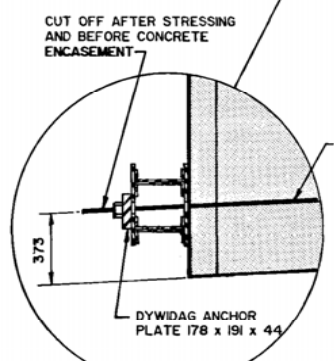
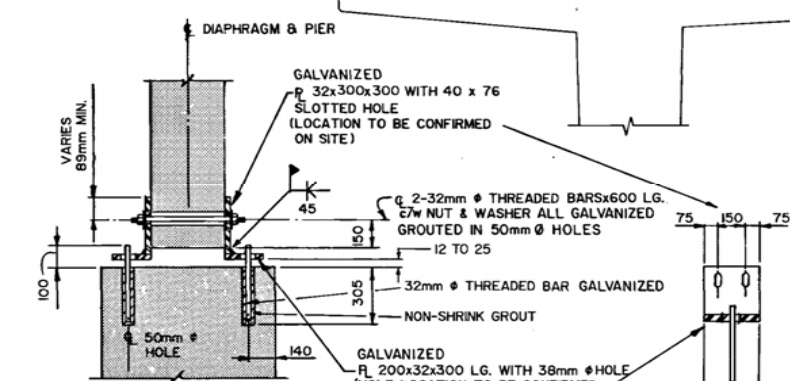


DETAIL AT INSERTS  
SCALE - 1 : 20



DETAIL AT DYWIDAG BAR  
SCALE - 1 : 20



SECTION D  
TYPICAL AT PIERS  
1, 2, 5, 7, 9 & 10  
SCALE - 1 : 20

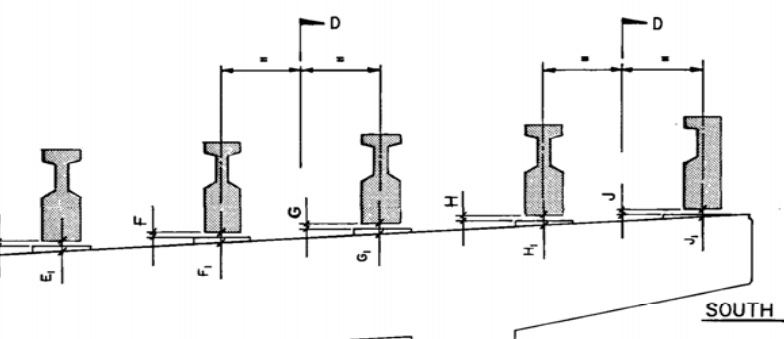
DEPTH	DISTANCE AT $\phi$ PIERS						DEPTH	DISTANCE AT $\phi$ PIERS		
	1	2	5	7	9	10		3	4	5
A	25	25	25	25	25	25	A <sub>1</sub>	161	161	161
B	25	25	25	25	25	25	B <sub>1</sub>	150	150	150
C	25	25	25	25	25	25	C <sub>1</sub>	150	150	150
D	25	25	25	25	25	25	D <sub>1</sub>	150	150	150
E	25	25	25	25	25	25	E <sub>1</sub>	150	150	150
F	25	25	25	25	25	25	F <sub>1</sub>	150	150	150
G	25	25	25	25	25	25	G <sub>1</sub>	150	150	150
H	25	25	25	25	25	25	H <sub>1</sub>	150	150	150
J	25	25	25	25	25	25	J <sub>1</sub>	161	161	161

SECTION C  
SCALE - 1 : 20

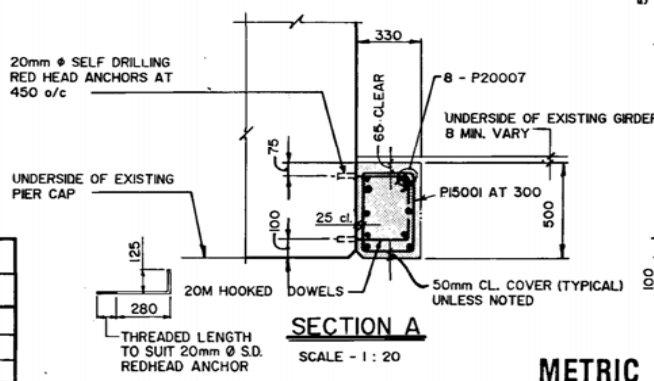
PIER 6  
SCALE - 1 : 50

TABLE A - WILLIAMS SUPER HIGH TENSILE BOLT DATA

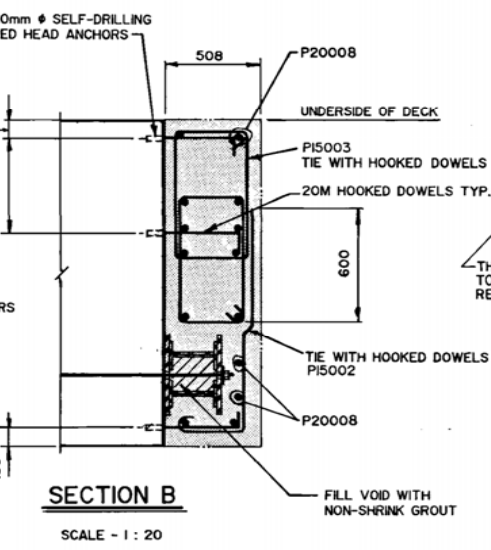
NORTH SIDE	HOLE DEPTH(mm)	TEST LOAD (kN)	SOUTH SIDE	HOLE DEPTH(mm)	TEST LOAD (kN)
# 1	438	0.645	# 1	610	1.392
# 2	508	1.165	# 2	685	1.357
# 3	508	1.165	# 3	381	0.645
# 4	457	0.778	# 4	381	0.614



PIERS 1 TO 5 & 7 TO 10  
SCALE - 1 : 50



SECTION A  
SCALE - 1 : 20



SECTION B  
SCALE - 1 : 20

METRIC  
WHOLE NUMBERS INDICATE MILLIMETRES  
DECIMALIZED NUMBERS INDICATE METRES

NO	REVISIONS	DATE	APP
1	RECORD DRAWING	NOV. 86	



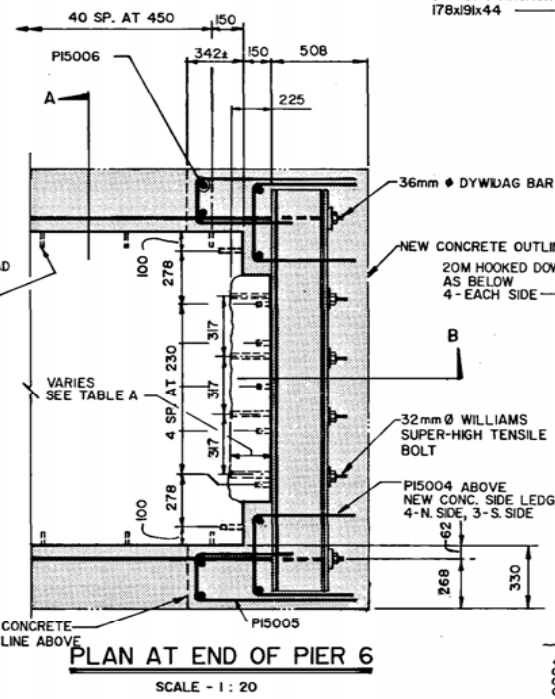
the **uma** group  
Underwood McLeilan Ltd.  
Consulting Engineers and Planners

DESIGNED BY: K.U.	DRAWN BY: BH
CHECKED BY: J.T.	DATE: APRIL 1985
APPROVED BY: [Signature]	DATE: NOV. 86
	JOB No. 0265-216-01-03

THE CITY OF WINNIPEG  
WORKS & OPERATIONS DIVISION  
STREETS & TRANSPORTATION DEPARTMENT

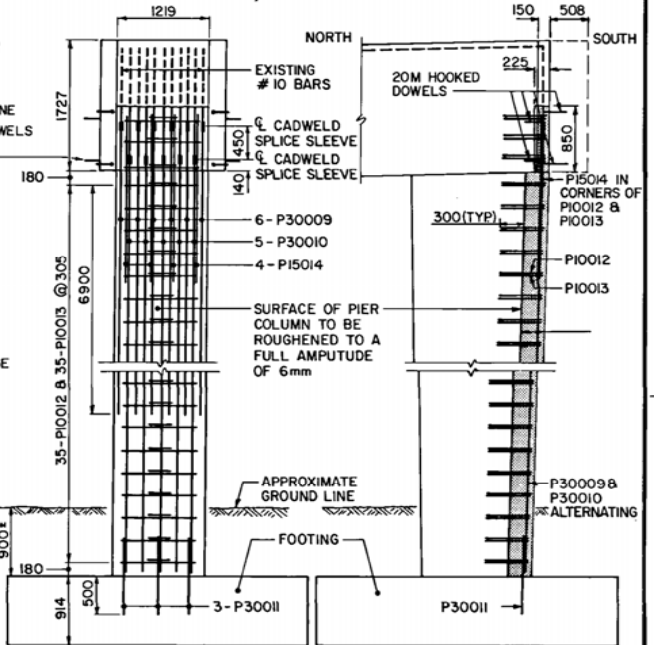
NAIRN AVENUE OVERPASS  
DECK REHABILITATION, STRUCTURAL STRENGTHENING AND RELATED WORKS

PIER MODIFICATIONS	
AUTHORIZED BY: [Signature]	DATE: 1985-04-16
ACCEPTED BY: [Signature]	DATE: 85-04-16
SCALE: AS NOTED	DRAWING NO. B121-85-06



PLAN AT END OF PIER 6  
SCALE - 1 : 20

SOUTH END VIEW OF PIER 6  
(NORTH END SIMILAR)  
SCALE - 1 : 20



SOUTH ELEVATION WEST ELEVATION  
PIER 6 - SOUTH COLUMN STRENGTHENING  
SCALE - 1 : 50

- NOTES:
- POST-TENSIONING BARS SHALL BE 36mm  $\phi$  DYWIDAG THREADED BARS WITH AN ULTIMATE STRESS OF 1230 MPa.
  - FINAL PRESTRESS FORCE PER DYWIDAG BAR TO BE 630 kN.
  - POST-TENSIONING OF THE DYWIDAG BARS WILL NOT BE ALLOWED UNTIL THE GROUT FOR THE 32mm  $\phi$  BOLTS HAS ATTAINED A COMPRESSIVE STRENGTH OF 40MPa.
  - DYWIDAG BARS ON EACH SIDE OF THE PIER BEAM SHALL BE STRESSED SIMULTANEOUSLY.
  - CONCRETE FOR THE ENCASEMENT SHALL BE PLACED ONLY AFTER THE DYWIDAG BARS HAVE BEEN STRESSED AND ANCHORED.
  - MINIMUM CONCRETE CYLINDER STRENGTH AT 28 DAYS FOR CONCRETE ENCASEMENT SHALL BE 45MPa.
  - ALL STRUCTURAL STEEL TO BE IN CONFORMANCE WITH THE REQUIREMENTS OF CSA STANDARD G40.21 GRADE 300W.
  - THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS CONSISTING OF THREE (3) SETS OF PRINTS AND ONE (1) SET OF REPRODUCIBLE SEPIAS FOR THE POST-TENSIONING INCLUDING ANCHORAGE ASSEMBLIES TO THE ENGINEER FOR APPROVAL PRIOR TO FABRICATION.
  - COLOR MATCH NEW CONCRETE WITH EXISTING.

RECORD DRAWING

B-5572