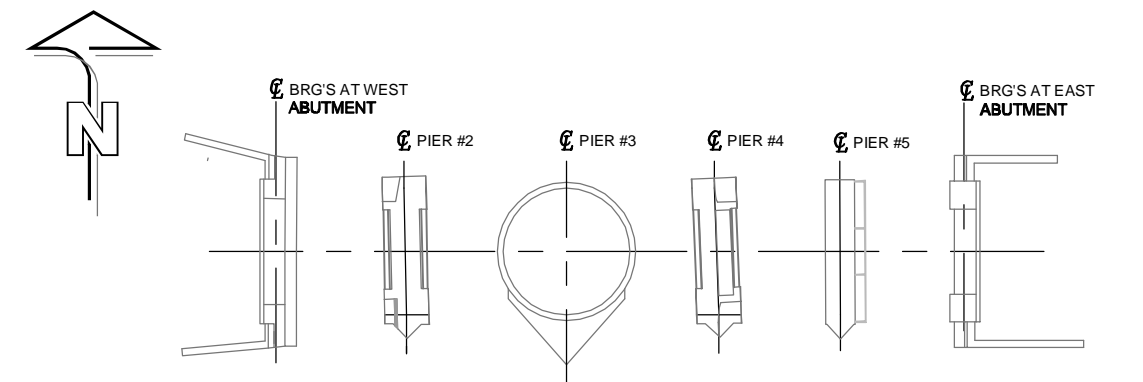
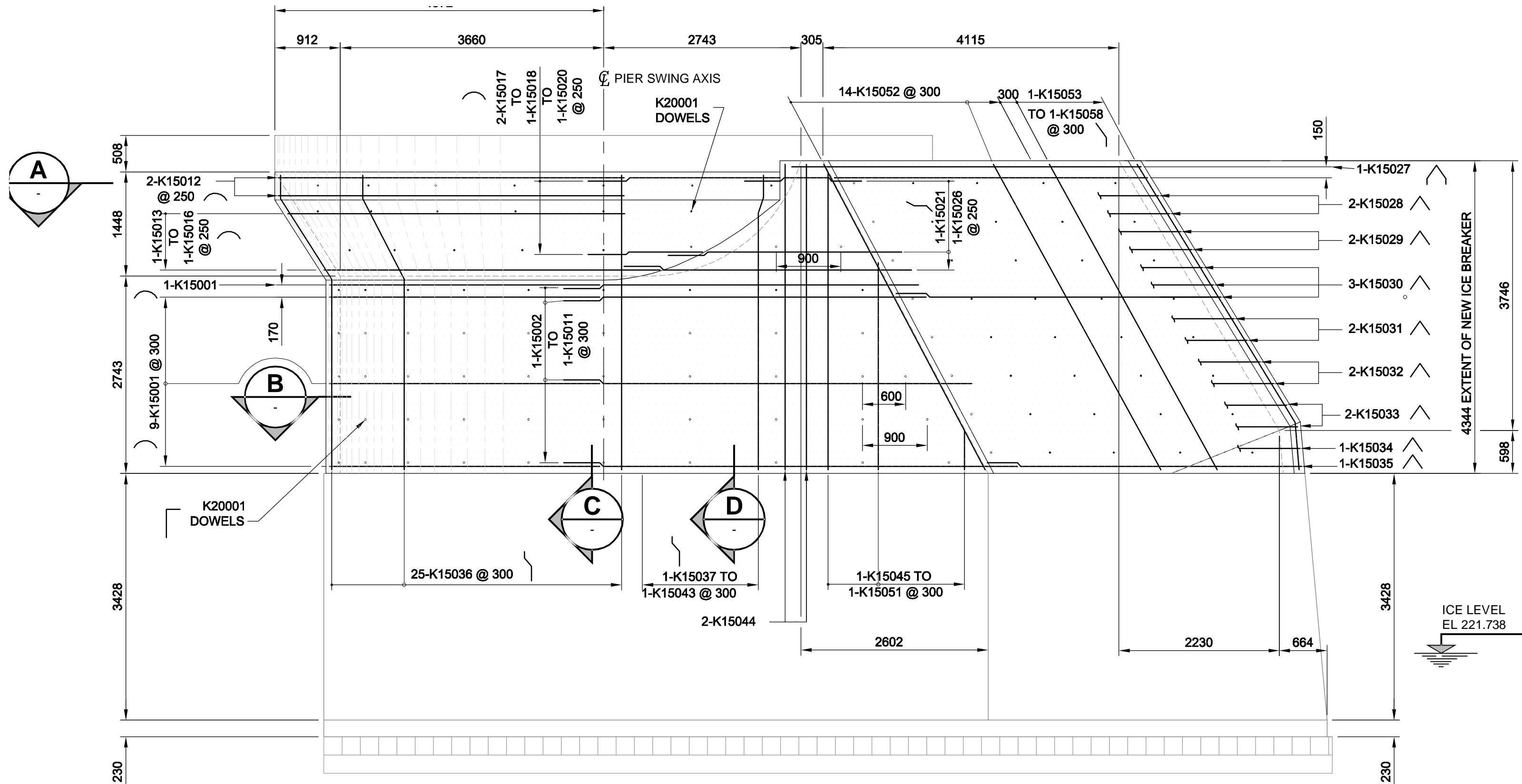
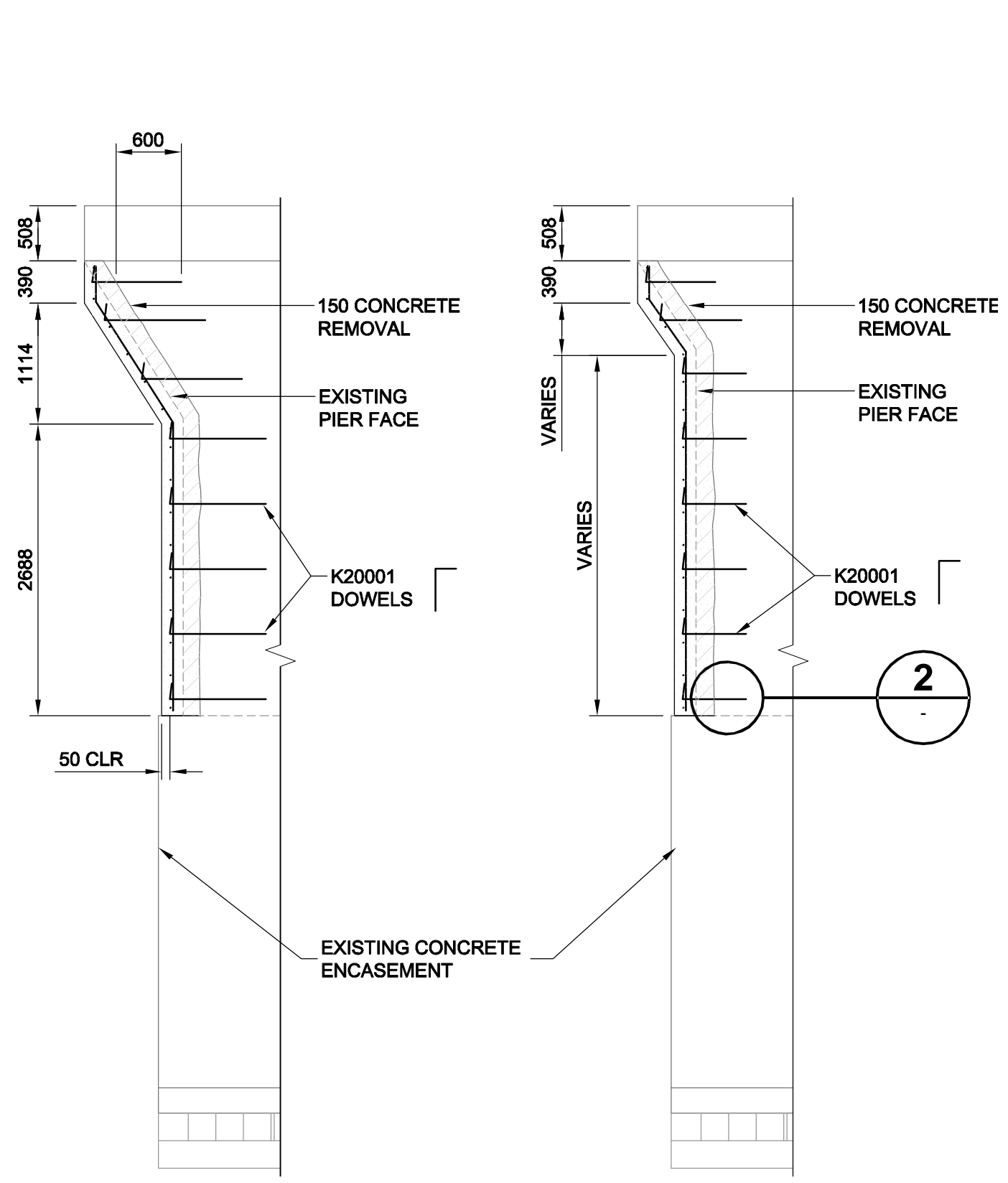
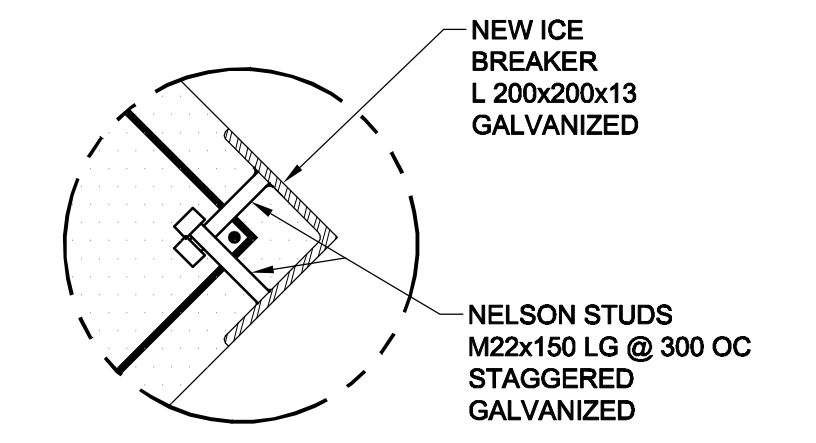


D SIZE 22" x 34" (559mm x 864mm)

PLOT SCALE: 1:1  
AUG2017 15:08 P:\026535-05\AutoCAD\15-WorKing Drawings\0265-35-05\_01-S-0017\_PX.dwg 2017-08-20 10:48am CGC



**KEY PLAN**  
SCALE 1:500  
SUBSTRUCTURE - ABUTMENTS & PIERS



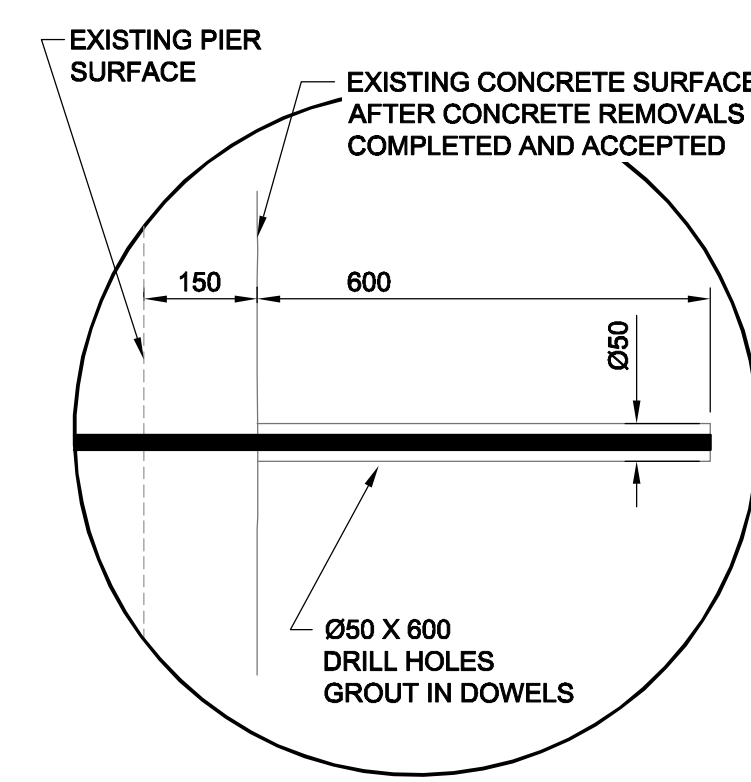
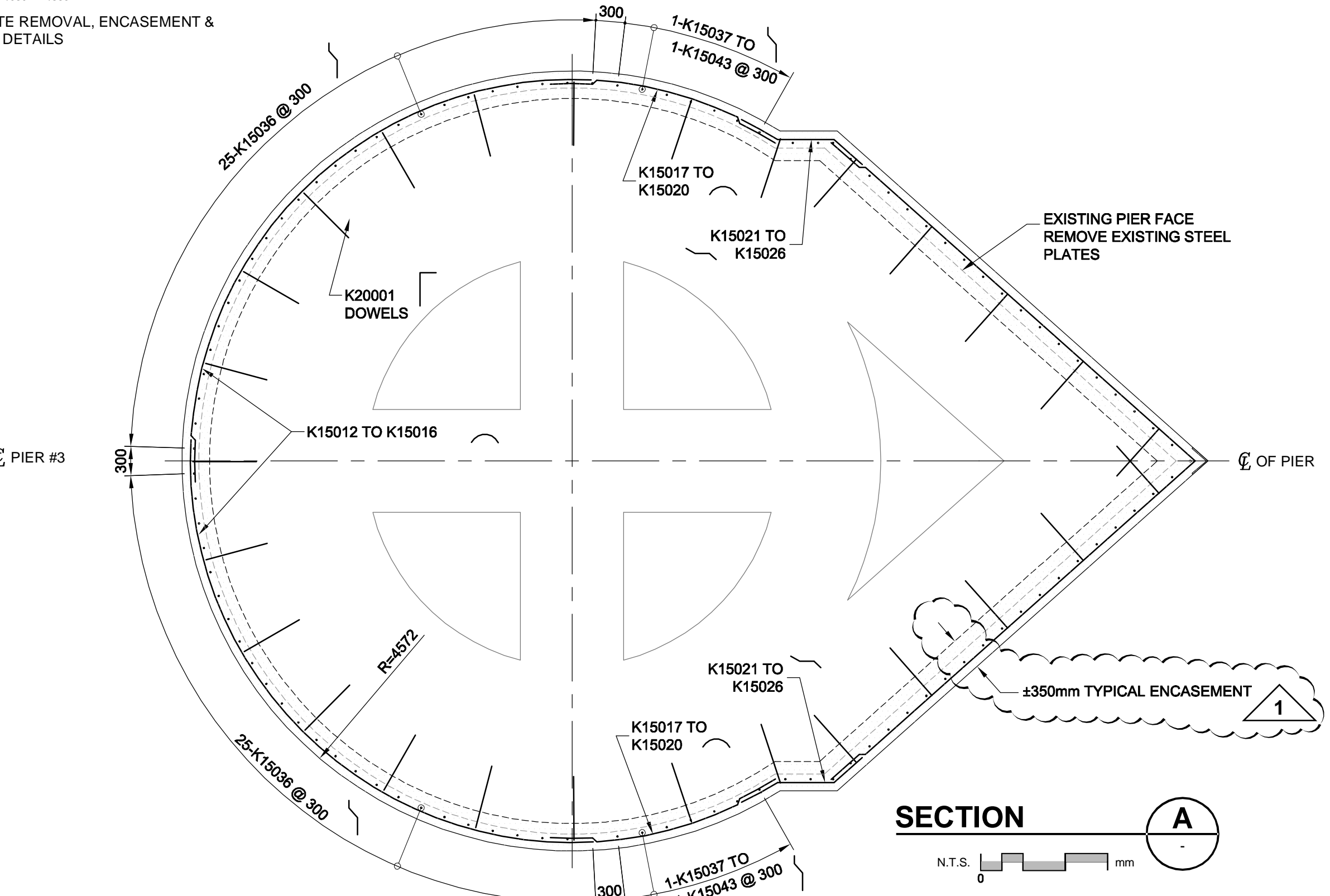
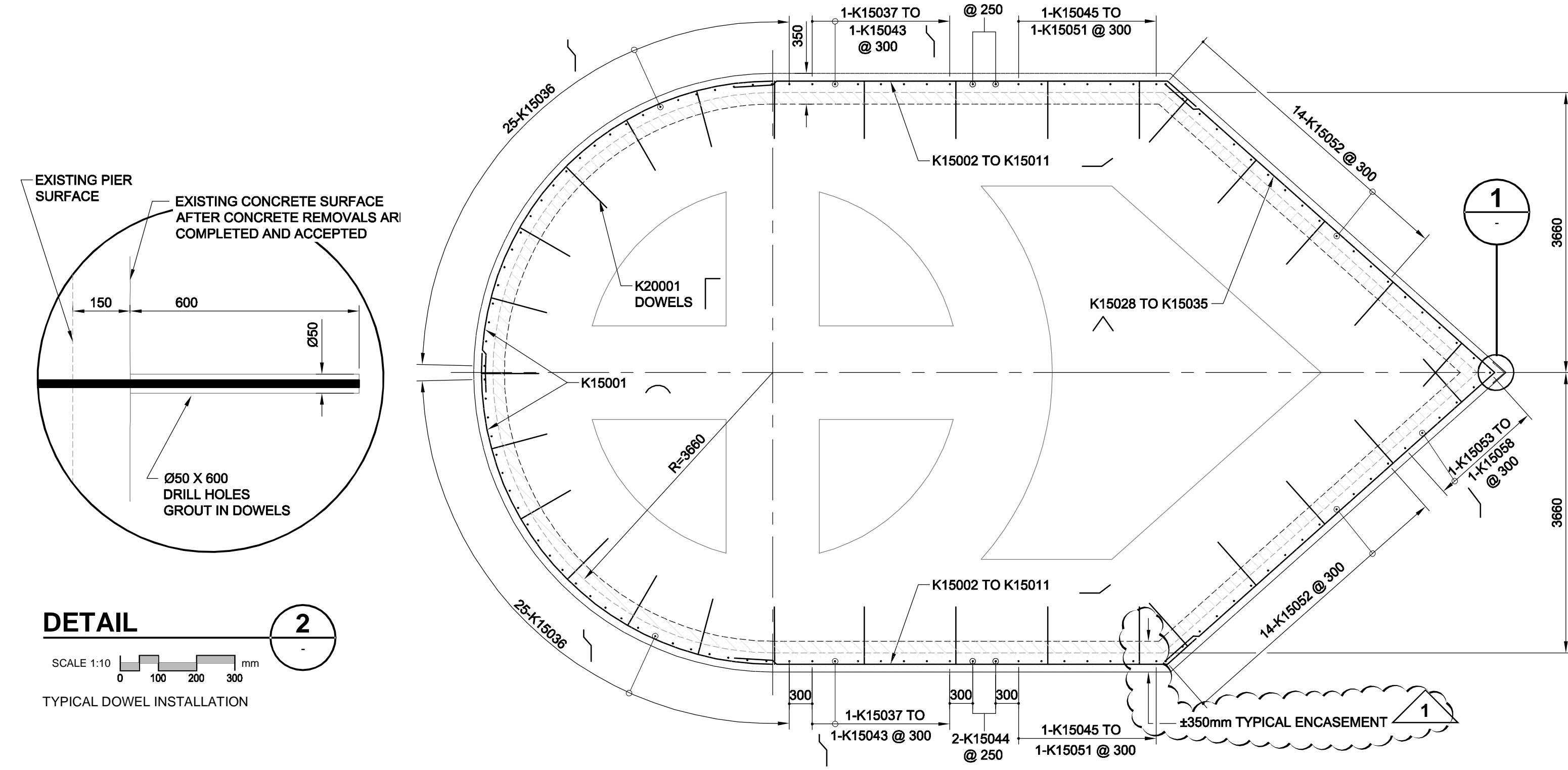
**DETAIL 1**  
SCALE 1:10  
PIER 3  
NEW ICE BREAKER

**SECTION C**  
SCALE 1:50

**SECTION D**  
SCALE 1:50

**PIER #3 WEST ELEVATION**  
SCALE 1:50

PROPOSED CONCRETE REMOVAL, ENCASUREMENT & REINFORCING STEEL DETAILS



**DETAIL 2**  
SCALE 1:10  
TYPICAL DOWEL INSTALLATION

- GENERAL NOTES:**
- ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSION STRENGTH OF 30 MPa AT 28 DAYS.
  - MAXIMUM AGGREGATE SIZE SHALL NOT EXCEED 20mm.
  - ALL REINFORCING STEEL & DOWELS SHALL BE DEFORMED BARS IN ACCORDANCE WITH CSA SPECIFICATION G 30.18.
  - CONCRETE REMOVAL TO BE 150mm UNLESS OTHERWISE NOTED.
  - THE CONCRETE PIER ENCASEMENTS SHALL HAVE A MINIMUM THICKNESS OF 200mm BEYOND THE ORIGINAL PIER FACES, EXCEPT FOR THE UPSTREAM (SOUTH) FACE OF PIER 2, WHICH WILL NOT EXTEND BEYOND THE ORIGINAL FACE.
  - REMOVE NOSEPLATES AS DIRECTED BY ENGINEER.
  - ALL 20M DOWELS TO BE SPACED AT 1200mm HORIZONTALLY AND 800mm VERTICALLY UNLESS OTHERWISE NOTED. DOWELS SHALL BE EMBEDDED 600mm INTO CONCRETE AND SHALL EXTEND TO WITHIN 50mm OF THE FORMED SURFACE. UNLESS OTHERWISE NOTED.
  - ALL REINFORCING BARS TO HAVE MINIMUM 50mm CLEAR COVER.
  - ALL 15M REINFORCING BARS TO BE AT 300mm MAX TYPICAL SPACING UNLESS OTHERWISE NOTED. TILT BARS AS REQUIRED TO SUIT UPWARD TAPER OF PIER FACES.

**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

**APEGM**  
Certificate of Authorization  
UMA Engineering Ltd.  
No. 256 Expiry: April 30, 2006

<b>UMA Engineering Ltd.</b> * Consulting * Engineering * Construction * Management Services		
DESIGNED BY	BLL	CHECKED BY
DRAWN BY	DL	APPROVED BY
HOR. SCALE	AS SHOWN	ACCEPTED BY
VERT. SCALE	AS SHOWN	DATE
NO.	REVISIONS	DATE

ENGINEER'S SEAL  
REVISION 0, ISSUED FOR CONSTRUCTION WAS SEALED BY B.L. LAU AND DATED 05/07/06  
CONSULTANT DRAWING NO. 17  
0265-376-00

**THE CITY OF WINNIPEG PUBLIC WORKS DEPARTMENT**

**REDWOOD BRIDGE REHABILITATIVE MAINTENANCE AND RELATED WORKS**

**PIER #3 CONCRETE REMOVAL, ENCASUREMENT AND REINFORCING STEEL DETAILS**

CITY DRAWING NUMBER B113-05-17  
SHEET 17 OF 74  
REV 17

Bid Opportunity No. 257-2005