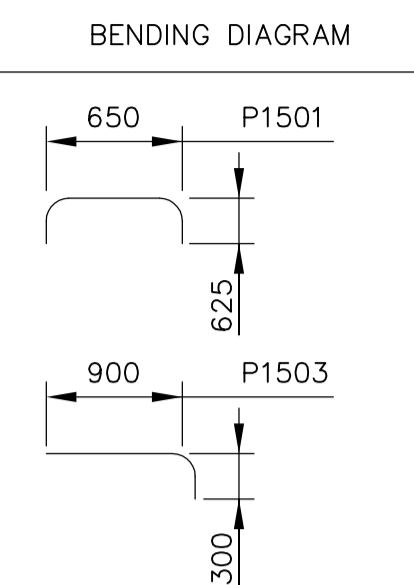
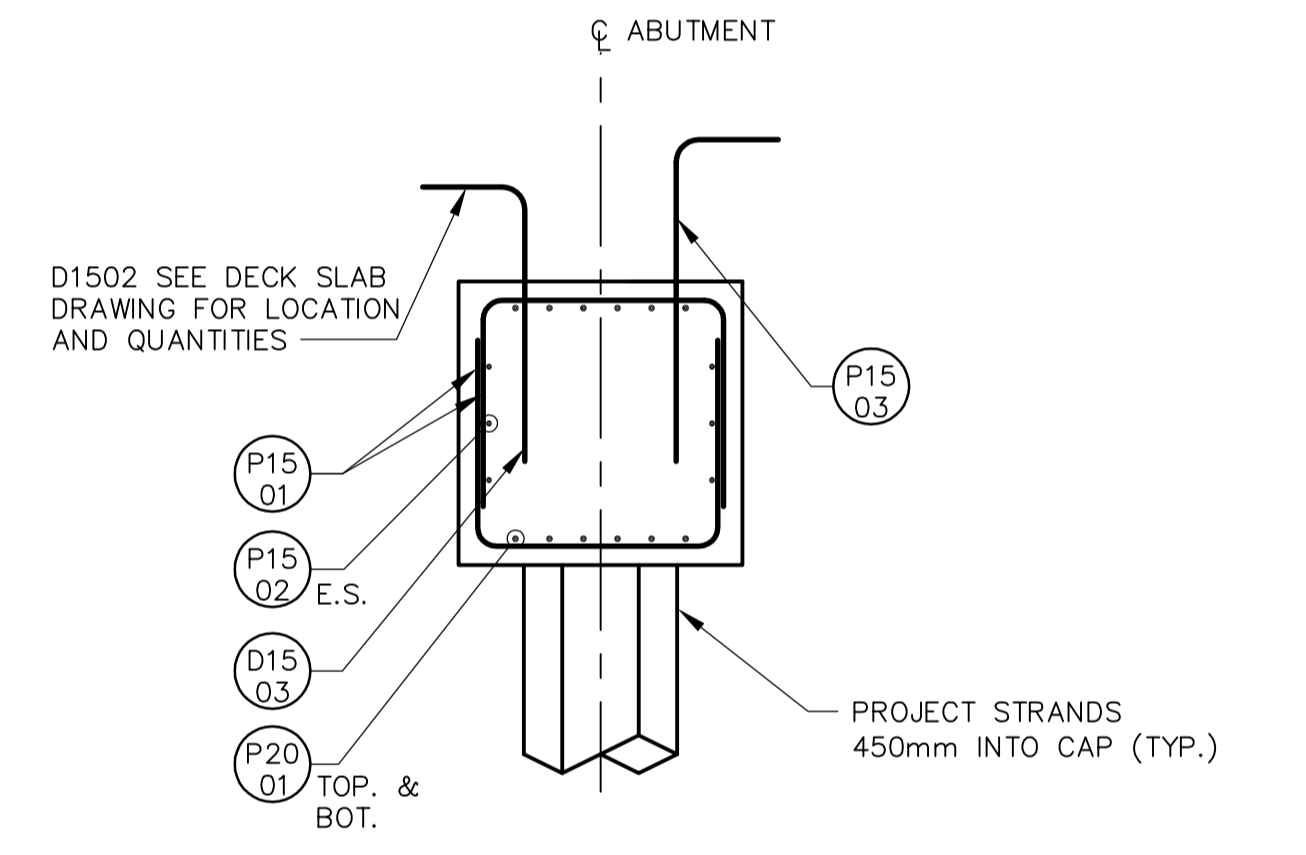


BILL OF REINFORCING STEEL FOR BOTH ABUTMENTS							
STRAIGHT BARS				BENT BARS			
MK.	No.	LENGTH	MASS	MK.	No.	LENGTH	MASS
P1502	12	9100	171	P1501	112	1900	334
				P1503	22	1200	41
P2001	24	9100	514				
TOTAL MASS OF REINFORCING STEEL							1060 kg.
TOTAL VOLUME OF STRUCTURAL CONCRETE (ABUTMENTS)							10.35 m ³
TOTAL NUMBER OF HEX. PRECAST PILE							8



- NOTES:
1. ALL DIMENSIONS GIVEN ARE OUT TO OUT, EXCEPT RADII ARE INSIDE DIMENSIONS.
 2. ALL REINFORCING STEEL SHALL BE DEFORMED REINFORCING, UNLESS NOTED OTHERWISE IN THE ABOVE BILL OF REINFORCING STEEL.
 3. ALL REINFORCING STEEL SHALL CONFORM TO CAN/CSA G30.16-M92 GRADE 400W UNLESS NOTED OTHERWISE IN THE ABOVE BILL OF REINFORCING STEEL.
 4. LIKE BARS SHALL BE BUNDLED, SECURELY TIED AND IDENTIFIED AS TO MARK AND SITE No. BY APPROPRIATE MEANS. ALL OTHER ITEMS SHALL BE IDENTIFIED IN A SIMILAR FASHION.



APEGN
Certificate of Authorization
Earth Tech Canada Inc.
No. 730 Expiry: April 30, 2006

B.M. ELEV.	NO.	ISSUED FOR TENDER	DATE	REVISIONS	BY
	00	ISSUED FOR TENDER	06/02/03		KC

DESIGNED BY	AP	CHECKED BY	EBL
DRAWN BY	KC	APPROVED BY	D.J. TANIGUCHI
SCALE:	AS NOTED	RELEASED FOR CONSTRUCTION BY:	R. SOROKOWSKI
DATE		DATE	

ENGINEER'S SEAL
PROVINCE OF MANITOBA
ORIGINAL SIGNED BY
E.B. LOEWEN
Member 8325
06/02/06
REGISTERED PROFESSIONAL ENGINEER
CONSULTANT DRAWING NO.
WN-S0491

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT
ENGINEERING DIVISION

WATER TREATMENT PLANT
AQUEDUCT BRIDGES
FOUNDATIONS & CONCRETE STRUCTURES

STRUCTURAL
EASTERN BRIDGE
ABUTMENT REINFORCING DETAILS

CITY FILE NUMBER
SHEET 4 OF 8
CITY DRAWING NUMBER
1-060IN-A-S0491-001-00D