

THANET STRATEGIC ACCESS MANAGEMENT AND MONITORING PLAN
NOTES TO ACCOMPANY TARIFF FOR 17,140 HOMES
April 2017

Thanet SAMM – Revised (or‘17k’) Tariff – revised April 2017

Notes to accompany spreadsheets

The total number of new dwellings required in the plan period is now 17140. In the 6 years since the Plan’s start date (2011/12) 1555 dwellings have been completed and a further 3017 dwellings have received planning permission, leaving 12568 net additional dwellings to be completed by 2031.

The current draft Local Plan attributes dwelling delivery evenly across the plan period, with an average of 857 per annum over the whole plan period. However, the actual numbers built or granted permission in that period is currently below the target figure. Accordingly, in the remaining 14 years to 2031 for the purposes of calculating the Tariff, the trajectory will need to be increased to accommodate the remaining required number of dwellings (see tariff spreadsheet).

Information provided by Thanet Council (TDC) from their OAN updated report indicates the mix of dwelling types required for both market housing and affordable housing.

Tables 1 and 2 use data from the OAN update report. The OAN updated report provides dwelling type percentage figures for 1 bed, 2 bed, 3 bed and 4+ bed properties, split between market and affordable housing (see Table1 below). The updated report also provides figures for built form (See Table 2 below).

Further, it is understood that TDC is to apply a requirement of 30% affordable dwellings to its housing figures.

The percentages for each category in the OAN updated report are ranged across 5%. For calculating the revised Tariff the percentage range in each category will be set at the midpoint of the range.

17140 = 100% of housing required in the plan period; 12000 = 70% => market housing to be provided; 5140 = 30% => affordable housing to be .+provided

Table1: Proposed Dwelling Type (by number of bedrooms) (from OAN)

	Market housing %	Market Housing @ 70% of total	Affordable housing %	Affordable Housing @30% of total	Totals
1bed	12.5%	1500	37.5%	1928	3428
2bed	42.5%	5100	32.5%	1671	6771
3bed	32.5%	3900	22.5%	1156	5056
4+bed	12.5%	1500	7.5%	385	1885
Totals	100% (of 70% of total housing)	12000	100%(of30%oftotalhousing)	5140	17140

Table 2: Proposed Built Form (from OAN)

	Market housing %	Affordable housing %
Flat	22.5%	47.5%
Terraced house	22.5%	22.5%
Semi-detached house	27.5%	27.5%
Detached house	27.5%	2.5%
Totals	100% (of 70% of total housing)	100% (of 30% of total housing)

Using the data from Tables 1 and 2 the dwelling split is assessed for the total requirement over the Plan period (see Table 3 below).

Table 3: Proposed mix of housing by dwelling type and built form

Market Housing					Affordable Housing					Totals	Balance of housing required (73.32% of total)
No of bedrooms		Built Form		No of dwellings	No of bedrooms		Built Form		No of dwellings		
1 bed	12.5%	1 bed flat	12.5%	1500	1bed	37.5%	1bed flat	37.5%	1928	3428	2514
2 bed	42.5%	2 bed flat	10%	1200	2bed	32.5%	2bed flat	10%	514	1714	1257
		2b Terraced house	22.5%	2700			2b Terraced house	22.5%	1156	3856	2827
		2b Semi-det house	10%	1200						1200	880
3 bed	32.5%	3b Semi-det house	17.5%	2100	3bed	22.5%	3b Semi-det house	22.5%	1156	3256	2387
		3b Detached house	15%	1800						1800	1320
					4+bed	7.5%	4b Semi-det house	5%	257	257	189
4+ bed	12.5%	4+b Detached house	12.5%	1500			4+b Detached house	2.5%	129	1629	1194
				12000					5140	17140	12568

As 1555 homes have already been built, they have already contributed to the Tariff on the initial interim rate (based on earlier housing figures of 12k).

A further 3017 homes have been granted planning permission and the tariff for these homes will be charged at the rate based on the later housing figure of 15660.

For the homes already built or with planning permission, the average rate of tariff will be applied in each case.

Thus:

1555 homes x Average tariff (from the '12k' tariff model) of £542 per dwelling = £842, 810 over a 6 year period (assumes an average of 259 built per year)

3017 homes x Average tariff (from the '16k' model) of £408 per dwelling = 1,230,936 (this will be added as a lump sum at year 6 as it is not known when the tariff will apply)

The revised (or '17k') tariff will apply to the balance of 12568 homes for 14 years (i.e. 2017/18 – 2030/31).

Tariff per dwelling– including requirement for in-perpetuity funding	'12k' Tariff 12,000 total Balance of 11,165 new homes	'16k' Tariff 15,660 total Balance of 14,825 new homes	'17k' Tariff 17,140 total Balance of 12568 new homes
1 bedroom flat	£327	£229	£202
2 bedroom house or 2 bedroom flat	£518	£362	£320
3 bedroom house	£687	£480	£424
4+ bedroom house	£858	£600	£530
Average tariff per dwelling	£542	£408	£350

It is assumed that the mitigation package will not have changed and will be on track for delivery at the rates set out in earlier versions of this tariff.

However, it should be noted that the total number of dwellings to be built in the plan period is now around 50% more than the number on which the mitigation plan was based. This will inevitably result in a potential increase in the numbers of people who will visit the area. For this reason it is important that the monitoring elements of the plan are actioned to detect any changes on the ground. For example, an increase in visitor numbers may necessitate a review of the number of Wardens required, the costs of the education programme or the enforcement costs.

Thanet – 17140 Homes Option

Calculation of the Average Tariff per Dwelling

Item	Cost£	Notes
SAMM projects	£1,315,415	Mitigation plan cost estimate
Contingency @10%	£131,542	10% contingency
Overall Total Cost	£1,446,957	Overall Total Cost
Revenue Funding per dwelling	£115	Overall Total Cost divided by expected development
Capital Investment per dwelling	£235	
Total Average Tariff per dwelling	£350	Revenue funding per dwelling + Capital investment per dwelling [100% of tariff contribution]

Inflation Rate – Staff Cost	0.02
Inflation Rate - Capital	0.025
Interest Accrual	0.01 to 0.02

Census 2011 average occupancy = 2.2

Assumptions:

17140 homes to be built within the Thanet DC boundary between 2015 and 2031; current balance of 12568 to be developed; 1555 already built; a further 3017 have received planning permission; it is assumed these homes have paid tariffs at rates based on earlier versions of the tariff
The Tariff Calculation assumes all homes built within the 17,140 total will make a contribution to the tariff, albeit that they will be at differing rates
Assumes capital investment will achieve sustainable funding of the mitigation plan within this period;
The expected development within the district includes current planning applications and expected windfalls;
A proportion of the Tariff will fund the revenue required for the mitigation activities and the rest of the tariff will contribute to the capital investment to fund the projects in perpetuity (125 years).

Calculation of the Standard Cost (Tariff per person)

Item	Cost	Notes
Number of dwellings	12,568	Forecast delivery within 7.2km of the SPA
Total Revenue Required	£1,446,957	Sum required for mitigation = Revenue funding per dwelling x number of dwellings
Total Sum Required for Investment	£2,953,480	Invested into the long-term fund = Capital investment per dwelling x number of dwellings
Total Required	£4,400,437	Investment + Revenue = Total required
Average tariff per house	£350	Original total divided by expected development = Total average Tariff per house
Occupancy	2.2	Census 2011 data
Total number of residents	26146	Number of dwellings multiplied by occupancy based on housing size
Tariff per person	£168	Original total divided by Total number of residents = Tariff per person

Calculation of Tariff per dwelling using local occupancy rates

Occupancy x Tariff per person = Local Tariff per dwelling

No of bedrooms	Occupancy (Census 2011-all Thanet District)	Local Tariff per dwelling
1	1.20	£201.96
2	1.90	£319.77
3	2.52	£424.11
4+	3.15	£530.14
Averaged	2.2	

	Occupancy per household type	Average
All categories: No of bedrooms		2.20
1bedroom	1.20	
2bedrooms	1.90	
3bedrooms	2.52	
4bedrooms	2.94	3.15
5ormorebedrooms	3.37	

The differentiated tariff is calculated using local occupancy rates derived from the 2011 Census. The averaged rate of 2.2 was also from the Census 2011.

Project income for period (ie for given number of dwellings in the interim period)

No of bedrooms	Housing mix	Expected dwellings	Local Tariff per dwelling	Projected number of people	Projected income
1flat		2514	£201.96	3017	£507,725
2flat		1257	£319.77	2388	£401,949
2house		3707	£319.77	7043	£1,185,383
3house		3707	£424.11	9342	£1,572,192
4+house		1383	£530.14	4356	£733,188
Total		12568		26146	£4,400,437

1555@12k tariff
542

3017@16k tariff
408
Total
1,230,936

Projected trajectory of new homes within the 7.2km zone of influence			
11/12	12/13	13/14	14/15
259	259	259	259
Contribution to capital pot			
£140,378	£140,378	£140,378	£140,378

The first 6 years have been charged at £542 per dwelling built; it is assumed the mitigation programme has not yet started in which case all the funding will contribute to the capital pot; in addition dwellings with pp have been charged at £408 and this also added to the capital pot as a lump sum at year 6

Projected trajectory of new homes within the 7.2km zone of influence																
15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31	Total
259	259	897	897	897	897	898	898	898	898	898	898	898	898	898	898	13086
Contribution to capital pot										Contribution to capital pot						
£ 140,378	£ 1,371,314	£ 210,795	£ 210,795	£ 210,795	£ 210,795	£ 211,030	£ 211,030	£ 211,030	£ 211,030	£ 211,030	£ 211,030	£ 211,030	£ 211,030	£ 211,030	£ 211,030	£ 4,465,172
Plus 3017 @ '16K' tariff = £1,230,936 added at 2016/17																

Cost of Providing Mitigation in Perpetuity

A potential calculation for ensuring that the mitigation measures can be secured in-perpetuity is set out below based on a cash flow analysis.

This shows the input from development in each year, the rolled over totals from previous years and the interest that can be gained on the investment.

By year 2030/31 sufficient annual interest can be gained on the investment such that the mitigation scheme can be self-funding.

Row No	Cost	Formula
1	Input from previous year (a)	Carried over from (e) of previous year
2	Interest rate (b)	Assumed rate of interest
3	Interest gained per year (c)	$a \times b$
4	Input from development (d)	Carried over
5	Sub-total	$a + c + d$

Row No		2011/12	2012/13	2013/14	2014/15
1	(a)		£140,378	£282,159.78	£425,359.38
2	(b)		1.00%	1.00%	1.00%
3	(c)		£1,403.78	£2,821.60	£4,253.59
4	(d)	£140,378	£140,378	£140,378	£140,378
5	(a+c+d)	£140,378	£282,159.78	£425,359.38	£569,990.97

Row No		2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
1	(a)	£569,990.97	£716,069	£2,094,544	£2,326,284	£2,560,342	£2,796,740	£3,042,495	£3,299,162
2	(b)	1.00%	1.00%	1.00%	1.00%	1.00%	1.25%	1.50%	1.60%
3	(c)	£5,700	£7,161	£20,945	£23,263	£25,603	£34,959	£45,637	£52,787
4	(d)	£140,378	£1,371,314	£210,795	£210,795	£210,795	£210,795	£211,030	£211,030
5	(a+c+d)	£716,069	£2,094,544	£2,326,284	£2,560,342	£2,796,740	£3,042,495	£3,299,162	£3,562,979

2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
£3,562,979	£3,836,361	£4,124,118	£4,417,630	£4,717,013	£5,022,383	£5,333,861	£5,651,568
1.75%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
£62,352	£76,727	£82,482	£88,353	£94,340	£100,448	£106,677	£113,031
£211,030	£211,030	£211,030	£211,030	£211,030	£211,030	£211,030	£211,030
£3,836,361	£4,124,118	£4,417,630	£4,717,013	£5,022,383	£5,333,861	£5,651,568	£5,975,629

The table shows that by investing the capital sum each year, at a rate of between 1% and 2% pa a sustainable funding position may be achieved by 2030/31.

SAMM Calculation

Mitigation costs over a 14 year period from 2017/18 to 2030/31

Wardening Costs

	Warden salary		On-costs* (NI/SA)	First, 6 th & 11 th & 16th years capital costs	Travel/ Equipment	Sub-Total per Warden	Total for Two Wardens
	fte	0.6fte					
Year 1	£18,987	£11,392	£3,797	£2,500	£3,152	£20,842	£41,683.20
Year 2	£19,367	£11,620	£3,873		£3,231	£18,724	£37,448.38
Year 3	£19,754	£11,852	£3,951		£3,312	£19,115	£38,229.66
Year 4	£20,149	£12,089	£4,030		£3,394	£19,514	£39,027.37
Year 5	£20,552	£12,331	£4,110		£3,479	£19,921	£39,841.86
Year 6	£20,963	£12,578	£4,193	£2,700	£3,566	£23,037	£46,073.49
Year 7	£21,382	£12,829	£4,276		£3,655	£20,761	£41,522.62
Year 8	£21,810	£13,086	£4,362		£3,747	£21,195	£42,389.63
Year 9	£22,246	£13,348	£4,449		£3,840	£21,637	£43,274.89
Yr 10	£22,691	£13,615	£4,538		£3,936	£22,089	£44,178.79
Yr 11	£23,145	£13,887	£4,629	£3,054	£4,035	£25,605	£51,209.73
Yr 12	£23,608	£14,165	£4,722		£4,136	£23,022	£46,044.11
Yr 13	£24,080	£14,448	£4,816		£4,239	£23,503	£47,006.35
Yr 14	£24,562	£14,737	£4,912		£4,345	£23,994	£47,988.87
Totals						£302,959	£605,918.94
Total per annum averaged over 14 years (i.e. to 2030/31)							£43,279.92
* Assumes full superannuation contribution							

Co-ordination Role Costs

	Co-ordination role		Oncosts(NI/SA)	First,6 th and11 th years capital costs	Travel/ Equipment/ Materials	Vol Scheme costs	Community Engagement costs	Totals
	fte	0.4fte		PC/equipment				
Year1	£36,414	£14,566	£4,370	£2,000	£2,101	£2,627	£2,627	£28,290
Year2	£37,142	£14,857	£4,457		£2,154	£2,693	£2,693	£26,853
Year3	£37,885	£15,154	£4,546		£2,207	£2,760	£2,760	£27,428
Year4	£38,643	£15,457	£4,637		£2,263	£2,829	£2,829	£28,015
Year5	£39,416	£15,766	£4,730		£2,319	£2,900	£2,900	£28,615
Year6	£40,204	£16,082	£4,824	£2,200	£2,377	£2,972	£2,972	£31,428
Year7	£41,008	£16,403	£4,921		£2,437	£3,047	£3,047	£29,854
Year8	£41,828	£16,731	£5,019		£2,497	£3,123	£3,123	£30,493
Year9	£42,665	£17,066	£5,120		£2,560	£3,201	£3,201	£31,147
Yr10	£43,518	£17,407	£5,222		£2,624	£3,281	£3,281	£31,815
Yr11	£44,388	£17,755	£5,327	£2,400	£2,689	£3,363	£3,363	£34,897
Yr12	£45,276	£18,110	£5,433		£2,757	£3,447	£3,447	£33,194
Yr13	£46,182	£18,473	£5,542		£2,826	£3,533	£3,533	£33,906
Yr14	£47,105	£18,842	£5,653		£2,896	£3,621	£3,621	£34,634
Totals								£430,568
Total per annum averaged over 14 years i.e. to 2030/31)								£30,754.85

Education and Enforcement Costs

	Interpretative signage programme	Information Signage programme	Leaflets and other material and web presence	Interpretive displays	Legal Order amendments/ extensions	Totals
Year 1	£5,000		£1,500	£4,500	£1,500	£12,500
Year 2	£14,900	£5,000	£1,538	£2,500	£1,500	£25,438
Year 3	£14,900		£1,576			£16,476
Year 4	£500		£1,615			£2,115
Year 5	£500		£1,656			£ 2,156
Year 6	£500		£1,697			£ 2,197
Year 7	£500	£5,700	£1,740	£3,000		£ 10,940
Year 8	£500		£1,783			£ 2,283
Year 9	£500		£1,828			£2,328
Yr 10	£500		£1,873			£2,373
Yr 11	£500		£1,920			£2,420
Yr 12	£8,500		£1,968	£4,000		£14,468
Yr 13	£8,500	£6,400	£2,017			£16,917
Yr 14	£500		£2,068			£2,568
Totals	£56,300	£17,100	£24,778	£14,000	£3,000	£115,178
P.a. avgd over 14 yrs						£8,227

Bird Surveys and Visitor Surveys

Bird surveys		Visitor surveys	
Year 1	£3,151	Year 1	£6,356
Year 2	£3,230	Year 2	nil
Year 3	£3,311	Year 3	nil
Year 4	£3,394	Year 4	nil
Year 5	£3,479	Year 5	£7,015
Year 6	£3,566	Year 6	nil
Year 7	£3,655	Year 7	nil
Year 8	£3,746	Year 8	nil
Year 9	£3,840	Year 9	£7,938
Year 10	£3,936	Year 10	nil
Year 11	£4,034	Year 11	nil
Year 12	£4,135	Year 12	nil
Year 13	£4,238	Year 13	£8,762
Year 14	£4,344	Year 14	nil
Totals	£52,059	Totals	£30,071
Total p.a. avgd over 14 years	£3,718.50		£2,147.93

Elements of Surveying - Comparator costs			
Bird Surveys and reporting	Outline costs (comparator)	TCP and SBBOT costs (i.e. local delivery, based on recent costs)	Notes
Survey logistics (organising survey sites, forms, admin)	£1,000		
On-site surveys	£6,500.00		Outline costs for comparator based on 13 sites x 4 visits @ £125 per day plus mileage plus overnight stays
Data entry	£400.00		2 days @ £200
Report writing and analysis	£2,450.00		7 days @ £350
		£3000 (includes turnstone counts and reporting)	Based on current arrangement between NE and TCP with SBBOT
Total	£10,350.00	3000	One year totals; surveys annual

Visitor Surveys and Reporting		Assumes external consultancy costs
Survey logistics (designing forms, printing and organising maps, admin)	£700	Based on two days @ £350
Site surveys	£3,200	Outline costs for comparator based on 8 sites x 2 visits @ £150 per visit plus mileage plus overnight stays
Data entry	£400	2 days @ £200 per day
Report writing and analysis	£1,750	5 days @ £350
Total (2015 prices)	£6,050	Total for one survey

Management of Visitors On-site

	Costs per annum averaged over 14 year period	Notes
Access modifications and path routing	£500	
Zoning	£1,000	Three exercises in 14 years to comprise physical works and signage
Access management strategy for the NNR	£400	Estimated one-off initial cost of £5,500
Off-site modifications and zoning to accommodate dog exercising (eg Pegwell Bay Country Park)	£3,430	One-off cost of £15k to fence and gate field, signage, plus £5k for repairs and replacements and field mowing costs @ £2k per annum over 14 years = Total of £48k
Refuges	£500	Minor works to protect and/or provide Turnstone refuges; assumes one-off works plus maintenance over 16 year period
Total per annum averaged over 14 years (i.e. to 2031)	£5,830.00	

TOTALS OF MITIGATION PACKAGE

Total of all costs in mitigation package: Total, per annum and averaged over 16 years		
	Outline costs averaged per annum over 16 years	Outline costs for the period 2015 - 2031 (16 years total)
Wardening service	£43,280	£ 605,919
Co-ordination role	£30,755	£ 430,568
Enforcement		
Education and Engagement		
Interpretation and signage programme	£8,227	£115,178
Community Engagement		
Voluntary Code of Conduct		
Monitoring:		
Bird surveys	£3,718.50	£52,059
Visitor surveys	£2,147.93	£30,071
Access management projects:		
Restrictions on dog access	£5,830	£81,620
Zoning		
Refuge development works		
Totals over 14 years		£1,315,415
Total per annum averaged over 14 years (i.e. to 2031)	£93,958	