

Our Ref: SCM010/EIA Screening SCM MP

20th February 2024

Ms Selima Bahri
Smart City Malta
SCM1001 Ricasoli

Dear Ms Bahri,

Subject: Proposed changes to the Smart City Master Plan that was originally approved under PA/01997/08 – EIA screening of changes

1. SmartCity Malta has applied with the Planning Authority to make amendments to the Master Plan of Smart City. During the consultation process with ERA, in an e-mail dated 11th August 2022 the Environment & Resources Authority (ERA) requested SmartCity Malta (SCM) to provide the following:

ERA is kindly requesting a statement from the EIA Coordinator, which should include the following:

- Overview of the proposed changes to the Master Plan;
- Comparison between the proposed and approved Master Plan in terms of land use, building heights, and GFA (the latter should also include underground development, as required by the EIA Regulations S.L. 549.46);
- Confirmation or otherwise whether such changes to the project are likely to affect any of the findings and conclusions of the EIA carried out for the approved Master Plan.

Note: the statement should also consider the scenario where American University of Malta (AUM) would be granted the additional 33,000 m² GFA for its development.

2. In order to undertake the assessment as requested by ERA the architect provided plans showing the proposed changes to the approved permit PA/01997/08.

Overview of proposed changes to the Master Plan

3. The proposed changes to the Master Plan approved under PA/01997/08 are summarized hereunder:
 - An increase of the development GFA from 313,230 m² to 368,628 m²;
 - Plot O (referred to as the satellite site) will not be developed and the residential GFA that was assigned to Plot O (8,000 m²) will be transferred to Plot G;
 - The addition of a 240-bed hotel in Plot A;

- A 200-bed private hospital in Plot E¹;
- Between 953 and 1,060 residential units, depending on the mix of apartment sizes:
 - Plot A: Between 95 and 128 units;
 - Plot D: 365 units;
 - Plot G: Between 187 and 199 units;
 - Plot H: 69 units;
 - Plot I: Between 98 and 125 units;
 - Plot K: Between 139 and 174 units;
- Retail and F&B outlets with a retail GFA to GRA efficiency ratio of 75 per cent. This will result in a retail GRA of 22,507 m² ²;
- A school for approximately 650 students (ages 3 to 15), the Institute for Tourism Studies (ITS) Campus for 2,500 students³, and the American University of Malta (AUM) Campus for 4,000 students⁴. It is noted that both campuses include ancillary facilities that are primarily targeted at staff and students. These include student and staff halls of residence, F&B and retail outlets, offices, sports facilities, childcare facilities, and a hotel; and
- Relocation of the road in the villa plot as well as omission of roads previously envisaged through plot M and in Plot J and reduction in roads in Plot O given that this will not be developed.

4. **Table I** below summarizes the changes in GFA.

¹ As per Adi Associates Environmental Consultants Ltd, 2016. To construct Hospitality Campus (Institute of Tourism Studies) and an adjacent hotel at Smart City, Kalkara. Project Description Statement. San Gwann December 2016; vi + 32 pp + 1 Appendix.

² (Plot D GRA) + (Plots C + F + K + Belvedere) x 90%
= (15,429 m²) + (5,437 m² + 1,000 m² + 800 m² + 2,200 m²) x 90% = 22,507 m².

³ Based on Doc222s of PA/03575/16.

⁴ The 4,000 student figure is for both the Bormla and SmartCity campuses, based on media reports. There is no indication of how many will be accommodated in the SmartCity campus. The worst case (4,000 students) is assumed.

Table 1: Approved and Proposed Land Use Allocations (GFA)

| Land Uses | Approved Master Plan | Proposed Master Plan | Change |
|--------------|-----------------------|-----------------------|-----------------------|
| | GFA (m ²) | GFA (m ²) | GFA (m ²) |
| Offices | 158,830 | 34,337 | - 124,493 |
| Commercial | 91,670 | 186,301 | + 94,631 |
| Residential | 62,730 | 147,990 | + 85,260 |
| Total | 313,230 | 368,628 | + 55,398 |

Note: The commercial land use includes retail / F&B, a hotel, a school, student campuses, and a hospital.

Assessment of proposed changes

5. In terms of the geo-environment, although Plot O (near St Peter's Battery) will no longer be developed, the amount of excavated material has been estimated by the project architects to increase by about 132% from what was estimated in the EIA for the approved Master Plan. It is noted that this figure includes excavation already undertaken including site wide grading as well as from AUM. The impact remains major.
6. As with the approved Master Plan under PA/01997/08, there are no proposed structures in the marine environment. Potential impacts remain similar to those assessed in the EIS relating to discharges to the marine environment.
7. In terms of ecology and agriculture, impacts remain similar to those assessed in the EIS for PA/01997/08; however, noting that Plot O will now be developed into a park. Since agricultural land will still be lost the impact on agriculture remains.
8. In terms of cultural heritage, with regards to Plot O the EIS stated: *cultural heritage features located within the satellite site will also be affected. Removal of the St. Peter's position finding station in its entirety and a Grade 2 farmhouse will result in a major negative impact.* Again because the satellite site (Plot O) will not be developed into a residential area, reduces the impact on cultural heritage.
9. In terms of visual amenity, although the bulk of the development is likely to remain, the change in heights of the different buildings could have an impact on the visual assessment. The fact that Plot O will no longer be developed into a residential area could also have positive impacts on the closer views.
10. In terms of air quality, the 2008 EIS estimated the impact on air quality using peak hours as opposed to the Annual Average Daily Traffic (AADT). In assessing the change in AADT, Appendix I estimates the AADT of the 2008 Scheme and that of the proposed changes to the Master Plan, using the same methodology that is applied today. Taking account of the proposed land uses, the predicted AADT from the Scheme is now estimated to be 17,000.
11. In terms of noise, the assessment of construction noise and vibration impacts also took account of Plot O and the sensitive receptors closest to it. The removal of the development of Plot O would affect the noise assessment, in particular those sensitive receptors closest to it. It is also noted that excavations in relation to the construction of Shoreline and ITS have already been undertaken. In addition, the assessment of noise

impacts from traffic was not undertaken in the same way in the 2008 EIS as is done today, so as such no comparisons can be made.

12. Should ERA have any queries on the above please do not hesitate to get in contact with us.

Yours sincerely,



Rachel Xuereb
Director, Adi Associates

Figure I: Updated Master Plan

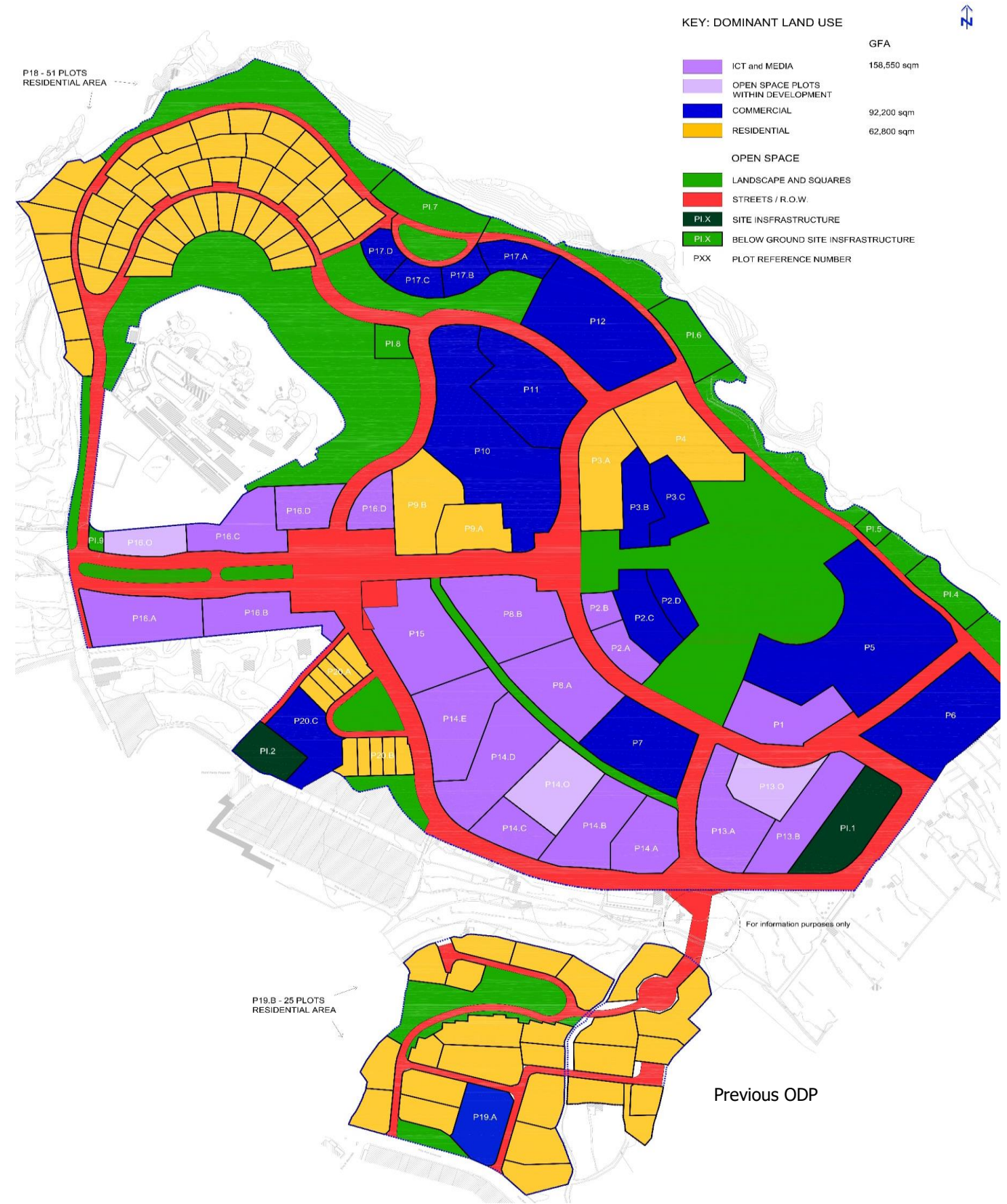
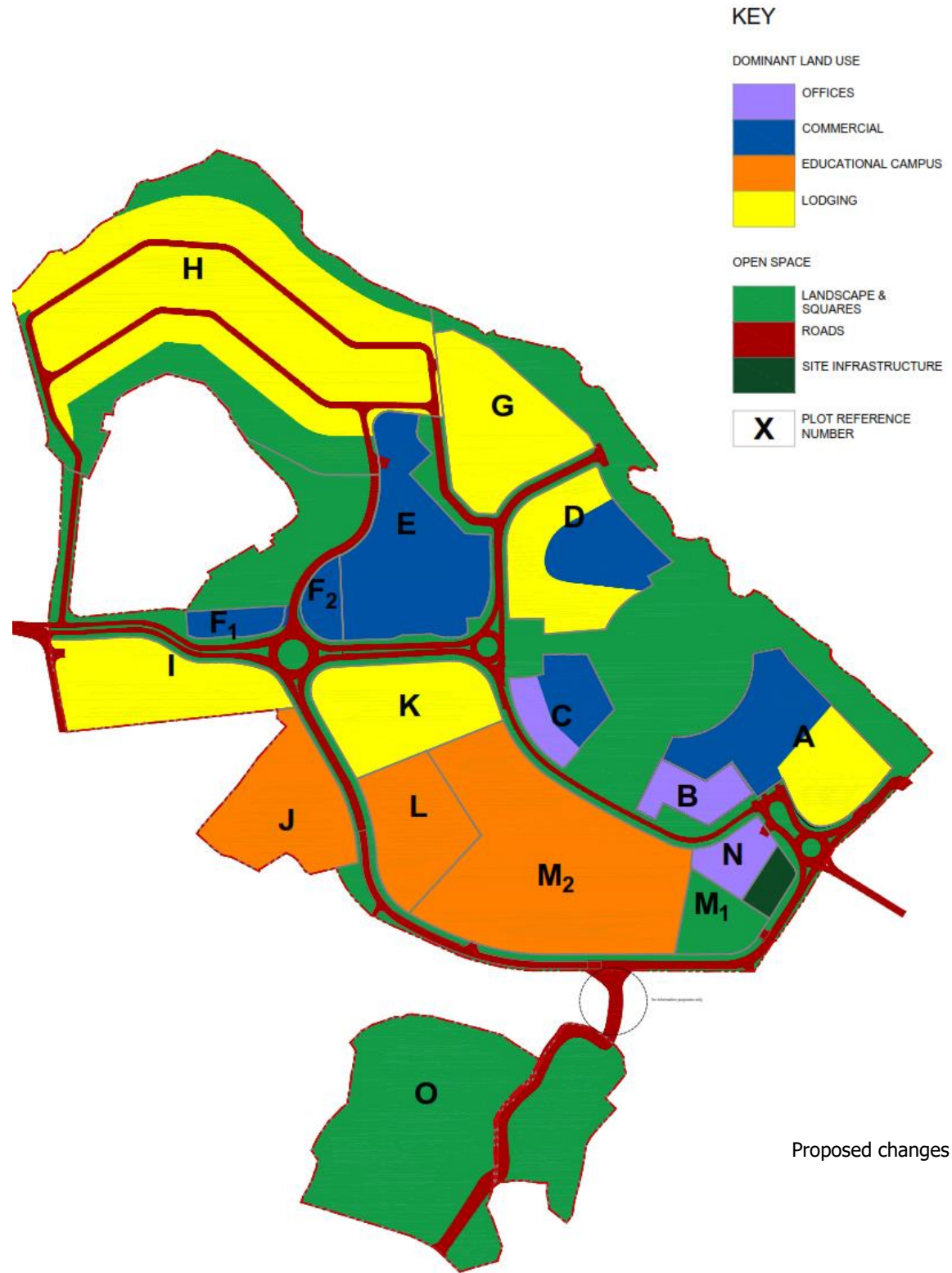
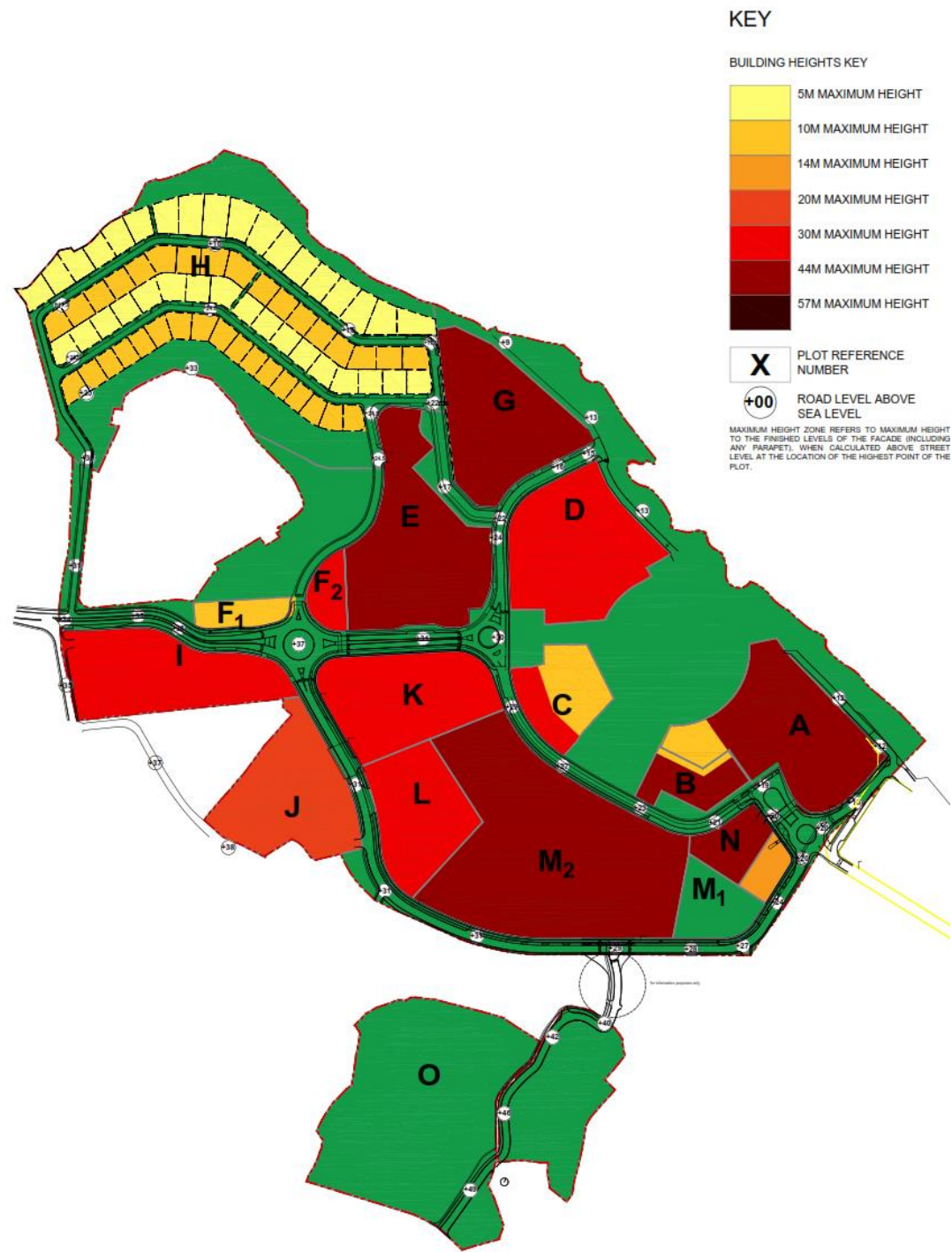
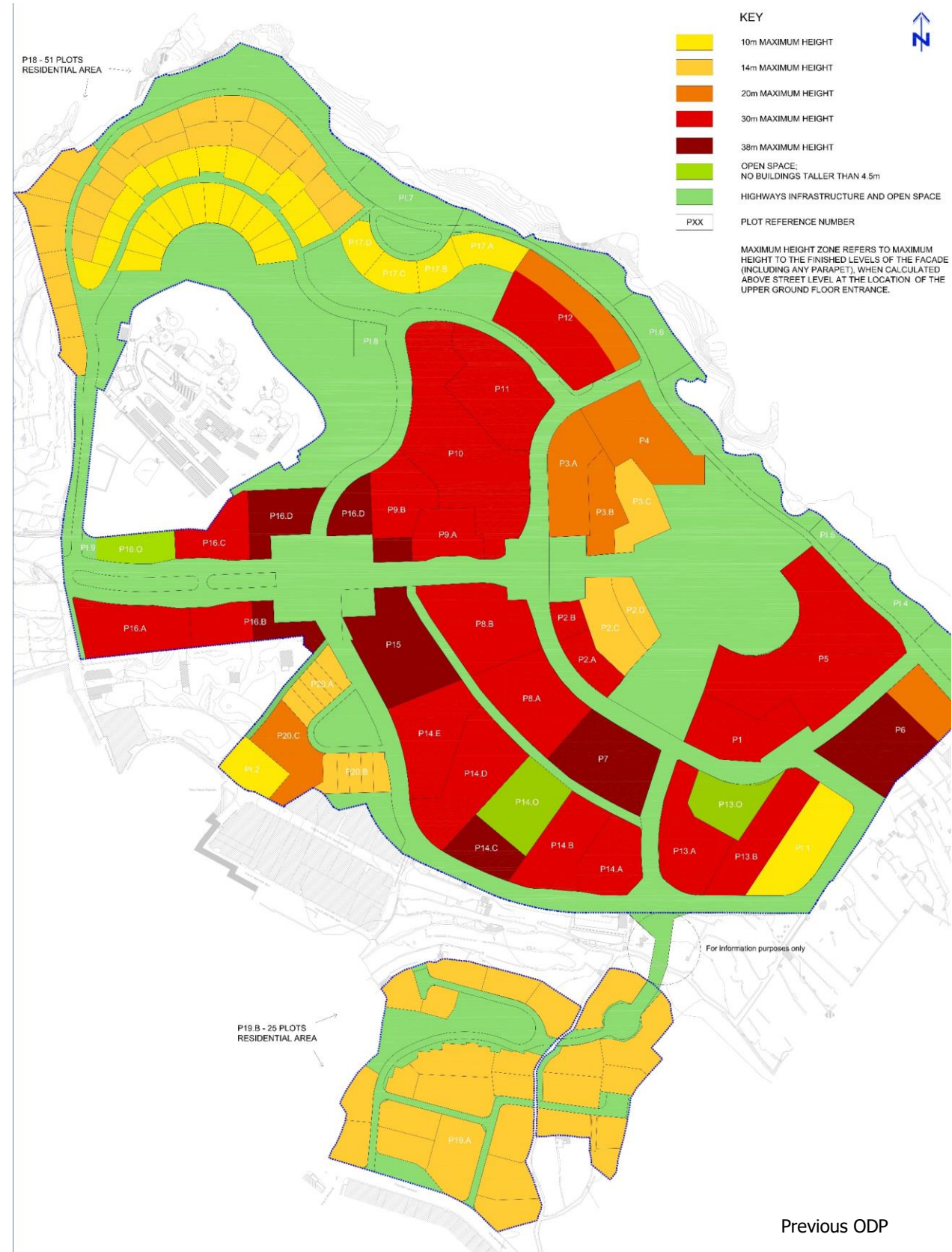


Figure 2: Approved and proposed changes in height to the Master Plan



Proposed changes



Previous ODP



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Appendix I: AADT Calculations

ESTIMATION OF THE AADT IN CONNECTION WITH THE UPDATE TO THE SMARTCITY MASTER PLAN

January 2024

INTRODUCTION

1. Adi Associates has been commissioned by SmartCity Malta to prepare this Note to present the Annual Average Daily Traffic (AADT) estimates in relation to the latest update to the SmartCity Master Plan as proposed in PA/03109/23.
2. Prior to the estimation of the trips for the proposed changes to the approved Master Plan for SmartCity, the trip generation model that was applied by Colin Buchanan (CB) in the original Traffic Impact Statement (TIS) and subsequent Addendum prepared for SmartCity Malta in 2008 is presented. These figures are then revised, based on current and local trip rates since the CB TIS was based on UK trip rates. Finally, an estimate is provided for the latest version of the Master Plan (hereinafter referred to as the Scheme).
3. Overall, a total of three trip generation scenarios are presented in this Note:
 - Scenario 1: 2008 TIS Addendum estimates;
 - Scenario 2: 2008 TIS Addendum revision with local trip rates and internal trip assumptions; and
 - Scenario 3: 2023 Master Plan with local trip rates and internal trip assumptions.
4. It is noted that based on surveys undertaken in April 2018, the AADT generated by the currently operational establishments in SmartCity Malta is of 1,418 vehicles. It is unlikely that this has since changed significantly since no new buildings within SmartCity have become operational since then. The average daily flows are shown below.

Table 1: SmartCity Malta daily flows (2018)

| Daily flow | Vehicles |
|------------|----------|
| Weekday | 1,660 |
| Saturday | 713 |
| Sunday | 910 |

THE 2008 TIS ADDENDUM

5. The schedule of accommodation that was used as a basis of the 2008 TIS Addendum is dated December 2007. A summary is provided below.

Table 2: 2008 TIS: Schedule of accommodation

| Land use | Gross Built Area (m ²) | Details |
|-------------------------------------|------------------------------------|---|
| Community Centre | 1,300 | Health centre, nursery, library etc. |
| Conference Centre | 3,426 | |
| Hotel | 63,382 | 580 rooms in four hotels |
| Office | 157,036 | |
| Residential – Apartments | 24,328 | 317 apartments, including 110 serviced apartments |
| Residential – Villas and townhouses | 33,830 | 50 villas; 77 townhouses |
| Retail | 18,700 | |

Scenario I: 2008 TIS Addendum results

6. The 2008 TIS Addendum was submitted to the former Malta Environment and Planning Authority (MEPA) in January 2008. For all land uses, CB applied UK trip rates from the TRICS database (Version 2007(a)). In order to apply trip rates that are likely to reflect the local conditions of SmartCity Malta, CB did not consider sites that were located in Greater London, local regions, town centres, and local centres. This means that the sites from which the trip rates were derived were located at the edge of town centres, suburban areas, at the edge of towns, or free standing. These do not necessarily represent local conditions.
7. **Table 3** shows the estimated 24-hour flows for each individual land use. It is noted that these flows are based on weekday trip rates only and, therefore, cannot be considered as AADT since weekend flows were not taken into consideration. The likelihood is that the AADT will be lower than the total 24-hour flow quoted below since the main trip generator (offices) will generate significantly lower trips on weekends.

Table 3: Scenario I: 2008 TIS Addendum: 24-hour flows

| Land use | Vehicles |
|-------------------------------------|---------------|
| Community Centre | 494 |
| Conference Centre | 1,736 |
| Hotel | 3,932 |
| Office | 22,262 |
| Residential – Apartments | 635 |
| Residential – Villas and townhouses | 744 |
| Retail | 11,166 |
| TOTAL | 40,969 |

8. It is noted that with respect to offices, CB assumed that 22 per cent of employees will work on a two-shift (14 per cent) or three-shift (8 per cent) work schedule, i.e., there will also be some office workers on weekends.
9. Following this initial estimate, CB applied trip reduction assumptions that result from internalised trips, i.e., trips that occur within SmartCity Malta. The following reduction in trips was assumed for each land use:

- Hotel: 15 per cent;
- Residential: 5 per cent; and
- Retail: 25 per cent;

10. CB also assumed that all office employees live off site. As a result of the assumptions on internalised trips, the weekday 24-hour flow for each land use was determined as follows.

Table 4: Scenario 1: 2008 TIS Addendum: 24-hour flows (with internalised trips)

| Land use | Vehicles |
|-------------------------------------|---------------|
| Community Centre | 494 |
| Conference Centre | 1,736 |
| Hotel | 3,342 |
| Office | 22,262 |
| Residential – Apartments | 603 |
| Residential – Villas and townhouses | 707 |
| Retail | 8,375 |
| TOTAL | 37,519 |

11. The final trip generation estimate in the 2008 TIS Addendum takes into consideration a five per cent shift from vehicles to public transport, and a further five per cent shift from vehicles to other means of transport.
12. This resulted in a final estimated 24-hour flow (for the whole project) of **33,583 vehicles**. It is noted that in 2008, the former Malta Environment and Planning Authority approved the SmartCity Malta Master Plan and the relevant environmental and traffic studies based on the above traffic flows.

Scenario 2: 2008 TIS Addendum revision with local trip rates and internal trip assumptions

13. Given that the original TIS was based on the TRICS database, and that parts of SmartCity Malta have since become operational, it was considered appropriate to revise the trip generation estimates and assumptions of the 2008 TIS Addendum. This was done for comparative purposes only.
14. Two buildings are currently operational at SmartCity Malta. Following the leasing of both units to a number of entities, it results that SmartCity Malta has a Gross Rentable Area (GRA) / Gross Floor Area (GFA) efficiency rate of 73 per cent as confirmed by Perit Paul Camilleri (see **Attachment I**). The non-GRA consists of lifts, stairwells, service shafts, toilets, telecom and BMS rooms, and common corridors etc. Therefore, in this scenario it is assumed that all subsequent buildings will have a similar efficiency rate. This figure is useful since trip generation and parking demand estimates for offices and retail prepared used by Adi Associates are based on GRA, as opposed to GFA. Therefore, the GRA of the office and retail floor space assessed in the 2008 TIS Addendum are:
- Offices: $157,036\text{m}^2 \times 73\% = 114,636\text{m}^2$; and

- Retail: $18,700\text{m}^2 \times 73\% = 13,651\text{m}^2$.
15. The land uses assessed in the Addendum also included four hotels with a total of 580 rooms, as well as 110 serviced apartments, comprising 110 bedrooms. For trip generation purposes, the latter were considered as hotel rooms, so that the total number of hotel rooms is 690.
16. The trip rates used in this scenario are based on the following local surveys:
- Hotel: Surveys at a 331-room rural four-star hotel with limited accessibility, located in the northern part of Malta;
 - Office: Data collected from SmartCity Malta¹;
 - Residential: Surveys undertaken at Blata l-Għolja in Mosta, a residential enclave that comprises 149 residential units with an adult population of 443 persons². This is equivalent to an average of three adults per residential unit. The trip rates were adjusted to reflect the national average household size of 2.23 adults per household; and
 - Retail / F&B: Car park data from *The Point*, a 16,850m² shopping mall in Tas-Sliema³.
17. The community facilities and conference centre were assumed to generate minimal external trips, and hence were not taken into consideration for trip generation purposes.
18. The following internalised trip assumptions were made, which are identical to those applied by CB in the 2008 TIS Addendum:
- Hotel: 15 per cent;
 - Residential: 5 per cent; and
 - Retail / F&B: 25 per cent.
19. The resulting weekday 24-hour flow is shown below. Based on the above assumptions and using local trip rates, the 24-hour weekday flow was estimated at **21,833 vehicles**.
20. Weekend trip rates were used to estimate the AADT. The results suggest that the AADT for the 2008 TIS Addendum is **18,247 vehicles**. It is noted that for offices, it is assumed that on weekends there will be 22 per cent of the weekday office trips, as per the CB 2008 TIS Addendum.

¹ Current office floorspace is 17,706m², accommodating 800 employees. This translates into an employee density of 22.1m² per employee at 80 per cent occupancy. For the AADT assumptions, however, this was decreased to 18m² / employee.

² As established from the Electoral Register.

³ Retail / F&B trip rates are based on GRA and using car park data from The Point (both short term and contractual).

Table 5: Scenario 2: 2008 TIS Addendum: Revised estimates: Weekday 24-hour flow based on Malta trip rates and internal trip assumptions

| Land use | Vehicles |
|--------------|---------------|
| Hotel | 1,704 |
| Office | 14,905 |
| Residential | 2,945 |
| Retail / F&B | 2,279 |
| TOTAL | 21,833 |

Table 6: Scenario 2: 2008 TIS Addendum: AADT based on Malta trip rates and internal trip assumptions

| Land use | Vehicles |
|--------------|---------------|
| Hotel | 1,619 |
| Office | 11,583 |
| Residential | 2,916 |
| Retail / F&B | 2,129 |
| TOTAL | 18,247 |

PROPOSED MASTER PLAN CHANGES

21. The new Master Plan (PA/03109/23) is proposing a shift from a predominantly office workplace into a locality with more varied land uses and which will now also accommodate new land uses related to education and healthcare. Changes are also proposed to the configuration of the approved road network and include dedicated cycling facilities. Furthermore, the site at San Pietru (Plot O) will no longer be developed; instead, the previously allocated Gross Floor Area (GFA) of Plot O has been transferred to Plot G.
22. Overall, the Scheme will result in an increase in the GFA of approximately 55,400 m² compared to the approved 2008 Master Plan.
23. The table below presents a comparison between the GFA allocations of the approved Master Plan and those envisaged by the proposed amendments.

Table 7: Approved and Proposed Land Use Allocations (GFA)

| Land Uses | Approved Master Plan | Proposed Master Plan | Change |
|--------------|-----------------------|-----------------------|-----------------------|
| | GFA (m ²) | GFA (m ²) | GFA (m ²) |
| Offices | 158,830 | 34,337 | - 124,493 |
| Commercial | 91,670 | 186,301 | + 94,631 |
| Residential | 62,730 | 147,990 | + 85,260 |
| Total | 313,230 | 368,628 | + 55,398 |

Note: The commercial land use includes retail / F&B, a hotel, a school, student campuses, and a hospital.

24. Compared to the 2008 Master Plan, SmartCity Malta is now divided into 16 plots with Plots B, C and D⁴ representing the existing units built so far. Works at Plot L (the site of the

⁴ Plots B and C are the existing office blocks whereas Plot D is the *Shoreline* development which is currently at finishing stage. It is expected to become fully operational by the middle of 2024.

Institute of Tourism Studies⁵) have commenced, whereas the planning application for Plot A was approved in August 2023⁶. The proposed Gross Floor Area (GFA) of each plot and its land use allocation is shown in the following table.

Table 8: Gross Floor Areas by Plot

| Plot | Education | Hospital | Hotel | Office | Residential | Retail / F&B | TOTAL |
|--------------|----------------|---------------|---------------|---------------|----------------|---------------|----------------|
| A | | | 21,000 | | 16,500 | | 37,500 |
| B | | | | 12,929 | | | 12,929 |
| C | | | | 13,908 | | 5,437 | 19,345 |
| D | | | | | 41,090 | 13,968 | 55,058 |
| E | | 23,500 | | | | | 23,500 |
| F | | | | | | 1,000 | 1,000 |
| G | | | | | 29,000 | | 29,000 |
| H | | | | | 24,400 | | 24,400 |
| I | | | | | 15,000 | | 15,000 |
| J | 4,500 | | | | | | 4,500 |
| K | | | | | 22,000 | 800 | 22,800 |
| L | 31,896 | | | | | | 31,896 |
| M | 82,000 | | | | | | 82,000 |
| N | | | | 7,500 | | | 7,500 |
| O | | | | | | | 0 |
| BLV | | | | | | 2,200 | 2,200 |
| Total | 118,396 | 23,500 | 21,000 | 34,337 | 147,990 | 23,405 | 368,628 |

Note 1: The retail / F&B for Plot D excludes 13,076 m² which is located below street level and considered as non-GFA for planning purposes in the Case Officer Report for PA/01029/18.

Note 2: BLV refers to the Belvedere / Laguna area.

Note 3: The ITS and AUM campuses within Plots L and M include ancillary facilities that fall under other use classes (such as staff and student accommodation, a hotel, and retail and F&B outlets). However, these ancillary uses are not considered to be trip generating and hence presenting them separately is not warranted.

25. Specifically, the amendments to the Master Plan will result in:

- A 240-bed hotel in Plot A;
- A 200-bed private hospital in Plot E⁷;
- An additional office block, which will have a higher GFA to GRA (Gross Rentable Area) efficiency ratio of 80 per cent, when compared to the current 73 per cent. This will

⁵ PA/03575/16: To construct hospitality campus (Institute of Tourism Studies) to cater for local and foreign students and other ancillary facilities including underground parking spaces, gymnasium, two indoor pools and a spa. Permit granted on 11 August 2022.

⁶ PA/03920/22: Proposed development on Plots P5 and P6 (currently in partial use as a temporary car park) with height of ground floor plus ten floors plus two underlying levels comprising Class 3B (tourism and Leisure) Hotel with ancillary facilities and class 1 residential development (95-128 units) as well two floors of underlying parking in lieu of development as proposed in PA 01997/08 'Construction of an ICT, including all related amenities'. Permit granted on 03 August 2023.

⁷ As per Project Description Statement for PA/07779/17 and PA/10663/17: Adi Associates Environmental Consultants Ltd, 2018. To Excavate Plots 9 and 10 and to construct a new Class 2A 200-Bed Hospital at Smart City, Kalkara. Project Description Statement. San Gwann August 2018; vi + 32 pp + 4 Appendices.

result in an overall office GRA of 23,706 m²⁸;

- Between 953 and 1,060 residential units, depending on the mix of apartment sizes:
 - Plot A: Between 95 and 128 units;
 - Plot D: 365 units;
 - Plot G: Between 187 and 199 units;
 - Plot H: 69 units;
 - Plot I: Between 98 and 125 units;
 - Plot K: Between 139 and 174 units;
- Retail and F&B outlets with a retail GFA to GRA efficiency ratio of 75 per cent. This will result in a retail GRA of 22,507 m²⁹; and
- A school for 650 students (ages 3 to 15), the Institute for Tourism Studies (ITS) Campus for 2,500 students¹⁰, and the American University of Malta (AUM) Campus for 4,000 students¹¹. It is noted that both campuses include ancillary facilities that are primarily targeted at staff and students. These include student and staff halls of residence, F&B and retail outlets, offices, sports facilities, childcare facilities, and a hotel.

26. As mentioned, the number of residential units is not fixed to allow for a degree of flexibility due to changing market conditions; a range of between 953 units (lower limit) and 1,060 units (upper limit) is assessed. The following table provides the typology of each scenario in terms of bedrooms per unit. In essence, the lower limit is a scenario where the number of apartments is dominated by one- and three- bedroom units. On the other hand, the upper limit is dominated by one- and two-bedroom units. However, overall the number of bedrooms is likely to be very similar (2,108 for the lower limit compared to 2,102 for the upper limit).

⁸ (Office GRA Plots B + C) + ((Office GFA Plots N) x 80%)
= (8,955 m² + 8,751 m²) + (7,500 m²) x 80%
= 23,706 m².

⁹ (Plot D GRA) + (Plots C + F + K + Belvedere) x 90%
= (15,429 m²) + (5,437 m² + 1,000 m² + 800 m² + 2,200 m²) x 90% = 22,507 m².

¹⁰ Based on Doc222s of PA/03575/16.

¹¹ The 4,000 student figure is for both the Bormla and SmartCity campuses, based on media reports. There is no indication of how many will be accommodated in the SmartCity campus. The worst case (4,000 students) is assumed.

Table 9: Residential configuration: lower limit

| Plot | Number of bedrooms | | | | | Total |
|-----------------------|--------------------|------------|--------------|------------|------------|--------------|
| | 1 | 2 | 3 | 4 | 5 | |
| A | 6 | 40 | 41 | 8 | | 95 |
| D | 226 | 78 | 61 | | | 365 |
| G | 39 | 44 | 97 | 7 | | 187 |
| H | | | | 34 | 35 | 69 |
| I | 24 | 16 | 54 | 4 | | 98 |
| K | 24 | 28 | 82 | 5 | | 139 |
| Total units | 319 | 206 | 335 | 58 | 35 | 953 |
| Total bedrooms | 319 | 412 | 1,005 | 232 | 140 | 2,108 |

Table 10: Residential configuration: upper limit

| Plot | Number of bedrooms | | | | | Total |
|-----------------------|--------------------|------------|------------|------------|------------|--------------|
| | 1 | 2 | 3 | 4 | 5 | |
| A | 44 | 52 | 30 | 2 | | 128 |
| D | 226 | 78 | 61 | | | 365 |
| G | 49 | 65 | 73 | 12 | | 199 |
| H | | | | 34 | 35 | 69 |
| I | 45 | 64 | 6 | 10 | | 125 |
| K | 70 | 69 | 10 | 25 | | 174 |
| Total units | 434 | 328 | 180 | 83 | 35 | 1,060 |
| Total bedrooms | 434 | 656 | 540 | 332 | 140 | 2,102 |

27. The overall schedule of accommodation is summarised below, with a comparison against the development as assessed in the 2008 TIS Addendum provided as well.

Table 11: Comparison between the 2008 TIS Addendum and 2023 Master Plan

| Land use | 2008 TIS Addendum | 2023 Master Plan | Change |
|---------------------|---------------------------|--|---|
| Community Centre | 1,300m ² GFA | - | - 1,300 m ² GFA |
| Conference Centre | 3,426m ² GFA | - | - 3,426 m ² GFA |
| Education | - | 650 students / 150 staff 2,500 post-secondary students / 361 staff 4,000 tertiary students / 320 staff | + 650 students / + 150 staff + 2,500 students / + 361 staff + 4,000 tertiary students / + 320 staff |
| Hospital | - | 200 beds | + 200 beds |
| Hotel | 580 rooms | 240 rooms | - 340 rooms |
| Office | 157,036m ² GFA | 34,337 m ² GFA | - 122,699 m ² GFA |
| Residential | 334 units 772 bedrooms | 953 / 1,060 units 2,108 / 2,102 bedrooms | + 619 / 726 units + 1,336 / 1,330 bedrooms |
| Retail + F&B | 18,700m ² GFA | 36,481 m ² GFA | + 17,781 m ² GFA |
| Serviced apartments | 110 units | - | - 110 units |

Note 1: The Retail / F&B land use includes 13,076 m² of non-GFA within Plot D (i.e. below ground level) since this is a trip generating floor area.

Note 2: Estimated staff at ITS Campus based on Doc 222s of PA/03575/16.

Note 3: Estimated staff at the AUM Campus was based on details in the Case Officer Report for PA/01189/16 (the Bormla Campus) where it was envisaged that it would accommodate 500 students and 40 staff.

Scenario 3: 2023 Master Plan with local trip rates and internalised trips

28. Since the Scheme is still at Master Planning stage, certain details are absent, especially where information is pending from third parties (such as by AUM). Nonetheless, the AADT estimates have been worked out using the information and assumptions provided above.
29. Local trip rates were used to estimate the weekday 24-hour flow and AADT. These are based on the following local surveys:
- Hospital: Surveys undertaken at the Gozo General Hospital;
 - Hotel: Surveys at two rural four-star hotels located in the northern part of Malta;
 - Office: Data collected from SmartCity Malta¹²;
 - Residential: Surveys undertaken at Blata l-Għolja in Mosta, a residential enclave that comprises 149 residential units with an adult population of 443 persons¹³. This is equivalent to an average of three adults per residential unit. The trip rates were adjusted to reflect an estimated density at SmartCity Malta of 2.2 adults per unit¹⁴;
 - Retail / F&B: Car park data from *The Point*, a 16,850m² shopping mall in Tas-Sliema¹⁵; and
 - School: Surveys undertaken at an independent school located in the North Harbour area with the trip rates adjusted to reflect an overall school transport modal share of 75 per cent whereas 95 per cent of staff use their private car.
30. The estimated office trips are based on the net increase of 6,000 m² GRA since 17,706 m² already exist. The office trip rates were adjusted to reflect a higher density of 18 m² per employee compared to the current density at SmartCity Malta of 22.1 m² per employee. Furthermore, as per the 2007 TIS it was assumed that 22 per cent of employees will work on a two-shift (14 per cent) or three-shift (8 per cent) work schedule, i.e. there will also be some office workers on weekends.
31. Trip estimates for the proposed ITS and AUM campuses were based on TRICS data for three colleges and a university having a combined average student population of circa 9,500 students and located at the edge of town centres. This was considered relevant in this case given that ITS students would typically arrive at the Institute using public transport whereas AUM mostly markets itself to foreign students who will be subsequently accommodated at SmartCity or nearby.

¹² Current office GRA is 17,706m², accommodating 800 employees. This translates into an employee density of 22.1m² per employee at 80 per cent occupancy.

¹³ As established from the Electoral Register.

¹⁴ An occupancy of one adult per bedroom was assumed, which implies that the lower limit of the residential range translates into a higher population density:

Lower limit: 2,120 adults / 968 residential units = 2.2 adults per unit.

Upper limit: 2,109 adults / 1,042 residential units = 2.0 adults per unit

¹⁵ Retail / F&B trip rates are based on GRA and using car park data from *The Point* (both short term and contractual).

32. With respect to the retail / F&B land uses, it is assumed that 10 per cent of the floor area will be allocated to F&B.
33. The following internalised trip assumptions were made, which are identical to those applied by CB in the 2008 TIS Addendum, and also considered in Scenario 2:
 - Hotel: 15 per cent;
 - Residential: 5 per cent; and
 - Retail / F&B: 25 per cent.
34. The proposed hospital was assumed to have a similar internalised trip reduction as that of the hotel. Similarly, the school was assumed to attract 15 per cent of its students from the resident population. No internalised trip reductions were made to the ITS and AUM estimates since the original trip rates are already sourced from edge of town centre sites which reflect a lower trip generation.
35. It is noted that no assumptions of internalised trips in relation to the office workers were originally considered in the 2008 TIA Addendum. Given that the 2023 Master Plan is proposing a range of between 953 and 1,060 residential units, it is highly likely that some people will live and work in SmartCity Malta. Assuming an average occupancy of one adult per bedroom (i.e. an adult population of 2,108 residents) and that one adult from every four residential units works in SmartCity Malta, this translates into 238 adults who live and work in SmartCity Malta (or 11.3 per cent of the adult resident population).
36. For trip generation purposes, residents were divided between adults who work in SmartCity Malta (238 persons) and those who do not ($2,108 - 238 = 1,870$ persons). Observations at the Blata l-Għolja residential enclave showed that the average household size is three adults per household, with each adult undertaking 4.1 trips per day; the estimated household size in SmartCity Malta is of 2.2 adults per unit (as explained above).
37. In order to account for internalised residential trips, it was assumed that residents who do not work in SmartCity Malta will similarly undertake 4.1 trips per day, i.e. 28.7 car trips per week. On the other hand, it was assumed that residents who work in SmartCity Malta, will undertake 8 car trips¹⁶ per week out from / into SmartCity Malta. Therefore, the residents who do not work in SmartCity Malta will perform a weekly total of 53,662 trips (1,870 adults x 28.7 trips per week); those who do will make a weekly total of 1,906 trips (238 adults x 8 trips per week) for a combined weekly total of 55,568 residential trips.
38. The above was translated into a percentage by first calculating the total weekly residential car trips should none of the residents work in SmartCity Malta. This would be equivalent to 60,500 trips (2,108 adults x 28.7 trips per week). This means that in this Scenario, the

¹⁶ SmartCity Malta offers a mix of land uses that encourages residents to be served within SmartCity itself (retail, in particular, which can take the form of pharmacies, convenience shops, stationeries etc.).

internalised trips for residents is equivalent to 8.2 per cent (1 – (55,568 / 60,500 trips)), as opposed to the five per cent considered by CB.

39. With respect to office workers, the total number of office employees is estimated to reach 1,133 workers¹⁷. Since 238 of these are likely to live in SmartCity Malta, then the internalised office trips are equivalent to 21.0 per cent (238 residents / 1,133 office workers).
40. To summarise, the following reduction in trips was assumed for each land use:
 - Hospital: 15 per cent;
 - Hotel: 15 per cent;
 - Offices: 21 per cent;
 - Residential: 8 per cent;
 - Retail / F&B: 25 per cent; and
 - School: 15 per cent.
41. Based on the above, the 24-hour weekday flow was estimated at **18,650 vehicles**.
42. Using weekend trip rates, the 2023 Master Plan is estimated to result in an AADT of **17,000 vehicles**, which is lower than the revised estimates in Scenario 2 (2008 TIS Addendum revision with local trip rates and internal trip assumptions) of 18,247 vehicles, see below.

Table 12: Scenario 3: 2023 Master Plan: Weekday 24-hour flows with internal trips

| Land use | Vehicles |
|---------------------|---------------|
| Hospital | 1,777 |
| Hotel | 428 |
| Office | 614 |
| Residential | 8,019 |
| Retail / F&B | 3,292 |
| School | 940 |
| School (ITS & AUM)) | 1,920 |
| Total | 16,990 |
| <i>Current</i> | <i>1,660</i> |
| TOTAL | 18,650 |

¹⁷ Current employees + future employees at one employee per 18m²
 800 current + 6,000 m² / 18m² = 1,133 office employees.

Table 13: Scenario 3: 2023 Master Plan: AADT with internal trips

| Land use | Vehicles |
|---------------------|---------------|
| Hospital | 1,658 |
| Hotel | 427 |
| Office | 477 |
| Residential | 7,927 |
| Retail / F&B | 3,050 |
| School | 671 |
| School (ITS & AUM)) | 1,371 |
| Total | 15,581 |
| Current | 1,418 |
| TOTAL | 17,000 |

CONCLUSION

43. This note has presented estimates of the Annual Average Daily Traffic (AADT) and peak hour flows that will result from the proposed amendments to the Master Plan of SmartCity, based on the latest GFA of 368,628 m². A number of scenarios are included that are described further below.
44. Scenario 1 presents the 24-hour flows and relevant assumptions that were calculated by CB in the 2008 TIS Addendum. The estimated flows with, and without modal shift are included.
45. Scenario 2 was done for comparative purposes only. This scenario presents the estimated 24-hour flows and AADT, using the 2008 TIS schedule of accommodation as a basis, but applying local trips rates together with the internalised trip assumptions considered by CB.
46. Finally, Scenario 3 applies the local trip rates and updated internal trip assumptions to the latest configuration of the Master Plan. This scenario also includes the current AADT of 1,418 vehicles and the average daily weekday flow of 1,660 vehicles.
47. The summarised results in **Table 14** indicates that the trip generation and 24-hour flows provided in the 2008 TIA Addendum (Scenario 1) will not increase as a result of the 2023 Master Plan. The figures also show that with the increase in the floor area proposed by the 2023 Master Plan and using the current trip generation rates and updated assumptions on internal trips, the weekday 24-hour flow (Scenario 3) is significantly less than what was estimated in 2008 (Scenario 1). It is noted that the Scenario 1 estimates were used as a basis of all the environmental and traffic impact studies that were part of the 2008 approved SmartCity Malta Master Plan.

Table 14: Summary of Results: 24-hour flows and AADT

| Scenario | Weekday 24-hr flow | AADT |
|--|----------------------|--------|
| Scenario 1: 2008 TIS Addendum | 37,519 * 33,583 ^ | - |
| Scenario 2: 2008 TIS Addendum revision with local trip rates and internal trip assumptions | 21,833 | 18,247 |
| Scenario 3: 2023 Master Plan with local trip rates and internal trip assumptions | 18,650 | 17,000 |

* Excludes reduction due to modal shift, since none were considered in the subsequent scenarios.

^ Estimated 24-hr flow with reduction due to modal shift.

Note: Scenario 3 includes current flows.



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Attachment I:
Email from Architect



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Dear Sirs,

Please find attached a sample floor plan of one of the office floors in Building01, namely level2, which is colour coded to indentify the GRA areas; which shows that the GRA constitutes 73% of the GFA. If required, we could provide this for all the floors.

Perit Paul Camilleri

Kind regards,

Paul

Paul Camilleri

PAUL CAMILLERI & ASSOCIATES

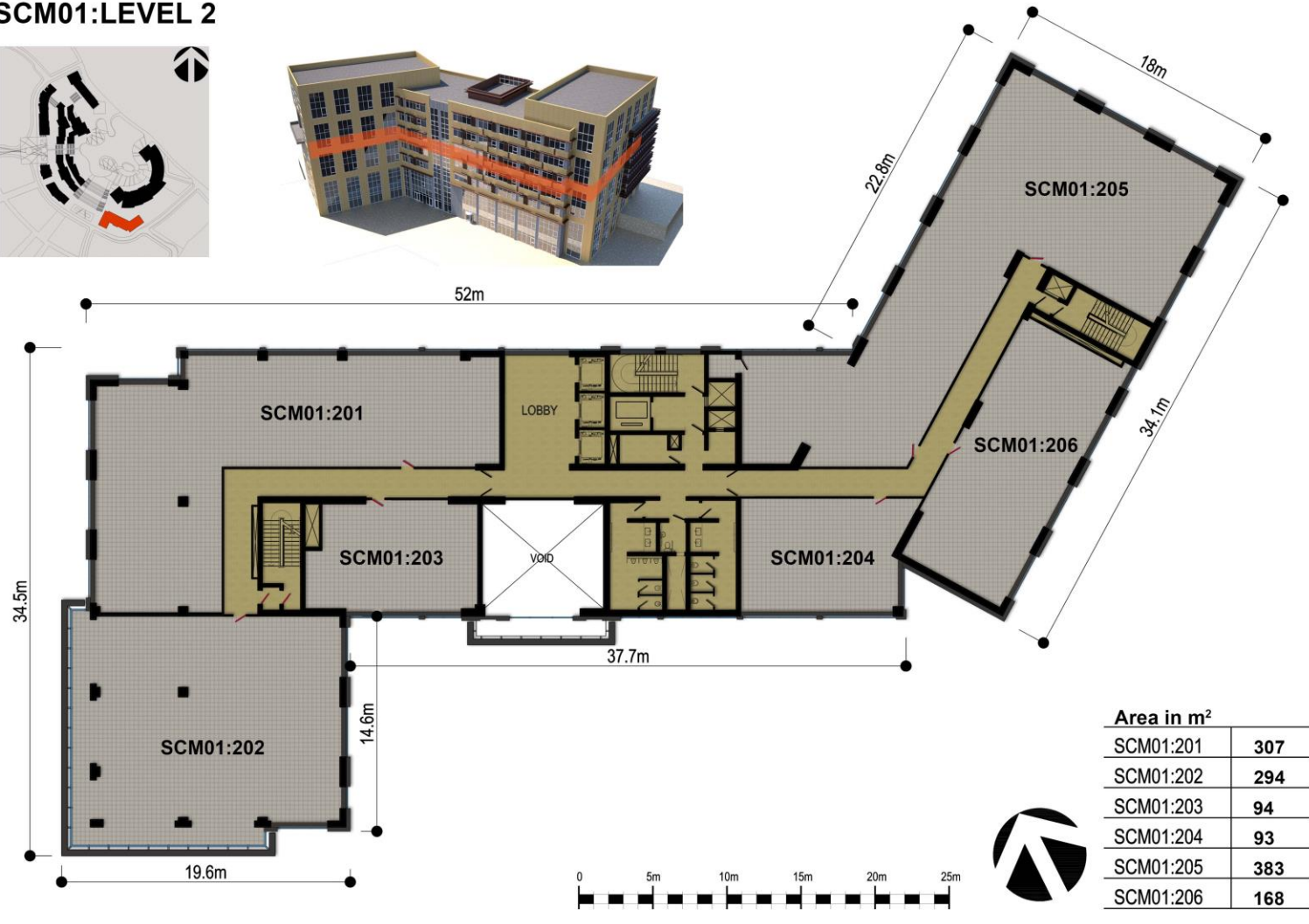
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SCM01:LEVEL 2



| Area in m ² | |
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| SCM01:203 | 94 |
| SCM01:204 | 93 |
| SCM01:205 | 383 |
| SCM01:206 | 168 |





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