(85316) Wt.46435/242 120,000 3/48 A.& E.W.Ltd Gp.685

N

O.S 355.

TRAVERSE COMPUTATION – MACHINE METHOD

Name of Traverse N Loop 3 *Computer* *Date*

Total Length 172 *Error*

BEARINGS

1 | 11-11a 331 45 / 191 30 / 140 15 | 11-10 141 00 / 00 00 / 141 00 | 11-12 212 30 / 72 48 / 139 42 | 11-13 204 00 / 64 30 / 139 30

2 | 11-14 190 00 / 46 24 / 143 36 | 11-15 195 00

Mean 140 49 / 10 22 / 130 27 / 11-10 / 64 30 / 194 57

3

4

46 192

Station	Bearing	Corr.	Corrected Bearing	Distance	Cos. V.A.	Sine	Cosine	E. 618.27	N. 113.55
G11-10	129 38 / 64 30					+	−	1	6
G13	194 08		194 08	29.39		24418	96973	611.09 08	085.05 0 11
	14 / 214 21					−	−	1	6
G13a	228 29		228 29	4.38		74876	66284	607 81 80	082 15 21
	Mag	-1022				−	−	2	10
N9	276 30		266 08	18.43		99772	06743	589 43 41	080.90 1.00
						+	+	3	11
N10	10 30		00 08	7.01		00233	1.0	589 44 41	087.91 8.02
						−	+	3	13
N11	354 15		344 53	12.40		27759	96070	586.00 5.97	099.83 96
						+	+	4	15
N12	92 30		82 08	7.72		99059	13687	593.65 61	100.88 1.03
						+	+	4	17
N13	16 30		06 08	10.05		10684	99428	594.72 68	110.88 1.05
						−	+	4	19
N14	308 00		297 38	5.20		88593	46381	590.11 07	113.29 47
						−	+	4	19
N15	339 00		328 38	3.39		52051	85385	588.35 31	116.76 36
						−	+	5	23
N16	291 00		280 38	22.02		98283	19452	566.71 66	120.24 47
						−	+	6	24
N17	320 00		309 38	7.24		77014	63787	561.13 07	124.86 5.10
						+	+	6	26
N18	95 30 / ~~334 08~~		85 08 / ~~273 38~~	12.20		99639	08484	573 29 23	125.90 6.16

Station	Bearing	Corr.	Corrected Bearing	Distance	Cos. V.A.	Sine	Cosine	E.	N.
M18						+	+		
M19	98 30		88 08	18.80		99947	03257	592.08 01	126.51 81
						+	+	69	1.30
M20	31° 00		20 38	4.78		35239	93585	593 76	130 99
						+	−	55	44
G11a	105 00		94 38	10.90		99673	08078	604 63	130.11
								604.55	130.44
								−.08	+.33.

SOLUTION OF UP-STATIONS, EXTRA BEARINGS, ETC.

(85316) Wt.46435/242 120,000 3/48 A.& E.W.Ltd Gp.685

N

O.S 355.

TRAVERSE COMPUTATION — MACHINE METHOD

Name of Traverse..... *Computer*..... *Date*.....

Total Length..... *Error*.....

BEARINGS

1

2

3

4

Station	~~Bearing~~ Va.	Corr.	Corrected Bearing	Distance	Cos. V.A.	Sine	Cosine	E.	N.
N									
24-25	0			23.70 ~~24.00~~	7.22	~~17365~~	~~98481~~		7.22
25-26	+10°			19 11·~~33~~	3.41	+ 17365	98481		3.36
26-27	+ 2° 15′			24 14.~~42~~	4.34	+ 03926	99923		4.34
27 28	+6° 15′			20.82 ~~21.08~~	6.35	+ 10887	99406		6.31
28 29	+27° 00′			39.83 ~~40.33~~	12.14	+ 45399	89101		10.82
29 30	+30° 15′			73 14.~~92~~	4.49	+ 50377	86384		3.88
30 31	+~~36~~ 33 15			34 26.~~67~~	8.03	+ 54829	~~85629~~		~~6.72~~
30 31	+38 00			29 71.~~92~~	21.73	+ 61566	78801		~~17.12~~
30 32	+36° 00′			08 ~~85.83~~	25.93	+ 58779	80902		~~20.98~~
29-32	+36° 00			08 ~~85.83~~	25.93	+ 58779	80902	1.4 75~~0~~	20.98
30-31	+33 15′			34 26.~~67~~	8.03	+ 54829	83629	722.5	6.72
30.32	+38 00			29 71.~~92~~	21.73	+ 61566	78801	751.4 ~~752.0~~	17.12

N

O.S. 355

TRAVERSE COMPUTATION — MACHINE METHOD

Name of Traverse N Loop. 4 *Computer* ..... *Date* .....

Total Length 106 *Error* .....

BEARINGS

1

2

3

4

Station	Bearing	Corr.	Corrected Bearing	Distance	Cos. V.A.	Sine	Cosine	E. 611.10 (547)	N. 085.10 (396)
G13	170 30	-10.22				+	−		
G15'	~~170 30~~		160 08	14.85		33983	94049	7 09 616.16	5 06 071.11
G15a	167 30		157 08	18.21 ~~13.91 15.79~~		+ 38859	− 92141	18 05 623.15	13 20 054.33
N1	197 30		187 08	13.03		− 12418	− 99226	25 36 621.64	18 22 041.40
N2	214 45'		204 23	4.38		− 41284	− 91080	27 54 619.81	19 22 037.41
N3	335 00		324 38	6.91		− 57881	+ 81546	31 50 615.81	22 2.82 043.04
N4	329 00		318 38	5.81		− 66088	+ 75050	34 63 611.97	25 15 047.40
N5'	333 15'		322 53	10.07		− 60344	+ 79741	39 50 605.89	29 14 055.43
N6	342 30		332 08	4.34		− 46742	+ 88404	42 44 603.86	30 8.97 059.27
N7	22 30		12 08	5.44		+ 21019	+ 97766	44 4.57 605.01	32 27 064.59
N8	345' 30		335 08	12.92		− 42051	+ 90729	51 06 599.57	37 5.94 076.31
G13a	64 45'		54 23	10.83		+ 81293	+ 58236	58 7.80 608.38	42 .20 082.62
								607.80	082.20
								−.58	−.42

O.S. 337

TRAVERSE ABSTRACT

Town G.B.

Traverse N - Oxbow - Loop.

Date 1st Oct. 49. Angle Book

Sketch, Distances, etc., on Reverse Side

Station	To	1st Round Bear° ' "	2nd	3rd	4th	5th V	6th A.	Mean Dist. ft ins	S	R.P. Dist. Lt	Rt	R.P. Check Fl	Rt.
N1A	N2.	215°	34	5		−	12°	14' 10"	1	2	3	10	20
2	3	334°	15	6		+	6°	23' 0"	2	3	2	3	20
3	4	328	15	0		+	22°	20' 9"	3	1	1½	3	30
4	5	332·5	15	4		+	16½°	34' 9"	4	3	1	4	30
5	6 A	342	16	3		+	30½	16' 8"	5	2	3	4	40
6	7	22	20	3		+	35	22' 0"	6	3	2	5	30
7	8 △	345	16	6		+	38	54' 3"	7	7	3	10	30
8	G13a. △	65	24	4·5		+	32½	42' 6"	9	6	5	5	6
8	9	—	12	8		+	33	41' 3"	10	10	2	1	8
G13a	9	227	9	6			0°	61' 0"	11	3	20	8	10
9	P1 △	252	7	3		−	13	11' 4"					
9	10	10	19	1		+	33	27' 8"					
10	11 △	353·5	17	5		+	22	44' 3"					
G13a	b	302°						11'					
G13a	c	227°						20'					
N8	c	80°				+	38°	26'					
8	d	296°						12'					
8	e	118°						13'					
9	15' pitch							7'					
11	b	140°						20' 6"					
11	a	82°						24					
Side Passage at P1													
	c undefined pt on wall												
G15a	N1	178°	17			+	8°	43' 7"					

Tape Shrinkage. 1st 50' 6½" and 50' 9"

9910 (9911)

(*35202) Wt.44019/239 25,000 3/48 A.& E.W.Ltd. Gp.685
(*36224) Wt.20773/261 130,000 8/48 " "

Observer RAB NGB BIL.

Abstracted by

(35316) Wt.16435/242 120,000 3/48 A.& E.W.Ltd Gp.685

O.S 35a.

TRAVERSE COMPUTATION — MACHINE METHOD

Name of Traverse..... *Computer*..... *Date*.....

Total Length..... *Error*.....

BEARINGS

1

2

3

4

Station	Bearing	Corr.	Corrected Bearing	Distance	Cos. V.A.	Sine	Cosine	E. 593.69	N. 131.30
N20		-1022				−	+		
21	324 30		314 08	21.34		71772	69633	578.37	146.16
22	06 30		356 08	4.70		06743	99772	578.06	150.85
23	37 30		27 08	3.30		45606	88995	579.56	153.79
24	340 30		330 08	11.80		49798	86719	573.69	164.02
25	281 00		270 38	7.22		99994	01105	566.47	164.10
26	345 00		334 38	3.36		42841	90358	565.03	167.13
27	16 00		05 38	4.34		09816	99517	565.45	171.45
28	333 30		323 08	6.31		59995	80003	561.67	176.50
29	352 00		341 38	10.82		31510	94906	558.26	186.77
30	24 00		13 38	3.88		23571	97182	559.17	190.54
29-32	08 30		358 08	20.98		03257	99947		
31	323 24		313 02	6.72		73096	68242	554.26	195.13
32	357 45		347 23	17.12		21843	97585	560.52	211.87

Station	Bearing	Corr.	Corrected Bearing	Distance	Cos. V.A.	Sine	Cosine	E.	N.
N8		-1022							
c	80 00		69 38	6.19					
N8									
d	296		285 38	3.62					
N8									
e	118		107 38	3.93					
N11									
B	140		129 38	6.19					
N11									
a	82		71 38	7.25					
N17									
17a	234		223 38	3.81					
N17									
17B	292 30		282 08	7.44					
N17B									
17c	284 00		273 38	12.49					
N18									
18a	99 00		88 38	10.64					
N18a									
18B	04 00		353 38	2.42					
G13a									
B	302 00		291 38	3.32					
G13a									
c	227 00		216 38	6.04					

SOLUTION OF UP-STATIONS, EXTRA BEARINGS, ETC.

9-Pitch

2.11

N W

O.S. 337

TRAVERSE ABSTRACT

Town G.B. Head of White Passage.

Traverse

Date Angle Book Sketch, Distances, etc., on Reverse Side

Station	To	1st Round Book	2nd Back	3rd	4th	5th A.	6th	Mean Dist. Dist.	S.	R.P. Dist. L	R	R.P. Check F	Rf
N30	N31.	322 ·5.	144						a	4	2	3	25
N31	a	118	297		+	6·3		27' 0"	b	1	1	3	15
a	b	—	273		+	46		14' 6"	c	1	2	5	10
b	c	101	281		+	17·5		11' 2"	d	2	2	3	10
c	d	108	289	·5	+	6		20' 4"	e	2	1	1	10
d	e	56°	—		—	½		4' 3"	f			2	10
e	f	354	174		+	10		50' 5"	g	9"	9"	2	8
f	g	103	—		+	14		13' 8"	h	1	2	2	10
f	h.	86	—		—	24		54' 0"	i	3	4	3	8
h	i	34	215		+	31		22' 8"	J	2	6	2	10
i	J.	351	179		+	35		26' 9"	K	12	1	2	8
J.	K	69	250		+	52		17'					
	Tabe passage dimensions from sketch drawing												
N31	W 1	277	98		—	4		19' 2"	31	2	3	3	3
W1	W2	28	209		+	38·5		15' 11"	1			3	25
W2	3	2	183		+	26		13' 8"	2	2	1	0	15
3	4	301	120		+	39		5' 3"	3	½	½	3	8
4	5	7	—		+	31		13' 10"	4	½	½	5	8
5	6	—	171		+	38·2		13' 1"	5	1	1	3	7
6	7	114	—		+	33·5		6' 2"	6	2	1	6	4
7	8	—	180		·	0		120' 6"	7	½	½	10	1
8	9	141	—		+	10·3		7' 0"	8	½	½	3	4
9	10	—	236		+	18·5		10' 1"	9	½	½	3	1
10	11	346	—		+	22·3		23' 2"	11	1	5	2	2
11	12	—	210		+	41		23' 2"	12	1	1	3	2
12	13	172	—		—	5		22	13	32	2	2	2
12	14	333	—		+	46·5		6' 0"	14	½	2	5	½
14	15.	4°	—			0		6'	15	2	2	2	3

Tape slightly slack & in front of 5ft.

Tape slightly slack & in front of 50.

Tape slightly slack & in front of 7½.

(*35202) Wt.44019/239 25,000 3/48 A.& E.W.Ltd. Gp.685
(*30224) Wt.20773/261 130,000 8/48 " "

N 0·99000

Observer Abstracted by

W 0·98250

(85316) Wt.46435/242 120,000 3/48 A.& E.W.Ltd Gp.685

O.S 355.

TRAVERSE COMPUTATION — MACHINE METHOD

Name of Traverse OXBOW LOOP. *Computer* ..... *Date* .....

Total Length 106.7. *Error* .....

BEARINGS

1

2

3

4

Station	Bearing	Corr.	Corrected Bearing	Distance	Cos. V.A.	Sine	Cosine
G13a		-10'2"				+	−
G15	170 30		160 08	14.87		33983	94049
	176 30					+	−
G15a	164 ~~00~~ 30.		156 38	18.21		38859 ~~39661~~	92141 ~~91799~~
						−	−
N1	197 30		187 08	13.03		12418	99226
						−	−
N2	214 45		204 ~~197~~ 23	4.38		41284 ~~24844~~	91080 ~~46866~~
						−	+
N3	335 00		324 38	6.91		57881	81546
						−	+
N4	329 00		318 38	5.81		66088	75050
						−	+
N5	333 15		322 53	10.07		60344	79741
						−	+
N6	342 30		332 08	4.34		46742	88404
						+	+
N7	22 30		12 08	5.44		21019	97766
						−	+
N8	345 30		335 08	12.92		42051	90729
						+	+
G13a	64 45		54 23	10.83		81293	59236
N8						−	+
N9	308 00		297 38	10.45		88593	46381

607.8 082.2

611.10. 085.10.

08. .07 06. .05
616.~~15~~. 071.~~11~~.

18 .05 13. .21
623.~~28~~. 054.~~34~~.

25. .36 19. .22
621.~~64~~. 041.~~44~~.

27. .53 20. .22
619.80. 037.~~42~~.

31 .79 23. 2.82
615.80. 043.05.

34 .62 25. .16
611.~~96~~. 047.~~44~~.

39. .50 29. .05
605.~~89~~. 055.~~14~~.

41 .45 31. 8.97
603.86. 059.~~28~~.

44 4.56 33 .27
605.~~00~~. 064.~~60~~.

51 .06 39. 5.93
599.57. .16.~~32~~.

57 43
~~608.57~~. 092.~~63~~.

607.80. 092.20
−.57 −.43

Station	Bearing	Corr.	Corrected Bearing	Distance	Cos. V.A.	Sine	Cosine	E. 611.08	N. 085.11
G13a		7022	° ' 23'			−	−	599.00	075.89
\N8	244 45		234 ~~23~~	10.83		81293	58236	~~602.28~~	~~078.80~~
N9						+	−	589.40	081.00
\N8	128 00		117 38	10.45		88593	46381	598.66	076.15
								3.62	2.65
						MN.	N8.	598.83	076.02

SOLUTION OF UP-STATIONS, EXTRA BEARINGS, ETC.

N

O.S. 355

TRAVERSE COMPUTATION — MACHINE METHOD

Name of Traverse N Loop. *Computer* ..... *Date* .....

Total Length ..... *Error* .....

BEARINGS

1

2

3

4

9910

565.6 ✓

Station	~~Bearing~~ Va.	Corr.	Corrected Bearing	Distance	Cos. V.A.	Sine	Cosine	E.	N.
						−		~~567.53~~	
G13-G15	− 39 00			62.82	19.15	526.1 62932	2 −.15 77715	6.07 526.30	14.84
					25.84	− 465.9	3 −.3		18.21
G15A	− 45 12			84.78	~~19.74~~	70957	70463	466.29	~~13.91~~
				19		+	5 −45		
N1	+ 08 00			43.~~583~~	13.16	471.9 13917	99027	472.45	13.03
				70		−	7 −60		
N2	− 12 00			14.~~83~~	4.48	468.9 20791	97815	469.54	4.38
				22.79		+	8 −75		
N3	+ 6 00			~~23.00~~	6.95	471.2 10453	99452	472.07	6.91
				56		+	10 −9		
N4	+ 22 00			20.~~75~~	6.27	478.9 37461	92718	479.92	5.81
				44		+	11 −105		
N5	+ 16 30			34.~~75~~	10.50	488.7 28402	95882	489.86	10.07
				52		+	13 −12		
N6	+ 30 30			16.~~67~~	5.04	493.1 50754	86163	498.39	4.34
				21.80		+	15 −135		
N7	+ 35 00			~~22.00~~	6.64	502.6 57358	81915	511.04	5.44
				53.76		+	16 −15		
N8	+ 38 00			~~54.25~~	16.39	542.7 61566	78801	544.29	12.92
				12		+	18 −17		
G13a	+ 32 30			42.~~50~~	12.84	565.3 53730	84339	567.07	10.83
						7.1		~~568.87~~	
						1.8		+1.8	

(85316) Wt.46435/242 120,000 8/48 A.& E.W.Ltd Gp.685

N

O.S 355.

TRAVERSE COMPUTATION — MACHINE METHOD

Name of Traverse..... *Computer*..... *Date*.....

Total Length..... *Error*.....

BEARINGS

1

2

3

4

Station	Bearing	Corr.	Corrected Bearing	Distance	Cos. V.A.	Sine	Cosine	E.	N.
G N	F		N				1.0000		
13-9	60.451		18.43				~~99657~~		18.43
10	27.417		8.36				83867		7.01
11	43.852		13.37				92718		12.40
12	~~+07~~ 25 ~~428~~		7.75				99657		7.72
13	33.007		10.06				99905		10.05
14	17.859		5.44				95630 ~~90259~~		5.20
15	12.344		3.76				90259		3.39
16	73.075		22.27				98629		21.96
17	26.909		8.20				88295		7.24
18	40.404		12.32				99027		12.20
19	62.045		18.91				99255		18.77
20	18.022		5.49				87036		4.78
G16	36.138		11.01				98965		10.90

(2)

N

O.S. 337

TRAVERSE ABSTRACT

Town G. B.

Traverse N - Soop - Rumbolds White Passage

Date 2nd Oct 49. Angle Book ____ Sketch, Distances, etc., on Reverse Side

Station	To	1st Round	2nd	3rd	4th	5th	6th	Mean Dist.			R.P. Dist.		R.P. Check	
		° ′ ″	B.B.	Bot.		V.	A	ft	ins	S	Lt	Rt	Fr	Rr
N11	12	9 3	27	2		−	4¾	25′	9″	12	3	3	4	20
12	13	1 7	19	6		+	2½	33′	8″	13	2	3	3	15
13	14	30 7	12	9		+	17	18′	1″	14	2½	2½	5	20
14	15 △	33 8	16	0		+	25½	12′	6″	15	3	3	6	20
15	16	29 0	11	2		+	9½	74′	0″	16	2	3	8	4
16	17 △	31 9	14	1		+	28	27′	3″	17	9	6	4	15
17	17a △	23 3	5	5		+	16	13′	1½″	17a	2	3	5	30
17	17b.	29 2	11	3		−	3	24′	8″	17b	2	3	4	10
17b	17c △	28 3	10	5		+	5	41′	6″	17c	4	0	4	14
17	18	9 6	27	5		+	8	40′	11′	18	2½	½	5	6
18	19	9 9	28	8		+	7	62′	10″	19	1	3	2	3
19	20 △	3 0	21	2		+	29½	18′	3″	20	12	7	2	15
20	G11a △	10 6	28	4		−	8¼	36′	7″	11a	15 8	15 8		
New value G11a	G11 △	15 2	33	2		−	33½	85′	4″					
20	21 △	32 4	14	5		+	10½	71′	11″	21	4	0	5	10
21	22	7°	18	6		−	3½	15′	7″	22	4	1½	3	15
22	23	3 8	21	7		+	4¼	11′	0″	23	1	1	3	20
23	24 △	34 0	16	1		+	18	41′	3″	24	10	2	4	20
24	25	28 1	10	1			0	24′	0″	25	1	1	2½	20
25	26	34 4	16	6		+	10	11′	4″	26	¾	2	3	20
26	27	1 6	19	6		+	2¼	14′	5″	27	1	5	3	15
27	28	33 3	15	4		+	6¼	21′	1″	28	1	2	3	15
28	29.	35 1	17	3		+	27	40′	4″	29	1	4	2	10
29	30 △	2 5°	20	3		+	30¼	14′	11″	30	10	5		
29	32	8°	18	9°		+	36	85′	10″	31	0	14		
30 ?	31 △	322·5 319·5?	144 145 147			+	33¼	26′	8″	32	3	3	4	3
30 ?	32. △	35 6·5	19	9		+	38	71′	11″					
N18	18a.	9 9	28	8		+	7	35′	6″					
18a	18b	4°						8′						

Side passage at 18a, 30, 31, 17a, 17c,

Tape Shrinkage 1ST 50′ 7½″ 9875

2nd 50′ 3″

(*35202) Wt.44019/239 25,000 3/48 A.& E.W.Ltd. Gp.685
(*36224) Wt.20773/261 130,000 8/48 " "

Observer TZ. RAB. JIL. P.B.

Abstracted by

(35816) Wt.46435/242 120,000 3/48 A.& E.W.Ltd Gp.685

N

O.S 355.

TRAVERSE COMPUTATION — MACHINE METHOD

Name of Traverse N. LOOP DIST. *Computer* ..... *Date* 19/10/49.

Total Length ..... *Error* .....

BEARINGS

1

2

3

4

V.A.

Station	Bearing	Corr.	Corrected Bearing	Distance Ft.	Cos. V.A. M.	Sine	Cosine	E.	N.
						−			
G13-15	−39			62·81	19·14	62932	77715		14·87
						−			
G15a	−45° 12′			84·78	25·84	70957	70463		18·21
						+			
N1	+8°			78·19	13·16	13917	99027		13·83
						−			
2	−12°			14·70	4·48	20791	97815		4·38
						+			
3	+6°			22·79	6·95	10453	99452		6·91
						+			
4	+22°			20·56	6·27	37461	92718		5·81
						+			
5	+16½°			34·44	10·50	28402	95882		10·07
						+			
6	+30½°			16·52	5·04	50754	86163		4·34
						+			
7	+35°			21·80	6·64	57358	81915		5·44
						+			
8	+38°			53·76	16·39	61566	78801		12·92
	+					+			
G13a	40°32½			42·12	12·84	53730	84337		10·83

(35316) Wt.46435/242 120,000 3/48 A.& E.W.Ltd. Gp.685

N

O.S 355.

TRAVERSE COMPUTATION — MACHINE METHOD

Name of Traverse Oxbow loop N. *Computer* ..... *Date* .....

Total Length ..... *Error* .....

BEARINGS

1

2

3

4

Station	Bearing	Corr.	Corrected Bearing	Distance	Cos. V.A.	Sine	Cosine	E.	N.
G 13a									
G 15									
G 15A									
N 1									
N 2									
N 3									
N 4									
N 5									
N 6									
N 7									
N 8									

(85816) Wt.46435/242 120,000 8/48 A.& E.W.Ltd Gp.685

N

O.S 355.

TRAVERSE COMPUTATION — MACHINE METHOD

Name of Traverse N *Computer* ..... *Date* .....

Total Length ..... *Error* .....

BEARINGS

1

2

3

4

.99

Station	Bearing Va	Corr.	Corrected Bearing	Distance ft	Cos V.A. M.	Sine	Cosine	E. HUE	N. HD
						+			
N31-a	+6 18			26.73 ~~27.00~~	8.15	1097 ~~3~~	9940		8.10
						+			
a-b	+46			36 14.5	4.38	7193	6947		3.04
				06 ~~17~~		+			
b-c	+17 30			11.~~82~~	3.37	3007	9537		3.21
				13		+			
c-d	+6 00			20.~~33~~	6.14	1045	9945		6.11
						—			
d-e	-00 30			21 4.25	1.28	0	1		1.28
				49.92		+			
e-f	+10 00			~~50.42~~	15.22	1736	9848		14.99
						+			
f-g	+14 00			53 13.~~67~~	4.12	2419	9703		4.00
						—			
f-h	-24 00			4.95 ~~5.00~~	1.51	4067	9136		1.38
						+			
h-v	+31 00			44 22.~~67~~	6.84	5150	8572		5.86
						+			
v-j	+35 00			48 26.~~75~~	8.07	5736	8192		6.61
				16.83		+			
j-k	+52 00			~~17.00~~	5.13	7880	6157		3.16

(85316) Wt.46435/242 120,000 3/48 A.& E.W.Ltd Gp.685

N

O.S 355.

TRAVERSE COMPUTATION – MACHINE METHOD

Name of Traverse N Loop I *Computer* ..... *Date* .....

Total Length ..... *Error* .....

BEARINGS

1

2

3

4

Station	Bearing Va.	Corr.	Corrected Bearing	Distance	Cos. V.A.	Sine	Cosine	E.	N.
N1 N2	−12°			70 14·822	4·48				
2 N3	+6°			22·79 ~~23·00~~	6·95				
3 4	+22°								
4 5	+16° 30								
5 6	+30° 30								
6 7	+35°								
7 8	+38°								
8 13a	+32° 30′			12 42·50	12·84	+ 53730	84339		10·83 ~~3·94~~
8-9	+33°			40·88 ~~41·25~~	12·46	+ 54464	83867		10·45
9-13a	0			0·45 61·00	18·43	0	1·0	⑧14 09 568·23 ~~574·79~~	18·43
9-10	+ 33°			42 27·67	8·36	+ 54464	83867	19 0·82 581·01 ~~585·71~~	7·01
10-11	− 22°			43·85 44·25	13·37	+ 37461	92718	24 20 597·454 ~~602·68~~	12·40
11-12	− 4° 45′			43 ~~44~~ 25·75	7·75	− 08281	99657	28 05 595·373 ~~600·58~~	7·72

Station	Bearing	Corr.	Corrected Bearing	Distance	Cos. V.A.	Sine	Cosine	E.	N.
						+		33 45	
12-13	+2° 30′			00 23.42	10.06	04362	99905	596.78 568.02	10.05
						+		38 61	
13-14	+17°			17.85 18.08	5.44	29237	95630	601.99 573.24	5.20
						+		43 6.87	
14-15	+25° 30′			34 12.60	3.76	43051	90259	607.30 579.54	3.39
						+		47 8.92	
15-16	+9° 30′			73.25 74.00	22.33	16505	98629	619.39 590.64	22.02
						+		52 2.50	
16-17	+28° 00′			26.91 27.25	8.20	46947	88295	632.02 603.27	7.24
	8°					+		57 08	
17-18	+15			41 40.92	12.32	13917	99027	637.67 608.90	12.20
						+		62 4.60	
18-19	+7°			62.13 62.83	18.94	12187	99255	645.22 616.47	18.80
						+		66 3.45	
19-20	+29° 30′			02 18.25	5.49	49242	87036	654.09 625.34	4.78
				12		−		71 .20	
20-11a	−8° 15′			36.58	11.01	14349	98965	648.91 620.16	10.90
								−.71	
				.02	21.65	+			29
20-21	+10 30			18 71.92	21.70	18224	98325		21.34
				39		−			
21-22	−3 30			44 15.58	4.71	06105	99813		4.70
						+			
22-23	+4 15			10.86 11.00	3.31	07411	99725		3.30
						+			
23-24	+18 00			40.73 41.25	12.41	30902	95106		11.80

SOLUTION OF UP-STATIONS, EXTRA BEARINGS, ETC.

B11, 80.42 102.5 564.9.
13, 18 36 − 96.42 33654 568.61.

13A 6 12 + 14.5 10800. 570.18.

9. 11.25 22995 with + Va N 10-11
P1 13°

Ha = 553.03
648.20
error = 4.82 ft

831
180 585
651

11a 648.2