#### **Appendices**

- Appendix 1 Leased land area at La Collette Tank Farm (excl Gas Works).
- Appendix 2 TTS figures for waste arisings to La Collette 2005-2007
- Appendix 3 Calculation of super fill capacity
- Appendix 4 General Views of the proposed site of the new Tank Farm
- Appendix 5 RAMSAR Boundary at La Collette II
- Appendix 6 Hopkins Master Plan Section 4.2 Waste Management
- Appendix 7 Gas Vapourisation Plant at La Collette II
- Appendix 8 Extract re La Gigoulande Quarry Extensions
- Appendix 9 Tables from Projected Life of La Collette II model

<sup>&</sup>lt;sup>1</sup> Management of construction and demolition waste - working document No1. DGX1 ENV.E.3 - Waste Management April 2000.

<sup>&</sup>lt;sup>2</sup> Department for Communities and Local Government – Capita Symonds Report February 2007.

<sup>&</sup>lt;sup>3</sup> Specifying recycled in local authority contracts for highway maintenance: good practice.

<sup>&</sup>lt;sup>4</sup> Solid Waste Strategy Report – Carl Bro Group

<sup>&</sup>lt;sup>5</sup> Masterplan for The Esplanade Quarter, St Helier, 2007– Hopkins Architects

<sup>&</sup>lt;sup>6</sup> La Collette fuel farm, St. Helier: Lease to Shell UK Ltd and Esso Petroleum Company Ltd. Lodged au Greffe 13/05/03

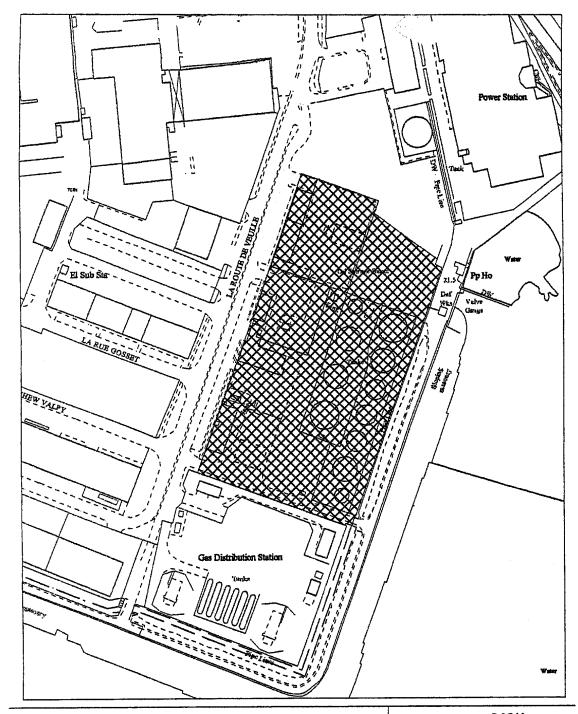
<sup>&</sup>lt;sup>7</sup> Review of the Current Arrangements for the Importation, Storage and Supply of Petroleum Products to the Distribution and Retail System in Jersey – Consultancy Services to the Oil Industry.

<sup>&</sup>lt;sup>8</sup> LC3 Fuel Storage Site. Decision Ref MD-PH-2006-0021

<sup>&</sup>lt;sup>9</sup> Jersey Mineral Strategy 2000-2020

<sup>&</sup>lt;sup>10</sup> Jersey Waste Strategy – Final version issue 5.

<sup>&</sup>lt;sup>11</sup> Appendix 2 – TTS recorded figures for material received at La Collette weighbridge



#### Appendix 1 – Leased land area at La Collette Tank Farm.

#### Shell UK / Esso Petroleum Ltd, La Collette

Boundary Information Supplied by the States of Jersey Planning Office, but no responsibility can be accepted for error.

# Drawing No: 648/1



COPYRIGHT PLANNING & ENVIRONMENT COMMITTEE

## States of Jersey Inert Waste Arising and Landfill Capacity Report

### Appendix 2 – TTS figures for waste arisings to La Collette

														f Recovered gregate	
														Weight (Tonnes)	
January	6	0.03	864	590.71	98	1097.48	2	1.95	1939	9605.71	504	3204.01	529	3567.34	
February	12	8.98	1030	574.94	116	1382.28	2	0.75	3484	19105.67	964	5832.48	1014	7543.95	
March	7	3.12	968	557.35	133	1638.71	0	0	2707	11287.05	716	3176.76	689	4771.94	
April	11	9.20	1112	632.61	206	1629.58	2	0.8	2703	10118.02	937	4826.28	536	3192.87	
Мау	4	3.40	1109	601.04	171	1639.89	4	4.24	2595	8968.99	1011	6323.6	666	4365.99	
June	5	7.60	1185	662.26	103	1199.82	1	0.78	2962	13718.68	895	5072.83	740	5060.68	
July	4	3.22	1087	700.45	111	1053.98	0	0	2873	13199.96	866	5572.72	746	4745.22	
August	9	2.60	1164	779.91	137	1515.82	1	1.5	2774	10254.9	942	6015.95	787	5198.59	
September	1	1.60	1022	671.05	88	864.08	3	3.92	2780	14498.91	863	4867.98	779	5841.64	
October	3	1.20	1185	669.45	153	1716.38	1	0.87	2939	12712.2	884	4175.68	956	6684.53	
November	7	2.20	1143	661.71	115	1220.09	0	0	2863	12385.31	39	4871.36	876	6629.92	
December	4	2.30	943	623.51	110	1198.84	0	0	2748	17738.44	805	5504.19	662	4413.53	
Total	73	45.45	12812	7724.99	1541	16156.95	16	14.81	33367	153593.84	9426	59443.84	8980	62016.20	

## States of Jersey Inert Waste Arising and Landfill Capacity Report

														Recovered regate
														Weight (Tonnes)
January	5	1.88	684	459.4	109	1303.02	1	0.52	1868	9948.49	329	2422.02	285	2101.70
February	9	3.34	895	516.46	113	1330.76	4	3.16	3296	17423.4	577	3557.98	489	3552.66
March	4	1.20	797	468.49	79	850.44	3	1.78	3005	15324.51	364	2024.02	382	2474.14
April	4	3.38	920	490.28	116	1217.88	6	4.88	4225	30778.89	524	3479.59	467	3099.18
Мау	2	0.98	1037	583.08	110	1138.88	4	3.87	3956	25844.89	651	4909.54	334	1702.31
June	1	0.32	1138	630.67	155	1883.90	4	4.51	3570	18742.2	639	3648.68	432	2673.61
July	4	1.12	1026	592.45	124	1298.46	3	2.45	2861	14441.45	481	2430.59	316	2018.74
August	4	1.94	1208	712.3	136	1655.78	1	0.01	3238	15853.47	479	1802.64	404	2365.54
September	8	2.30	1106	612.39	144	1672.99	3	3.74	3301	16529	618	2803.2	522	3390.42
October	6	3.10	1039	587.42	117	1289.32	2	2.12	2824	11254.48	516	2069.76	524	3670.32
November	2	0.28	1130	669.24	152	1658.16	3	8.16	3206	14259.52	505	2191.03	520	3294.28
December	6	2.14	976	595.44	116	1205.40	4	8.95	2483	10857.46	429	2039.05	524	3558.36
Total	55	21.98	11956	6917.62	1471	16504.99	38	44.15	37833	201257.76	6112	33378.1	5199	33901.26

## States of Jersey Inert Waste Arising and Landfill Capacity Report

														Recovered
														Weight (Tonnes)
January	6	2.58	478	401.21	106	1175.42	2	2.58	2277	13921.98	239	1497.54	203	1054.12
February	13	5.86	613	373.94	152	1873.66	1	1.4	2821	13815.07	600	3623.48	366	2082.43
March	6	2.08	537	345.01	95	1031.26	5	3.73	3277	21481	361	1937.54	257	1283.11
April	6	2.64	635	425.82	113	1246.26	3	3.17	3629	23148.16	566	3483.52	361	1908.37
Мау	5	1.56	770	444.44	111	1296.54	2	3.13	3520	22338.73	489	2576.9	281	1464.54
June	7	3.36	937	495.54	137	1558.48	5	5.23	3272	15510.65	443	2367.1	349	1845.05
July	5	3.30	922	514.35	105	1298.38	3	1.52	2581	10312.31	529	3125.46	283	1353.02
August	5	2.44	955	578.78	121	1237.98	8	7.64	2968	13764.19	476	2959.31	354	366.60
Septembe r	11	5.86	909	575.79	144	1756.08	3	4.19	2809	12724.9	657	4073.42	336	2253.12
October	9	3.72	822	462.38	95	1113.96	3	1.88	2545	10633.04	454	2168.19	390	2645.89
November	6	3.84	992	552.83	112	1318.63	5	4.49	3624	18788.08	446	2876.05	556	3398.08
December	7	4.46	891	473.36	157	1688.56	5	2.53	2916	14894.03	395	2691.26	610	4703.20
Total	86	41.70	9461	5643.45	1448	16595.21	45	41.49	36239	191332.14	5655	33379.77	4346	24357.53

#### Appendix 3 - Estimation of super fill capacity

The super fill area running in a North South orientation on the Eastern side of La Collette II is currently being used for non-inert ash disposal in lined pits. Measurements provided by Transport and Technical Services from existing drawings show the area currently available and being utilised as approximately 32,000m<sup>2</sup>. Assuming final restoration of this area of the site to a depth of 2 metres indicates that 64,000m<sup>3</sup> of inert waste could potentially be disposed of at this location. With the average density of this material of 1.75 tonnes/m<sup>3</sup>, this gives a tonnage of 112,000 tonnes, which is approximately equivalent to 8-9 months of net receipts for 2007.

This capping layer will not be constructed until after this area has been fully utilised for the storage of ash, which should be complete at present rate of ash deposit by 2011.

Since the new Energy from Waste plant is not due to be commissioned until 2011 it is unlikely that any ash from the new plant will be placed in this present ash pit area.

The Southern area identified for super filling will also according to Transport and Technical Services staff be required for ash containment. This will result in the use of this area for the gradual deposition of ash over a longer timeframe. Transport and Technical Services has estimated that the capacity of this area to receive ash will provide approximately 13 years of ash storage at present rates of ash production.

This will mean that this area of the site will potentially not be complete when the remainder of the site has been filled and closed for the receipt of inert waste. For example, the North South strip will be closed for the receipt of ash in 2011 and this Southern area will provide 13 years capacity at present rates of infill taking its expected life to 2024.

With the new Energy from Waste in operation by 2011 ashes from the plant will be deposited in the Southern area of the site. However, the predicted rates of infill are stated as between 5,531 tonnes in 2011 rising to 10,016 tonnes per annum in 2035. This gives an average figure of 8,745 tonnes per annum, which is approximately half of the amount of ash disposed of at present. The implications are that the southern area of the site could provide significant ash storage facilities in excess of that required due to the creation of alternative land fill facilities.

The opportunity to utilise restoration and capping works for the storage of inert waste is therefore not going to be available at this Southern location before the remaining site is full. It is likely that there will be no extension to the life of the site from the use of this area for ash containment. This Southern area therefore has the capacity to provide a further 6 years ash containment before the whole site reaches capacity in 2011 but will not extend its life.

However, with the remainder of the site closing in 2017 there is further 7 years ash storage capacity to be utilised in a site where permissions are in place for the deposition of such material. This represents a useful asset at a time when other possible locations in Jersey for waste disposal may not be available due to the filled levels potentially being below existing water tables. However, detailed modelling would be required to determine this and add detail to any proposals.

Regarding the area extending from the Southern tip to the most Westerly edge of the site there are existing plans detailing this area for use as super fill albeit to a lesser degree. It has been noted that there is pressure on this area for other uses, which may include the Fuel Farm relocation and future aggregates import and unloading area and aggregate recycling. Until a decision is made regarding the future use of this area it has been assumed that super filling would take place to the original plans. From information taken from the existing Michael Drawings Ltd drawings it would be reasonable to assume that the time taken to super fill this area of the site would be approximately 6 months at 2007 rates of infill.

As this area would not be used for ash containment then the super filling would be undertaken within the predicted life of the site and hence does add to the longevity of the site.

It should also be noted that the proposed final grading of the site from a level of 16mAAD at the inner edge of the super fill areas sloping to a finished level of 15 m AAD at the old La Collette I sea wall could add a further 2-4 months life to the site.

The total extension to the life of the site by the use of super filling in the areas described above could be approximately 18 months from 2017 giving a final closure date for the receipt of inert waste of late 2018.