

**PA/09876/19 AND PA/01948/20**

**PROPOSED MELLIEHA BAY HOTEL, L-GHADIRA, IL-MELLIEHA**

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**APPROPRIATE ASSESSMENT STATEMENT**



**Version I: April 2025**

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## Quality Assurance

### Proposed Mellieħa Bay Hotel Appropriate Assessment Statement April 2025

Report for: **Mellieħa Bay Hotel Ltd**

### Revision Schedule

Rev	Date	Details	Written by:	Checked by:	Approved by:
00	April 2025	Submission to client	<b>Eilis McCullough</b> Senior Consultant	<b>Rachel Xuereb</b> Director	<b>Adrian Mallia</b> Managing Director

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## INTRODUCTION

1. This Appropriate Assessment (AA) Statement describes the implications of proposed changes to the replacement of the Mellieħa Bay Hotel approved under PA/01948/20, in respect of the AA undertaken for the development. Specifically, the Statement describes how the changes will affect the conclusions of the AA as reported in the original AA Report Version 2<sup>1</sup>.
2. A Full Development Permit for the redevelopment of the Mellieħa Bay Hotel was issued by the Planning Authority (PA) in October 2023 (under PA/09876/19 and PA/01948/20). The Applicant subsequently revised the design for the replacement hotel. The proposed changes are being pursued through an Application for Minor Amendment; the changes are described as “*Minor internal and external alterations at all approved floor levels, which will result in a reduction of the GFA and height of the approved hotel*”. The ERA requested the submission of this AA Statement “*to confirm or otherwise whether the proposed changes will affect the conclusions of the AA previously carried out for the proposal*”<sup>2</sup>. The hotel has been demolished (under PA/09876/19) and construction works have commenced in pursuance of the permit issued under PA/01948/20.
3. The revised proposal is hereinafter referred to as ‘the Scheme’. **Figure I** shows the location of the Scheme site. The Scheme drawings are included below; these include superimpositions illustrating the changes in respect of the approved development. The layout plan and elevation drawings of the approved hotel are included in **Appendix I**.

## Background to the AA

4. The AA for the redevelopment of the Mellieħa Bay Hotel commenced in 2019, together with an Environmental Impact Assessment (EIA) for the development. Version 1 of the AA Report was submitted to the ERA and issued for consultation on 15<sup>th</sup> October 2021, together with Version 1 of the EIA Report. The development was subsequently redesigned, as a result of the ERA’s comments on Versions 1 of the AA and the EIA, as well as comments arising from the consultation. Given the substantive nature of those changes, it was agreed with the ERA to prepare a second version of the AA and EIA Reports. Version 2 of the AA Report, together Version 2 of the EIA Report, was submitted and issued for consultation on 8<sup>th</sup> August 2022; the ERA Board Hearing was held on 9<sup>th</sup> September 2022.
5. As mentioned, a Full Development Permit for the redevelopment of the hotel was issued in October 2023, specifically for: “*Proposed excavation works and construction of hotel (Class 3B) comprising of 359 guest bedrooms and ancillary facilities: 5 restaurants; snackeria; ice-cream outlet; 2 internal bars and 2 pool bars; an entertainment hall; an indoor*

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<sup>1</sup> Adi Associates Environmental Consultants Ltd, 2022. PA/09876/19 and PA/01948/20: Demolition and Redevelopment of the Mellieħa Bay Hotel, L-Għadira, Il-Mellieħa. Appropriate Assessment. Version 2. San Gwann, August 2022.

<sup>2</sup> Email from the ERA, dated 11<sup>th</sup> November 2024.

*and outdoor kids' play area; indoor teens' play area; 2 retail outlets; spa area inclusive with indoor pool, treatment rooms and a salon. Proposal also includes soft/hard landscaping, pools, restoration/construction of rubble walls and restoration of part of the coast and 2 LPG storage tanks of a volume of 5000L each".*

6. As further described below; in assessing and deciding on the application, the PA took account of the conclusions of the AA and the EIA, and of the recommended mitigation measures identified in Version 2 of the EIA Report. The approved documents include a Landscaping Plan, and a Lighting and Noise Report. The permit is also conditional having regard to the recommended mitigation measures, and including in relation to landscaping, external lighting, and the restoration of the foreshore.

### **Background to the Scheme**

7. The Mellieħa Bay Hotel has been in operation since 1969; the hotel was built specifically for the tour operator package market (Thomson). The hotel ceased operations in October 2019, in anticipation of the eventual redevelopment. Prior to its closure, the hotel comprised 313 guest rooms, together with amenities including food and beverage outlets, conference facilities, two outdoor swimming pools, an indoor pool, surface car parks, and two tennis courts.
8. In December 2019, the Applicant submitted two planning applications, the first pertaining to the demolition of the existing hotel - *"To demolish existing building as phase 1 of a redevelopment project"* (PA/09876/19) - and the second pertaining to the redevelopment (PA/01948/20). As originally proposed (and the subject of Version 1 of the EIA Report), the redevelopment envisaged *"Proposed development of hotel (Class 3B) with ancillary facilities including storage of LPG tanks and excavation works, following the demolition of the existing hotel (PA/09876/19). Proposal also includes soft/hard landscaping, pools, restoration/construction of rubble walls, and restoration of part of the coast, and restoration of part of the coast. Total proposed number of guest rooms is 421 rooms"*.
9. In December 2019, the Applicant also submitted a Project Description Statement (PDS). In February 2020, the ERA advised that the development required an EIA, in accordance with Schedule I, Category I, Section 7.1.1.1 of the *Environmental Impact Assessment Regulations* (as amended, S.L. 549.46).
10. A revised redevelopment proposal (subject of Version 2 of the EIA Report) was submitted to the PA in June 2022, with a revised project description, reflecting the changes – *"Proposed excavation works and construction of hotel (Class 3B) comprising of 359 guest bedrooms and ancillary facilities: 5 restaurants; snackeria; ice-cream outlet; 2 internal bars and 2 pool bars; an entertainment hall; an indoor and outdoor kids' play area; indoor teens' play area; 2 retail outlets; spa area inclusive with indoor pool, treatment rooms and a salon. Proposal also includes soft/hard landscaping, pools, restoration/construction of rubble walls and restoration of part of the coast and 2 LPG storage tanks of a volume of 5000L each"*.

11. A Full Development Permit for the demolition of the existing hotel was issued in June 2023 (PA/09876/19) and, as mentioned, a permit for the construction of the replacement hotel was issued in October 2023 (under PA/01948/20). As also mentioned, the former Mellieħa Bay Hotel has since been demolished and construction of the replacement hotel is underway.



Figure I: Location of the Scheme site





## DESCRIPTION OF THE SCHEME

### Change in Scale and Site Coverage

12. The Mellieħa Bay Hotel as approved under PA/01948/20 comprises 359 guestrooms and ancillary facilities, including restaurants, bars, outdoor swimming pools, a tennis court, a futsal pitch, and children's play areas, set in landscaped grounds. The changes envisaged by the Scheme primarily involve a reduction in the floorspace afforded to 'back of house' operations. There is no change to the number of guestrooms, or to the complement of ancillary facilities.
13. **Figures 2 to 5** illustrate the changes envisaged by the Scheme, in respect of the 'area of intervention' for the development, the extent of the hotel complex, the built-up area, the extent of soft landscaping, and the height profile in respect of the seaward (south-facing) elevation of the hotel, respectively. The detailed drawings for the Scheme are included in **Appendix 2. Table I** illustrates the comparison of the Scheme with the approved development<sup>3</sup>.

**Table I: Comparison of the Scheme and the Approved Development**

	Approved Development	Scheme	Difference
Guestroom complement	359	359	-
Parking complement	152 car spaces / 2 accessible van spaces / 7 coach bays	154 car spaces / 1 accessible van space / 4 coach bays	Increase of 2 car spaces / reduction of 1 accessible van space / reduction of 3 coach bays
Area of Intervention	46,455 m <sup>2</sup>	46,300 m <sup>2</sup>	Reduction of 315 m <sup>2</sup>
Complex Site Area	42,145 m <sup>2</sup>	42,240 m <sup>2</sup>	Increase of 95 m <sup>2</sup>
Area lying outside of Area for Restrained Redevelopment	12,389 m <sup>2</sup>	12,389 m <sup>2</sup>	-
Area encroaching within the Area of Ecological Importance	300 m <sup>2</sup>	300 m <sup>2</sup>	-
Built-up Area ( <i>including all buildings, outdoor facilities / services, and all hard surfaces</i> )	36,545 m <sup>2</sup>	36,460 m <sup>2</sup>	Reduction of 85 m <sup>2</sup>
Area of Soft Landscaping	5,600 m <sup>2</sup>	5,780 m <sup>2</sup>	Increase of 180 m <sup>2</sup>
Building Footprint	15,206 m <sup>2</sup>	12,100 m <sup>2</sup>	Reduction of 3,106 m <sup>2</sup>
Gross Floor Area	50,980 m <sup>2</sup>	43,477 m <sup>2</sup>	Reduction of 7,503 m <sup>2</sup>

<sup>3</sup> The Applicant explains that certain of the figures quoted for the approved development in Table I were clarified following the publication of Version 2 of the EIA Report. This resulted from the undertaking of more detailed site surveys post-permit.

14. The approved development envisages an area of intervention of approximately 46,455 m<sup>2</sup>. The Scheme envisages a reduction in the area of intervention, by approximately 315 m<sup>2</sup>, to approximately 46,300 m<sup>2</sup>. The approved Mellieħa Bay Hotel complex will occupy an area of approximately 42,145 m<sup>2</sup>. The Scheme will have a marginally increased coverage, of approximately 42,240 m<sup>2</sup> (an increase of 95 m<sup>2</sup>). This is still smaller than the area occupied by the former Mellieħa Bay Hotel complex (42,813 m<sup>2</sup>).
15. With the approved development, the extent of the complex lying outside of the Area for Restrained Redevelopment identified in the 2006 Local Plan is approximately 12,389 m<sup>2</sup>. The Scheme will not change this encroachment.
16. The approved development envisages the restoration to their natural state of an area within the Rđum mil-Ponta ta' l-Aħrax sa Rđum il-Ħmar Area of Ecological Importance (AEI) on the northeast corner of the complex, areas along the northern perimeter of the site, and an area along the foreshore (the areas to be restored having a cumulative area of approximately 4,060 m<sup>2</sup>). As with the approved development, there will still be some encroachment within the AEI, to accommodate a new turning circle. However, the land take within the AEI (of approximately 300 m<sup>2</sup>) is unchanged from that envisaged under the approved development.
17. The approved development was redesigned to ensure the retention of the burial site discovered during the cultural heritage baseline study. The changes envisaged by the Scheme have no implications for the retention *in situ* of this important heritage feature.
18. The Scheme will have a reduced built-up area, building footprint and Gross Floor Area (GFA) compared to the approved development. The approved development has a built-up area of approximately 36,545 m<sup>2</sup>, a building footprint of approximately 15,206 m<sup>2</sup>, and a GFA of approximately 50,980 m<sup>2</sup>. The Scheme will have a built-up area of approximately 36,460 m<sup>2</sup>, a reduction of approximately 85 m<sup>2</sup>, a building footprint of approximately 12,100 m<sup>2</sup>, a reduction of approximately 3,106 m<sup>2</sup> (20%), and a GFA of approximately 43,477 m<sup>2</sup>, a reduction of approximately 7,503 m<sup>2</sup> (15%).

### Change in Height Profile

19. **Table 2** outlines the changes in the height profile of the approved development as envisaged by the Scheme. This is also illustrated in **Figure 5**. The approved development comprises 11 interconnected blocks (Blocks A, B, C1, C2, C3, D, E1, E2, F1, F2, and F3) of varying heights, between one to seven-storey equivalent as viewed from the seaward side (from the south), and with one basement level. The Scheme envisages one less block, a reduced overall height, and changes to the massing and height profile throughout. The hotel will be spread across 10 interconnected blocks (Blocks A, B, C1, C2, C3, D, E1, E2, F1, and F2). Again, these will be of varying height, but ranging between one to six-storeys equivalent, as viewed from the seaward side. The maximum height of the approved development is +38.75 m (Block D). The Scheme envisages a maximum height of +38.05 m (Blocks D, E1 and E2), an overall decrease of approximately 0.70 m.

**Table 2: Comparison of the Height Profile**

	<b>Approved Development</b>	<b>Scheme</b>	<b>Difference</b>
Block A	+31.03 m	+32.43 m	Increase of 1.40 m
Block B	+24.73 m	+22.50 m	Reduction of 2.23 m
Block C1	+32.78 m	+27.55m	Reduction of 5.23 m
Block C2	+36.68 m	+31.05 m	Reduction of 5.63 m
Block C3	+15.00 m	+11.50 m	Reduction of 3.50 m
Block D	+38.75 m	+38.05 m	Reduction of 0.70 m
Block E1	+38.45 m	+38.05 m	Reduction of 0.40 m
Block E2	+38.45 m	+38.05 m	Reduction of 0.40 m
Block F1	+28.68 m	+27.55 m	Reduction of 1.13 m
Block F2	+25.18 m	+24.05 m	Reduction of 1.13 m
Block F3	+17.00 m	-	Block omitted

### Landscaping

20. The permit for the approved development is conditional (Condition No. 5) to the submission to ERA of a detailed landscaping plan (being a condition imposed by the ERA). The permit is also conditional to the submission of a bank guarantee (Condition No. 2) for completion of the landscaping plan. The Applicant explains that the landscaping plan is currently being updated to reflect the changes envisaged by the Scheme, but that it will remain generally the same.
21. As illustrated in **Table 1**, the approved development envisages approximately 5,600 m<sup>2</sup> of soft landscaping (13% of the hotel complex). The changes envisaged by the Scheme will marginally increase the area of soft landscaping, by approximately 180 m<sup>2</sup> to approximately 5,780 m<sup>2</sup> (14% of the complex). **Figure 4** shows the area of soft landscaping envisaged by the Scheme superimposed on the approved landscaping plan.
22. The approved landscaping plan envisages the incorporation of the remains of the Fedeau / Qassisu Battery, discovered during the cultural heritage baseline survey. The permit for the approved development is conditional to a bank guarantee in respect of the restoration of this feature (Condition No. 3). The changes envisaged by the Scheme have no implications for the retention *in situ* of the Fedeau / Qassisu Battery, or the proposals for its incorporation and showcasing within the landscaping.

### Exterior Lighting

23. The permit for the approved development is conditional (Condition No. 5) to the submission to ERA of a detailed lighting plan (again being a condition imposed by the ERA). This Plan “shall be in line with the Birdlife Malta’s & NTM-FEE’s Guidelines on



*Ecologically Responsible Lighting*”, as was recommended in Version 2 of the EIA Report. The Applicant explains that the external lighting plan is currently being updated to reflect the changes envisaged by the Scheme, but, again, that it will remain generally the same and will follow the principles set out in the guidelines.

### **Access and Parking**

24. The changes envisaged by the Scheme have no implications to the approved access arrangements. The entrance point from Triq il-Marfa (which forms part of the TEN-T network) has already been redesigned, to facilitate access to the new public car park adjacent to the western boundary of the hotel complex. Within the Scheme site, the existing service roads along the northern and northeastern perimeters of the hotel complex will be retained *in situ*. The former pedestrian access to the Mellieħa Bay Hotel complex from along the coast will be reinstated once the construction has been completed.
25. As illustrated in **Table I**, the Scheme envisages marginal changes to the parking facilities on site, with the addition of two car parking spaces to those approved under PA/01948/20 (154 car parking spaces in total), and the reduction of one accessible van parking space (one accessible van space is to be provided), and of three coach parking bays (four coach bays are to be provided at surface level).
26. The change in the parking complements have no implications for the calculation of the Annual Average Daily Traffic (AADT). This was calculated as 95 vehicles for the approved development.

### **Proposals for the Coastline**

27. The approved development was redesigned at the request of the ERA, so as to set the hotel complex further back from the coastline, with the objective of facilitating the restoration of a part of the coastline to natural rocky shore. The permit for the approved development is conditional (Condition No. 5) to the submission to ERA of a restoration method statement for the works (being a condition imposed by the ERA). The changes envisaged by the Scheme will not compromise the restoration of the coastline as envisaged in the approved development. The Applicant explains that the Restoration Method Statement remains valid for the Scheme.

### **Resources**

28. The approved documentation under PA/01948/20 includes a Utilities Management Plan. This is being updated to reflect the changes envisaged by the Scheme. However, as mentioned, the Scheme will have a similar complement of guestrooms and ancillary facilities to the approved development. Accordingly, the energy and water consumption rates remain unchanged from those identified in Version 2 of the EIA Report. Similarly, the arrangements for the supply of electricity and water, and water harvesting, remain unchanged.
29. The construction of the Scheme envisages the use of a similar range of raw materials to that envisaged to be used in the construction of the approved development.

### **Scheme Construction**

30. As mentioned, the former Mellieħa Bay Hotel has already been demolished, and excavation and construction works on the sub-structure of the new hotel have commenced. Notably, the excavation has been undertaken having regard to the Scheme, as opposed to the approved development. Hence, there has been less excavation than would have been required for the approved development. This has had implications for the volume of excavated material (and excavation waste), as well as the scale of remodelling of the slope and the interventions required to ensure its stability, as explained below.
31. The Construction Management Plan (CMP) for the approved development outlines a construction programme that is just under three years (from January 2024 to November 2026). The Applicant explains that the construction timeframe outlined in the CMP remains generally relevant for the Scheme. Hence, the remaining construction period has a duration of approximately two years.
32. The volume of excavated material envisaged for the approved development was estimated at 122,872 m<sup>3</sup>. It is envisaged that the excavated volume for the Scheme as revised will be approximately 107,000 m<sup>3</sup>. Approximately 62,500 m<sup>3</sup> of material has been cleared / excavated to date – approximately 51,400 m<sup>3</sup> of excavated material and approximately 11,000 m<sup>3</sup> of soil (with some man-made material). As intended, all of the soil has been retained on site, and will be used in the new landscaping. Approximately 2,000 m<sup>3</sup> of the excavated material, as well as approximately 6,000 m<sup>3</sup> of the demolition waste, has also been retained, to be reused in the new build. Approximately 49,400 m<sup>3</sup> of excavated material and approximately 2,000 m<sup>3</sup> of material from the site clearance (approximately 51,400 m<sup>3</sup> in total) has been disposed of at Hard Stone Quarry HM 33 (Lapsi), as authorised by the ERA. Version 2 of the EIA Report had made reference to the potential for dumping the waste material at sea. However, this option was not pursued.
33. The construction for the approved development had envisaged supporting the sides of the excavation with propped cantilever retaining structures (using ground anchors of up to a maximum of 30 m) and, potentially the construction of gravity retaining structures (mass concrete walls) in some areas. For the construction of the blocks themselves, it was envisaged to use piles and piled rafts, and micro-piling, as necessary. With the Scheme having a reduced excavation volume, the need for such extensive interventions has been avoided and the construction will involve limited piling.
34. It had been intended to have both a mobile stone crusher and a batching plant on the site during construction. However, only the former has been installed and the Applicant explains that there is now no intention to install a batching plant.



**Figure 2: Area of Intervention – Superimposition of the Scheme on the Approved Development**

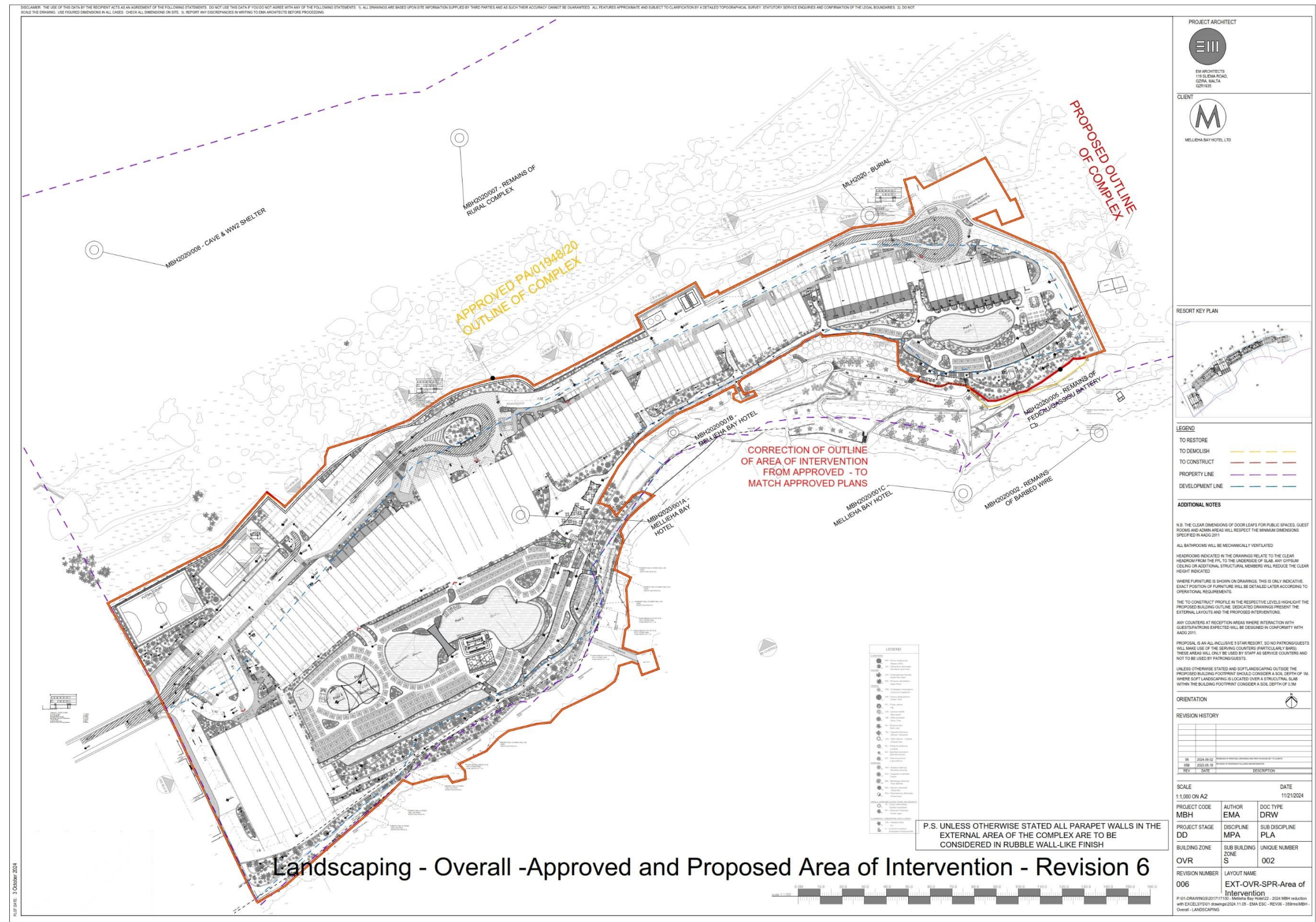




Figure 3: Hotel Complex – Superimposition of the Scheme on the Approved Development

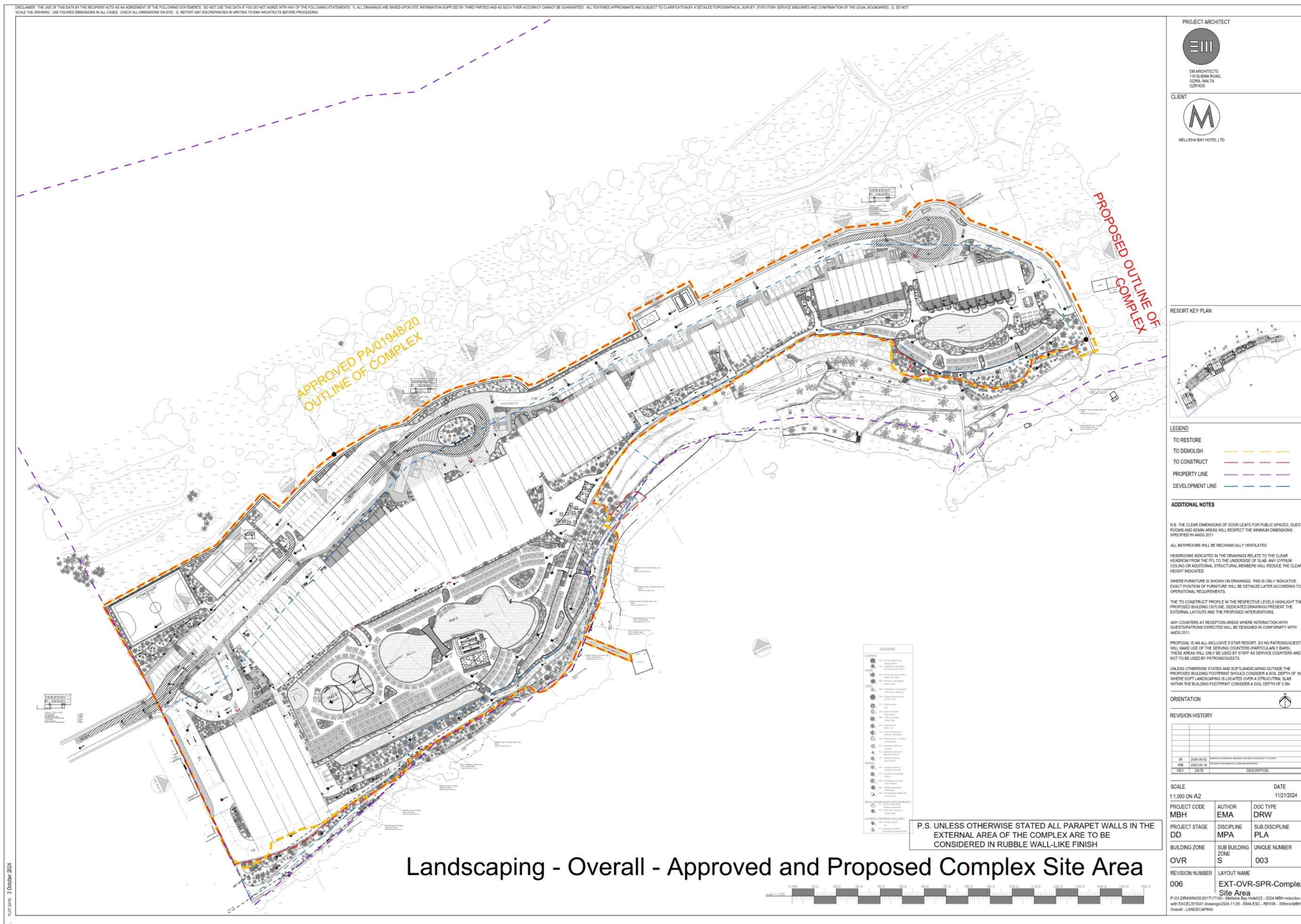
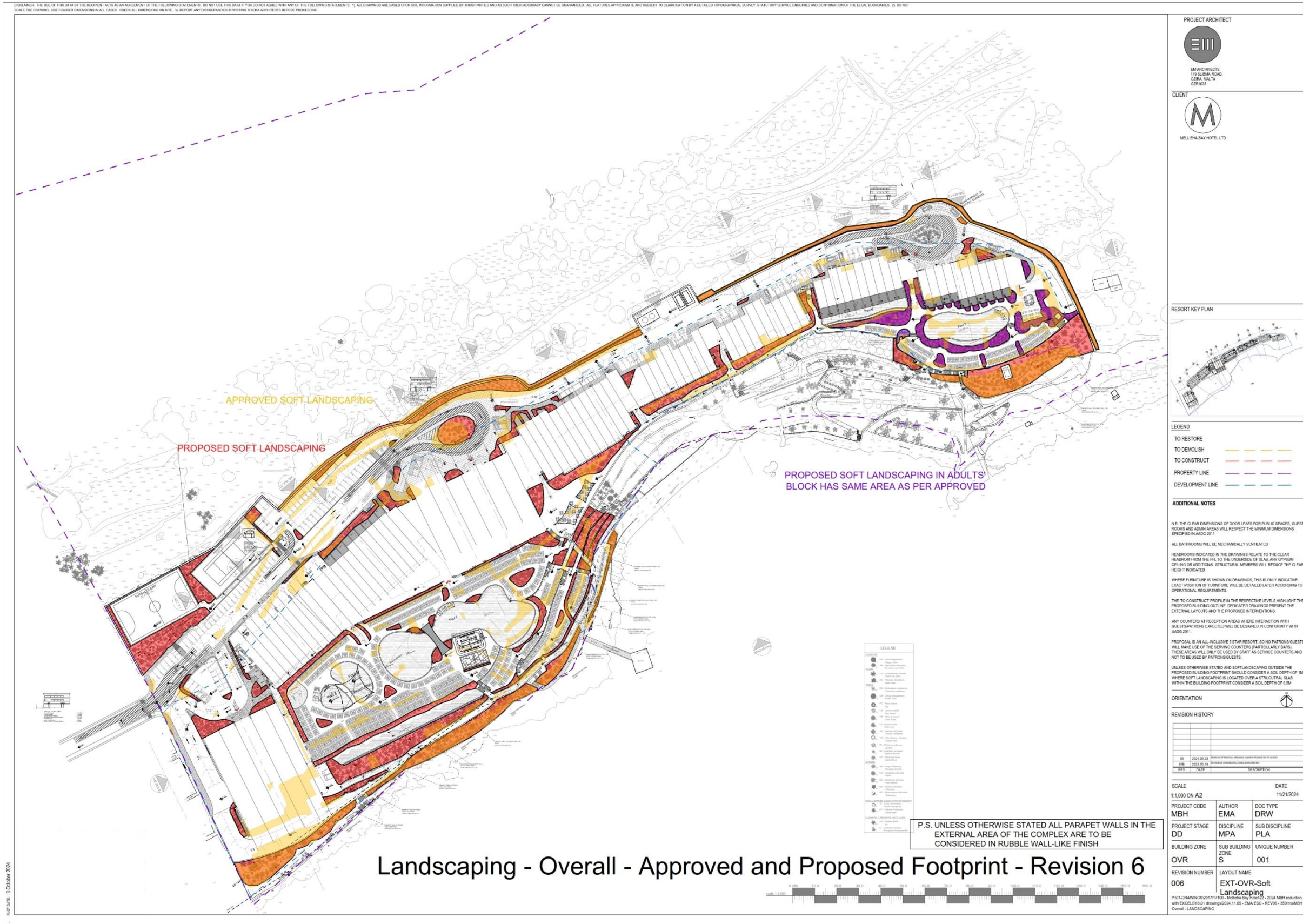




Figure 4: Soft Landscaping – Superimposition of the Scheme on the Approved Development







## **APPROPRIATE ASSESSMENT**

35. This section of the AA Statement summarises the implications of proposed changes to the replacement of the Mellieħa Bay Hotel approved under PA/01948/20, in respect of how the changes affect the conclusions of the AA as reported in the original AA Report Version 2 – see **Table 3**.

**Table 3: Assessment**

Approved Development		Scheme	
Predicted Impact	Proposed Mitigation Measures	Change to Predicted Impact	Proposed Mitigation Measures
<b>Avifauna</b>			
<b>Impacts on avifauna from light pollution</b>	<p>The approved development will be ODZ, and between two Natura 2000 sites and SPAs. Accordingly, the external lighting treatment warrants an ecological approach. The permit is conditional to the submission of a detailed external lighting plan, to be submitted to and agreed by the ERA. The lighting plan must also have regard to the <i>Guidelines on Ecologically Responsible Lighting</i>. Any departure from the Guidelines could result in impacts of major significance. It is important that the details of the lighting plan, as well as the management and control of the external lighting when the Scheme comes into operation, adhere to the <i>Guidelines on Ecologically Responsible Lighting</i>, as the potential impact will depend on this. In this respect, the impacts from the current lighting scheme are considered to be uncertain, with a potential for impacts of minor to major significance, depending on how the lighting plan is designed and implemented to adhere to the Guidelines.</p>	<ul style="list-style-type: none"> <li>• The external lighting plan should be detailed and implemented to adhere with the <i>Guidelines for Ecologically Responsible Lighting</i>. Outdoor decorative lighting should be kept to a minimum and balcony lights should be able to be controlled by guests or centrally dimmed during specific hours or periods of the year</li> </ul>	<ul style="list-style-type: none"> <li>• The external lighting plan should be detailed and implemented to adhere with the <i>Guidelines for Ecologically Responsible Lighting</i>. Outdoor decorative lighting should be kept to a minimum and balcony lights should be able to be controlled by guests or centrally dimmed during specific hours or periods of the year</li> </ul>
<b>Impacts on seabirds from light pollution</b>	<p>The approved development will be ODZ, and between two Natura 2000 sites and SPAs. Accordingly, the external lighting treatment warrants an ecological approach. The permit is conditional to the submission of a detailed external lighting plan, to be submitted to and agreed by the ERA. The lighting plan must also have regard to the <i>Guidelines on Ecologically Responsible Lighting</i>. Any departure from the Guidelines could result in impacts of major significance. It is important that the details of the lighting plan, as well as the management and control of the external lighting when the Scheme comes into operation, adhere to the <i>Guidelines on Ecologically Responsible Lighting</i>, as the potential impact will depend on this. A sensitive lighting plan will reduce the potential impact of strandings of seabirds. It is important that external decorative lighting is kept to a minimum in accordance with the Guidelines and that during the fledging period, outdoor lighting is switched off or dimmed as much as possible. If not, the potential impact on seabirds could be major as strandings are already recorded in the baseline situation, any addition or status quo will continue to pose a threat. An improvement to the lighting at the hotel over that which was previously in place should be sought through the operational permit. With such a permit in place, the impact is expected to be of minor significance.</p>	<ul style="list-style-type: none"> <li>• Ensure that mitigation measures related to light and noise pollution are implemented as permit conditions; and</li> <li>• Establish a consultative relationship with Birdlife Malta to ensure that the Scheme operations are not affecting key species including seabirds and terrestrial birds possibly through the participation in monitoring programmes</li> </ul>	<p>The external lighting plan is being updated to reflect the changes envisaged by the Scheme. However, the lighting plan will remain generally the same and has regard to the <i>Guidelines on Ecologically Responsible Lighting</i>. The impact in respect of disturbance of avifauna from light pollution remains uncertain, with a potential for impacts of minor to major significance, depending on how the lighting plan is designed and implemented to adhere to the Guidelines.</p> <ul style="list-style-type: none"> <li>• Ensure that mitigation measures related to light and noise pollution are implemented as permit conditions; and</li> <li>• Establish a consultative relationship with Birdlife Malta to ensure that the Scheme operations are not affecting key species including seabirds and terrestrial birds possibly through the participation in monitoring programmes</li> </ul>

Approved Development		Scheme	
Predicted Impact	Proposed Mitigation Measures	Change to Predicted Impact	Proposed Mitigation Measures
<b>Avifauna</b>			
<p><b>Impacts of birds from noise pollution</b></p> <p>The assessment predicts that noise reaching the bird populations at the receiver locations MP 2 and MP 3 could exceed the ambient noise levels in the critical frequencies for communication throughout the construction, with the highest noise levels being experienced when the batching plant is in operation (in the range of 79 - 81 dBA). Having regard to the assessment criteria, the noise levels in the vicinity of MP 1 and 2 throughout the construction period could potentially be of minor significance, where masking of communication signals could occur beyond that which already occurs from natural ambient noise and could result in other behavioural and / or physiological effects.</p> <p>Noise levels in the vicinity of MP 3 are likely to be lower, given the distance to the construction site, and could potentially be of no significance during the demolition / site clearance stage and the construction / finishing stage, and when neither the stone crusher nor the batching plant is in operation in both cases. Again, the highest noise levels at MP 3 are likely to be experienced when the batching plant is in operation (in the range of 54 dBA). Having regard to the assessment criteria, the noise levels at MP 3 throughout most of the construction period could potentially be of minor significance, where masking of communication signals could occur beyond that which already occurs from natural ambient noise and could result in other behavioural and / or physiological effects.</p> <p>Assuming the measured noise levels at MPs 1 and 2 to be reasonably representative of the ambient noise levels in the critical frequencies in the wider area at these measurement locations, the assessment predicts that construction noise levels up to approximately 200 m north of the site and up to approximately 1 km east of the site could exceed the ambient noise levels in the critical frequencies for communication.</p> <p>The exception would be during the demolition / site clearance stage and the construction / finishing stage, and when neither the stone crusher nor the batching plant is in operation in both cases; noise levels at these times would exceed the ambient noise levels up to approximately 50 m from the site. Hence, having regard to the assessment criteria, the noise levels up to 200 m north of the site and up to 1 km east of the site could potentially be of minor significance, where masking of communication signals could occur beyond that which already occurs from natural ambient noise and could result in other behavioural and / or physiological effects.</p> <p>The assessment predicts that noise reaching the bird populations at the receiver location MP 3 from outdoor entertainment activity with only background noise playing could be below the ambient noise levels in the critical frequencies for communication, where masking of communication signals is not an issue. Hence, in this scenario, the impact could potentially be of no significance.</p> <p>In the case of MPs 1 and 2, the assessment predicts that noise reaching the bird populations at these receiver locations could exceed the ambient noise levels in the critical frequencies for communication, being in the range of 28 – 30 dBA and 20 – 22 dBA, respectively). Having regard to the assessment criteria, the noise level at MPs 1 and 2 with only background music playing could potentially be of minor significance, where masking of communication signals could occur beyond that which already occurs from natural ambient noise and could result in other behavioural and / or physiological effects.</p>	<ul style="list-style-type: none"> <li>• In relation to construction noise impacts and given that the assessment identifies that the impact on birds could potentially serve to mask communication signals and result in other behavioural and / or physiological effects, the CMP should address the control of noise arising from all stages of the construction. In addition to adhering to the provisions of the Environmental Management Construction Site Regulations (S.L.552.09), as amended, which will afford a measure of mitigation regarding noise at certain times of the day, the CMP should detail working hours and the types of plant / machinery to be used, as well as outline measures for the control of noise at source.</li> <li>• It is recommended that noise monitoring is undertaken during all phases of the construction. If noise levels become significant, in relation to the relevant standards / values outlined above, or if evidence of significant noise impact is observed and / or reported, works should be reassessed and alternative methodologies and / or more appropriate control measures should be investigated and put in place. This investigation should be discussed and agreed with the relevant competent authority and addressed in the environmental permit for the construction of the Scheme.</li> <li>• In relation to operational noise impacts and given that the assessment identifies that the impact on birds could potentially serve to mask communication signals and result in other behavioural and / or physiological effects even with only background music playing, the operators / management of the Scheme should address the control of noise arising from outdoor entertainment activities. In particular, the playing of amplified music should be restricted only for the purpose of providing good ambience (that is, background music). The control of music should be regulated by the environmental permit for the operation of the Scheme. The environmental permit should prohibit the playing of amplified music over the level of background music.</li> </ul>	<p>Demolition of the former hotel has been completed and excavation of the site is almost complete, and the excavation works have been undertaken having regard to the Scheme, as opposed to the approved development. Furthermore, the batching plant was not (and will not be) installed on site. Noise monitoring conducted at the Ghadira Nature Reserve as part of the EMPs for the demolition and excavation works has identified noise values in the range of 35 to 59 dBA (being of no significance to minor significance). During the construction / finishing stage of the Scheme, it is likely that noise levels would be in the same range as predicted for the approved development, hence being of no significance at Ghadira Nature Reserve, and being of no significance to minor significance (20 to 79 dBA) in the areas immediately to the north and east of the site.</p> <p>The changes envisaged by the Scheme have no implications for the nature or location of the outdoor entertainment activities. Hence, the impact in respect of noise from outdoor entertainment activities remains of no significance to minor significance, depending to the loudness of the amplified music and the location of the birds.</p>	<ul style="list-style-type: none"> <li>• In relation to construction noise impacts and given that the assessment identifies that the impact on birds could potentially serve to mask communication signals and result in other behavioural and / or physiological effects, the CMP should address the control of noise arising from all stages of the construction. In addition to adhering to the provisions of the Environmental Management Construction Site Regulations (S.L.552.09), as amended, which will afford a measure of mitigation regarding noise at certain times of the day, the CMP should detail working hours and the types of plant / machinery to be used, as well as outline measures for the control of noise at source.</li> <li>• It is recommended that noise monitoring is undertaken during all phases of the construction. If noise levels become significant, in relation to the relevant standards / values outlined above, or if evidence of significant noise impact is observed and / or reported, works should be reassessed and alternative methodologies and / or more appropriate control measures should be investigated and put in place. This investigation should be discussed and agreed with the relevant competent authority and addressed in the environmental permit for the construction of the Scheme.</li> <li>• In relation to operational noise impacts and given that the assessment identifies that the impact on birds could potentially serve to mask communication signals and result in other behavioural and / or physiological effects even with only background music playing, the operators / management of the Scheme should address the control of noise arising from outdoor entertainment activities. In particular, the playing of amplified music should be restricted only for the purpose of providing good ambience (that is, background music). The control of music should be regulated by the environmental permit for the operation of the Scheme. The environmental permit should prohibit the playing of amplified music over the level of background music.</li> </ul>

	<p>In the scenario where amplified music is playing at full volume, the assessment predicts that noise levels at MP 1, MP 2, and MP 3 could exceed the ambient noise levels in the critical frequencies for communication (being in the range of 77 dBA, 69 dBA and 59 dBA, respectively). Hence, the impact could potentially be of minor significance, where masking of communication signals could occur beyond that which already occurs from natural ambient noise and could result in other behavioural and / or physiological effects.</p> <p>Again, there is the potential for noise levels when amplified music is playing at full volume to be higher closer to the site than MPs 1, 2 and 3. At the boundary of the Scheme complex, at the closest point to where the amplified music could potentially be playing (at the outdoor dining area and around the pools in the east of the complex), noise levels could potentially be in the range of 91 dBA. Having regard to the assessment criteria, the noise levels in the vicinity of the Scheme site could potentially be of minor significance but approaching 93 dB(A) SPL where hearing loss and permanent threshold shift are unlikely to occur, but where noise might still temporarily elevate a bird's threshold, mask important communication signals, and possibly lead to other behavioural and / or physiological effects.</p>	<ul style="list-style-type: none"> <li>• If noise levels from outdoor entertainment activities become significant, in relation to the relevant standards / values outlined above, or if evidence of significant noise impact is observed and / or reported, the management regime should be reassessed and alternative, more appropriate control measures should be investigated and put in place. This investigation should be discussed and agreed with the relevant competent authority.</li> </ul>		<p>If noise levels from outdoor entertainment activities become significant, in relation to the relevant standards / values outlined above, or if evidence of significant noise impact is observed and / or reported, the management regime should be reassessed and alternative, more appropriate control measures should be investigated and put in place. This investigation should be discussed and agreed with the relevant competent authority.</p>
<b>Marine Ecology</b>				
<p><b>Changes or disturbance to seabed habitats during the construction of discharge infrastructure and coastal rehabilitation</b></p>	<p>The approved development envisages a new RO system where hypersaline effluent will be discharged into ground boreholes drilled in the bedrock close to the coast, finding its way into the sea in a dispersed manner and reaching the sea in a diluted form. It is predicted that the effluent will not impact the marine benthic assemblages in the vicinity of the site in respect of salinity effects. The new discharge borehole/s will be constructed in the area between the RO plant Room and the coast (i.e., less than 50 m from the shoreline). The exact location of the discharge borehole/s (one for each RO unit, or one for both RO units), is yet to be determined and will ultimately depend on the results of the geological investigations carried out at a depth of around 50 m below sea level. The discharge borehole/s will be constructed downstream of the intake boreholes to prevent mixing. In this way, the original proposal of constructing a discharge pipeline on the southern edge of the embayment, and which would have required drilling through the reef, has been completely eliminated.</p> <p>Construction of the discharge borehole/s will be a one-time activity of very short duration (1 – 2 days), and there is not expected to be any impact on the marine environment from this drilling. The main physical alteration will be at the drilling site itself. This will necessitate access to the site by a small drilling rig and excavation of the borehole down to 50 m depth. The surface impact will be minimal and related to the diameter of the borehole/s. Drilling fluids, if used, will be contained by means of sandbags or similar enclosures and collected once the drilling is completed. No drilling fluid will be allowed to reach the marine environment.</p> <p>The existing concrete jetty is also in need of repairs. This will be addressed as part of the Scheme, which will need to consider whether the jetty is in a state to be repaired or whether it requires complete replacement with a similar or alternative structure. The impacts from such works, which have a limited footprint, are deemed to be of minor significance. Being located within the marine environment, these works will require careful planning and use of appropriate mitigation measures, including deployment of proper silt curtains to contain any turbid plumes that may be released from the works. Any marine plant and vessels to be used on site are to be inspected by an engineer prior to dispatch to the site to ensure against marine discharges / leaks. Marine grade spill kits are to be available on board at all times and personnel trained in their use in order to provide a rapid intervention capability throughout the marine works.</p>	<ul style="list-style-type: none"> <li>• It is important that all marine works are carried out in accordance with the measures described in <b>Chapter 2</b>, of the AA Report good practice working in natural areas, and that the works are properly supervised through permit conditions. The coastal works aimed at restoring the rocky shore will require attention to ensure that none of the removed material or dust / turbid waters reach the marine environment. Appropriate silt curtains are to be deployed before such works are taken in hand. No coastal works are to be carried out when the sea conditions in Mellieħa Bay are not calm. Again, such works should be adequately monitored.</li> <li>• Surface water run-off, especially during the demolition, excavation and construction phases will need to be carefully controlled through excavation of culverts and collection sumps or similar so as to avoid discharges of turbid waters into the marine environment.</li> <li>• The drilling of the discharge boreholes will need to be carefully planned to avoid impacting the intake boreholes and the drilling works would need to be adequately supervised and barriers installed to ensure that no excavation material or drilling fluids reaches the shore.</li> <li>• The exact location for the discharge borehole/s is still to be confirmed, but the current proposal is to locate this around 50 m from the shore on the northern side of the</li> </ul>	<p>The revised Scheme still envisages repair of the jetty and the RMS remains valid for the Scheme. Hence, the impact in respect of changes or disturbance to seabed habitats during the repair works on the jetty remains of minor significance.</p> <p>The revised Scheme still envisages the restoration of the foreshore through the removal of the concrete platforms and the old discharge infrastructure and the RMS remains valid for the Scheme. Hence, the impact in respect of the restoration of the coast remains of minor positive significance, but where a lack of attention to good practice during the works could result in minor negative impacts in respect of changes or disturbance to seabed habitats.</p> <p>The revised Scheme envisages the same RO system as envisaged for the approved development. Hence, the impact in respect of salinity effects on the baseline hydromorphological, chemical and physico-chemical elements of the Bay remains of no significance.</p>	<ul style="list-style-type: none"> <li>• It is important that all marine works are carried out in accordance with the measures described in <b>Chapter 2</b>, of the AA Report good practice working in natural areas, and that the works are properly supervised through permit conditions. The coastal works aimed at restoring the rocky shore will require attention to ensure that none of the removed material or dust / turbid waters reach the marine environment. Appropriate silt curtains are to be deployed before such works are taken in hand. No coastal works are to be carried out when the sea conditions in Mellieħa Bay are not calm. Again, such works should be adequately monitored.</li> <li>• Surface water run-off, especially during the demolition, excavation and construction phases will need to be carefully controlled through excavation of culverts and collection sumps or similar so as to avoid discharges of turbid waters into the marine environment.</li> <li>• The drilling of the discharge boreholes will need to be carefully planned to avoid impacting the intake boreholes and the drilling works would need to be adequately supervised and barriers installed to ensure that no excavation material or drilling fluids reaches the shore.</li> <li>• The exact location for the discharge borehole/s is still to be confirmed, but the current proposal is to locate this around 50 m from the shore on the northern side of the</li> </ul>



	<p>On instructions of the ERA, the Scheme will also aim to rehabilitate the coastal area that has been concreted over in the past. While these works are not marine in nature, their coastal location is such that unless careful measures are taken during the removal of the concrete and the rehabilitation of the area, impacts on the adjacent marine environment can result. Good coastal working methods, including ensuring that machinery is orientated away from the coast and broken concrete is shifted landward on generation, as well as the control of surface waters and use of silt curtains or similar containment methods, will be important to protect the marine environment. The impacts are expected to be of minor significance.</p> <p>The permit is conditional to the submission of a detailed restoration method statement (RMS) for the coastal works, to be submitted to and agreed by the ERA. Any departure from the RMS could result in impacts of major significance.</p>	<p>small embayment fronting the Scheme site.</p> <ul style="list-style-type: none"> <li>Any marine plant and vessels to be used on site are to be inspected by an engineer prior to dispatch to the site to ensure against marine discharges / leaks. Marine grade spill kits are to be available on board at all times and personnel trained in their use in order to provide a rapid intervention capability throughout the marine works.</li> <li>A silt curtain will also be deployed around the jetty before repair works on this structure are commenced.</li> </ul>		<p>small embayment fronting the Scheme site.</p> <ul style="list-style-type: none"> <li>Any marine plant and vessels to be used on site are to be inspected by an engineer prior to dispatch to the site to ensure against marine discharges / leaks. Marine grade spill kits are to be available on board at all times and personnel trained in their use in order to provide a rapid intervention capability throughout the marine works.</li> <li>A silt curtain will also be deployed around the jetty before repair works on this structure are commenced.</li> </ul>
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## **CONCLUSION**

36. In reference to the original AA Report, two operational aspects were of particular concern. These related to potential significant impacts on birds, as a result of light and noise pollution, and impacts on the marine environment from the discharge of reject brine water from the reverse osmosis plant through ground boreholes.
37. The assessment of the proposed changes to the replacement of the Mellieħa Bay Hotel approved under PA/01948/20 has had no implications for the conclusions of the original AA, as reported in the original AA Report Version 2. The AA still identifies potential impacts from the revised Scheme, both during the construction and the operational phase of the hotel. The mitigation measures referred to in the original AA still apply.
38. As long as the mitigation measures are implemented as described, and the final lighting plan respects the Guidelines and minimises exterior lighting (especially in the eastern part of the site closest to the SAC / SPA), the impacts on the SAC / SPA and the Annex I bird species can be contained and the integrity of the SPA / SAC will not be compromised. Monitoring will be important to confirm this and to feedback any adjustments that may be required.
39. Likewise, the impacts on the marine environment as a result of the changes implemented in the chiller system (which will now not generate any effluent) and the change in the discharge of the RO brine water (from a direct discharge to sea to discharge through ground boreholes). Hence, the integrity of the marine SAC is not expected to be impacted. Any localised impacts from the rehabilitation of the jetty can be easily managed through the CMP / EMP and appropriate monitoring of the works.