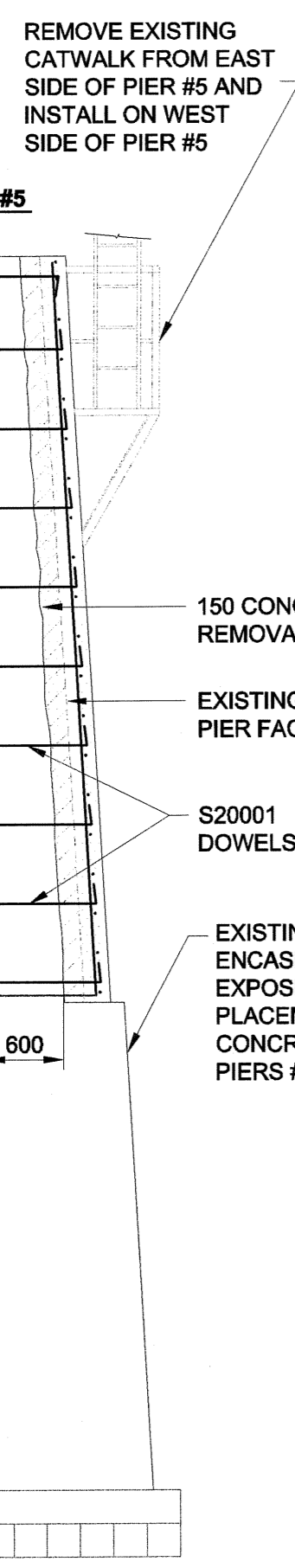
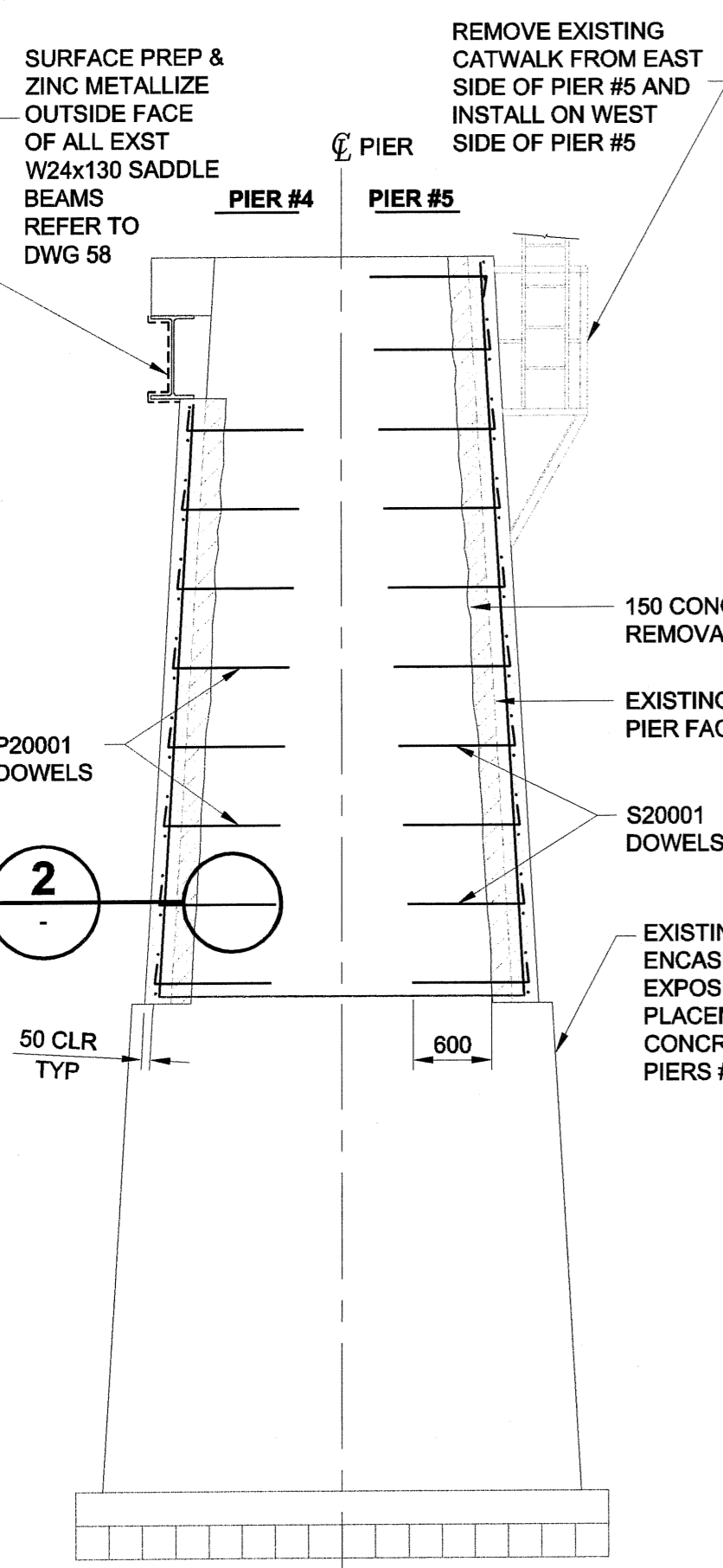
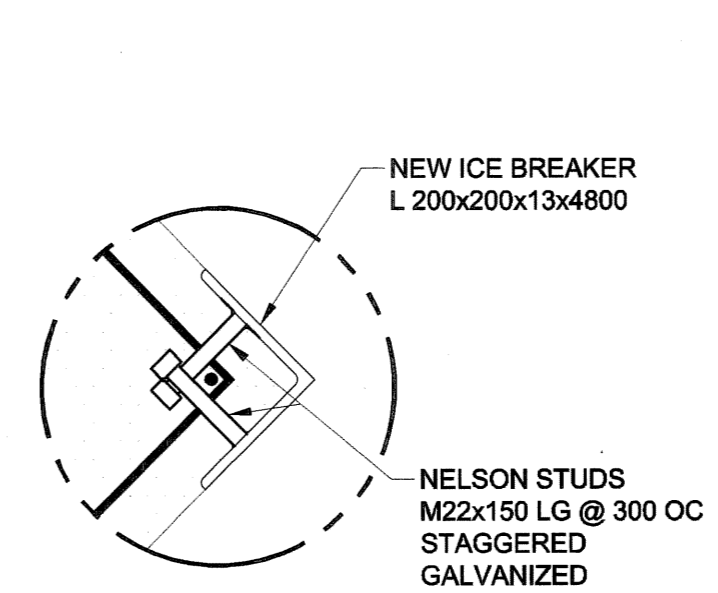


D SIZE 22" x 34" (559mm x 864mm)



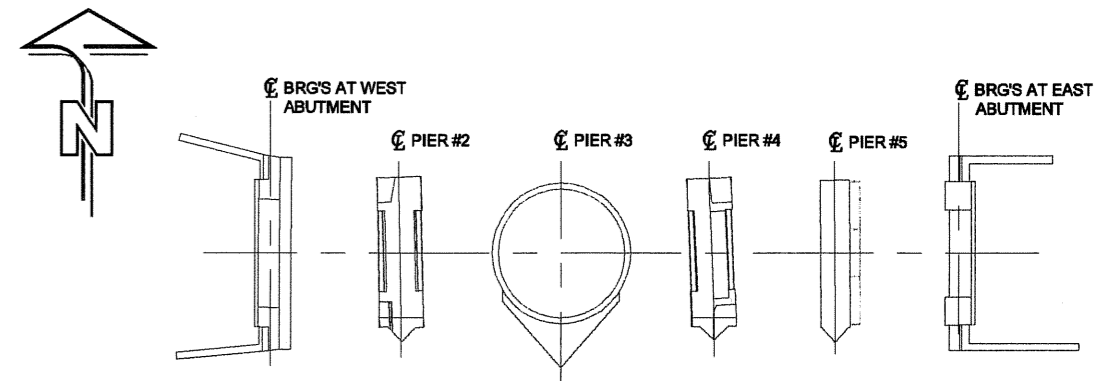
**SECTION A**  
N.T.S. 0 500 1000 1500 mm

PIER #4 & #5  
PROPOSED CONCRETE REMOVAL, ENCASEMENT & REINFORCING STEEL DETAILS.



**DETAIL 1**  
SCALE 1:10 0 200 400 600 mm

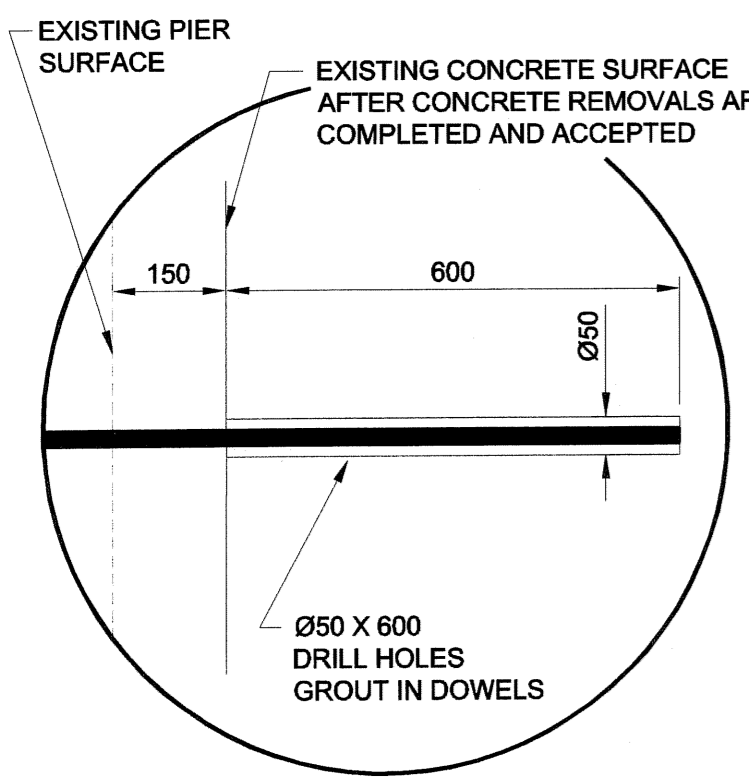
NEW ICE BREAKER  
TYPICAL FOR PIERS #4 & #5



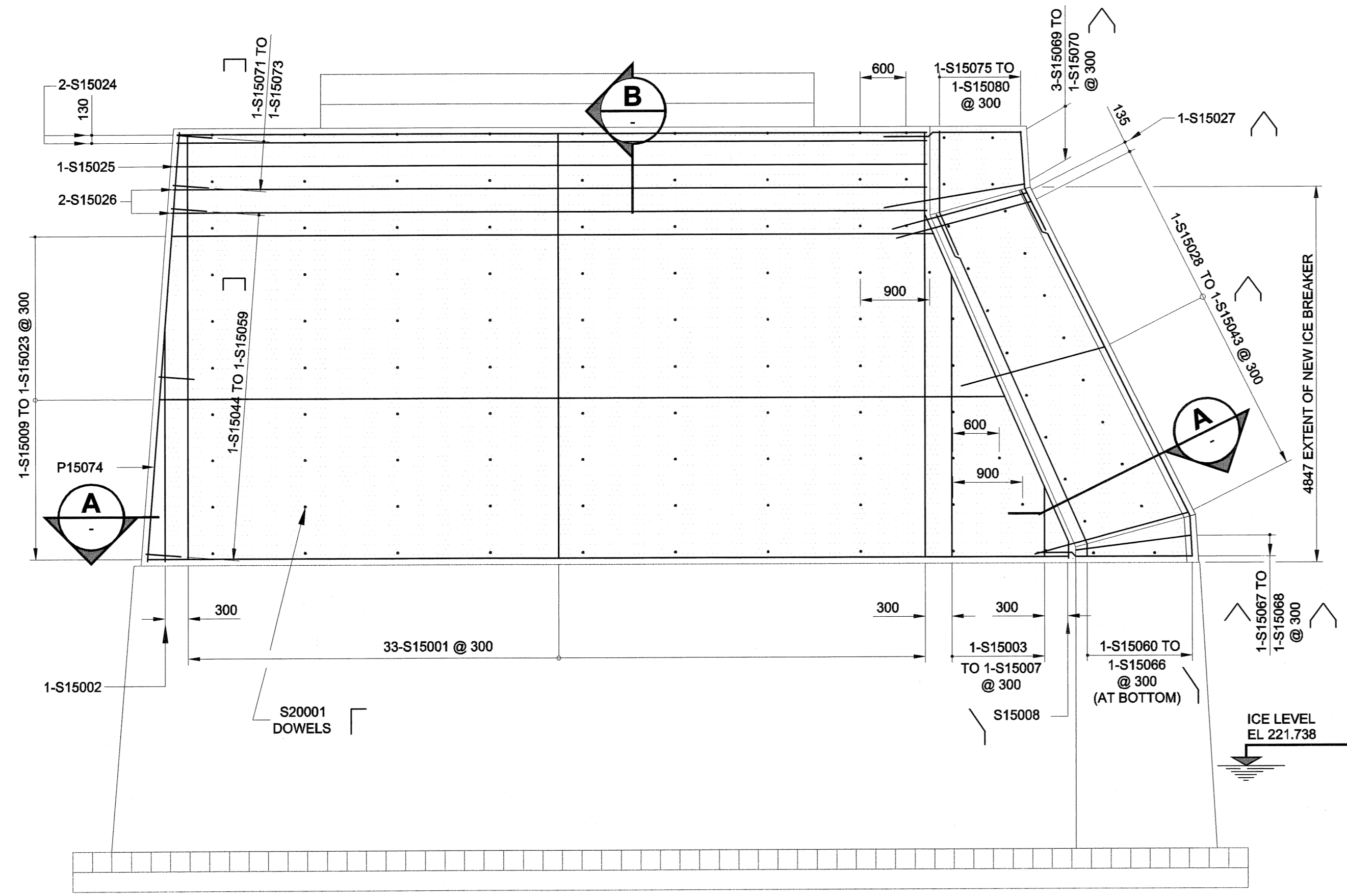
**KEY PLAN**

SCALE 1:500 0 1500 3000 4500 mm  
SUBSTRUCTURE - ABUTMENTS & PIERS

**SECTION B**  
SCALE 1:50 0 500 1000 1500 mm  
PIERS #4 & #5  
PROPOSED CONCRETE ENCASEMENT

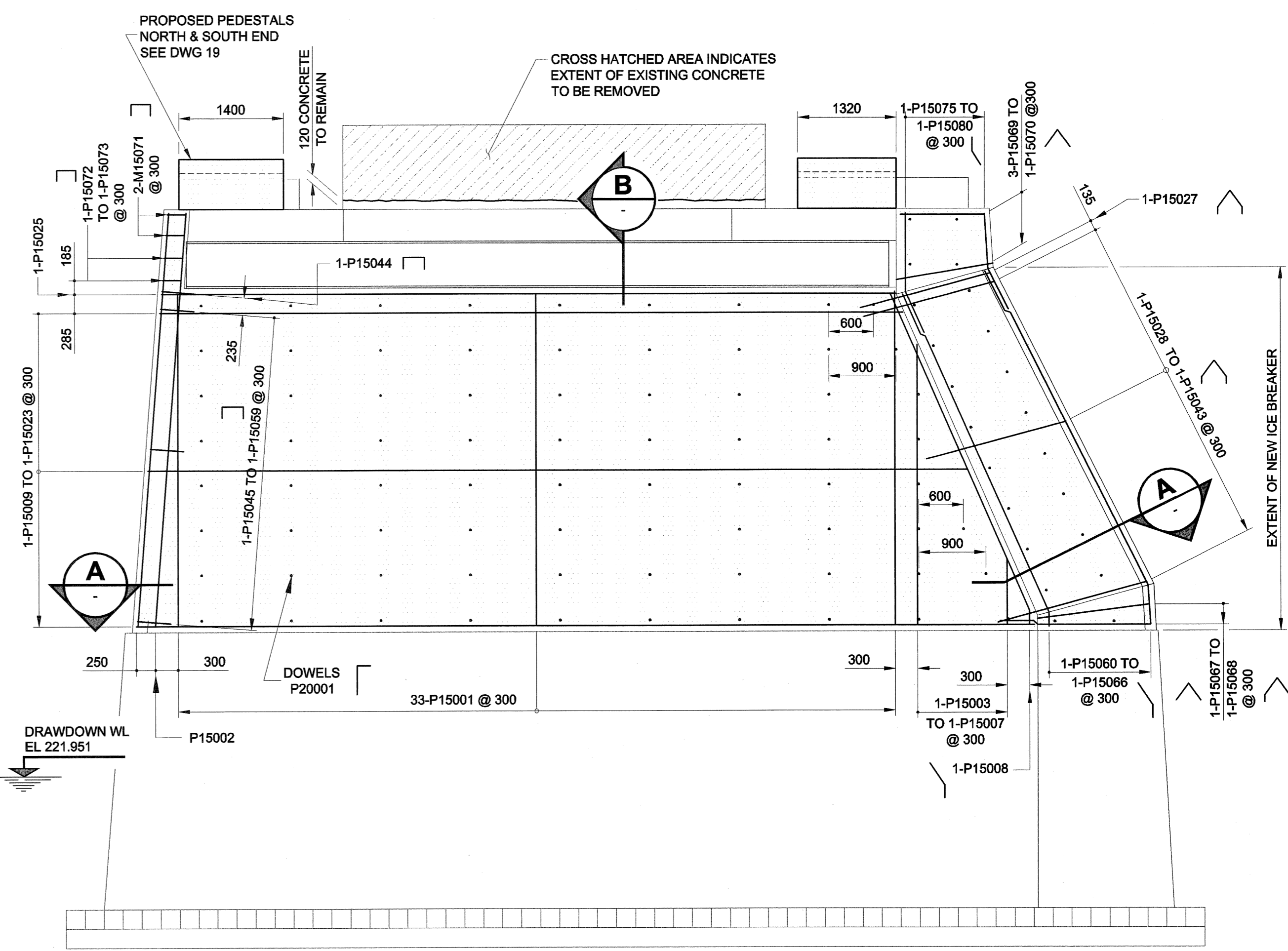


**DETAIL 2**  
SCALE 1:10 0 100 200 300 mm  
TYPICAL DOWEL INSTALLATION



**PIER #5 WEST ELEVATION**

SCALE 1:50 0 500 1000 1500 mm  
PROPOSED CONCRETE REMOVAL, ENCASEMENT & REINFORCING STEEL DETAILS



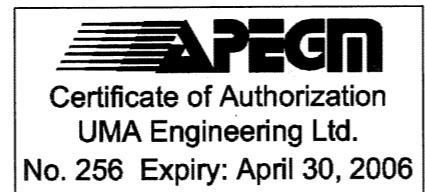
**PIER #4 WEST ELEVATION**

SCALE 1:50 0 500 1000 1500 mm  
PROPOSED CONCRETE REMOVAL, ENCASEMENT & REINFORCING STEEL DETAILS

**GENERAL NOTES:**  
1. FOR EXISTING PIER DIMENSIONS REFER TO PIER #2 CONCRETE ENCASEMENT DRAWING.  
2. REFER TO "GENERAL NOTES" ON DRAWING 17.

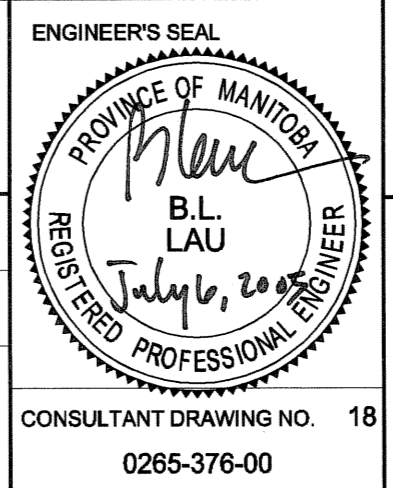
**NOTE:**  
ALL DIMENSIONS SHOWN ON THE DRAWINGS ARE BASED ON AVAILABLE INFORMATION AND RECORD DRAWINGS. THE CONTRACTOR SHALL FIELD MEASURE AND VERIFY ALL DIMENSIONS PRIOR TO COMMENCING CONSTRUCTION OR PRIOR TO PREPARATION OF SHOP DRAWINGS. THE CONTRACTOR SHALL MAKE THE APPROPRIATE ADJUSTMENTS TO THE APPLICABLE DETAILS AND DIMENSIONS ACCEPTABLE TO THE CONTRACT ADMINISTRATOR. THE CONTRACTOR SHALL THEN FABRICATE AND CONSTRUCT THE WORKS IN ACCORDANCE WITH THE CORRECTED DIMENSIONS.

**METRIC**  
WHOLE NUMBERS INDICATE MILLIMETRES  
DECIMALIZED NUMBERS INDICATE METRES



DESIGNED BY	BLL	CHECKED BY	SBB
DRAWN BY	DL	APPROVED BY	<i>Barb</i>
HOR. SCALE	AS SHOWN	ACCEPTED BY	<i>Mein</i>
VERT. SCALE	AS SHOWN	DATE	2005 07 27
NO.	REVISIONS	YYMMDD	BY
0	ISSUED FOR CONSTRUCTION	05/07/05	MP

**UMA** UMA Engineering Ltd.  
• Consulting • Engineering • Construction • Management Services



**THE CITY OF WINNIPEG**  
PUBLIC WORKS DEPARTMENT

**REDWOOD BRIDGE**  
REHABILITATIVE MAINTENANCE AND RELATED WORKS

PIER #4 & PIER #5  
CONCRETE REMOVAL, ENCASEMENT AND REINFORCING STEEL DETAILS

CITY DRAWING NUMBER  
B113-05-18

SHEET 18 OF 74

REV 18 0

CONSULTANT DRAWING NO. 18  
0265-376-00

Bid Opportunity No. 257-2005