TABLE 1 – GIRDER DEPTH (mm) – GROUTED SHEAR KEY				
SPAN (m)	L–75	L–100	L–150	L–165
6	350	350	400	400
7	350	350	400	400
8	350	400	400	450
9	350	400	450	450
10	400	400	450	500
11	400	450	500	500
12	450	450	550	550
13	450	500	550	600
14	500	500	550	600

TABLE 2 – GIRDER 28 DAY CONCRETE STRENGTH – GROUTED SHEAR KEY				
SPAN (m)	L–75	L–100	L–150	L–165
6	40	40	40	45
7	40	40	45	50
8	40	40	50	45
9	50	45	40	50
10	40	50	50	45
11	50	40	45	50
12	40	50	40	45
13	50	40	45	45
14	45	50	50	50

TABLE 3 – SIZE & NUMBER OF OPEN STIRRUPS/SECTION – GROUTED SHEAR KEY					
SPAN (m)	STIRRUP ZONE	L–75	L–100	L–150	L–165
6	ZONE A	–	–	–	–
	ZONE B	–	–	2–10M	2–10M
7	ZONE A	–	–	–	–
	ZONE B	–	–	2–10M	2–10M
8	ZONE A	–	–	–	–
	ZONE B	–	–	2–10M	2–10M
9	ZONE A	–	–	–	–
	ZONE B	–	–	2–10M	2–10M
10	ZONE A	–	–	–	1–10M
	ZONE B	–	–	2–10M	2–10M
11	ZONE A	–	–	–	1–10M
	ZONE B	–	–	2–10M	2–10M
12	ZONE A	–	–	2–10M	2–10M
	ZONE B	–	–	2–10M	2–10M
13	ZONE A	–	–	2–10M	2–10M
	ZONE B	–	–	2–10M	2–10M
14	ZONE A	–	–	2–10M	2–10M
	ZONE B	–	–	2–10M	2–10M

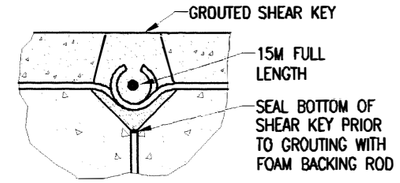
TABLE 4 – L–75 TRUCK – GROUTED SHEAR KEYS						
SPAN (m)	NO. OF STRANDS	TOP/BOTTOM BARS	STIRRUP SPACING		GIRDER WEIGHT (kg)	
			ZONE A	ZONE B	4300 WIDE	4900 WIDE
6	13	4–15M	250	250	5370	6060
7	16	4–15M	230	230	6190	7000
8	19	4–15M	210	210	7020	7932
9	22	4–20M	200	200	7850	8870
10	22	4–20M	240	240	9380	10670
11	25	4–20M	230	230	10270	11690
12	24	4–20M	280	280	11780	13510
13	28	5–20M	260	260	12690	14560
14	27	5–20M	280	280	14030	16260

TABLE 5 – L–100 TRUCK – GROUTED SHEAR KEYS						
SPAN (m)	NO. OF STRANDS	TOP/BOTTOM BARS	STIRRUP SPACING		GIRDER WEIGHT (kg)	
			ZONE A	ZONE B	4300 WIDE	4900 WIDE
6	15	4–15M	160	160	5370	6060
7	19	4–15M	150	150	6190	7000
8	18	4–20M	170	170	7600	8650
9	22	4–20M	170	170	8490	9660
10	26	4–20M	170	170	9380	10670
11	25	4–20M	180	180	10830	12420
12	29	5–20M	190	190	11760	13490
13	28	5–20M	200	200	13070	15150
14	31	5–20M	200	200	14030	16260

TABLE 6 – L–150 TRUCK – GROUTED SHEAR KEYS						
SPAN (m)	NO. OF STRANDS	TOP/BOTTOM BARS	STIRRUP SPACING		GIRDER WEIGHT (kg)	
			ZONE A	ZONE B	4300 WIDE	4900 WIDE
6	18	4–15M	130	130	5820	6620
7	22	4–15M	120	120	6710	7630
8	26	4–20M	120	120	7600	8650
9	25	4–20M	120	120	8960	10280
10	30	4–20M	120	120	9900	11350
11	29	4–20M	140	140	11170	12930
12	28	4–20M	150	150	12240	14360
13	31	5–20M	150	150	13200	15480
14	35	5–20M	150	150	14150	16610

TABLE 7 – L–165 TRUCK – GROUTED SHEAR KEYS						
SPAN (m)	NO. OF STRANDS	TOP/BOTTOM BARS	STIRRUP SPACING		GIRDER WEIGHT (kg)	
			ZONE A	ZONE B	4300 WIDE	4900 WIDE
6	23	4–15M	100	100	5820	6620
7	27	4–20M	90	90	6710	7630
8	27	4–20M	100	100	8030	9200
9	31	4–20M	100	100	8960	10280
10	31	4–20M	100	100	10210	11820
11	35	4–20M	100	100	11170	12930
12	34	4–20M	110	110	12240	14360
13	35	4–20M	110	110	14990	17480
14	38	5–20M	120	120	16080	18760

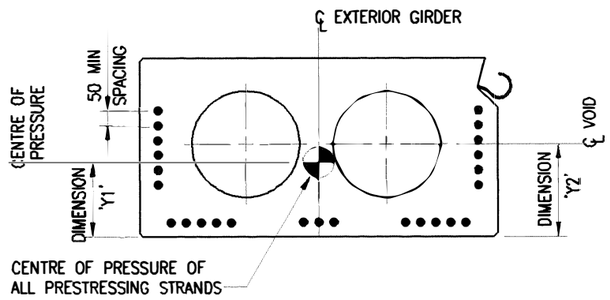
NOTE: TOP/BOTTOM BARS IN TABLES 4–7 ARE NUMBER AND SIZE OF BARS IN EACH FLANGE



GROUTED SHEAR KEY DETAILS

1:5

ASSUME NOT TO SCALE



PRESTRESS STRAND LAYOUT

TABLE 8 – VOID & PRESTRESS STRAND DATA			
GIRDER DEPTH (mm)	VOIDS	DIMENSION 'Y1' (mm)	DIMENSION 'Y2' (mm)
350	2–152 ø	123	154
400	2–203 ø	137	178
450	2–254 ø	149	203
500	2–305 ø	161	225
550	2–356 ø	169	252
600	2–356 ø	177	300

Rev	Date	Description	Init

ISSUE RECORD

SCALE

DESIGNED GWT DATE MAR/99
CHECKED GWT DATE MAR/99
DRAWN DG DATE MAR/99

Rev	Date	Description	Init

REVISIONS

Province of British Columbia
MINISTRY OF FORESTS
RESOURCE TENURES AND ENGINEERING BRANCH

STANDARD BRIDGE DRAWING

PRECAST PRESTRESSED CONCRETE SLAB GIRDERS
GIRDER DETAILS – GROUTED SHEAR KEYS

ORIGINAL SIGNED AND SEALED BY: GRAHAM W. TAYLOR, P.ENG.
APPROVED BY: June/99
DESIGN ENGINEER GRAHAM W. TAYLOR, P.ENG.
MOF ENGINEER
DATE
DATE
FILE No.:
DRAWING No.: STD–E–080–03 A

CANCEL PRINTS BEARING PREVIOUS LETTER