

HEFMA Benchmark Report



2009



Higher Education Facilities Management Association of Southern Africa

Dear HEFMA Colleagues

2009 Benchmark Report

Herewith the 2009 HEFMA Benchmark report, the fourth report of its kind to be published for the benefit of all HEFMA members, colleagues and interested parties. For this edition 10 institutions registered their intention to partake while 3 indicated that they were unable to partake. Of the 10 institutions who indicated their intention, 7 returned their surveys in time for report while the remaining 3 were unable to collate their figures by the due date. These 3 institutions have however indicated their intention to submit their figures during/after the conference. Should this be the case, HEFMA will publish a revised and updated 2009 Benchmark report before year end. I thus extend a warm word of thanks to the seven institutions who managed to find the time and effort to complete the survey questionnaire.

While the HEFMA Executive considered a possible expansion to the criteria, it was decided to maintain the focus on the original 5 operational areas as was the case with the previous three reports. These areas are again based on the valuable TEFMA benchmark report and cover;

- building maintenance,
- grounds maintenance,
- cleaning and waste management,
- energy and
- security.

There was no 2007/2008 report for various reasons and while the HEFMA Executive's intention to grow the report to include at least 75% of the HEFMA members has not yet materialised, this report builds on the success of the past with an increasing number of participants.

Regards,

A handwritten signature in black ink, appearing to read 'A Theys', is written over a white background.

André Theys
Executive Member: Information Services
HEFMA
October 2010

2009 HEFMA Benchmark Report

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Publisher: HEFMA: Higher Education Facilities Management Association (Southern Africa)

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List of Participating HEFMA Institutions (7)

Cape Peninsula University of Technology

Nelson Mandela Metropolitan University

University of Cape Town

University of Fort Hare

University of Pretoria

University of Stellenbosch

University of the Western Cape

General Notes and Qualifications:

Schedule of respondents. Your institutional representative has been issued with a “*Cheat Sheet*” that identifies survey participants, the names of which have been excluded from the main body of the report for confidentiality reasons.

Survey Guidelines. Guidelines and definitions for completing the survey are provided on pages 9/10. Note that additional explanatory notes were embedded into the actual 2009 survey questionnaire/spreadsheet.

Survey Errors and Improvements. As the HEFMA benchmark survey is in its early years some inconsistencies in the way participants interpret the survey definitions and collect and compile data is expected. If you find any errors in this report, or wish to submit suggestions for improving future surveys, please contact André Theys at andre.theys@uct.ac.za

Institution	General Statistical Data							
	CBD Suburban or Rural Campus	Gross Floor Area Total Campus (GFA)	Assignable Floor Area Total Campus (AFA)	AFA/GFA	ARV Buildings	Replacement Cost of Buildings	Total EFTS	GFA provided per EFTS
	2	3	4	5	6	7	8	9
	Type	m ² GFA	m ² AFA	%	R	R/m ² GFA	No.	m ² /EFTS
1	Suburban	438 937	307 164	70.0%	R 4 880 000 000	R 11 118	22 660	19.4
2	Suburban	246 144	185 484	75.4%	R 3 692 160 000	R 15 000	19 000	13.0
3	Suburban	577 576	347 854	60.2%	R 8 139 943 396	R 14 093	24 000	24.1
4	Suburban	189 382	118 364	62.5%	R 1 249 166 588	R 6 596	8 560	22.1
5	CBD	936 000	586 003	62.6%	R 7 692 410 637	R 8 218	38 819	24.1
6	Suburban	702 043	432 598	61.6%	R 5 464 379 374	R 7 784	21 730	32.3
7	Suburban	263 589	158 789	60.2%	R 2 728 293 691	R 10 351	13 575	19.4
Mean/Totals		3 353 671	2 136 256	63.7%	R 33 846 353 686	R 10 092	148 344	22.6

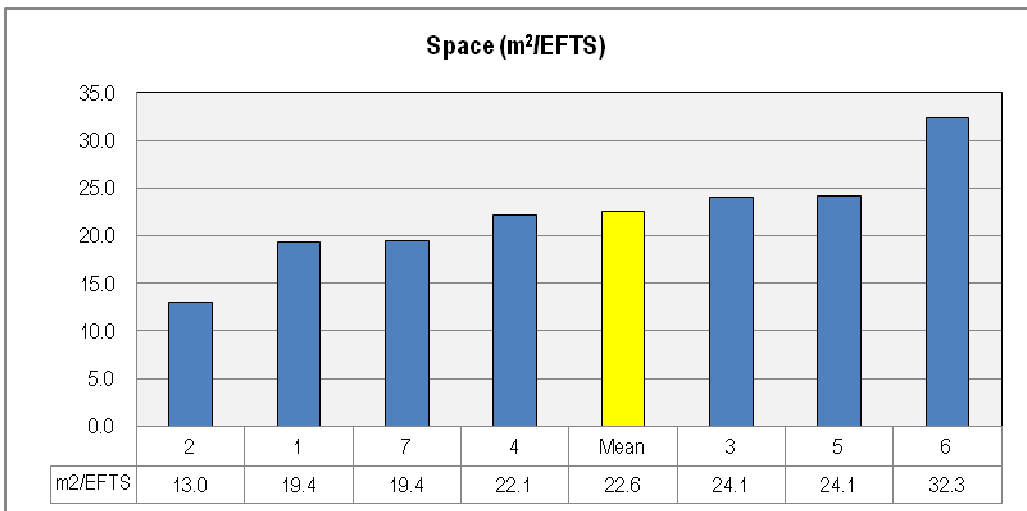
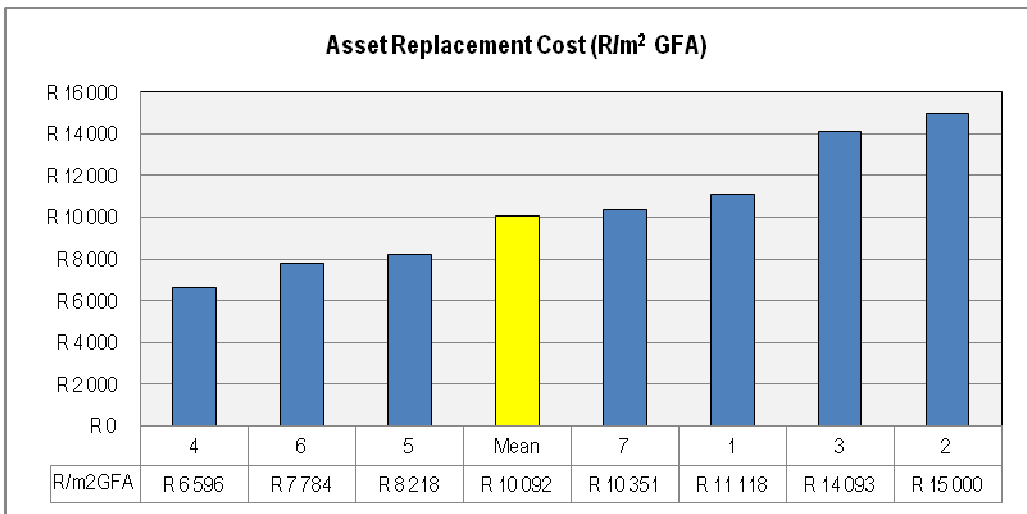
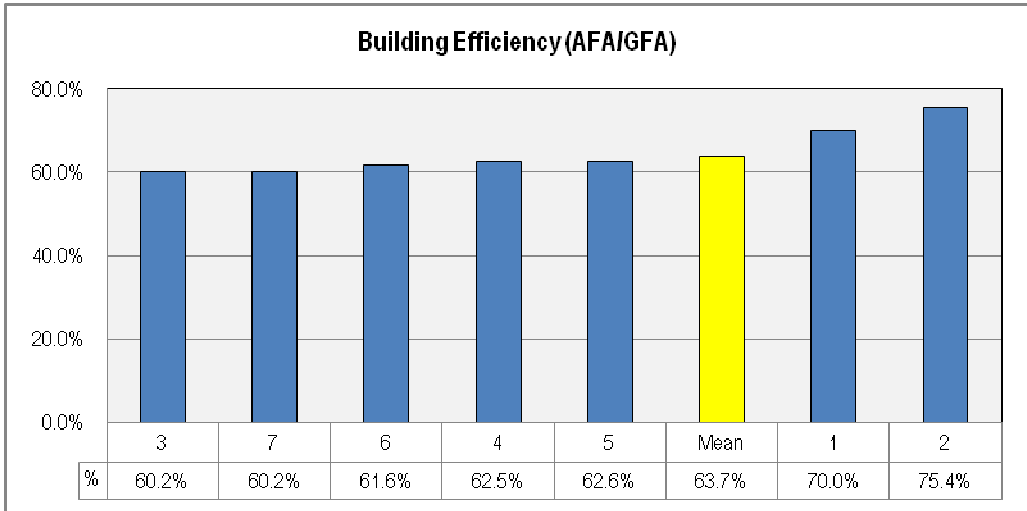
Institution	Maintenance								
	Preventive & Corrective Expenditure								
	Admin & Prof Staff Salaries	Trade Staff Wages	Total Staff Salaries/Wages	Materials & Contracts	Maintenance Projects on Capital Budget	Total Maintenance Expenditure	Area Maintained from Central Funds	Cost of Maintenance per m ² (GFA)	Cost of Maintenance per EFTS
	10	11	12	13	14	15	16	17	18
R	R	R	R	R	R	m ² GFA	R/m ² GFA	R/EFTS	
1	R 3 500 000	R 3 420 000	R 6 920 000	R 14 000 000	R 16 500 000	R 37 420 000	438 937	R 85.25	R 1 651
2	R 3 890 110	R 10 258 546	R 14 148 656	R 5 894 165	R 8 595 000	R 28 637 821	246 144	R 116.35	R 1 507
3	R 850 150	R 5 902 008	R 6 752 158	R 40 109 531	R 9 641 831	R 56 503 520	577 576	R 97.83	R 2 354
4	R 4 848 936	R 0	R 4 848 936	R 0	R 4 835 526	R 9 684 462	189 382	R 51.14	R 1 131
5	R 4 890 000	R 3 710 000	R 8 600 000	R 28 700 000	R 14 900 000	R 52 200 000	370 230	R 140.99	R 1 345
6	R 8 414 784	R 6 567 422	R 14 982 206	R 13 893 389	R 5 605 739	R 34 481 334	702 043	R 49.12	R 1 587
7	R 2 082 299	R 5 877 095	R 7 959 394	R 7 236 777	R 2 372 630	R 17 568 801	263 589	R 66.65	R 1 294
Mean/Totals	R 28 476 279	R 35 735 071	R 64 211 350	R 109 833 862	R 62 450 726	R 236 495 938	2 787 901	R 84.83	R 1 594

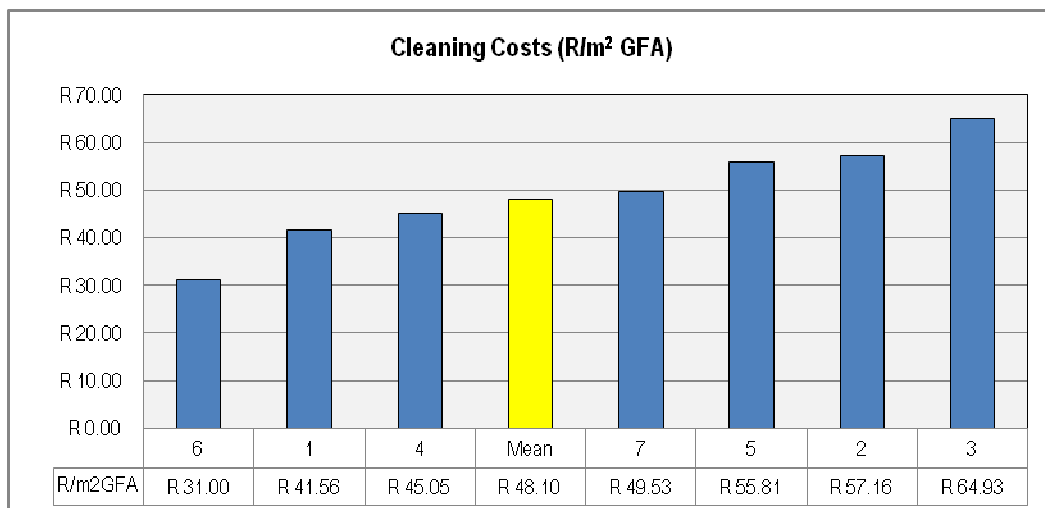
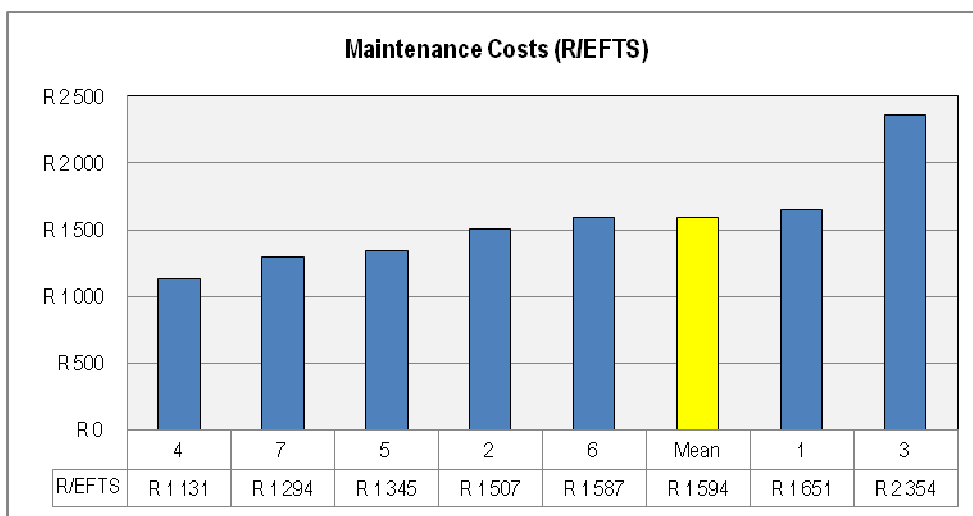
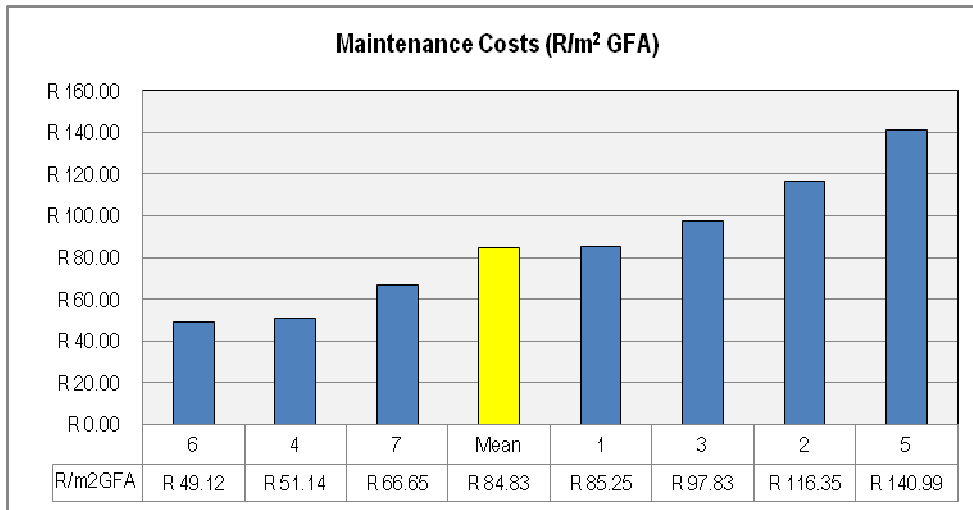
Institution	Cleaning & Waste Management Services									
	In-house Wages & On-costs	Cleaning Materials	Cleaning Contracts			Total Cleaning Expenditure	Area Cleaned from Cent Funds	Cost of Cleaning Buildings	Total Cost Cleaning R/GFA	Total Cost Cleaning R/EFTS
			Building	Non-Building						
				Gen Waste	Contaminated					
	19	20	21	22	23	24	25	26	27	28
R	R	R	R	R	R	m ² GFA	R/m ² GFA	R/m ² GFA	R/EFTS	
1	R 2 800 000	R 600 000	R 10 500 000	R 2 700 000	R 0	R 16 600 000	399 400	R 34.80	R 41.56	R 733
2	R 2 255 429	R 720 588	R 10 372 332	R 571 200	R 150 000	R 14 069 549	246 144	R 54.23	R 57.16	R 741
3	R 974 193	R 2 233 501	R 32 586 217	R 1 010 472	R 700 000	R 37 504 383	577 576	R 61.97	R 64.93	R 1 563
4	R 0	R 0	R 8 458 575	R 73 328	R 0	R 8 531 903	189 382	R 44.66	R 45.05	R 997
5	R 1 345 283	R 1 342 000	R 13 506 942	R 3 077 700	R 1 389 656	R 20 661 581	370 230	R 43.74	R 55.81	R 532
6	R 3 000 000	R 2 470 981	R 14 101 055	R 846 717	R 1 346 453	R 21 765 206	702 043	R 27.88	R 31.00	R 1 002
7	R 237 073	R 764 580	R 10 826 685	R 628 756	R 598 708	R 13 055 802	263 589	R 44.87	R 49.53	R 962
Mean/Totals	R 10 611 978	R 8 131 650	R 100 351 806	R 8 908 173	R 4 184 817	R 132 188 424	2 748 364	R 43.33	R 48.10	R 891

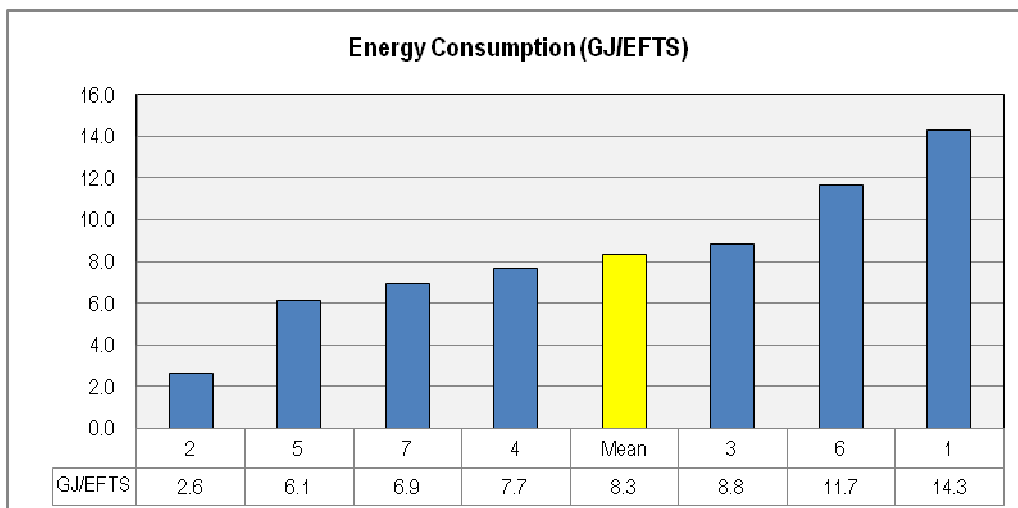
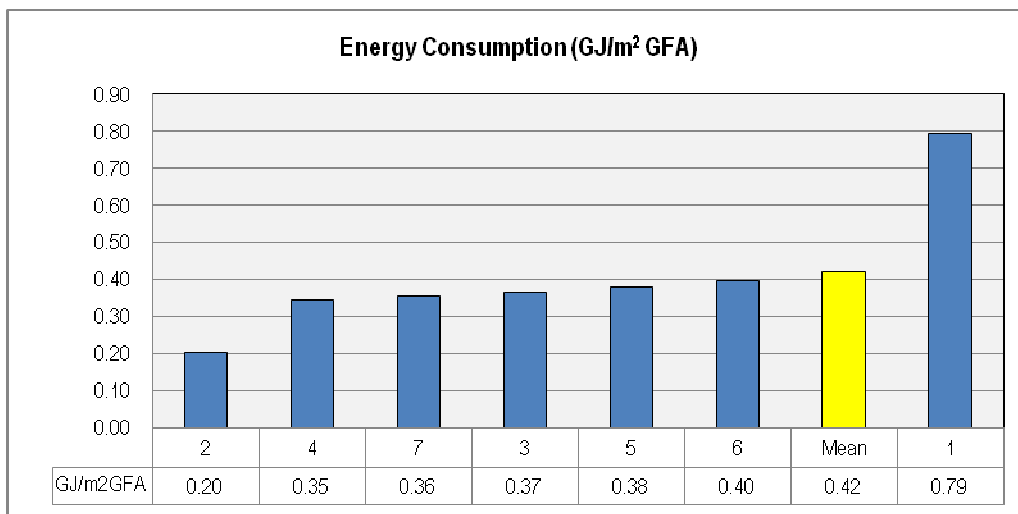
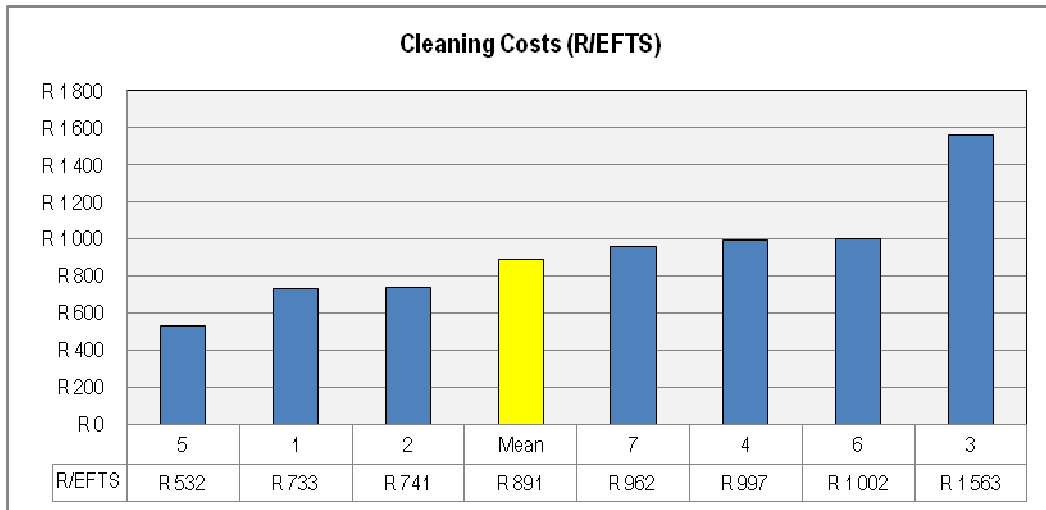
Institution	Energy Consumption/Expenditure							
	Annual Consumption in Gigajoules	Annual Cost of Energy Purchased	Total GFA services with energy	Energy Consumption per m ²	Energy Consumption per EFTS	Energy Cost per m ² (GFA)	Energy Cost per EFTS	Average Cost per kWhr
	29	30	31	32	33	34	35	36
	GJ	R	m ² GFA	GJ/m ² GFA	GJ/EFTS	R/m ² GFA	R/EFTS	cents/kWhr
1	324 000	R 21 300 000	407 641	0.79	14.3	R 52.25	R 940	23.7
2	50 276	R 14 305 207	246 144	0.20	2.6	R 58.12	R 753	102.4
3	211 915	R 21 842 003	577 576	0.37	8.8	R 37.82	R 910	37.1
4	65 636	R 7 394 872	189 382	0.35	7.7	R 39.05	R 864	40.6
5	238 697	R 12 758 922	631 000	0.38	6.1	R 20.22	R 329	19.2
6	253 756	R 39 113 199	638 497	0.40	11.7	R 61.26	R 1 800	55.5
7	93 876	R 13 019 609	263 589	0.36	6.9	R 49.39	R 959	49.9
Mean/Totals	1 238 156	R 129 733 812	2 953 829	0.42	8.3	R 43.92	R 875	37.7

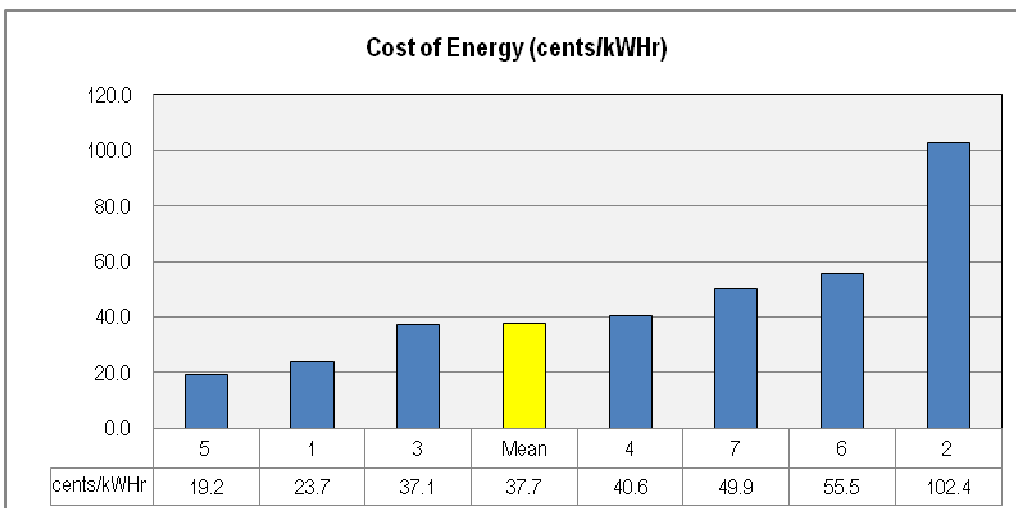
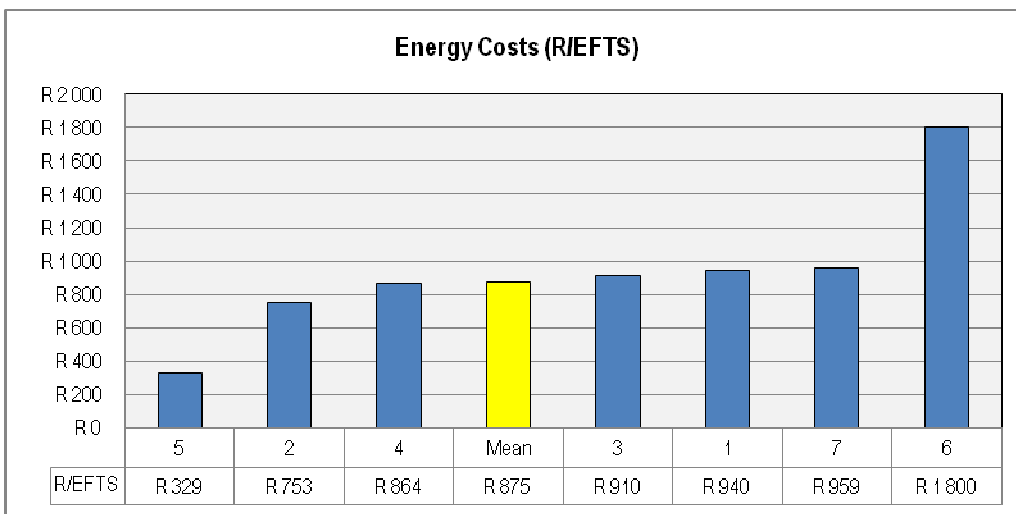
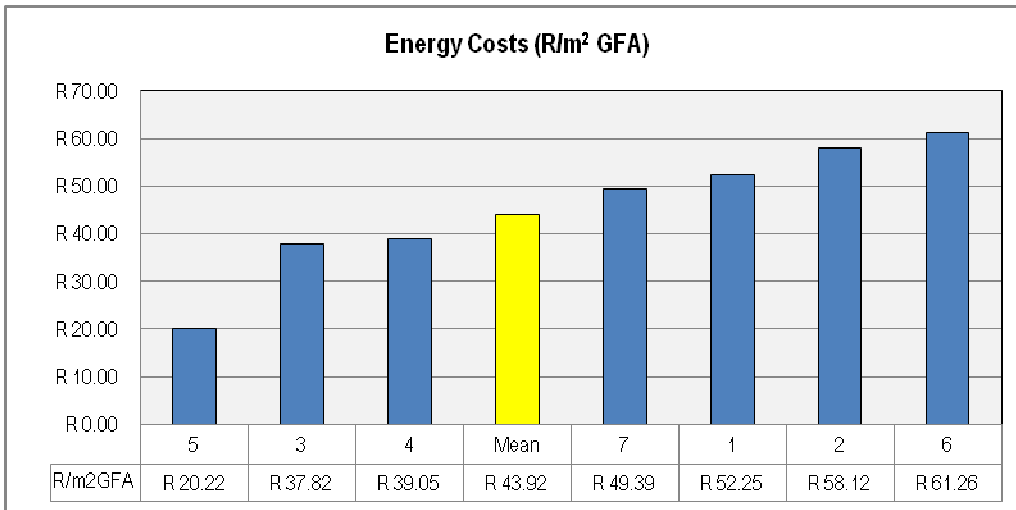
Institution	Security						
	Security Staff Salaries/Wages	Expenditure on Security Contracts	Other Security Costs	Total Security Expenditure	GFA under Security Patrol	Cost of Security per m ² (GFA)	Cost of Security per EFTS
	37	38	39	40	41	42	43
	R	R	R	R	m ² GFA	R/m ² GFA	R/EFTS
1	R 3 884 000	R 25 800 000	R 940 000	R 30 624 000	438 937	R 69.77	R 1 351
2	R 2 132 761	R 17 302 525	R 1 800 000	R 21 235 286	246 144	R 86.27	R 1 118
3	R 300 000	R 23 593 069	R 876 431	R 24 769 500	577 576	R 42.89	R 1 032
4	R 0	R 8 264 507	R 0	R 8 264 507	189 382	R 43.64	R 965
5	R 13 736 467	R 21 150 000	R 75 000	R 34 961 467	936 000	R 37.35	R 901
6	R 9 307 630	R 2 917 681	R 1 908 983	R 14 134 294	90 737	R 155.77	R 650
7	R 2 360 457	R 7 432 189	R 896 074	R 10 688 720	263 589	R 40.55	R 787
Mean/Totals	R 31 721 315	R 106 459 971	R 6 496 488	R 144 677 774	2 742 365	R 52.76	R 975

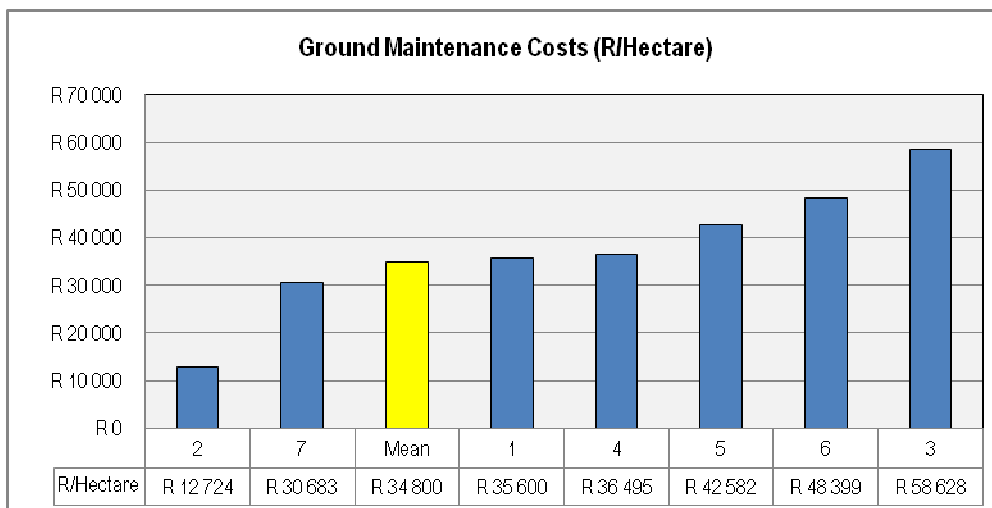
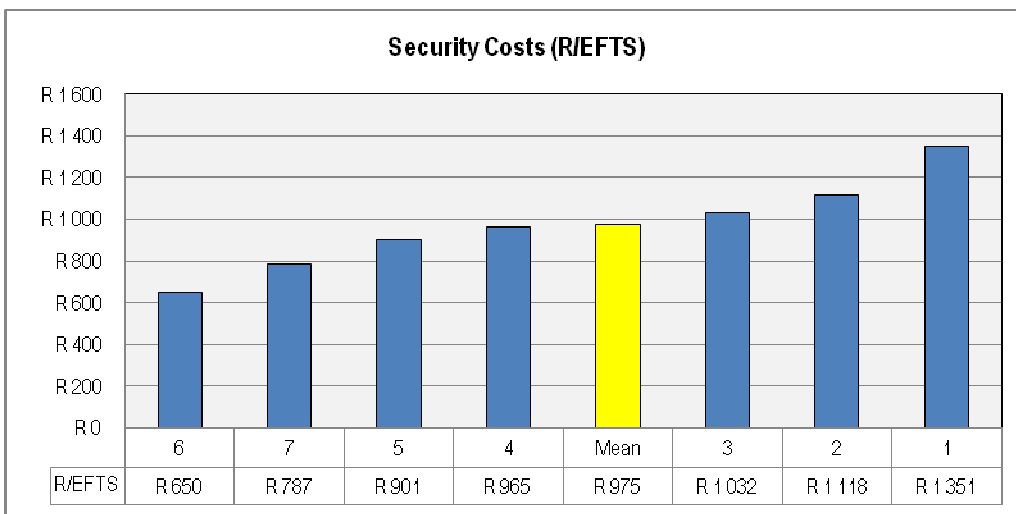
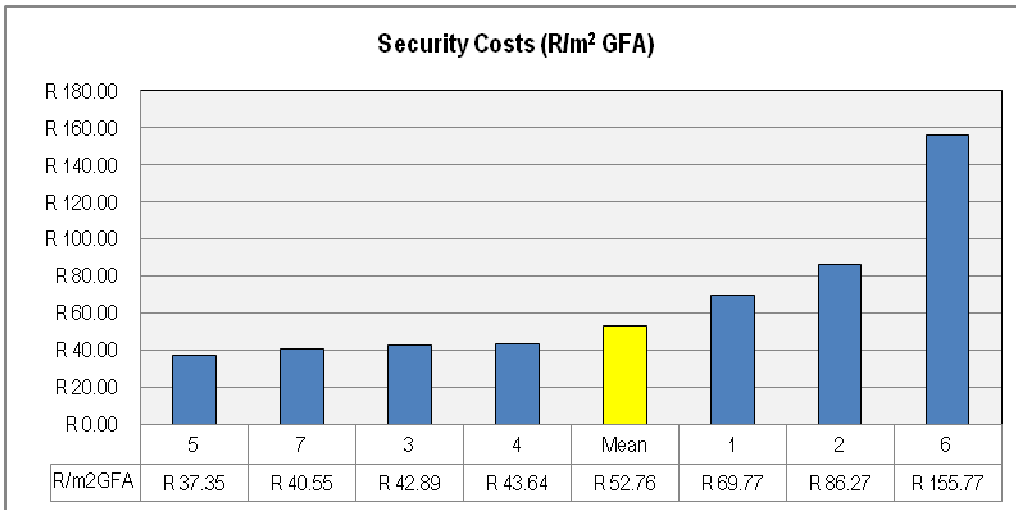
Institution	Grounds Maintenance					Building Operating Costs			
	Staff Salaries/Wages	Materials & Contracts	Total Grounds Maintenance Expenditure	Hectares maintained from Central Funds	Maintenance Expenditure per Hectare	Total Operating Costs (Maint, Cleaning, Security & Energy)	Operating Costs per m ² (GFA)	Operating Costs per EFTS	Operating Costs as % of ARV
	44	45	46	47	48	49	50	51	52
	R	R	R	Ha	R/Hectare	R	R/m ² GFA	R/EFTS	% ARV
1	R 2 300 000	R 2 150 000	R 4 450 000	125	R 35 600	R 105 944 000	R 242	R 4 675	2.2%
2	R 2 257 174	R 2 196 395	R 4 453 569	350	R 12 724	R 78 247 863	R 315	R 4 118	2.1%
3	R 516 753	R 5 873 734	R 6 390 487	109	R 58 628	R 140 619 406	R 241	R 5 859	1.7%
4	R 0	R 3 613 025	R 3 613 025	99	R 36 495	R 33 875 744	R 178	R 3 957	2.7%
5	R 1 364 922	R 12 559 542	R 13 924 464	327	R 42 582	R 120 581 970	R 242	R 3 106	1.6%
6	R 3 030 053	R 6 988 589	R 10 018 642	207	R 48 399	R 109 494 033	R 294	R 5 039	2.0%
7	R 479 503	R 3 233 152	R 3 712 655	121	R 30 683	R 54 332 932	R 201	R 4 002	2.0%
Mean/Totals	R 9 948 405	R 36 614 437	R 46 562 842	1 338	R 34 800	R 643 095 948	R 225	R 4 335	1.9%

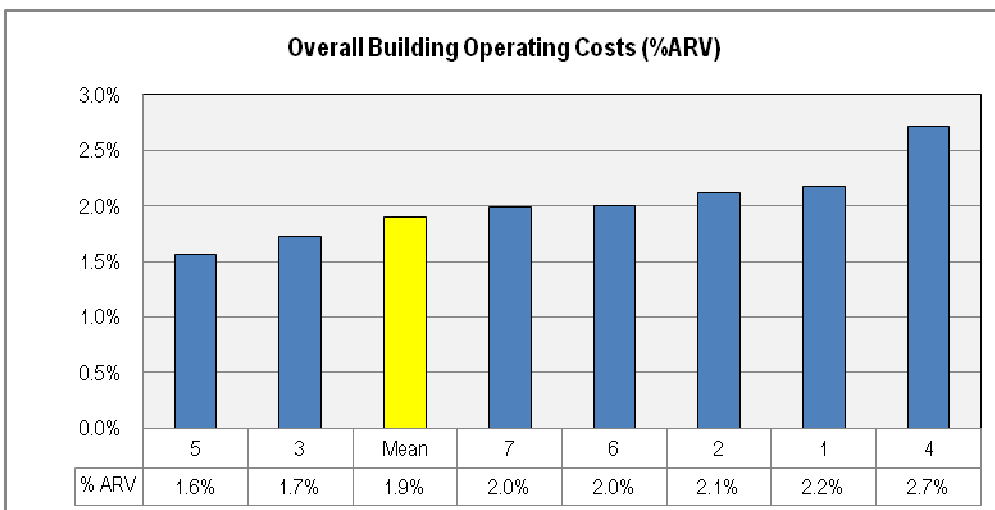
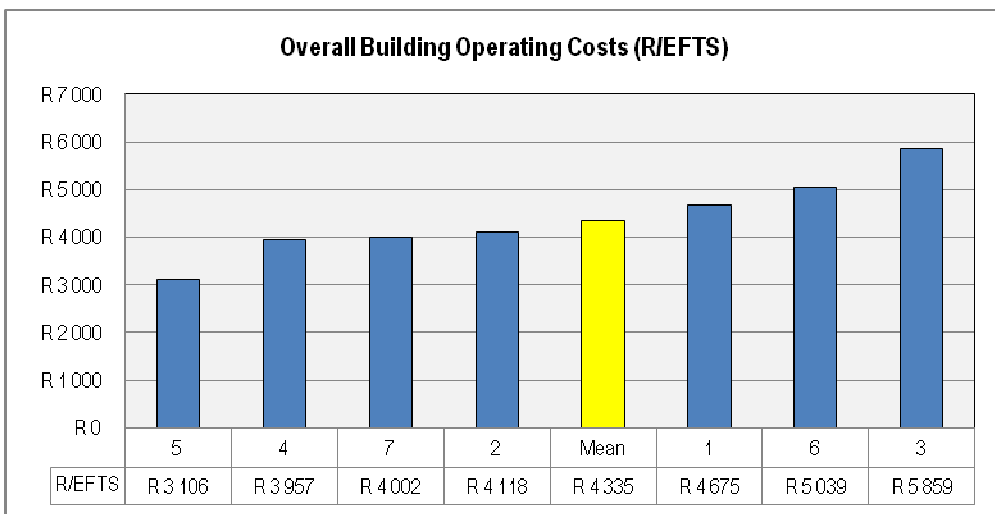
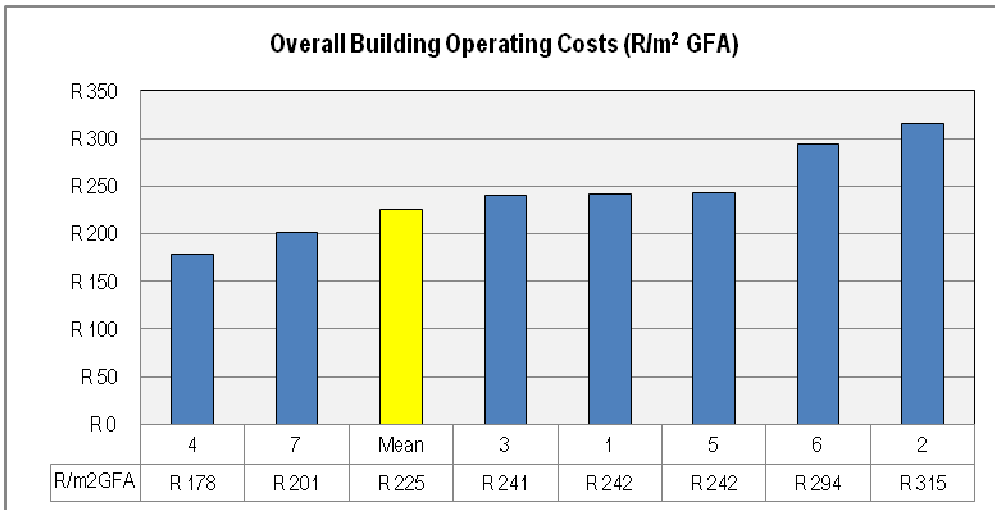












Guidelines for completing the 2009 HEFMA benchmark survey

Welcome to the 2009 HEFMA Benchmark Survey. This survey has been adapted for South African higher education institutions, and is the same version as used for the 2006 survey. Once again, please fill in only the green cells on each tab of the spreadsheet. Depending on your screen size, you may be required to scroll through the tabs at the bottom of the spreadsheet. Totals are calculated in the yellow cells and carried forward to the front page to show your institution's total building operating costs.

General Instructions:

1. All Higher Education Institutions in South Africa submit an annual HEMIS survey. In this benchmark survey, you are required to use the **HEMIS definitions** as indicated. This will ensure that all participating institutions use the same definitions for calculations. The HEMIS definitions are applicable to **GFA, AFA, ARV and EFTS**.
2. Only fill in the **green** cells. **Yellow** cells are calculated by the computer. **Blue** cells are the RSA 2006 figures (averages or totals) to provide you with an order of magnitude to use as a reference, but participants are advised to consider the escalation since the last survey.
3. You may include or exclude student housing (residences) from your figures, as long as you do it consistently. If you include residences in your GFA, you must also include it in your AFA and ARV, as well as in the relevant data fields associated with providing services to student housing. Thus if you maintain your residences but don't clean them, include the residences in your GFA for Maintenance, but exclude it in your GFA for Cleaning and Waste Removal.
4. Start on the tab "**General Statistical Data**" and work your way through all the tabs. Ensure that you fill in values in all six tabs. While there are only 27 fields to complete, participants are advised to delegate to their sub-ordinates or colleagues responsible for the various areas, thus reducing the size of the task.
5. Save this spreadsheet as **YourUniversityBenchmark.xls**. When you are done, please email this spreadsheet with your results back to **andre.theys@uct.ac.za**. All questionnaires must be submitted back before **30 September 2010**. On completion of the survey and analysis, the final report (in PDF format), will be distributed electronically to all HEFMA members. If all participants submit the completed questionnaires by the due date, then it is hoped to have printed copies of the survey, analysis and final report available at the annual 2010 conference.
6. As before, the name of your institution will not be revealed to other participants, unless you give your explicit permission. The HEFMA Executive thanks those institutions who have indicated their participation.

Guidelines for each column

Column Guideline

General Statistical Data

- | | |
|---|--|
| 1 | The name of your institution e.g. University of Pretoria |
| 2 | Indicate whether these figures represent the aggregate of all your campuses (preferably) or name of separate campus. If not aggregate, please fill in a survey per campus. |
| 3 | The all inclusive total floor area of all floors measured over the outer walls of the building. Includes all assignable and non-assignable areas. |
| 4 | AFA = GFA - non-assignable floor area (NFA): NFA includes mechanical floor areas, custodial floor areas, circulation floor areas etc |
| 5 | Calculated field. Do not fill in. |
| 6 | The total cost to erect a similar building at today's cost. Includes building cost, professional fees, municipal costs and fixed equipment. |
| 7 | Calculated field. Do not fill in. |
| 8 | Use the standard HEMIS definition for Equivalent Full-time Students. Only include contact students and exclude distance students. |
| 9 | Calculated field. Do not fill in. |

Maintenance (Corrective and Preventative)

- | | |
|----|---|
| 10 | Include costs of professional and administrative staff directly and indirectly involved in the maintenance operation. Where a staff member spends only part of his or her time on maintenance activities, please estimate & apportion their time and costs accordingly. Include a provision for FM management overhead. |
| 11 | Include all costs associated with maintenance trades staff working on maintenance activities only. Where maintenance staff also performs "new work", this portion should be excluded from the maintenance costs reported. |
| 12 | Calculated field. Do not fill in. |

- 13 Include the costs of materials (e.g. paint, timber, hardware, lamps, plumbing supplies, etc) used by your maintenance staff on preventive and corrective maintenance activities plus payments made to external service providers (e.g. air-conditioning, lift, electrical, plumbing contractors, etc).
- 14 Spent on maintenance projects from capital budget. Exclude budgets spent on new work.
- 15 Calculated field. Do not fill in.
- 16 Cannot exceed the GFA in Col 3.
- 17 Calculated field. Do not fill in.
- 18 Calculated field. Do not fill in.

Cleaning and Waste Management Services

- 19 Include costs of professional and administrative staff directly and indirectly involved in the cleaning and waste management operations. Where a staff member spends only part of his or her time on these activities, please estimate & apportion their time and costs accordingly. Include a provision for FM management overhead.
- 20 Include the costs of cleaning materials used by your cleaning staff on all cleaning related activities plus materials provided to external service providers.
- 21 Payments made to external service providers.
- 22 The total cost of general waste removal, either internally or by waste removal contractor.
- 23 The total cost of contaminated waste removal, either internally or by waste removal contractor. Include pathological and chemical waste removal.
- 24 Calculated field. Do not fill in.
- 25 Cannot exceed the GFA in Col 3.
- 26 Calculated field. Do not fill in.
- 27 Calculated field. Do not fill in.
- 28 Calculated field. Do not fill in.

Energy

- 29 The total annual energy consumption of your Institution that relates to the GFA in column 43. Only include by facilities that are included in GFA in column 43, where $GJ = (kWhrs \times 3600) / (1 \times 10^6)$, i.e. 1 kWhr = 0.0036 GJ
- 30 The total annual cost of energy purchased by your institution that relates to the GFA in column. Only include cost to facilities that are included in GFA in column 43.
- 31 Ensure GFA figure is consistent with definitions provided in Columns 41 and 42. Cannot exceed the GFA in Col 3.
- 32 Calculated field. Do not fill in.
- 33 Calculated field. Do not fill in.
- 34 Calculated field. Do not fill in.
- 35 Calculated field. Do not fill in.
- 36 Calculated field. Do not fill in.

Security

- 37 Include costs of professional and administrative staff directly and indirectly involved in the security operation. Where a staff member spends only part of his or her time on security activities, please estimate & apportion their time and costs accordingly. Include a provision for FM management overhead.
- 38 Indicate whether this figures represent the aggregate of all your campuses (preferably) or name of separate campus
- 39 Payments made to external service providers.
- 40 Calculated field. Do not fill in.
- 41 Only use the Gross Floor Area of the buildings patrolled, not the area of all grounds patrolled. This figure cannot exceed the GFA in Col 3.
- 42 Calculated field. Do not fill in.
- 43 Calculated field. Do not fill in.

Grounds Maintenance

- 44 Include costs of professional and administrative staff directly and indirectly involved in the grounds maintenance operation. Where a staff member spends only part of his or her time on maintenance activities, please estimate & apportion their time and costs accordingly. Include a provision for FM management overhead.
- 45 Include the costs of materials used by your grounds maintenance staff on these activities plus payments made to external service providers.
- 46 Calculated field. Do not fill in.
- 47 Effective area of grounds maintained with these funds. This may include the area of your landscaped gardens and sports fields if applicable.
- 48 Calculated field. Do not fill in.