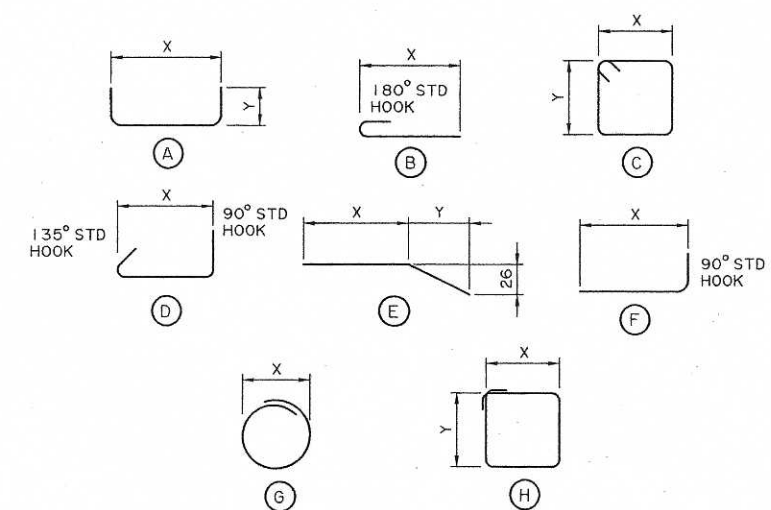
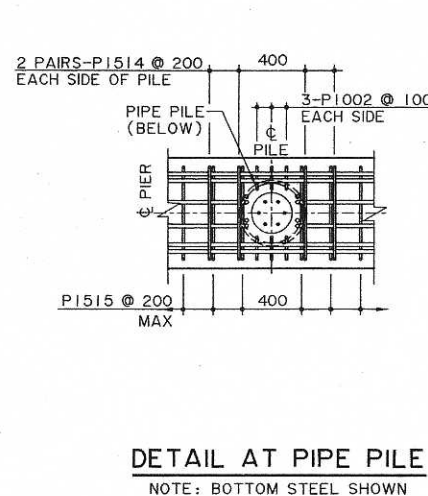
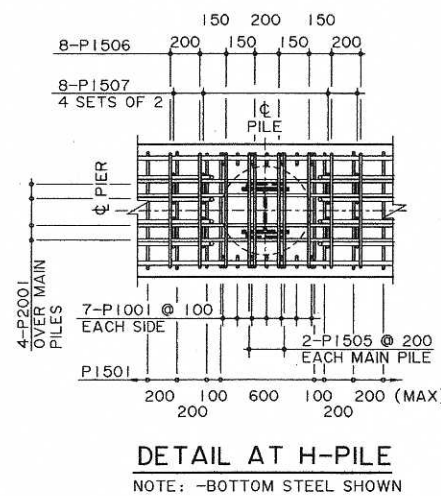
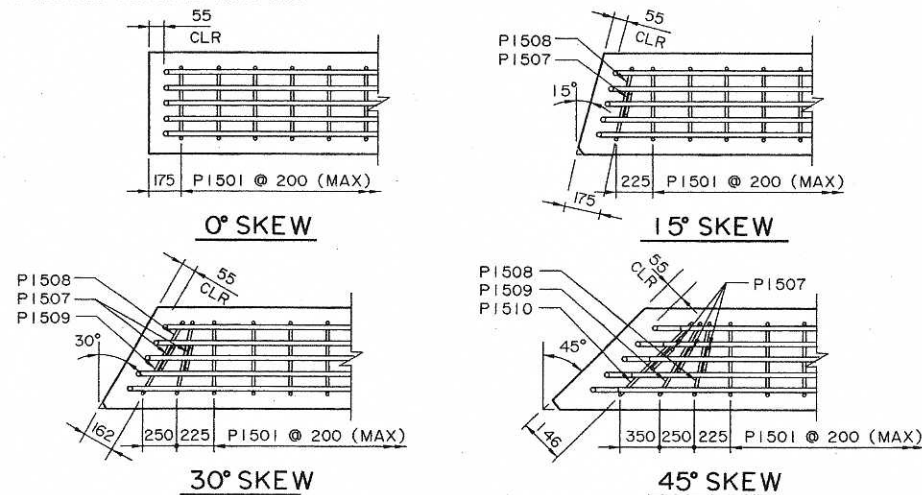


DATA FOR STANDARD SC PRECAST GIRDER BRIDGES WITH PRECAST CONCRETE SUBSTRUCTURES

CLEAR ROADWAY (GIRDERS PER SPAN)	SKEW	8940 (8)				10160 (9)				11370 (10)				12590 (11)				13810 (12)				15020 (13)			
		0°	15°	30°	45°	0°	15°	30°	45°	0°	15°	30°	45°	0°	15°	30°	45°	0°	15°	30°	45°	0°	15°	30°	45°
		HP	HP	HP	HP	HP	HP	HP	HP	HP	HP	HP	HP	HP	HP	HP	HP	HP	HP	HP	HP	HP	HP	HP	HP
NUMBER OF MAIN STIRRUPS	P1501	48	50	52	62	52	56	60	72	60	62	68	82	66	68	72	90	70	72	80	98	76	78	86	106
NUMBER OF U-BARS	P1502	18	18	22	28	20	20	24	32	22	24	28	36	24	26	30	38	28	28	32	42	30	32	36	46
LENGTH OF MAIN BARS	M				9000				9000	12000	9000	9000	12000	9000	9000	12000	12000	9000	12000	12000	12000	12000	12000	12000	12000
NUMBER OF TOPPING BARS	P2501				10				10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
LENGTH OF TOPPING BARS	N	9610	9950	1110	6035	10825	11210	4915	4750	4440	4870	6320	6475	5655	6130	4725	8190	6870	4385	6130	9910	5090	5645	7530	11630
NUMBER OF TIE BARS	P2502	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
LENGTH OF BOTTOM BARS	P				9000				9000	12000	9000	9000	12000	9000	9000	12000	12000	9000	12000	12000	12000	12000	12000	12000	12000
NUMBER OF TIE BARS	HP				2				2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
LENGTH OF TIE BARS	Q	9610	9950	1110	5920	10820	11210	4815	4650	4340	4770	6220	6375	5555	6030	4625	8090	6770	4285	6030	9810	4990	5545	7430	11530
NUMBER OF TIE BARS	HP	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
LENGTH OF TIE BARS	R	2360	2440	2725	3335					3575	3700	4130	5055					4790	4960	5530	6775				
NUMBER OF TIE BARS	HP	12	12	12	12					12	12	12	12					12	12	12	12				
NUMBER OF TIE BARS	PP	8	8	8	8					8	8	8	8					8	8	8	8				
LENGTH OF TIE BARS	R					2360	2440	2825	3400					3575	3700	4230	5300					4790	4960	5630	7030
NUMBER OF TIE BARS	HP					12	12	12	12					12	12	12	12					12	12	12	12
NUMBER OF TIE BARS	PP					8	8	8	8					8	8	8	8					8	8	8	8
LENGTH OF BOTTOM BARS	S	825	880	1060	1455	770	825	1000	1380	975	1035	1235	1670	910	965	1160	1575	860	915	1100	1505	1010	1070	1275	1720
NUMBER OF TIE BARS	HP	20	20	20	20	24	24	24	24	24	24	24	24	28	28	28	28	32	32	32	32	32	32	32	32
LENGTH OF TIE BARS	T	645	680	805	1080	645	680	805	1080	645	680	805	1080	645	680	805	1080	645	680	805	1080	645	680	805	1080
NUMBER OF TIE BARS	HP	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
NUMBER OF PILE U-BARS	P1505	12	12	12	12	14	14	14	14	14	14	14	14	16	16	16	16	18	18	18	18	18	18	18	18
NUMBER OF PILE TIES	P1506	48	48	48	48	56	56	56	56	56	56	56	56	64	64	64	64	72	72	72	72	72	72	72	72
NUMBER OF PILE STIRRUPS	P1507	48	50	52	54	56	58	60	62	56	58	60	62	64	66	68	70	72	74	76	78	72	74	76	78
NUMBER OF STIRRUPS	P1508		2	2	2		2	2	2		2	2	2		2	2	2		2	2	2		2	2	2
NUMBER OF STIRRUPS	P1509		2	2	2		2	2	2		2	2	2		2	2	2		2	2	2		2	2	2
NUMBER OF STIRRUPS	P1510		2	2	2		2	2	2		2	2	2		2	2	2		2	2	2		2	2	2
NUMBER OF EDGE TIES	P1001	84	84	84	84	98	98	98	98	98	98	98	98	112	112	112	112	126	126	126	126	126	126	126	126
NUMBER OF PILE TIES	P1514	48	48	48	48	56	56	56	56	56	56	56	56	64	64	64	64	72	72	72	72	72	72	72	72
NUMBER OF MAIN STIRRUPS	P1515	48	50	56	70	54	56	62	78	60	62	70	88	66	68	78	96	72	74	86	102	78	80	90	112
NUMBER OF U-BARS	P1516	18	18	22	28	20	20	24	32	22	24	28	36	24	26	30	38	28	28	32	42	30	32	36	46
NUMBER OF TIES	P1002	36	36	36	36	42	42	42	42	42	42	42	42	48	48	48	48	54	54	54	54	54	54	54	54
NUMBER OF STIRRUPS	P1517		2	2	2		2	2	2		2	2	2		2	2	2		2	2	2		2	2	2
NUMBER OF STIRRUPS	P1518		2	2	2		2	2	2		2	2	2		2	2	2		2	2	2		2	2	2
NUMBER OF STIRRUPS	P1519		2	2	2		2	2	2		2	2	2		2	2	2		2	2	2		2	2	2
NUMBER OF PILE LAP BARS	P2001	24	24	24	24	28	28	28	28	28	28	28	28	32	32	32	32	36	36	36	36	36	36	36	36
LENGTH OF TOP & BOT BARS	P2505	1150	1200	1385	1780	1095	1150	1325	1705	1300	1360	1560	1995	1235	1290	1485	1900	1185	1240	1425	1830	1335	1395	1600	2045
NUMBER OF TIE BARS	PP	20	20	20	20	24	24	24	24	24	24	24	24	28	28	28	28	32	32	32	32	32	32	32	32
LENGTH OF TIE BARS	V	860	895	1020	1290	860	895	1020	1290	860	895	1020	1290	860	895	1020	1290	860	895	1020	1290	860	895	1020	1290
NUMBER OF TIE BARS	PP	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
NUMBER OF PILE LAP BARS	P2507	12	12	12	12	14	14	14	14	14	14	14	14	16	16	16	16	18	18	18	18	18	18	18	18
NUMBER OF PILE DOWELS	E2501	36	36	36	36	42	42	42	42	42	42	42	42	48	48	48	48	54	54	54	54	54	54	54	54
NUMBER OF PILE DOWEL TIES	E1001	18	18	18	18	21	21	21	21	21	21	21	21	24	24	24	24	27	27	27	27	27	27	27	27
NUMBER OF GIRDER DOWELS	Z2501H	16	16	16	16	18	18	18	18	20	20	20	20	22	22	22	22	24	24	24	24	26	26	26	26

PP REQUIRED FOR PIPE PILE SUPPORTED PIERS ONLY  
 HP REQUIRED FOR H-PILE PILE SUPPORTED PIERS ONLY



SECTION - REINFORCING DETAILS

NOTE:  
 H-PILE ALTERNATE SHOWN  
 SUBSTITUTE BARS FROM  
 TABLE FOR PIPE PILE  
 ALTERNATE PIER CAP

H-PILE	PIPE PILE
P1501	P1515
P1508	P1517
P1509	P1518
P1510	P1519



PERMIT TO PRACTICE  
 CH2M HILL CANADA LIMITED  
 Signature: [Signature]  
 Date: January 27, 2005  
 PERMIT NUMBER: P 2558  
 The Association of Professional Engineers,  
 Geologists and Geophysicists of Alberta

DESIGNER  
 PROFESSIONAL ENGINEER  
 [Signature]  
 DATE: JAN. 27, 2005

CHECKER  
 PROFESSIONAL ENGINEER  
 [Signature]  
 DATE: Jan 27, 2005

REV	DATE	REVISIONS	BY

RECOMMENDED  
 DIRECTOR BRIDGE ENGINEERING  
 [Signature]  
 APPROVED  
 EXECUTIVE DIRECTOR  
 TECHNICAL STANDARDS BRANCH  
 [Signature]  
 DATE: Feb 3/05

Albera TRANSPORTATION

SC PRECAST GIRDER BRIDGES  
 WITH PRECAST CONCRETE  
 SUBSTRUCTURES - SHT 6

DEPARTMENT BAR CODE: [Blank] DATE: 2005-01-27 SHEET: 6 OF 6 DRAWING: S-1695-04

BAR LIST: FOR ONE PIER

MARK	SIZE	TYPE	X	Y	LENGTH
P1001	10	B	500		640
P1002	10	H	140	500	1560
P1501	15	C	790	500	2860
P1502	15	A	790	510	1810
P1503	15	E	R	600	R + 600
P1504	15	E	R	1200	R + 1200
P1505	15	A	790	500	1790
P1506	15	D	790		1070
P1507	15	H	180	500	1640
P1508	15	C	820	500	2920
P1509	15	C	910	500	3100
P1510	15	C	1120	500	3520
P1514	15	D	640		920
P1515	15	C	640	500	2560
P1516	15	A	640	500	1640
P1517	15	C	660	500	2600
P1518	15	C	740	500	2760
P1519	15	C	905	500	3090
P2001	20	STR			2000
P2501	25	F	M		M + 400
P2502	25	F	N		N + 400
P2503	25	A	S	400	S + 800
P2504	25	A	T	400	T + 800
P2505	25	A	U	400	U + 800
P2506	25	A	V	400	V + 800
P2507	25	STR			2000
P3001	30	STR			P
P3002	30	STR			Q
Z2501H	25	STR			750
E1001	10	G	150		720
E2501	25	STR			1000

NOTES:  
 • SUFFIX LETTER 'H' ON BAR MARK DENOTES HIGH STRENGTH  
 SMOOTH BARS FABRICATED FROM ROUND BAR STOCK  
 CONFORMING TO ASTM A-193-B7, HOT DIPPED GALVANIZED  
 AFTER FABRICATION  
 • REINFORCING STEEL SHALL BE IN ACCORDANCE WITH  
 CAN/CSA G30.18 (LATEST EDITION)