APPENDIX 24: PETER ROBERTS CALCULATIONS SHOWING IRR AT 5%

APPENDIX 3B of Mr Macdonald Applying 2.5% inflation to Costs and Maintaining STDC Assumed Rental Growth but No Service Charge and Adopting CH2M Costs as previously advised and indexed to current day.

Row	Assumptions	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35	35/36	36/37	37/38	38/39	39/40	40/41	41/42	42/43	43/44	44/45	45/46	46/47	47/48	48/49	49/50
1																															
2	Acres yielding rental income	-	25	40	265	565	889	1,137	1,203	1,369	1,469	1,469	1,469	1,469	1,469	1,469	1,469	1,469	1,469	1,469	1,469	1,469	1,469	1,469	1,469	1,469	1,469	1,469	1,469	1,469	1,469
2A	Average rent per acre	7,520	15,000	14,849	17,488	19,771	20,775	21,106	22,411	22,196	23,979	24,204	25,163	25,163	25,448	25,886	26,152	27,641	27,641	27,924	28,407	28,672	30,161	30,161	30,445	30,975	31,241	32,729	32,729	33,014	
	Annual percentage increase in rate per acre		99.47	-1.01	17.78	13.05	5.08	1.60	6.18	-0.96	8.03	0.94	3.97	0.00	1.13	1.72	1.03	5.69	0.00	1.03	1.73	0.93	5.19	0.00	0.94	1.74	0.86	4.76	0.00	0.87	
	Service Charge (row 17) divided by acre (row 2)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3																															
4	STDC Share of Business Rates as fraction of rent	0.21																													
5	Service Charge, £(2019/20)k/acre	2.5																													
6	Land Purchase (incl. tax) & Compensation Loan: Interest Rate	0%																													
7	Land Purchase (incl. tax) & Compensation Loan: Repayment Period (yrs)	20																													
8	Land Purchase (incl. tax) & Compensation Loan: First Repayment Year	28/29																													
9	Financing Loan: Interest Rate	3%																													
10	Financing Loan: Repayment Period (years)	25																													
11																															
12		Totals	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35	35/36	36/37	37/38	38/39	39/40	40/41	41/42	42/43	43/44	44/45	45/46	46/47	47/48	48/49	49/50
13	Income and Finance In, £ (2019/20)k	20/21-49/50	£k	£k	£k	£k	£k	£k	£k	£k	£k	£k	£k	£k	£k	£k	£k	£k	£k	£k	£k	£k	£k	£k	£k	£k	£k	£k	£k	£k	£k	£k
14																															
15	Rental	978,480		188	600	3,935	9,881	17,576	23,621	25,391	30,680	32,606	35,225	35,555	36,965	36,965	37,383	38,027	38,417	40,604	40,604	41,021	41,730	42,119	44,306	44,306	44,724	45,503	45,893	48,079	48,079	48,497
16	Bus. Rates	142,550				79	126	337	2,557	4,170	4,949	5,364	7,064	7,450	7,745	7,745	7,833	7,968	8,049	8,507	8,507	8,595	8,743	8,825	9,283	9,283	9,371					
17	Service Charge	0				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Scrap	23,099				466	466	626	493	2,635	3,358	3,198	3,198	3,198	2,548	2,548	291	74														
19	Direct income	1144129		188	600	4,480	10,473	18,539	26,671	32,196	38,987	41,168	45,487	46,203	47,258	47,258	45,507	46,069	46,466	49,111	49,111	49,616	50,473	50,944	53,589	53,589	54,095	45,503	45,893	48,079	48,079	48,497
20																															
21	Assumed loan for Land purchase (incl. tax) & Compensation	31,572			31572																										
22	TVCA Prairie Site Support	9,638	1940	2536	3251	1082	829																								
23	MHCLG funding for prairie Site Regeneration (pre-CSR)	13,082	5623	4909	2550																										
24	BEIS Switch of budgetted KS costs (within CSR period)	10,544			10544																										
25	Ask of Govt (CSR Funding)	55,858	7000	10982	32531	5345																									
26	TVCA & Government-sourced Grant and Loan income	120,694	14563	18427	80448	6427	829																								
27																															
28	Financing Loan	255,159				64585	57424	47939	55706	29505																					
29																															
30	Total Income	1,519,982	14,563	18,615	81,048	75,492	68,726	66,478	82,377	61,701	38,987	41,168	45,487	46,203	47,258	47,258	45,507	46,069	46,466	49,111	49,111	49,616	50,473	50,944	53,589	53,589	54,095	45,503	45,893	48,079	48,079	48,497
31																															
32																															
33	**Expenditure and Finance Out, £(2019/20)k**																														
34																															
35	Demolition Macdonald	(71,958)	(900)	(900)	(10,982)	(975)	(10,625)	(17,500)	(21,588)	(7,588)	(500)	(400)																			
	Phasing		1.2507%	1.2507%	15.2617%	1.3550%	14.7656%	24.3197%	30.0008%	10.5450%	0.6948%	0.5559%																			
	Demolition CH2M/Roberts	(88,530)	-900	-900	-10,982	-975	-10,625	-17,500	-21,588	-7,588	-500	-400																			
36	Decomissioning/cleaning of plant and facilities (COMAH) Macdonald	(13,158)				(6,579)	(6,579)																								
	Phasing		0.0000%	0.0000%	0.0000%	50.0000%	50.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%																			
	Decomissioning/cleaning of plant and facilities (COMAH) Roberts	(40,080)	0	0	0	(20,040)	(20,040)	0	0	0	0	0																			
37	Infrastructure - Highway	(95,416)	(3,625)	(4,140)	(5,076)	(18,586)	(13,626)	(13,323)	(10,961)	(6,512)	(5,356)	(1,235)	(6,902)	(1,802)	(1,802)	(1,235)	(1,235)														
	Phasing		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0														
	Infrastructure - Highway Roberts	(92,990)	(3,533)	(4,035)	(4,947)	(18,113)	(13,280)	(12,984)	(10,682)	(6,346)	(5,220)	(1,204)	(6,727)	(1,756)	(1,756)	(1,204)	(1,204)														
38	Infrastructure - Marine	(26,000)							(13,000)	(13,000)																					
	Phasing		0	0	0	0	0	0	1	1	0	0	0	0	0	0	0														
	Infrastructure Marine Roberts	(26,000)	0	0	0	0	0	0	(13,000)	(13,000)	0	0	0	0	0	0	0														
39	Infrastructure - Rail	(16,226)				(1,570)	(2,027)	(2,480)	(1,995)	(1,366)	(1,333)	(1,091)	(1,091)	(1,091)	(1,091)	(1,091)															
	Phasing		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0														
	Infrastructure - Rail Roberts	(16,600)	0	0	0	(1,606)	(2,074)	(2,537)	(2,041)	(1,397)	(1,364)	(1,116)	(1,116)	(1,116)	(1,116)	(1,116)	0														
40	Infrastructure - Utilities (incl Elec. Infr. Provision)	(77,680)	(3,174)	(4,939)	(4,739)	(14,070)	(11,069)	(10,007)	(9,080)	(5,416)	(4,464)	(1,070)	(5,304)	(1,104)	(1,104)	(1,070)	(1,070)														
	Phasing		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0														
	Infrastructure - Utilities Roberts	(79,080)	(3,231)	(5,028)	(4,824)	(14,324)	(11,268)	(10,187)	(9,244)	(5,514)	(4,544)	(1,089)	(5,400)	(1,124)	(1,124)	(1,089)	(1,089)														
41	Landscape and public realm	(10,588)				(833)	(930)	(925)	(689)	(415)	(336)	(89)	(1,179)	(864)	(864)	(1,776)	(1,688)														
	Phasing		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0														
	Landscape and public realm Roberts	(11,498)	0	0	0	(905)	(1,010)	(1,005)	(748)	(451)	(365)	(97)	(1,280)	(938)	(938)	(1,929)	(1,833)														
42	Site Preparation	(71,968)	(900)	(2,377)	(10,847)	(19,122)	(9,351)	(5,835)	(7,305)	(6,972)	(4,872)		(3,167)	(167)	(610)	(443)															
	Phasing		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0														
	Site Preparation Roberts	(106,405)	(1,331)	(3,514)	(16,037)	(28,272)	(13,825)	(8,627)	(10,800)	(10,308)	(7,203)	0	(4,682)	(247)	(902)	(655)	0														
	Coke Ovens Gas Main	(18,765)		(18,765)																											
	Heavy Fuel Oil Main	(3,175)		(3,175)																											
43	Capitalisable Strategic Costs	(67,584)	(5,365)	(5,637)	(5,661)	(5,495)	(5,253)	(3,991)	(3,473)	(3,453)	(3,386)	(4,914)	(4,744)	(4,769)	(4,795)	(4,648)	(2,000)														
44	STDC Pick up of KS+I2S+Tier3 costs	(98,433)			(11,355)	(7,678)	(5,000)	(5,000)	(5,000)	(5,000)	(2,700)	(2,700)	(2,700)	(2,700)	(2,700)	(2,700)	(2,700)	(2,700)	(2,700)	(2,700)	(2,700)	(2,700)	(2,700)	(2,700)	(2,700)	(2,700)	(2,700)	(2,700)	(2,700)	(2,700)	(2,700)
45	Direct Costs	(1,032,134)	(14,360)	(41,054)	(53,807)	(97,408)	(82,375)	(61,831)	(76,577)	(53,057)	(25,282)	(11,520)	(26,649)	(12,650)	(13,331)	(13,341)	(8,826)	(2,700)	(2,700)	(2,700)	(2,700)	(2,700)	(2,700)	(2,700)	(2,700)	(2,700)	(2,700)	(2,700)	(2,700)	(2,700)	(2,700)
	Total Direct Costs with inflation at 2.5% per annum	**(764,075)**	**(14,719)**	**(43,133)**	**(57,944)**	**(107,520)**	**(93,200)**	**(71,705)**	**(91,026)**	**(64,645)**	**(31,574)**	**(14,746)**	**(34,966)**	**(17,013)**	**(18,377)**	**(18,850)**	**(12,783)**	**(4,008)**	**(4,108)**	**(4,211)**	**(4,316)**	**(4,424)**	**(4,535)**	**(4,648)**	**(4,764)**	**(4,884)**	**(5,006)**	**(5,131)**	**(5,259)**	**(5,391)**	**(5,525)**	**(5,663)**
46																															
47	Overheads (balances Serv. Ch. & KS+I2S+T3 once prep concluded), £k	(25,012)	(600)	(620)	(818)	(645)	(657)	(670)	(683)	(690)	(696)	(703)	(710)	(717)	(724)	(731)	(738)	(974)	(974)	(974)	(974)	(974)	(974)	(974)	(974)	(974)	(974)	(974)	(974)	(974)	(974)
48																															
49	Assumed Land Purchase (incl. tax) & Compensation	(31,572)			(31,572)																										
50	Assumed Land Purchase (incl. tax) & Compensation Loan Interest																														
51	Assumed Land Purchase (incl. tax) & Compensation Loan Repayment (incl. historic pu	(42,580)									(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	
52	Assumed Land Purchase (incl. tax) & Compensation Loan Costs	(74,152)			(31,572)						(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	
53																															
54	Financing Loan Interest	(103,088)					(1,938)	(3,607)	(4,941)	(6,459)	(7,133)	(6,884)	(6,628)	(6,364)	(6,092)	(5,812)	(5,524)	(5,227)	(4,921)	(4,606)	(4,282)	(3,947)	(3,603)	(3,248)	(2,883)	(2,507)	(2,119)	(1,720)	(1,309)	(885)	(449)	
55	Financing Loan Repayments	(255,156)					(1,771)	(3,493)	(5,075)	(7,051)	(8,291)	(8,540)	(8,796)	(9,060)	(9,332)	(9,612)	(9,900)	(10,197)	(10,503)	(10,818)	(11,143)	(11,477)	(11,822)	(12,176)	(12,542)	(12,918)	(13,305)	(13,704)	(14,116)	(14,539)	(14,975)	
56	Financing Loan: Total	(358,244)					(3,709)	(7,100)	(10,016)	(13,510)	(15,424)	(15,424)	(15,424)	(15,424)	(15,424)	(15,424)	(15,424)	(15,424)	(15,424)	(15,424)	(15,425)	(15,424)	(15,425)	(15,424)	(15,425)	(15,425)	(15,424)	(15,424)	(15,425)	(15,424)	(15,424)	
57																															
58	Total Expenditure	(1,489,542)	(14,960)	(41,674)	(86,197)	(98,053)	(86,741)	(69,601)	(87,276)	(67,257)	(43,531)	(29,776)	(44,912)	(30,920)	(31,608)	(31,625)	(27,117)	-21227	(21,227)	(21,227)	(21,228)	(21,227)	(21,228)	(21,227)	(21,228)	(21,228)	(21,227)	(21,227)	(21,228)	(21,227)	(19,098)	(3,674)
59																															
60																															
61	Balance, £(2019/20)k																														
62																															
63	Balance ie income + Finance In - Expenditure - Finance Out	30,440									-4,544	11,392	575	15,283	15,650	15,633	18,390	24,842	25,239	27,884	27,883	28,389	29,245	29,717	32,361	32,361	32,868	24,276	24,665	26,852	28,981	44,823

		1144129	0	188	600	4480	10473	18539	26671	32196	38987	41168	45487	46203	47258	47258	45507	46069	46466	49111	49111	49616	50473	50944	53589	53589	54095	45503	45893	48079	48079	48497
		31,572	0	0	31,572	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		9,638	1,940	2,536	3,251	1,082	829	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		13,082	5,623	4,909	2,550	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		10,544	0	0	10,544	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		55,858	7,000	10,982	32,531	5,345	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		1,264,823	14,563	18,615	81,048	10,907	11,302	18,539	26,671	32,196	38,987	41,168	45,487	46,203	47,258	47,258	45,507	46,069	46,466	49,111	49,111	49,616	50,473	50,944	53,589	53,589	54,095	45,503	45,893	48,079	48,079	48,497
		(764,075)	(14,719)	(43,133)	(57,944)	(107,520)	(93,200)	(71,705)	(91,026)	(64,645)	(31,574)	(14,746)	(34,966)	(17,013)	(18,377)	(18,850)	(12,783)	(4,008)	(4,108)	(4,211)	(4,316)	(4,424)	(4,535)	(4,648)	(4,764)	(4,884)	(5,006)	(5,131)	(5,259)	(5,391)	(5,525)	(5,663)
		(25,012)	(600)	(620)	(818)	(645)	(657)	(670)	(683)	(690)	(696)	(703)	(710)	(717)	(724)	(731)	(738)	(974)	(974)	(974)	(974)	(974)	(974)	(974)	(974)	(974)	(974)	(974)	(974)	(974)	(974)	(974)
		(74,152)	0	0	(31,572)	0	0	0	0	0	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	(2,129)	0	0
		(863,239)	(15,319)	(43,753)	(90,334)	(108,165)	(93,857)	(72,375)	(91,709)	(65,335)	(34,399)	(17,578)	(37,805)	(19,859)	(21,230)	(21,710)	(15,650)	(7,111)	(7,211)	(7,314)	(7,419)	(7,527)	(7,638)	(7,751)	(7,867)	(7,987)	(8,109)	(8,234)	(8,362)	(8,494)	(6,499)	(6,637)
		401,584	-756	-25,138	-9,286	-97,258	-82,555	-53,836	-65,038	-33,139	4,588	23,590	7,682	26,344	26,028	25,548	29,857	38,958	39,255	41,797	41,692	42,089	42,835	43,193	45,722	45,602	45,986	37,269	37,531	39,585	41,580	41,860

This is before any account is taken of the compensation cost being too low. **IRR 5.0%**