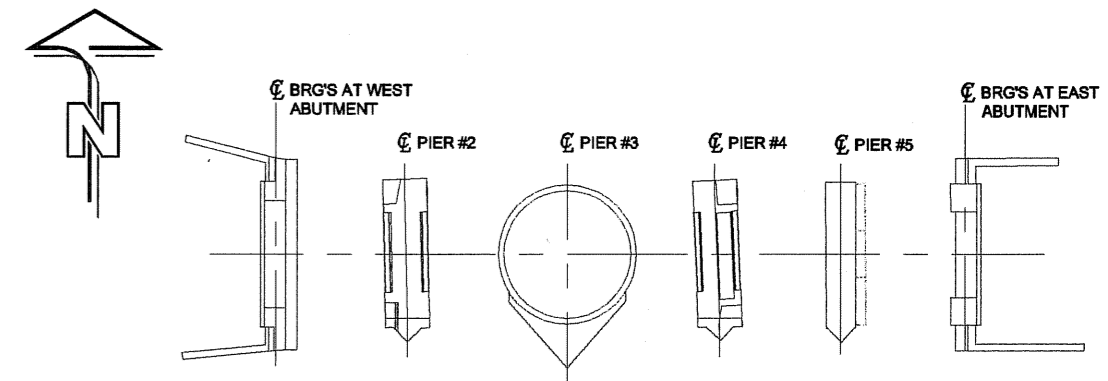
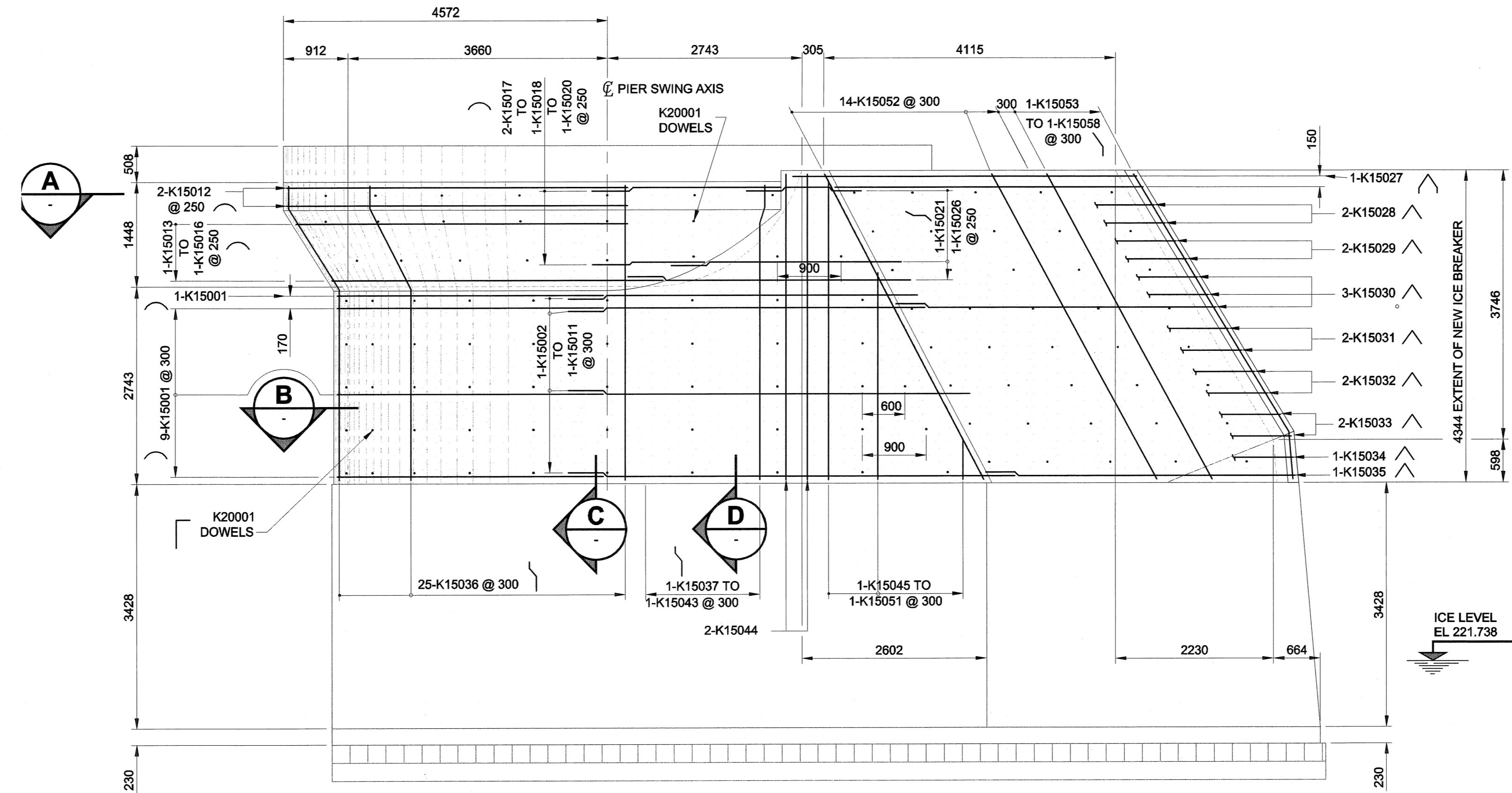
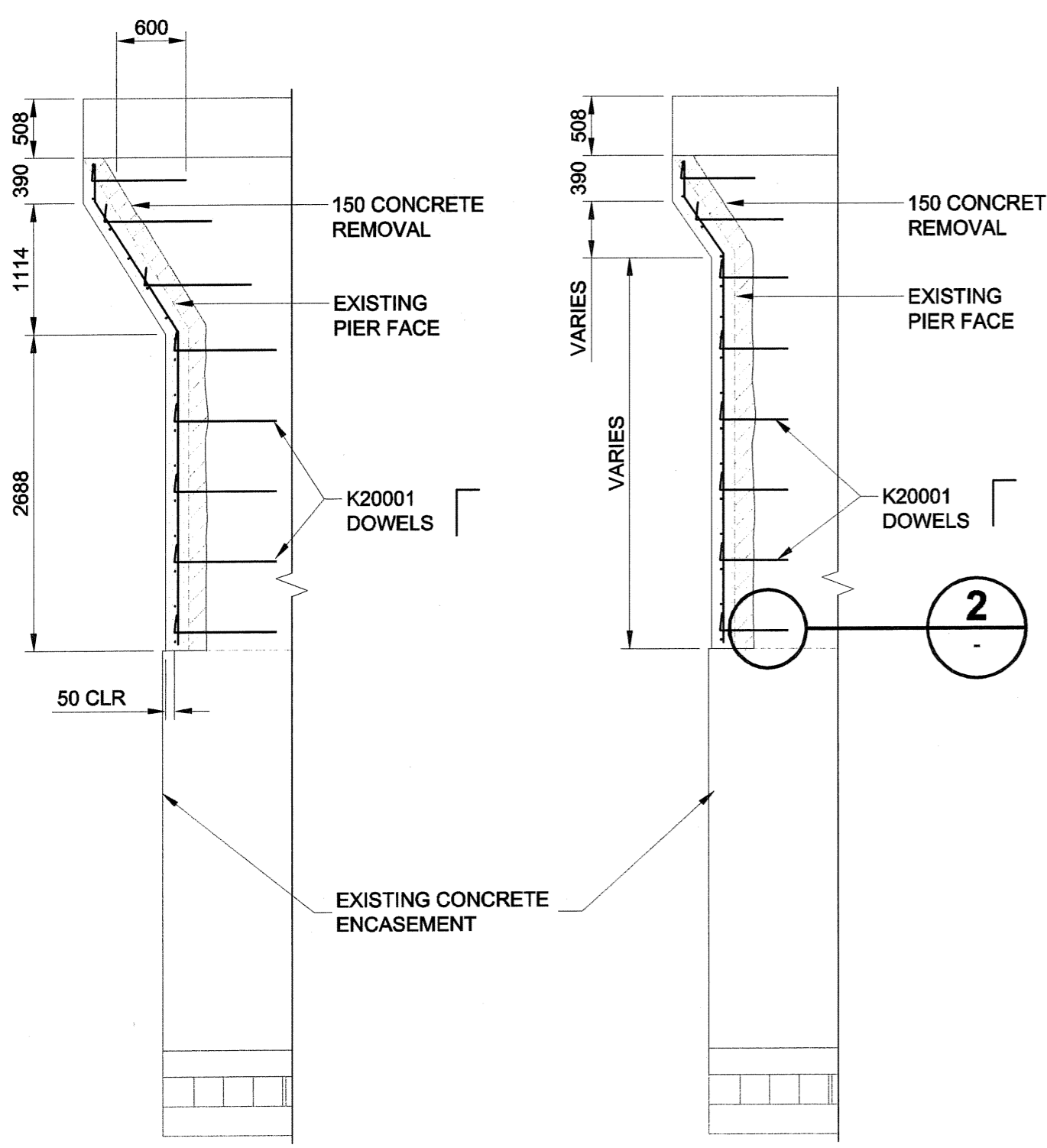
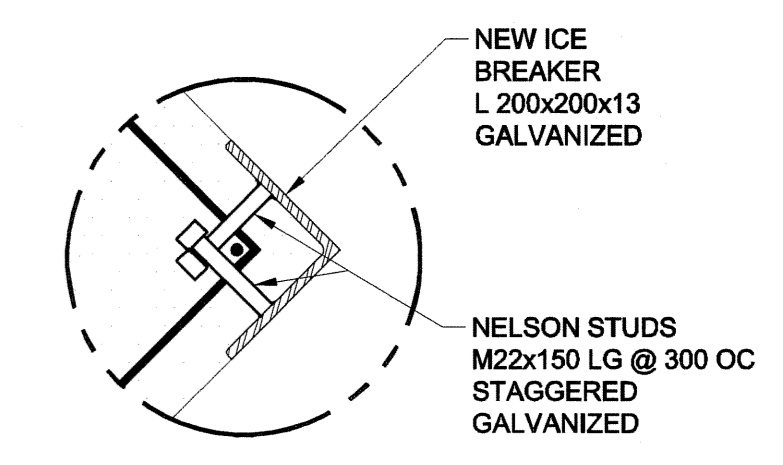


D SIZE 22" x 34" (559mm x 864mm)



KEY PLAN
SCALE 1:500
SUBSTRUCTURE - ABUTMENTS & PIERS



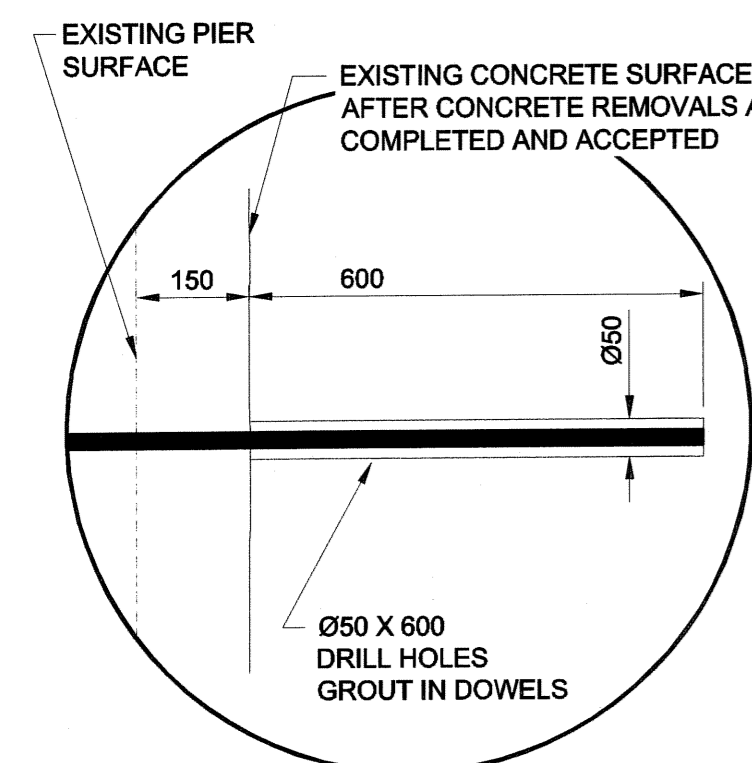
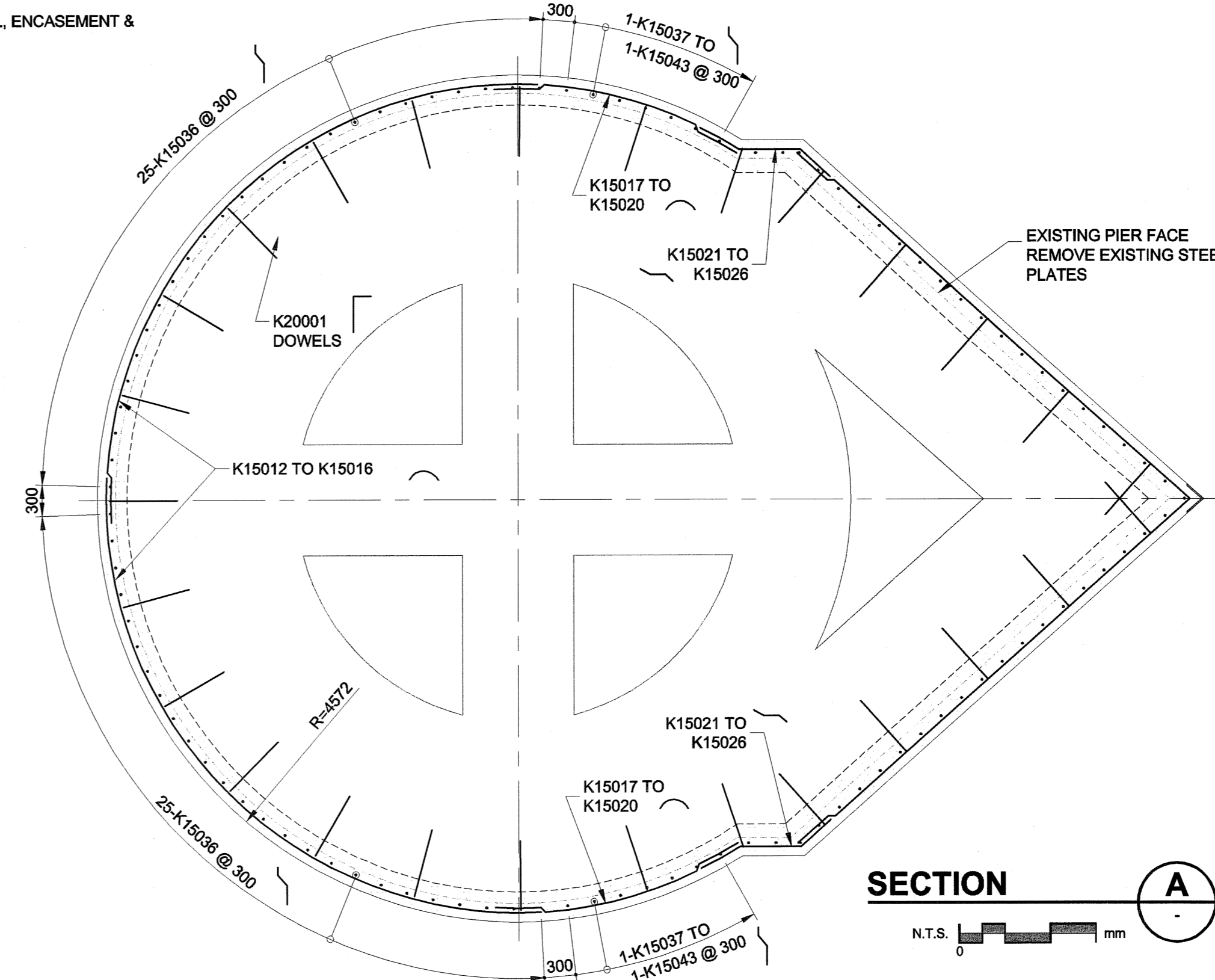
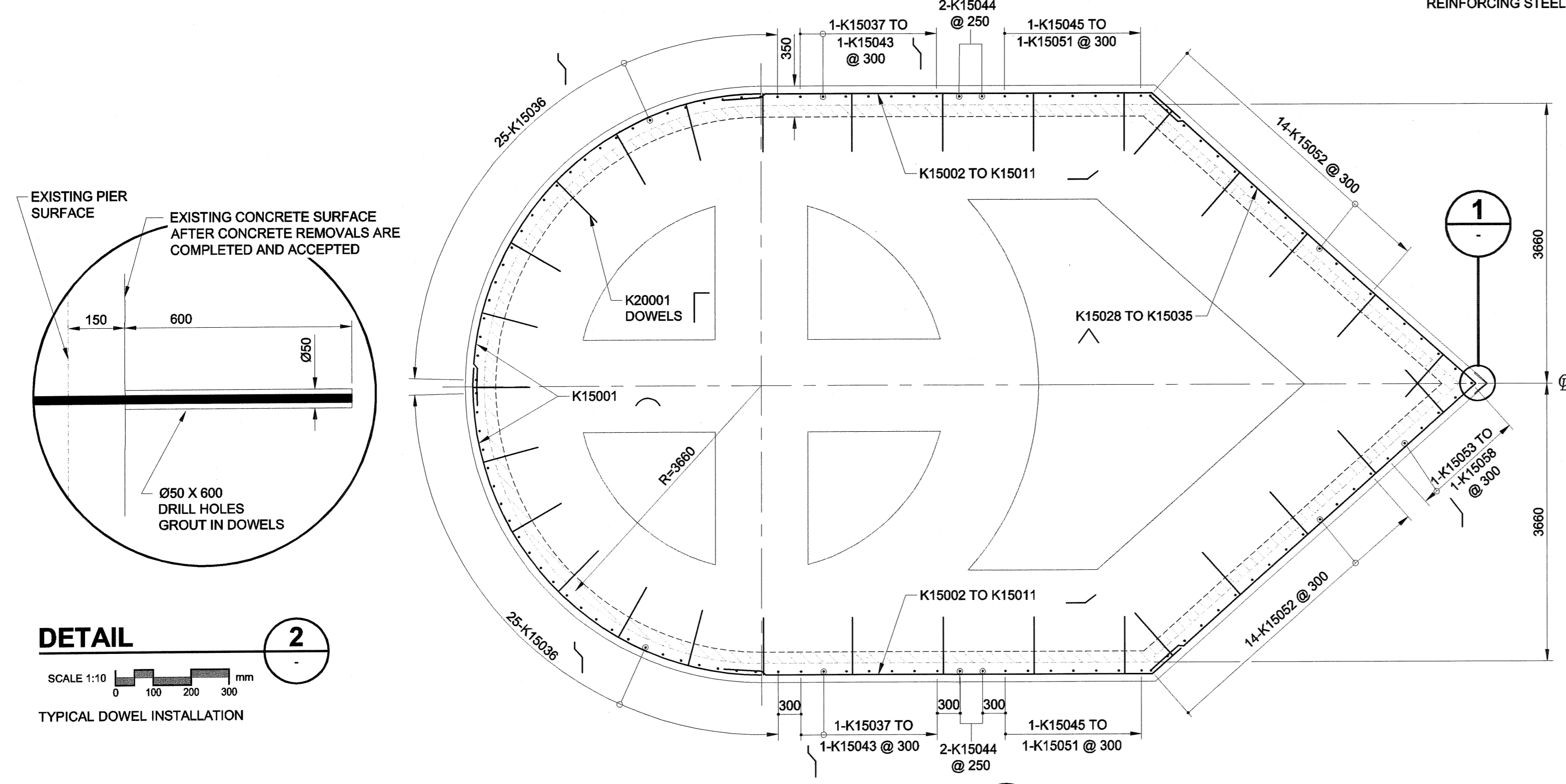
DETAIL 1
SCALE 1:10
PIER 3
NEW ICE BREAKER

SECTION C
SCALE 1:50

SECTION D
SCALE 1:50

PIER #3 WEST ELEVATION
SCALE 1:50

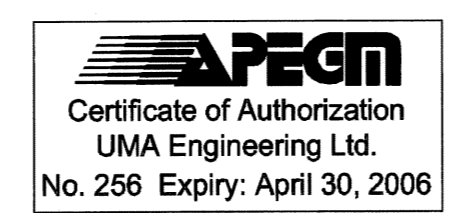
PROPOSED CONCRETE REMOVAL, ENCASEMENT & REINFORCING STEEL DETAILS



- 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 600mm 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



UMA Engineering Ltd. • Consulting • Engineering • Construction • Management Services		ENGINEER'S SEAL PROVINCE OF MANITOBA B.L. LAU REGISTERED PROFESSIONAL ENGINEER July 6, 2006	
DESIGNED BY: BLL	CHECKED BY: SBB	CONSULTANT DRAWING NO. 17 0265-376-00	
DRAWN BY: DL	APPROVED BY: BUB	CITY DRAWING NUMBER B113-05-17	
HOR. SCALE: AS SHOWN	ACCEPTED BY: [Signature]	SHEET 17 OF 74	
VERT. SCALE: AS SHOWN	DATE: 2005 07 07	REV 0	
NO. REVISIONS	BY	PIER #3 CONCRETE REMOVAL, ENCASEMENT AND REINFORCING STEEL DETAILS	

THE CITY OF WINNIPEG PUBLIC WORKS DEPARTMENT

REDWOOD BRIDGE REHABILITATIVE MAINTENANCE AND RELATED WORKS

PIER #3 CONCRETE REMOVAL, ENCASEMENT AND REINFORCING STEEL DETAILS

Bid Opportunity No. 257-2005