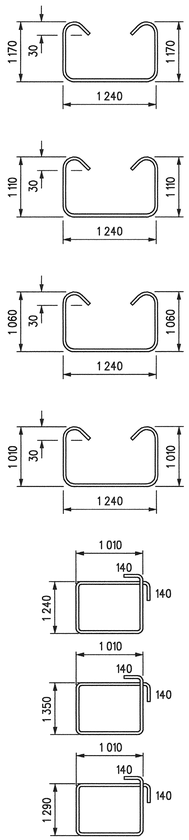
BILL OF REINFORCING STEEL
FOR ABUTMENT MODIFICATION - STAGE 1 SITE No. 2924-00

MARK	TYPE	PIN DIAMETER	LENGTH	No.	MASS
1501	BENT	90	3 580	11	61.83
1502	BENT	90	3 460	18	97.78
1503	BENT	90	3 360	16	84.40
1504	BENT	90	3 260	4	20.47
1505	BENT	65	4 780	10	75.05
1506	BENT	65	5 000	1	7.85
1507	BENT	65	4 880	1	7.66

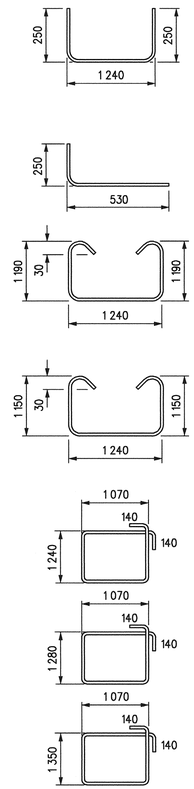
BENDING DIAGRAM



BILL OF REINFORCING STEEL
FOR ABUTMENT MODIFICATION - STAGE 1 SITE No. 2924-00

MARK	TYPE	PIN DIAMETER	LENGTH	No.	MASS
1508	BENT	90	1 740	8	21.85
1509	STR		1 120	8	14.07
1510	STR		1 010	6	9.51
1511	BENT	90	780	570	698.02
1512	BENT	90	3 620	12	68.20
1513	BENT	90	3 540	5	27.79
1514	BENT	65	4 900	9	69.24
1515	BENT	65	4 980	1	7.82
1516	BENT	65	5 120	1	8.04
1517	STR		1 150	8	14.44
1518	STR		1 070	6	10.08
1519	STR		12 530	3	59.02

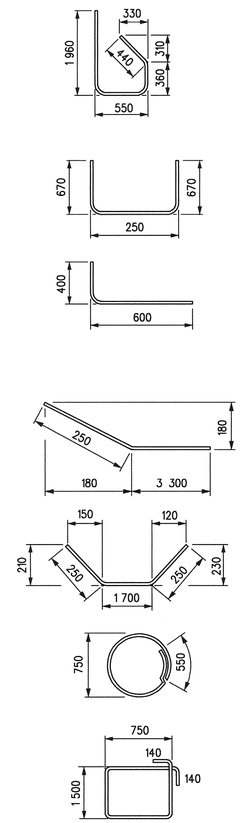
BENDING DIAGRAM



BILL OF REINFORCING STEEL
FOR ABUTMENT MODIFICATION - STAGE 1 SITE No. 2924-00

MARK	TYPE	PIN DIAMETER	LENGTH	No.	MASS
1522	BENT	90	3 310	84	436.52
1523	STR		12 500	3	58.88
1524	BENT	90	1 590	84	209.69
1525	BENT	90	1 000	81	127.17
1526	STR		12 400	7	136.28
1527	STR		12 640	7	138.91
1528	STR		1 350	84	178.04
1529	BENT	90	3 550	4	22.29
1531	BENT	90	2 190	4	13.75
1535	BENT		2 920	8	36.68
1536	STR		450	20	14.13
1537	BENT	65	4 780	8	60.04

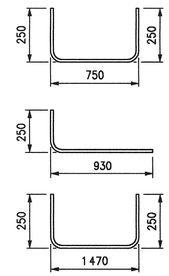
BENDING DIAGRAM



BILL OF REINFORCING STEEL
FOR ABUTMENT MODIFICATION - STAGE 1 SITE No. 2924-00

MARK	TYPE	PIN DIAMETER	LENGTH	No.	MASS
1538	BENT	90	1 250	16	31.40
1539	BENT	90	1 180	24	44.46
1540	BENT	90	1 970	4	12.37
1541	STR		4 400	4	27.63
1542-1	STR		1 760	1	2.76
1542-2	STR		2 340	1	3.67
1542-3	STR		2 930	1	4.60
1543	STR		1 920	2	6.03
1544	STR		1 370	6	12.91
1545	STR		950	6	8.95
1546-1	STR		2 360	2	7.41
1546-2	STR		2 210	2	6.94
1546-3	STR		2 050	2	6.44
1546-4	STR		1 900	2	5.97
1546-5	STR		1 750	2	5.50
1546-6	STR		1 590	2	4.99
1546-7	STR		1 440	2	4.52
1546-8	STR		1 290	2	4.05
1546-9	STR		1 130	2	3.55
1546-10	STR		980	2	3.08
1547	STR		3 040	7	33.41
1548	STR		1 110	5	8.71
1549	STR		4 360	4	27.38
1550-1	STR		2 900	1	4.55
1550-2	STR		2 310	1	3.63
1550-3	STR		1 730	1	2.72
1551	STR		3 880	5	30.46
1552-1	STR		1 840	1	2.89
1552-2	STR		2 440	1	3.83
1553-1	STR		1 390	1	2.18
1553-2	STR		1 990	1	3.12
1554	STR		1 270	2	3.99
1555	STR		1 190	6	11.21
1556-1	STR		2 390	2	7.50
1556-2	STR		2 240	2	7.03
1556-3	STR		2 090	2	6.56
1556-4	STR		1 940	2	6.09
1556-5	STR		1 790	2	5.62

BENDING DIAGRAM



REVISIONS

DATE	BY	DESCRIPTION

PROVINCE OF MANITOBA
MAR. 15/10
S.S
RIHAL
REGISTERED PROFESSIONAL ENGINEER

ABUTMENT MODIFICATIONS
STAGE 1 - BILL OF REINFORCING

RECONSTRUCTION AND STRENGTHENING OF EXISTING BRIDGE
OVER ASSINIBOINE RIVER - CONTRACT THREE
ON P.T.H. No. 100 IN R.L.'S 72, 73 & 94
PARISH OF ST. CHARLES

CITY OF WINNIPEG

Manitoba
Infrastructure and Transportation
Water Control & Structures

DESIGN — BY: M.B.C. — CHECKED: S.S.R.
DETAILS — BY: M.S. — CHECKED: S.S.R./J.J.

RELEASED FOR CONSTRUCTION
BY:
Ruth Yaden Manchester
DIRECTOR — DATE
STRUCTURES, DESIGN AND CONSTRUCTION BRANCH

SCALE:
SHEET No. 30
SITE No. 2924-00

...\292400_Abut_Reinf_Contract3.dgn 2010-03-09 11:43:39 AM