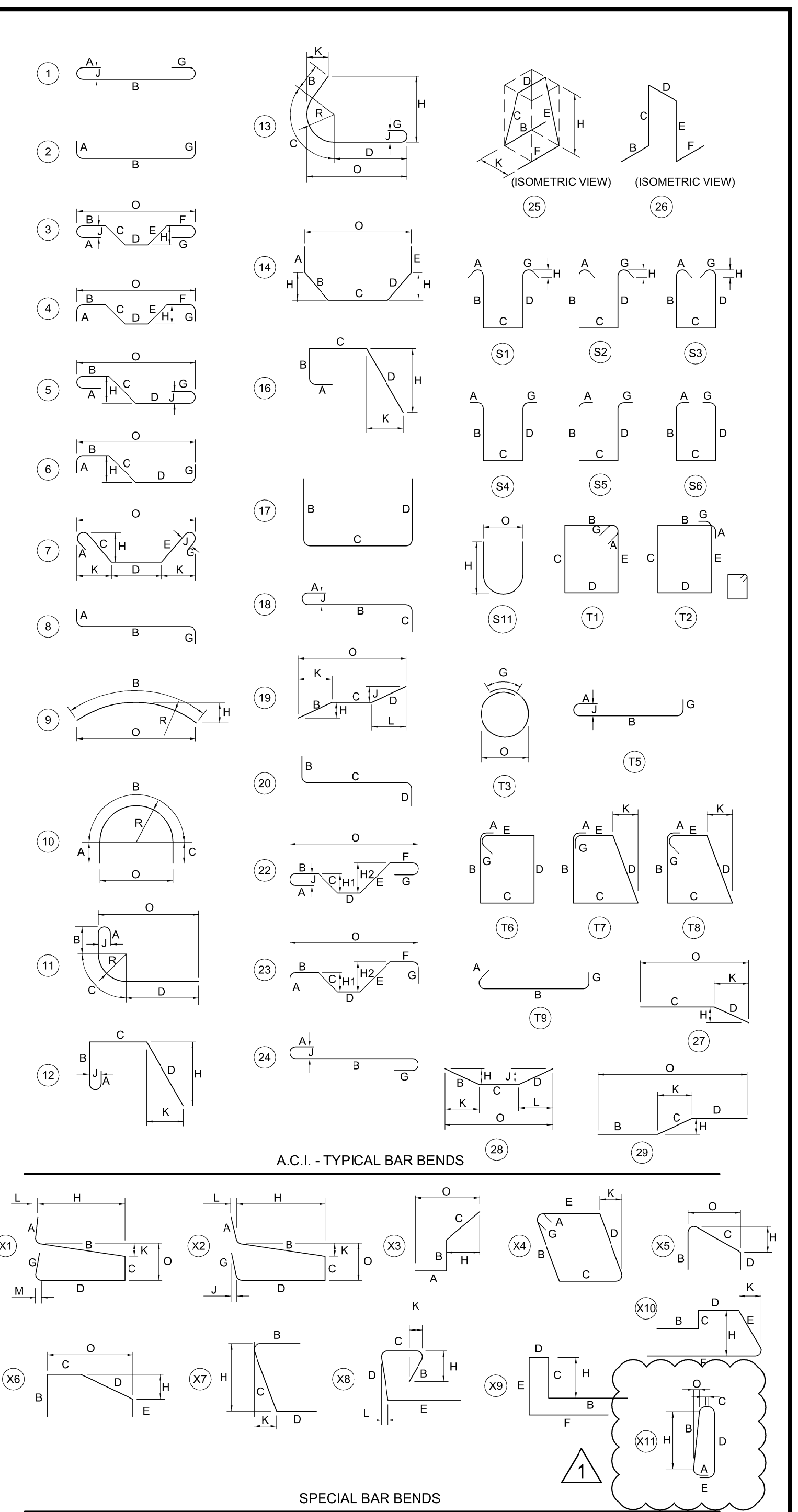


MARKS	NO BARS	SIZE	LENGTH	TYPE	A	B	C	D	E	F	G	H	J	K	L	M	O	R	SHAPE	MASS (kg)
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MARKS	NO BARS	SIZE	LENGTH	TYPE	A	B	C	D	E	F	G	H	J	K	L	M	O	R	SHAPE	MASS (kg)
ROADWAY NORTH SHOULDER BARRIER																				
N1301X(1)	36	13	12 000	STR																429.41
N1301X(2)	6	13	6 350	STR																37.87
N1301X(3)	6	13	7 570	STR																45.15
N1301X(4)	6	13	5 575	STR																33.25
N1301X(5)	6	13	6 290	STR																37.51
N1601X	54	16	1 590	T7		690	210	690												133.25
N1602X	4	16	1 385	X3	260	625	500					270							530	8.60
N1603X	15	16	1 345	2	260	1085														31.31
N1604X	30	16	1 350	2	150	1050						150								62.86
N1605X(1)	24	16	2 830	STR																105.41
N1605X(2)	32	16	4 830	STR																239.88
N1606X	11	16	1 035	8	260	515						260								17.67
N1607X	6	16	1 385	16	260	625	500													12.90
N1608X	5	16	1 340	2	260	1080														10.40
N1609X(1)	1	16	1 590	T7		690	210	690												2.47
N1609X(2)	1	16	1 590	T7		690	210	690												2.47
N1609X(3)	1	16	1 590	T7		690	210	690												2.47
N1609X(4)	1	16	1 590	T7		690	210	690												2.47
N1609X(5)	1	16	1 590	T7		690	210	690												2.47
N1609X(6)	20	16	1 590	T7		690	210	690												49.35
N1610X	5	16	1 610	17		690	230	690												12.49
N1611X	30	16	2 330	T1	140	675	350	675	350			140								108.48
N1612X	8	16	2 160	T1	140	590	350	590	350			140								26.82
N1613X	12	16	1 930	T1	140	475	350	475	350			140								35.94
N1614X	30	16	1 385	16		260	625	500												64.49
N1615X	8	16	1 350	28		500	250	600				270	380	420	465		1135			16.76
N1616X	12	16	1 350	28		500	250	600				35	380	495	465		1210			25.14
N1617X	8	16	920	STR																11.42
N1618X	4	16	1 000	STR																6.21
N1619X	8	16	1 060	STR																13.16
N1620X	4	16	1 280	STR																7.95
N1621X	8	16	1 900	STR																23.59
N1622X	8	16	1 200	9		1200						205					1100	850		14.90
N1623X	50	16	1 545	2	260	1285														119.89
N1624X	637	16	1 760	X11	84	770	27	795	84			695					60			1 739.98
N1625X	637	16	2 090	X5		995	470	625				365					340			2 066.22
N1901X	637	19	2 600	T2	300	500	500	500	500			300								3 701.61
N1902X(1)	48	19	12 000	STR																1 287.36
N1902X(2)	8	19	6 350	STR																113.54
N1902X(3)	8	19	7 570	STR																135.35
N1902X(4)	8	19	5 575	STR																99.68
N1902X(5)	8	19	6 290	STR																112.47
N2501X	120	25	600	STR																286.70
TOTAL MASS: ROADWAY NORTH SHOULDER BARRIER (kg)																				11 297.32
TOTAL MASS OF CHROMX																				= 11 297.32 kg



NOTES:

- ALL DIMENSIONS ARE OUT-TO-OUT OF A BAR EXCEPT 'A' AND 'G' ON STANDARD 180° AND 135° HOOKS.
- 'J' DIMENSION ON 180° HOOKS TO BE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE, OTHERWISE STANDARD HOOKS ARE TO BE USED.
- ON TRUSS BARS 'J' WILL BE KEPT EQUAL TO OR LESS THAN 'H'. WHERE 'J' CAN EXCEED 'H' IT SHOULD BE SHOWN.
- THE STIRRUPS 'H' DIMENSION SHOULD BE SHOWN ONLY WHERE NECESSARY TO FIT WITHIN CONCRETE.
- CRITICAL DIMENSIONS ARE TO BE IDENTIFIED WHERE BARS ARE TO BE BENT MORE ACCURATELY THAN STANDARD BENDING TOLERANCES.
- ON TYPE T3 'G' DIMENSION IS EQUAL TO CLASS C SPLICE.
- FIGURES SHOWN IN CIRCLES SHOW TYPES.
- ALL BAR BENDS OTHER THAN THE TYPES SHOWN ABOVE MUST BE DESIGNATED TYPE 'X'.

UNLESS OTHERWISE NOTED DIAMETER 'D' IS THE SAME FOR ALL HOOKS AND BENDS ON A BAR.

ENLARGED VIEW SHOWING BAR BENDING DETAILS

G:\CAD\175932\Drawings\Structural\Contract\UNDERPASS\175932-UNDERPASS-DOCK-CO-CO-REIN-STR-BD-ET-469



DILLON CONSULTING		DESIGNED BY: DRA	CHECKED BY: SSR
		DRAWN BY: MG/DN	APPROVED BY: MBL
1	ADDENDUM #5	18/03/16	DRA
0	ISSUED FOR TENDER	18/02/09	DRA
HOR. SCALE: AS SHOWN		RELEASED FOR CONSTRUCTION	
VERTICAL: AS SHOWN		DATE: 2018/02/09	
NO. REVISIONS		DATE	BY

ENGINEER'S SEAL

PROVINCE OF MANITOBA

D.R.C. AMORIM

Member 33215

REGISTERED PROFESSIONAL ENGINEER

CONSULTANT PROJECT NUMBER: 17-5932

THE CITY OF WINNIPEG
PUBLIC WORKS DEPARTMENT

FERMOR AVENUE BRIDGE OVER SEINE RIVER
BRIDGE RE-HABILITATION, PEDESTRIAN-CYCLIST UNDERPASS STRUCTURE AND ROADWORKS FROM ST. ANNE'S ROAD TO ARCHIBALD STREET

CITY DRAWING NUMBER: U-243-2017-CS-084

SHEET 084 OF 100

CONSULTANT DRAWING NUMBER: CS-084

PEDESTRIAN-CYCLIST UNDERPASS REINFORCING STEEL SCHEDULE 2 OF 6