



PA 02767/16

**REDEVELOPMENT OF AN EXISTING DERELICT HOTEL AT TA' KALANKA,
DELIMARA**

ENVIRONMENTAL PLANNING STATEMENT: ADDENDUM



Version 1: June 2017



Report Reference:

Adi Associates Environmental Consultants Ltd, 2017. Redevelopment of Existing Derelict Hotel at Ta' Kalanka, Delimara (PA 02767/16). Environmental Planning Statement Addendum prepared in support of development application no. PA 02767/16. San Gwann, June 2017.

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Comments on the 1st draft of the Environmental Planning Statement (EPS)

June 2017

PA 02767/16 (EA 7/16): Redevelopment of an existing derelict hotel including environmentally friendly measures and provision of public ancillary facilities at Ta' Kalanka, Delimara.

1. ERA Comments

Coordinated Assessment

N o.	Pa ge	Par a.	Comment (7 March 2017)	ADI Responses (3 May 2017)	ERA Comments (17 May 2017)	Adi Responses (1 st June 2017)	ERA Comments (14 th June 2017)
Detailed comments							
EPS							
Chapter 1 – Introduction							
N/A							
Chapter 2 – EIA Methodology							
N/A							
Chapter 3 – Description of the Scheme and Site							
1	11, 12	3.1 5 - 3.2 0	Why are the downscaling and omission of the tunnel and beach facilities not included as alternatives, when the omission of the tunnel and beach facilities are mentioned in the mitigation measures (e.g. EPS p 94). Refer to the Terms Of Reference (TOR) Section 2.0.	The Scheme as proposed includes a tunnel and beach facilities. Following impact assessment, it was identified that omission of these aspects of the Scheme could reduce the residual impact of cliff face stability. The proposed change to the design has been included as a result of the impact assessment, not as a result of	In order to ensure that the residual impact on geomorphology features and stability of the cliff face is minor (as stated in Table 5.1 p 94 and 95 of the EPS), the omission of the tunnel/beach facilities need to be reflected in the latest	The Applicant is opting not to omit the tunnel from the plans despite the findings of the EIA.	Noted.

				the Applicant's consideration of alternative Scheme designs.	plans to the proposal.		
Chapter 3 – Description of the Scheme and Site							
2	11	3.1 7	<p>Realistic alternatives to the project are to be included in the EPS in addition to Figures 3.1a to 3.1c. These options should provide a realistic alternative to the proposal in terms of density and massing.</p> <p>In addition, the EPS should include a brief assessment from an environmental point of view as to why the proposed alternatives were not considered as the preferred option and why the applicant opted for the design being assessed in this EPS.</p>	<p>The EPS includes designs that were realistically considered by the Applicant. These designs were discarded at an early stage of the design process, even before an application was submitted to PA and a subsequent EIA requested.</p> <p>This paragraph identifies that the Scheme as proposed was the more favourable option of those considered when taking account of visual and amenity impacts and this is why the Applicant opted for the Scheme as presented.</p>	<p>Kindly provide a justification as to why these designs were discarded by the applicant.</p> <p>Given the site context, where any other environmental considerations taken into account, in addition to the ones identified in your reply, to identify the more favourable option?</p>	<p>They were discarded because the Applicant favoured the current proposal over the others proposed.</p> <p>Refer to the final sentence of paragraph 3.20.</p>	Noted.
3	11	3.1 7	Kindly indicate other possible alternative uses for the area.	Refer to paragraph 3.20.	Noted. No further comments.	Noted.	-

4	18	Figure 3.2	Viewpoint E is included twice.	Noted. Figure has been updated, see Appendix 1 of this Addendum.	Noted. No further comments.	Noted.	-
5	28	3.3 6	ERA is of the opinion that the species, included in the proposed landscaping, are acceptable in terms of development ODZ. However, given that the surrounding area harbours species typical of coastal habitats, the proposed landscaping scheme doesn't sufficiently converge with the surrounding nature and therefore further increases the footprint of the scheme, rather than mitigate it.	Noted. An updated landscaping scheme is included in Appendix 2 of this table.	The updated landscaping scheme is noted and confirmed to converge better with the surrounding area, based on the proposed species composition and massing.	Noted.	-
6	28	3.3 6	Kindly specify the characteristics of the current soil layer in relation to depth requirements of the proposed tree species regarding rooting.	Soil depth was not measured in relation to landscaping. Where soil is too thin, additional material will be added if required in accordance with relevant permits.	Noted. No further comments.	Noted.	-
7	28	3.3 6	Kindly indicate whether the proposed grass blocks will consist of native plant species.	The areas labeled as 'grass blocks' refer to areas where existing species will be allowed to grow naturally and cover the ground in this area. For instance, <i>Moraea sisyrinchium</i> (Barbary Nut Iris) is particularly noticeable in this area.	Noted. No further comments.	Noted.	-

8	28	3.3 7 and Fig ure 3.2 1 (p3 9)	It is stated that lighting will be restricted to the eastern portion of the site. Furthermore, no lighting is to be provided in the landscaped area in the western half of the site. These statements are not according Figure 3.21. Kindly clarify.	All the lighting for the external walking paths are only for floor indication with low power and low luminance.	The use of all lighting for the external walking paths for floor indication is noted. However, kindly revise the reference to the orientation of the lighting in paragraph 3.37. Figure 3.21 shows that lighting will be restricted to the western half of the site, while no lighting is provided in the outer eastern portion of the site.	Paragraph 3.37 to remove sentence: <i>This will be restricted to the eastern portion of the site...</i>	Noted.
9	29-33	Fig ure s 3.1 1 to 3.1 4	For each and every drawing from Figures 3.11 to 3.14, kindly indicate the following keys in the legend: - Existing foot print; - Existing building; and - Scheme site if shown on the plans, for ease of reference.	Plans have been updated, see Appendix 1 to this report.	Noted. No further comments.	Noted.	-

10	40	3.3 9	<p>For any boilers, generators and associated fuel storage stored in the plant room, applicant is to indicate how:</p> <p>i. All bulk fuel storage tanks shall be provided with an adequately designed bund system with an impermeable base and walls. The capacity of the bund shall be a minimum of 110% of the largest tank within the bund or 25% of the total volume of all the tanks within the bund, whichever is greater. All filling and off-take points shall be located within the bund;</p> <p>ii. Exhaust gases from boilers, oil or solid fuel generators, fumes from cooking and other significant point source emissions shall vent through stacks 3 m above roof level or as otherwise specified in DC Policy and Design Guidance document issued by the Planning Directorate. The design and location of</p>	<p>i. The bulk LPG storage tank will be of 1,000 L capacity and stored underground.</p> <p>ii. The hotel will not have any gas or heating oil boilers. All hot water used by the hotel (space heating and domestic hot water) will be generated by heat pumps (electric drive) in conjunction with CHP technology. The CHP technology does not require a 3m stack since the technology is based on micro gas turbine technology.</p> <p>iii. The bulk LPG storage tank will be in conformity to the REWS standards.</p> <p>It is noted that these details will also be addressed in the eventual environmental permit application.</p>	Noted. No further comments.	Noted.	-
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			<p>the exhaust system should take into account noise and visual intrusion; and</p> <p>iii. Any fuel or LPG storage is to comply with the relevant REWS standards.</p>				
11	42	3.4 5	<p>An indication of the expected commencement date of each phase is to be included in the EPS.</p>	<p>This cannot be identified at this stage in the process as it would depend on the duration of the planning process. The Table provides sufficient information to evaluate the duration of the construction.</p>	<p>Noted. No further comments.</p>	<p>Noted.</p>	<p>-</p>

12	49	3.5 8	The EPS is to include plans of all room/area/store with impermeable flooring to cater for wastes to be stored, while pending collection for the operational phases.	See Appendix 1 of this Addendum (updated Figure 3.12). Note that this information is typically addressed in the environmental permit application.	Figure 3.12 in Appendix 1 is being noted, however kindly indicate the location of the waste room/area/store on plans.	Refer to updated Figure 3.12 of this Addendum where impermeable flooring has been marked. This is intended as a waste storage area.	Noted.
13	49	3.5 8	The frequency of disposal of waste is to be included in the EPS, along with their respective storage e.g. bins, drums, skips, etc. within the designated area (proposed waste room).	This information is not considered to inform the EIA and will be addressed in the environmental permit application.	Referring to comment 12, the respective storage is to be shown on plans and identified as waste room/area/store.	As above.	As above.
14	49	3.5 8	The following information is to be provided for each waste stream, as relevant to each phase: i. Identification of processes or activities that would result in waste generation; ii. European Waste Catalogue (EWC) Codes for each waste stream, as per relevant legislation; iii. The projected quantities and rate of generation for each type of waste; iv. Information on waste handling and storage, on site as well as off	Operational waste management table has been included in Appendix 3 . This is expected to be updated as part of the Environmental Permit Application.	Appendix 3 is being noted, however kindly note that each waste stream is to be included as a separate row in the operational waste management table, together with its respective EWC code, quantity and final disposal location.	The table was presented in this way to include potential operational waste streams and includes a cumulative estimated total. This is an operational issue and it is considered that any further detail is beyond the scope of the EIA. Such details do not inform the EIA in addition to them not being available at this early stage.	Noted.

			<p>site; and</p> <p>v. The method of transportation and frequency.</p> <p>This information should be presented in table format, as already provided for the construction phase in the EPS p 46.</p>				
15	50	3.6 4	<p>Kindly indicate how the beach facilities will be connected to the cesspit. Details regarding any work interventions, including construction works across the beach required to connect the beach facilities to the main cesspit are required.</p>	<p>The sewage collected at beach level will be pumped up to the main cesspit (located at a higher level to the facilities, refer to Figure 3.15). Thus, the connection from the beach facilities and the main cesspit will be through the proposed tunnel and lift shafts.</p>	<p>Kindly provide an updated cross-section for the cesspit showing how it is appropriately ventilated so as to avoid the accumulation of explosive, toxic or corrosive gases.</p>	<p>Appendix 4 to this Addendum has been updated to reflect this.</p>	<p>Noted..</p>
16	50	3.6 4	<p>Kindly indicate the discharge point of the swimming pool water, if any, and the composition of the discharge.</p>	<p>There will be no discharge from the pool as the water is filtered and any waste water from the pool will be recycled for irrigation purposes.</p>	<p>Noted. No further comments.</p>	<p>Noted.</p>	<p>-</p>

17	General	Kindly provide the Annual Average Daily Traffic (AADT), being the number of vehicles to be generated by the proposed development.	The AADT for this development is 131 vehicles.	Noted. No further comments.	Noted.	-
18	General	Kindly indicate whether any antifouling coatings or any other methods will be used to maintain the pipes to heat the hotel floors and the pool water.	According to the engineer, propylene glycol-water will be used in the hotel heating closed circuit. No antifouling will be used for pool water and heating system pipes since they will be made of PVC, and PPR or PEX respectively.	Noted. No further comments.	Noted.	-
19	General	<p>A cross-section of the septic tank/cesspit is to show how:</p> <ul style="list-style-type: none"> i. It is constructed in such a manner so as not to allow any leakages or spillages to the surrounding environment; ii. It is appropriately ventilated so as to avoid the accumulation of explosive, toxic or corrosive gases; and iii. The area surrounding the cesspit is rendered impermeable and the ground laid to fall towards the cesspit. 	<ul style="list-style-type: none"> i. The cesspit will have a double wall filled with C25 concrete between the excavated rock face and the brick wall, which will also be covered with geotextile. The cesspit will be plastered with flex and resistive material with nylon mesh to improve its flex property. ii. The ventilation system will be mechanically operated with 110 mm diameter for each section. iii. The cesspit will be covered by soil to enable plantation. <p>Appendix 4 includes plans of the cesspit.</p>	Kindly provide an updated cross-section for the cesspit showing how it is appropriately ventilated so as to avoid the accumulation of explosive, toxic or corrosive gases.	Appendix 4 to this Addendum has been updated to reflect this.	Noted.

20	General	<p>Kindly clarify how effluents from the kitchen/food preparation area will be filtered. Kindly also provide the number and location of grease traps on site. This should include details on how:</p> <p>i. Oils and fats from cooking shall pass through a grease trap prior to being discharged to the sewers.</p>	Effluent will pass through grease traps to collect oil and fats from cooking. Further detail of how this is managed will be submitted during the environmental permit application; it is beyond the scope of the EIA.	Noted. No further comments.	Noted.	-
21	General	A decommissioning plan is to be included in the EPS, as stated in TOR Section 5.4 Decommissioning plan.	The Scheme is for the development of a hotel. If decommissioning involves complete demolition, waste generated would include demolition waste including waste from stripping the building, concrete, tiles, ceramics, wood, glass, plastics, and metals as relevant. Materials would be collected separately as far as possible and their waste management would respect the waste management hierarchy. At this stage whether the scheme would be decommissioned and its use changed cannot be identified. Any such changes would anyway be required to undergo planning permission applicable at the time.	Noted. No further comments.	Noted.	-

22	General	All hazardous materials, if any, used, stored, handled or produced at each phase by the project are to be identified, quantified and included in the EPS.	Water will be treated using an ionizer, no hazardous chemicals will be used in the treatment of pool water. Small amounts of cleaning products will be kept on site in relation to house-keeping. Biodegradable and environmentally friendly alternatives will be used where possible in order to preserve the biological processes being applied in the cesspit. This will be detailed in an environmental permit application. Such operational detail is beyond the scope of EIA.	Noted. Replies to comment 14 refer.	The table was presented in this way to include potential operational waste streams and includes a cumulative estimated total. This is an operational issue and it is considered that any further detail is beyond the scope of the EIA. . Such details do not inform the EIA in addition to them not being available at this early stage.	Noted.
23	General	The types and quantities of any solid waste and liquid effluents generated by the project, during all phases, are to be identified and included in the EPS. In addition, The methods for collecting, storing, treating, transporting and finally disposing of all liquid effluents should be included as well.	With regard to solid waste, Table 3.9 includes a waste management summary plan on construction waste. Appendix 3 of this Addendum includes a waste management summary plan for operational waste. See paragraphs 3.63-3.65 in relation to effluents. Further details will be provided in the eventual Environmental Permit Application.	Kindly note that edible oil is not permitted to handle any of the waste streams in Appendix 3. Furthermore, none of the waste management facilities mentioned in Appendix 3 are permitted to accept: detergents; batteries; electrical and electronic equipment. Alternative authorised waste management facilities may be available at: http://era.org.mt/en/Pages/IPPC-Installations.aspx and	Appendix 3 table has been updated to include other acceptable waste management facilities with regards to discarding edible oil. Further detail of which waste management facilities will be used per waste stream will be provided at environmental permitting stage. This is an operational issue and it is considered that any further detail is beyond the scope of the EIA.	Noted.

					http://era.org.mt/en/Pages/Waste-Management-Applications.aspx .		
Chapter 4 – Legislation and Policy Context							
24	59	4.2 8 - Water	Water Policy Framework Regulations, 2004 (Legal Notice 194 of 2004) was superseded by L.N. 345 of 2015 and the Water Policy Framework Regulations, 2015 (S.L. 549.100).	Noted.	Noted. No further comments.	Noted.	-
25	60	4.2 8 – Air Quality	Implications for the scheme: ‘consultation’ phase should be ‘construction’ phase.	Noted and agreed.	Noted. No further comments.	Noted.	-
Chapter 5 – Geo-environment							
26	80	5.1 4	Will the Quaternary deposits identified in the report, be affected in some way (e.g. excavated, trenched, covered)? As per provided plans, this might be the case and there might be some scope in preserving the deposits due to their paleontological value. In view of this, the Superintendence of	The impact assessment did not identify potential significant impacts on the Quaternary deposits.	Noted. No further comments.	Noted.	-

			Cultural Heritage may need to be contacted.				
Chapter 6 – Terrestrial Ecology							
27	115	6.4 5	The applicant is to provide an eradication methodology for the species to be eradicated as per ' <i>Guidelines on managing non-native plant invaders and restoring native plant communities in terrestrial settings in the Maltese Islands</i> ' (MEPA, 2011), including waste disposal technique.	This paragraph carries out an impact assessment in terms of significance on the predicted impact related to removal of alien species. Such a method statement can be produced if the permit is issued; eradication of alien species will in any case have to follow the guidelines.	Noted. No further comments.	Noted.	-
28	115	6.4 5	Even though the main objective of PA 02767/16 is to reinstate a building, the removal of invasive alien species (IAS) in the vicinity of the site, is encouraged (species' methodology subject to ERA's approval).	Noted. This could be included as a permit condition (planning gain) since at the moment it lies outside the scope of the Scheme.	Noted. No further comments.	Noted.	-
29	115	6.4 5	The EPS is to consider the potential impacts of the discharge of the geo-thermal and RO systems	Reject water from RO is hypersaline brine. The applicant has indicated that	The details of the discharge are noted. However, the comment does not point out at	Changes in water temperature, if significant, can affect other physical	Noted.

			<p>on the marine environment. This could consist of statements based on expert opinion. Such would include details on the volume of discharge and location(s) of release. Factors to consider are salinity (RO), temperature (geo-thermal) and chemical composition.</p>	<p>chlorinators will be used for the pool water. This technology uses the salt to generate chlorine to treat the water passing through the system.</p> <p>An ionization copper treatment will be used as an effective algacide and to control bacteria. This type of technology improves effectiveness and will safely reduce the concentration of chlorine from 3ppm to 1.5ppm.</p> <p>The temperature of the water discharged from the heat pump increase would not exceed an additional 4 °C in summer (as a worst case scenario, otherwise variation will be between 2 -3 °C).</p>	<p>the existence of potential impacts or otherwise as requested by ERA. Therefore, this comment has not been fully addressed</p>	<p>parameters of the water table as well as chemical ones thus negatively affecting water quality. There can also be an impact on marine organisms and/or habitats. Temperatures in the marine environment can vary by season, depth, currents and convection and surface water fluctuates more than deeper waters. Given that the marine environment has a relatively large heat capacity; fluctuations due to unusual events will only result in a slight impact. However, it needs to be considered that water that is too warm can affect growth, disease tolerance and survival rate in marine organisms. Warmer water also holds less dissolved oxygen. Organisms each have their own comfort range with regards to optimal temperatures. It is difficult to directly correlate water quality and its effects with</p>	
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						<p>temperature. At this stage, it is considered that while localized impacts may be anticipated noting the size of the operation and the amount of potential discharge, it is unlikely that a large area would be affected. Furthermore the discharge pipeline should be designed to avoid direct impacts with nearby boundaries. It should be orientated towards open water and not against the seabed, and in such a way as not to cause strong seabed interactions. Its design should be such as to enhance effluent mixing through strong initial mixing, perpendicular or co-flow orientation to the predominant ambient currents to optimally distribute the effluent within the water body (Bleninger et al., 20091). Multi-port diffusers on the</p>	
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¹ Bleninger, T., Niepelt, A., and Jirka, G., 2009. Desalination plant discharge calculator. Paper BD 180 for EDS Congress, May 17-20, 2009, Baden-Baden Germany; 20 pp.

						discharge endpoint would be advisable.	
30	116	1.8 4	Kindly indicate what measures will be taken to prevent the escape of invasive alien species (IAS) into natural habitats during the construction phase.	Invasive aliens will be removed before construction in accordance with <i>Guidelines on managing non-native plant invaders and restoring native plant communities in terrestrial settings in the Maltese Islands</i> (MEPA, 2011).	Noted. No further comments.	Noted.	-
31	116	1.8 4	Mitigation measures covering construction waste and runoff are requested to extend to include the marine environment as far as practicable.	The mitigation measures during construction aim to ensure that Annex I habitats are not impacted. These would be the first to be impacted. Thus, containment of waste and runoff would ensure that the Annex I habitats, and any other habitats beyond it, including the marine environment, are not significantly negatively impacted. No additional measures are proposed.	Noted. No further comments.	Noted.	-

32	116 , 117 and 198	1.8 4 and 10. 11	<p>If it is being stated that the impact of trampling will be reduced from major to minor significant (Table 6.5), more information is required, in terms of the following;</p> <ul style="list-style-type: none"> i. What habitats are proposed to be cordoned off? Where are these located? ii. How will these be cordoned off? Will it be a fence/wall? What material will be used? What will be the measurements (height, width) of such a fence/wall? iii. Will the cordoning be temporary or permanent? At what stages of the proposal will cordoning be required? iv. How will cordoning be maintained and will signage be provided to educate visitors/residents? <p>Potential areas to be cordoned should be included in the application and plans.</p>	Appendix 5 includes a map indicating areas to be cordoned off. The EPS identifies that cordoning off should be carried out during construction. The aim would be to make it more obvious to construction workers that these areas must be avoided and any machinery should not traverse over or pass in the immediate vicinity of these areas. Cordoning off would be temporary and could be as simple as using orange mesh supported on metal rods driven into the ground around the areas, the important thing is to clearly identify those areas to be avoided without of course introducing anything permanent that may itself result in additional impacts. Operational mitigation includes clearly marking pathways and introducing signage as appropriate, as prescribed in the EPS.	Noted. No further comments.	Noted.	-
33	117	1.8 4	Kindly indicate what measures a typical lighting plan would include to minimize light pollution.	For example, low bollards with downward facing light, low lux bulbs, etc.	Noted. No further comments.	Noted.	-

34	119	Table 6.5	A Construction Management Plan (CMP) is not applicable to the operational phase. Therefore this is not valid as a mitigation measure regarding disturbance of fauna during the operational phase.	Noted. Table updated.	Noted. No further comments	Noted.	-
Chapter 7 – Cultural Heritage							
N/A							
Chapter 8 – Landscape and Visual Amenity							
N/A							
Chapter 9 – Noise							
35	174	9.1 1	Kindly revise the traffic scoping survey dates, as 8 th October 2016 was a weekend day and 10 th October 2016 is a weekday, which is not consistent with point 73 and 75 of Technical Appendix 5: Noise Baseline Report.	The operational noise traffic surveys were undertaken as follows: <ul style="list-style-type: none"> • Day time (Thursday 6th October 2016), between 16:00 and 17:00; and • Evening time (Saturday 8th October 2016), between 20:00 and 21:00. 	Noted. No further comments.	Noted.	-

36	179	9.2 7	Kindly revise the noise measurement dates, as 8 th September 2016 is a weekday, which is not consistent with point 88 of Technical Appendix 5: Noise Baseline Report.	<p>The baseline noise surveys were undertaken as follows:</p> <ul style="list-style-type: none"> • One day time measurement at the residential sensitive receptors, on 6th October 2016, between 15:00 and 15:15; • One day time measurement at the recreational sensitive receptors, on 6th October 2016, between 15:30 and 15:45; and • One evening time measurement at the residential sensitive receptors, on 8th October 2016, between 21:15 and 21:20. 	Noted. No further comments.	Noted.	-
37	180	Figure 9.2	Kindly make reference to the three measurement locations in the legend, as the numbers alone do not make this clear.	Noted. Appendix 6 shows an updated plan.	Noted. No further comments.	Noted.	-
38	183	Table 9.3	Point 3 should read 12t instead of 14t, as per Table C.4 in BS 5228.	Noted and agreed.	Noted. No further comments.	Noted.	-
39	185	9.4 1	Kindly indicate from which reference the transmission of sound expression is taken.	The formula referenced in paragraph 9.41 of the EPS is the formula used for calculating noise transmission (propagation) outdoors from a point noise source assuming hemispherical radiation of sound. Commonly referred to as the Inverse Square Rule (or Inverse Square Law), the formulae for the transmission (propagation) of sound from a	Noted. No further comments.	Noted.	-

				point noise source (whether assuming hemispherical or spherical radiation of sound) are applied internationally by acoustics practitioners.			
40	188	Table 9.5	Kindly clarify the calculation of the estimated LAeq sound level (dBA) from the measured noise level.	The explanation of how the estimated L_{Aeq} sound level (dBA) at the nearest residential sensitive receptors was calculated is given in paragraphs 9.41 – 9.44 of the EPS. To clarify, the attenuation of the noise level over the distance between the nearest point of the outdoor terrace and the nearest residential sensitive receptor (118 m) was calculated using the formula ($L_p = L_w - 20 \log r - 8$), where the derived L_p is the estimated L_{Aeq} sound level (dBA) at the nearest residential sensitive receptor, taking account of the attenuation of the measured noise level that can be expected over a distance of 118 m. In the case of the noise level from the amplified music system, 5 dB was added to the calculated noise level at the sensitive receptor (specific noise level), to	Noted. No further comments.	Noted.	-

				take account of the tonal character of the bass beat sound.			
41	188	Table 9.5	Footnote i) makes reference to 105dBA while in the table the value is of 94dBA. Kindly explain the difference in values.	Footnote i) to Table 9.6 should read <i>“This assumes the worst case scenario, whereby the amplified music system is positioned on the eastern edge of the terrace”</i> .	Noted. No further comments.	Noted.	-

42	188	Table 9.5	<p>Kindly explain why, as for the operational phase, the estimated sound levels are reflected on the sensitive receptors (118 m from noise source), while for the construction phase these are reflected on the sensitive residential receptors (95 m from source) and recreational receptors (adjacent to source).</p> <p>It is envisaged that recreational receptors adjacent to the source, are present both during the construction and operational phase. In what manner these shall be impacted?</p>	<p>The estimated sound levels for operational noise (chatter, general activity and amplified music on the terrace of the restaurant) at the nearest residential sensitive receptors assume the closest of this activity to be at the eastern edge of the terrace, which is a distance of approximately 118 m from the nearest residential receptor. The estimated sound levels for construction noise at the nearest residential sensitive receptors assume the closest construction activity to be on the eastern perimeter of the site (the site boundary), a distance of approximately 95 m from the nearest residential receptor.</p> <p>The impact of construction noise on the recreational sensitive receptors is explained in paragraphs 9.56 – 9.58 of the EPS. Regarding operational noise impacts, the scoping assessment identified the most critical potential noise impacts arising from the operation of the Scheme to be on the residential sensitive receptors in the evening time, from the use of the outdoor terrace. From observation, the recreational sensitive receptors primarily use the beach during the day time. The scoping exercise concluded that those</p>	Noted. No further comments.	Noted.	-
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				<p>recreational receptors using the beach in the evening time (for barbecues, for example) are unlikely to be as sensitive to noise from the terrace (chatter, general activity and amplified music) as would be the nearest residential receptors. Accordingly, the assessment considered the worst case scenario in respect of assessing the impact of operational noise in the evening time and on the nearest residential sensitive receptors.</p>			
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43	193	9.6 4	<p>Rather than periodic monitoring during construction phase, noise can be included in the Construction Management Plan (CMP) as a good practice in order to minimize disturbance during construction. This could include the use of mufflers, silencers and noise enclosures for equipment, locating noisy equipment away from neighbours, and the restriction of operating hours for noisy equipment.</p>	<p>Noted. Good working practice in line with Construction Site Environmental Management Regulations are taken as given and typically included in CMPs approved by the PA. The monitoring helps in identifying the noise-related problems despite these measures.</p> <p>Experience from other projects shows that noise monitoring during construction guides decisions on rectification of work practices to mitigate such impacts further.</p>	Noted. No further comments.	Noted.	
44	193	9.6 5 – 9.6 6	<p>Natural screening by buildings, walls or fences with absorbing material around the terrace can help to reduce noise nuisance. Also, if an amplified music system is set up, it might be considered to opt for single directional rather than multidirectional speakers, in order to reduce the noise impacts on sensitive receptors.</p> <p>As a preventive measure it would be advisable for the developer to consider noise level indicators or electronic noise limiters to control the amplified noise</p>	<p>Noted. These issues can be discussed through the environmental permit application.</p>	Noted. No further comments	Noted.	-

			levels. Examples of this could be a Power Cut Off system or an Automatic Volume Controller.			
45	General	Kindly make reference in the noise assessment to other relevant sources of noise, such as general leisure on site, given the proximity of the proposed swimming pool and deck area to the edge of the cliffs and the bay, and the resonance characteristics of the latter.	The scoping exercise identified the most critical potential noise impacts arising from the construction and the operation of the Scheme, having regard to the sensitivity of the receptors and the nature and timing of the construction and operational activities. The detailed noise assessment considered the worst case scenario in respect of the impact on the recreational sensitive receptors and the residential sensitive receptors. The most critical potential noise impacts on the recreational sensitive receptors were considered to be those arising from the construction of the Scheme.	Noted. No further comments	Noted.	-
Chapter 10 – Summary of Key Impacts, Interaction Between Impacts and Mitigation						

46	200	10.23	<p>The EPS should include any existing or planned developments with which the project could have cumulative effects.</p> <p>It has been noted that two particular development planning application PA 04481/16 and PA 04951/16 have been filed by the same applicant. These applications are to be discussed in the EPS and their potential cumulative effects identified, as requested in TOR 1.0: 1.2.7 Longer-term developments and 4.0: 4.0.6: cumulative impacts.</p>	Cumulative impact assessment considers Schemes that have received planning permission.	<p>Planning application PA04481/16 has been approved on 27 February 2017 and PA 04951/16 on 18 April 2017. Therefore these applications are to be discussed in the EPS and their potential cumulative effects identified, as requested in TOR 1.0: 1.2.7 Longer-term developments and 4.0: 4.0.6: cumulative impacts.</p>	<p>These applications are to (i) reinstate a boundary wall in random built rubble and (ii) remove bird traps, reinstating agricultural use, sanction and convert existing pre 1994 structures to agricultural implement stores including tractor shed, construct underground water reservoir, pump room storage tanks and install a wind driven pump, respectively. These interventions are unlikely to result in significant negative impacts even if considered cumulatively with those identified as part of the Scheme and therefore no further assessment is considered necessary.</p>	Noted.
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No.	Page	Para.	Comment	ADI Responses	ERA Comments
Non-Technical Summary (NTS)					
47	8	37	To be amended, according to the outcome of comment 32 (Chapter 6).	The paragraph remains relevant and does not require amendment.	Noted. No further comments.
48	9	42	Kindly revise the references to the orientation of the viewpoints, as these are not consistent with the references in the EPS. (View looking north-eastwards vs. View of the site from the north-east).	They are consistent with those in the EPS, they refer to Viewpoints 1 and 3.	Noted. No further comments.
49	9	42	Discrepancy with EPS (p171): Viewpoint 3: residual impact, after landscaping (10 years) remains major, due to uncertainty whether landscaping would reach the size as shown in the proposed photomontage, as it is a coastal location. In the NTS the residual impact, after landscaping (10 years) is stated as moderate.	Noted. Residual impact remains major.	Noted No further comments.

2. Consultees' Comments on First Draft.

A. Malta Resources Authority (Email dated 27 January 2017)

Comments	ADI responses	ERA comments	Adi Responses (29th May 2017)
<p>The Malta Resources Authority notes that the EPS makes reference to the drilling of two boreholes that apparently reached into the saturated zone without the necessary permits as required in terms of the Borehole drilling and excavation works within the saturated zone regulations (SL423.32). As such, the authority cannot issue a no objection until the position of the applicant with respect to these boreholes is clarified and, if necessarily, regularized.</p> <p>If the proposed development includes excavation works that reach partially or totally within the saturated zone, or any proposals for water abstraction, then the developer should submit an application in writing to the MRA including the details specified in regulation 5(1) of the Borehole drilling and excavation works within the saturated zone regulations (SL423.32), together with a technical study showing that there will not be a significant impact on water resources; that water resources will be used efficiently in the course of any activities carried out; and that the water environment is protected including the limitation of discharges to the environment.</p> <p>This assessment is based primarily on the documentation that was published on the weblink provided as on the date of the assessment. The Authority made its assessment on a good faith basis and reserves the right to review its position and, or to take action against the authors of the documentation and, or the applicant if information relevant to its assessment (particularly the prior use of the site where the development is proposed) is 'buried' or concealed (including through the submission of documentation that is not text searchable).</p>	<p>Drilling did not occur below the mean sea water level, which is referred to as the saturated zone by MRA. The deepest borehole was 10.50m and the MSWL is at about 14-15m. Therefore, no permit was required from MRA.</p> <p>The excavation will also not go into the saturated zone. A permit will be required for the borehole that will be drilled for the geo-thermal system.</p>	<p>Noted. You may wish to inform MRA with this response.</p>	<p>In the EIA process, it is the role of ERA to communicate all responses to the various consultees.</p>

<p>This, and any other response in writing by the MRA to the application submitted for consultation or to any other documentation, should not in any way be deemed as approving or endorsing this application in any form or of condoning any matter that falls beyond the MRA's immediate remit as established under the Malta Resources Authority Act and as in force on the date of the relevant response. In particular, you are reminded that with the coming into force of the Act No. XXV of 2015 establishing the Regulator for Energy and Water Services, the Water Policy Framework Regulations and the Protection of Groundwater against Pollution and Deterioration Regulations have been excluded from the remit of Malta Resources Authority and as such the MRA has no authority to take a position on matters regulated by these regulations or indeed any other matter that does not fall within its remit. While this response may be published, any response by the MRA may not be publicly used or mentioned as a general or partial approval by the MRA of the matter referred to for consultation.</p>			
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B. Transport Malta (Email dated 27 January 2017)

Comments	ADI responses	ERA comments
Transport Malta has no objection to the EPS being made public.	Noted.	Noted.

C. Regulator for Energy and Water Services (Email dated 14 February 2017)

Comments	ADI responses	ERA comments
The Regulator for Energy and Water Services has no comments regarding this proposal.	Noted.	Noted.

D. Environmental Health Directorate (Email dated 22 February 2017)

Comments	ADI responses	ERA comments
<p>With reference to your e-mail dated 27 January 2017 regarding subject indicated in caption and following review of the 1st Draft of the Environmental Planning Statement, please be informed that this Directorate would like to submit the following comments/recommendations regarding this proposal :</p> <p>Applicant is to adopt best practice methods together with good site practices and ensure compliance with Environmental Management Construction Site Regulations during the demolition, site clearance, excavation and construction phase so as to cause least nuisance and address adverse air (from dust dispersal and emissions from vehicles and machinery), noise and vibration impacts on sensitive receptors (especially on residential and recreational receptors) in the Area of Influence. Effective and continuous noise, vibration and dust control measures during all the phases of the construction works is of utmost importance to mitigate adverse impacts (which are likely to span the entire construction period) on nearby receptors. The proposal that timing of works excludes the summer season is highly recommended to mitigate adverse construction impacts (including on the bathing water which although not considered as one of the official bathing sites the coastal area is sought for swimming), nuisances and complaints. Hence the importance of drawing up and implementation of a Construction Management Plan to ensure adherence to proper site management practices, to mitigate adverse construction impacts and to ensure safety measures. Monitoring of construction works especially the proposed noise monitoring is also highly recommended so as to ensure implementation of all necessary mitigation measures and adherence to work practices throughout all the phases of the project.</p> <p>Adequate measures should be taken so as to prevent adverse impacts caused by unsafe, inadequate storage and improper handling of raw materials on site and from potential accidental spillage of hazardous fluids, fuel and lubricants which are to be well managed and adequately stored.</p> <p>It is also pertinent that storm water runoff be carefully managed and properly channelled and that adequate measures are taken to ensure that no water from water dousing regimes, from wheel wash facilities and any general cleaning runs off the site.</p>	<p>Noted.</p>	<p>Noted.</p>

<p>A waste management strategy should be adopted and strictly implemented so that all generated waste streams will be contained, separated and disposed of safely through the appropriate facilities and according to the necessary permits/licences. With regards to removal and disposal of any hazardous waste, adherence to regulatory codes and procedures and due diligence is important in view of any adverse impacts on sensitive receptors. Generated wastes, cleaning chemicals, etc from any temporary sanitary facilities for on-site workers should be properly disposed of. Moreover all water for human consumption and personal hygiene including that of any showers at said facilities is to be adequate and potable and preferably from the Water Utility Supply i.e. Water Services Corporation.</p> <p>It is recommended that construction traffic follows established specific routes and adequate measures (such as covering of all trucks leaving site with proper tarpaulin sheets) are taken to mitigate adverse dust impacts and nuisances from HGVs during transportation of construction material.</p> <p>Pest control management on site and at the surrounding areas especially regarding rodents which could be an issue during the demolition, excavation and construction phase should also be taken into consideration.</p> <p>Rain water/surface water proposed to be collected in reservoirs and recycled waste water should not be used for human consumption and/or for personal hygiene. All water used for human consumption and/or for personal hygiene is to be adequate and potable and preferably from the Water Utility Supply i.e. Water Services Corporation. The reverse osmosis plant proposed to supply the Scheme with potable water should be duly registered with the Superintendent of Public Health.</p> <p>Applicant is also requested to carry out specific discussions with the Environmental Health Directorate regarding the proposed bar and restaurant, spa and pool, any water features and other proposed facilities (such as cooling systems, R.O. plants, etc.) in view of specific regulations under the Food Safety Act and the Public Health Act. Spa and pool should be duly registered with the Superintendent of Public Health.</p> <p>Proposed cesspit should also to be duly registered with the Superintendent of Public Health.</p> <p>It is recommended that all proposed mitigation measures regarding adverse impacts arising from this development be strictly implemented by applicant to mitigate significant adverse health effects and nuisances on sensitive</p>		
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<p>receptors in the Area of Influence and the general public. The possible health effects of any residual impacts that cannot be mitigated and cumulative impacts should also be taken into consideration. Moreover any other unpredicted impacts and nuisances which may arise from this development and that may have a significant adverse effect on public health are to be immediately addressed by the applicant and the necessary mitigation measures taken.</p> <p>Complaints lodged by the public regarding any adverse impacts/nuisances should be immediately addressed by the applicant. All complaints lodged and actions taken are to be recorded and such records are to be readily available to the Competent Authorities when requested.</p>		
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E. BirdLife Malta (Email dated 27 February 2017)

Comments	ADI responses	ERA Comments
<p>As a reaction on the Environmental Planning Statement of the proposed development PA 02767/16 “Redevelopment of an existing derelict hotel including environmentally friendly measures and provision of public ancillary facilities” in Ta’ Kalanka, Delimara, BirdLife Malta would like to submit the following comments:</p> <p>1. <i>The development does not contribute to conserve, protect or improve the natural heritage of the area and is breaching several policies which are listed in chapter 4. The mitigation measures in the EPS to avoid destruction and disturbances of the surrounding habitat, particularly caused during construction and operation is insufficient.</i></p> <p>2. The development site covers an area of approximately 3,646sq m including landscaped areas, however, the current buildings’ footprint covers an area of approximately 343sq m. The replacement buildings should not exceed the total floor area of the previous buildings as per the Rural Policy and Design Guidance, 2014, part 6. The building area is set to increase from 343sqm to 561sqm., and accordingly shall fall</p>	<p>1. Noted. Residual impacts have all been identified in the EPS.</p> <p>2. The EPS identifies all relevant policies and acknowledges that the Scheme involves the redevelopment of an existing building that will, however, have a larger footprint and will also include a pool. The impact assessment takes into consideration the potential impacts arising from this proposal. The EIA does not evaluate acceptability; its role is to provide detailed information for an informed decision by the</p>	<p>1. Noted.</p> <p>2. Noted.</p>

<p>short of such guidance. <i>This is against the national policy frameworks and should disqualify the planning application. It appears that the conditions that would allow this development to be allowed in an ODZ area are not met, and accordingly these development plans do not qualify for the granting of a permit. This point is not mentioned in the EPS.</i></p> <p>3. As stated correctly, Policy MD01 of the SPED designates Delimara Peninsula as the Delimara National Park. Hence, in accordance with Structure Plan Policy RCO14, the greater part of the Delimara Peninsula, as defined on the Policy Map, will be designated as a national park where priority will be given to conservation, protection and improvement of the natural heritage. In this location, positive provision will also be made for recreational uses consistent with this objective. Limited commercial development related to the needs of park users will be considered. Other uses likely to have a harmful or conflicting impact will be refused.</p> <p><i>In chapter 6.23 of the EPS, the survey of the habitat status identifies that the entire area of the Delimara Peninsula is in a poor conservation status.</i> Consequently, the area has suffered from severe habitat degradation already which has to be properly addressed by the respective governmental authority. Developing a hotel complex and thereby increasing human activity to a great extent will lead to further degradation. This breaches several national policies (including SPED, MD01 Delimara National Park, and Rural Policy and Design Guidance) and destroys the already endangered Maltese natural habitat.</p> <p>The above conclusion concerning the conservation status of the area, cannot however be taken seriously given that the ecology baseline survey for the area has been undertaken in August 2016. As both the consultant and ERA should know, August is not the right time to conduct such surveys given the seasonal nature of some flora, which with a survey undertaken in the midst of summer would have not even be recorded. The impact on the ecology as a result of this development is therefore inconclusive at this stage, up until both ERA and the</p>	<p>Competent Authorities; it is up to the ERA and PA to consider the implications of policy and whether this is acceptable or otherwise.</p> <p>3. The study carried out as part of the first draft of the EPS was in fact thorough and extensive in that it included a wide Area of Influence throughout which habitats were identified, described in terms of ecological importance and evaluated in terms of conservation status. It is noted that the timing of the survey work was not ideal; nonetheless, it is still possible to map overall habitats and obtain a picture of their structure and function based on key indicator species, which may or may not be flowering during the dry season, but for which vegetative material would in most cases remain and be identifiable. A wet season survey would, however, provide a more robust picture and would include a fuller species list, allowing for the improved understanding of the species diversity within each habitat. To this end, Adi Associates together with botanist Mr Edwin Lanfranco revisited the habitats of interest in the vicinity of the hotel in March 2017. Refer to Appendix 7 of this Addendum. The survey revealed a number of species not previously identified within the delineated habitats. As identified in the report, the presence of these additional species recorded in March 2017 does not affect the overall conclusions of the habitat evaluation undertaken in the dry season. Conservation status refers to the extent of area, structure and function, and future prospects of these aspects. Far from being speculative, as described above and indicated in the report, structure was classified as poor due to the abundance of alien species and a lack of a dominant phytosociological association that is typical of coastal areas. It is important to understand the habitat evaluation conclusions in the entire context i.e. (in this</p>	<p>3. ADI response and Wet Season Survey are noted.</p>
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<p>consultants can assure with certainty what sensitive receptors may occur within this Area of Ecological Importance. Statements such as 6.17 <i>In view of the above, this habitat is considered to have limited ecological value and is recorded throughout its extent as having a poor habitat quality</i>, appear to be none more than speculative with respect to the limited studies undertaken.</p> <p><i>ERA is obliged to safeguard and protect these areas/sites and therefore has to ensure that the proposed development meets the relevant environmental assessment criteria prior to taking decisions on this development.</i></p> <p>4. It is stated correctly, that “the construction phase of the project will lead to the loss of all the habitats found on the scheme site” (p. 114), however, the statement goes on with “the site was identified as being of low ecological value and mostly composed of ruderals and alien species. The impact is therefore considered to be not significant.” This is a wrong conclusion due to the fact that the development lies within two Areas of Ecological Importance (AEI) and in the direct surrounding of a Site of Scientific Importance (SSI), and an Area of High Landscape Value (AHLV). Furthermore, in the non-technical summary it is stated (p.10), that educating guests on the importance of avoiding trampling of sensitive habitats and general disturbance to the natural areas around the Scheme Site should serve as mitigation measures to address habitat destruction caused by future hotel guests. <i>AEI’s, SSI’s and AHLV’s require protection from developments because of their considerable ecological and scientific values.</i> As highlighted in point 3 above, the consultants cannot reach any conclusion on the impact on ecology from the proposed development, given the limitations of the ecological study undertaken.</p> <p>5. Section 6.44 and other sections mention the possible impact on habitats and flora as a result of dust generation. No</p>	<p>case) see paragraphs 6.14 – 6.18 for an explanation of how conclusions were reached.</p> <p>4. It is reiterated that the report should be reviewed in its entirety in order to ensure correct understanding of what is being stated. The paragraph referred to is one small part of the section entitled ‘Prediction and Significance of Impacts’. The reviewer is referred also to the baseline findings. Refer to the habitat map Figure 6.3 which summarises these findings including describing habitat quality. Paragraphs 6.43-6.50 describe the impact assessment which assesses impacts on all the habitats identified within the Area of Influence and these are further summarised in Table 6.5. The reviewer will note that whilst the impact on the site itself (i.e. the application footprint) was not identified to be significant from an ecological point of view, potential impacts were identified on habitats in the vicinity of the site including on habitats 1240/1420 and 8210. Thus, whilst it is acknowledged in the EIA too that the site is an AEI, the purpose of the ecological study was to study the A of I in more detail to pinpoint those areas within the A of I that are at risk as a result of the development. Potential mitigation measures were also identified. All this is summarised in the non-technical summary.</p> <p>5. This statement is incorrect. The EIA does include a list of mitigation measures in the section entitled ‘Mitigation’ which follows the section on impact assessment.</p>	<p>4. Noted.</p> <p>5. Noted</p>
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<p>appropriate mitigation measures are however suggested other than simply stating that this might be a temporary impact. The EPS should delve into what dust containing measures are to be considered by the developer (and enforced as permit conditions) given the development is within an AEI. Timing of construction is essential to ensure dust generation has no widespread impact.</p> <p>6. Chapter 6 mentions in various parts the presence of the endemic <i>Salsola melitensis</i>, which is a plant which has a good population around the Delimara peninsula. The EPS does not clearly highlight however if such an endemic is present within the site proposed for construction. This needs to be ascertained.</p> <p>In relation to this, it has to be noted that the landscaping plan presented in Figure 3.20 omits this species which is typical of the area, yet introduces other plants such as <i>Hedera helix</i> which are not typical of the surroundings and probably will also not thrive in the coastal conditions.</p> <p>7. The development may introduce excessive lighting during the constructions and operational phase, bringing light to an area which is otherwise not provided with any street lighting. The impact of the development in relation to contributing to sky glow in relation or addition to other major developments in the area needs to be carefully assessed, especially with regards to the impact of certain wildlife such as seabirds which are sensitive to coastal light pollution. <i>Furthermore to the light management approach pointed out on page 28 it is important to not only install dim and switch lights but rather to adjust the direction of the light beam to shine onto the ground and not in the direction of the coast and cliffs.</i></p> <p>8. In relation to point 5 above as well as the predicted noise generation from the development, the EPS does not delve much into what ERA should consider as mitigation during the operational phase of the development. The development</p>	<p>Mitigation measures are also summarised in Table 6.5. The list does include addressing dust arising from the construction phase. The mitigation proposed should always reflect the significance of the impact predicted, its duration, whether it is temporary or not, etc, as required as part of good practice and in accordance with ERA's Terms of Reference.</p> <p>6. Refer to paragraph 6.33. The site does include <i>Salsola melitensis</i>, it grows on rubble walls that will be maintained or rearranged as required. Comment regarding landscaping is noted also in light of ERA comments above. Appendix 2 includes an updated landscaping scheme.</p> <p>7. Potential impacts from light pollution on fauna have been discussed in Chapter 6. As described by the site engineer, all the lighting proposed for the external walking paths are only for floor indication with low power and low luminance. All selected light fittings are of very low power consumption/efficient systems (LED) type and also have a very low luminance. This will contribute towards reduction in CO2 emissions when lighting up the site and also contribute towards reduction in light pollution. All light fittings will include a top cover (as part of the design so that the light will be reflected to the ground). Hence the light fittings will not transmit light to the ambiance but the light will be absorbed by the ground providing just enough luminance for safely walking towards or around the hotel.</p> <p>8. The EIA includes mitigation measures and also</p>	<p>6. Noted.</p> <p>7. Noted.</p> <p>8. Noted.</p>
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<p>concerns a hotel situated within a national park and an area of ecological importance. There is a real risk that the hotel, for its operational reasons, operates lighting and noise, perceivable to the exterior of the hotel during the night. The EPS mentions that regulations require the cessation of noise until 23:00. Unless any conditions are imposed via an operational permit for the hotel, these conditions will simply in the long run be dismissed, and the hotel during its operational phase, will cause detrimental noise and lighting which will invariably and undoubtedly diminish the ecological value of the site and its surrounding.</p> <p>9. The statement (p. 60)“The Scheme will not result in a significant growth in vehicular traffic, either during the construction phase or when it comes into operation; hence, there will be no significant impact on air quality (particularly PM10 and NO2)” can be evaluated as incorrect. Traffic will increase both, during construction and operation of the project, including heavy-vehicle traffic and traffic due to visitors to the area. <i>This will cause negative impacts on air quality and will limit the availability of public space. Additional parking demand will be caused by the development, resulting in an impact on surrounding land, particularly if parking is poorly managed and illegal parking along the road increases. This is very likely if the beach facilities will be developed adjacent to the hotel complex.</i></p> <p>The cumulative impact section of the EPS marginally suggests that this impact may occur, yet no mitigation measures are being proposed. The provision of transport is commended and may indeed help alleviate the parking problem, however, the development will likely increase the amenity use of the beach and therefore increase parking pressure. As long as this is available in off-road areas or in make-shift car parks (as has been the case with an illegal car park operated in the vicinity at St Peter’s Pool during summer 2016), such measures will simply not work.</p> <p><i>10. We fully support the recommendation to omit the tunnel</i></p>	<p>describes residual impacts, which, the EIA notes, may remain and could (in the case of noise during operation) range from between not significant to being of minor or moderate significance. The role of the EIA is to identify potential significant impacts and also identify potential mitigation measures. It is, however, sometimes not possible to mitigate all impacts. The EIA must also identify residual impacts, which are those impacts that may remain despite mitigation measures. The decision-making body must then take an informed decision which includes taking into consideration the findings of the EIA.</p> <p>9. This statement is not speculative but is based on the findings of a Simplified Traffic Statement (STS) that was carried out for the proposed development. The STS identified that the Annual Average Daily Traffic (AADT) as a result of the Scheme will be an additional 131 vehicles– this is considered to be insignificant by ERA. A proposed development will need to generate at least an additional 1,000 vehicles before ERA considers that there could be a significant impact on air quality.</p> <p>Construction traffic will be controlled through the implementation of a Construction Management Plan to be approved by the PA.</p> <p>Illegal parking is a matter for enforcement by the relevant public authorities and not attributable to the proposed development.</p> <p>10. Noted.</p>	<p>9. Noted.</p> <p>10. Noted.</p>
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<p><i>and related beach facilities from the Scheme (p. 90).</i></p> <p>11. The national power plant facility is in the immediate surrounding of the proposed development. Emissions and noise resulting from the power plant might have an impact on hotel users which needs to be considered. <i>This point has not been addressed in the EPS.</i></p>	<p>11.The scope of the EIA is to assess potential impacts arising from the proposed development. Impacts from other activities not associated with the development, and the hotel residents (who are not considered to be sensitive receptors) fall outside the scope of the EIA.</p>	<p>11. Noted.</p>
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B. Nature Trust Malta (Email dated 27 January 2017)

Comments	ADI responses	ERA comments
<p>1. Nature Trust is against the re-development of this area into a hotel for reasons mentioned in the points below. Besides this is an ODZ and having a hotel in a rural area and according to existing policies, such development is unacceptable. This application is in conflict with the SPED National Spatial Framework. Alternative sites should have been considered WITHIN the built areas and not ODZ. The alternative described on page 12 (3.18) that the landowner would consider developing the land into a residence should be considered ONLY if the current footprint is significantly reduced, the area is well landscaped and the building is masked. This would be the lesser of two evils, given that the RPG do not unfortunately give the option of ecological restoration and total removal of existing structures which by existing laws are illegal.</p> <p>2. The built up area will increase from 343 m2 to 561 m2.</p> <p>i. Pg 50 explains the use of sea-water for the geo-thermal system. Mention is also of the rejected RO water though a borehole. Would such water be treated? Would there be additional chemicals added to the sea water? If yes then the necessary precautions must be taken.</p> <p>ii. Again – ecological studies were carried out in SUMMER (August 2016) pg 101. This is unacceptable as winter plants are being missed. This was already pointed out by Nature Trust before. NTM insists that a winter vegetation survey be done as soon as possible.</p> <p>iii. The design of the hotel is in conflict with the surrounding (pg 160, 163, 167 confirms this as having a major landscape impact) and stringent efforts should be made by the developer to make it less alien to the</p>	<p>1. Noted.</p> <p>2. (i) Reject water from RO is brine. Chlorinators will be used for the pool water. This technology uses the salt to generate chlorine to treat the water passing through the system. An ionization copper treatment will be used as an effective algacide and to control bacteria. (ii) A wet season survey of the habitats of conservation interest in the vicinity of the hotel was carried out by Adi Associates and Mr Edwin Lanfranco. The report of this survey is included in Appendix 7. (iii) Noted.</p>	<p>1. Noted</p> <p>2. i. Noted.</p> <p>ii. The Wet Season Survey is noted.</p> <p>iii. Noted.</p>

<p>rural surroundings by lowering the height and making it more contoured. The introduction of vertical green walls is highly recommended - using local indigenous species.</p>		
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Appendix 1 – Updated Figures

Figure 3.2: Existing Delimara Bay Hotel – General Plan

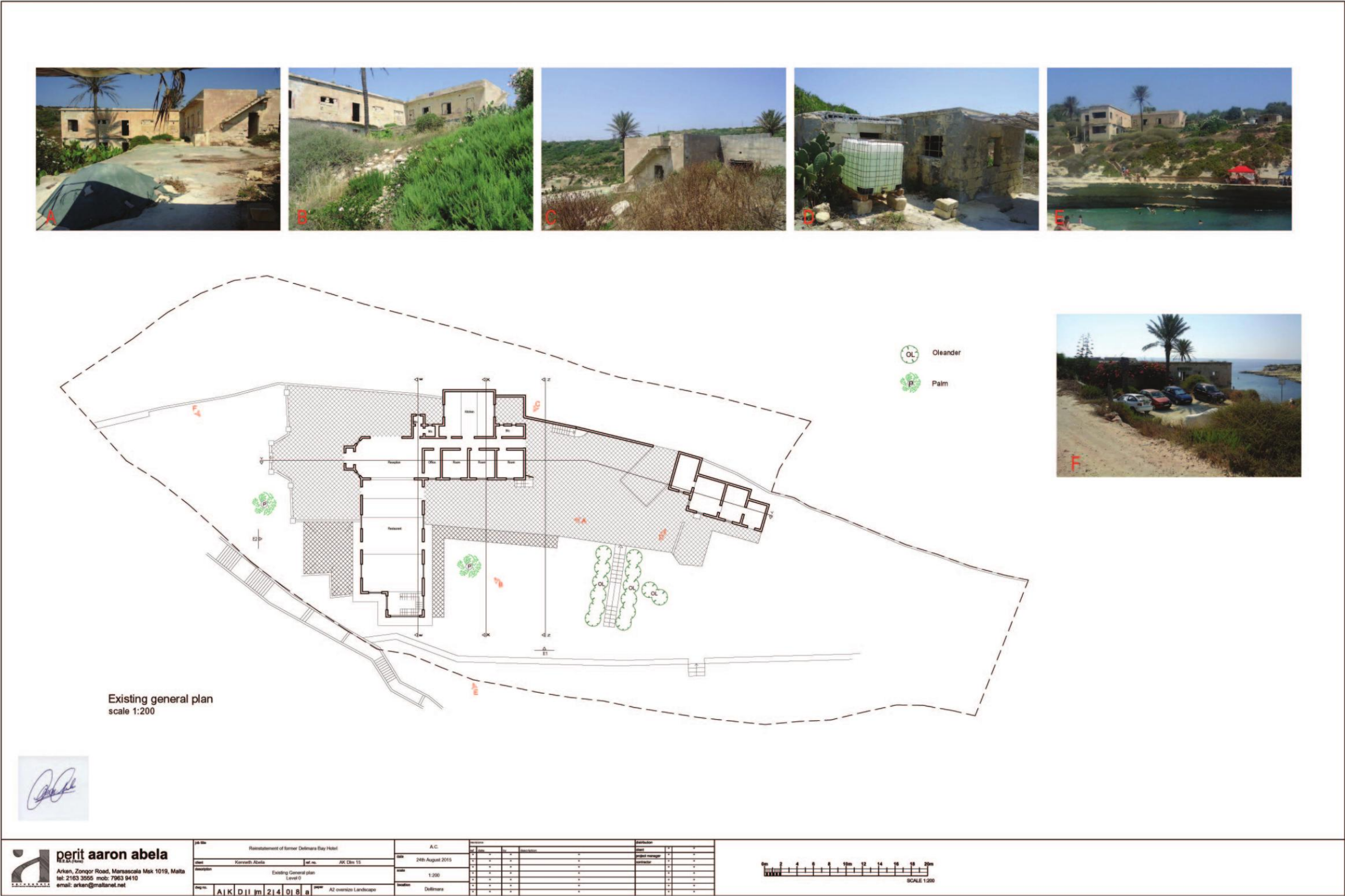


Figure 3.11: Proposed Site Layout

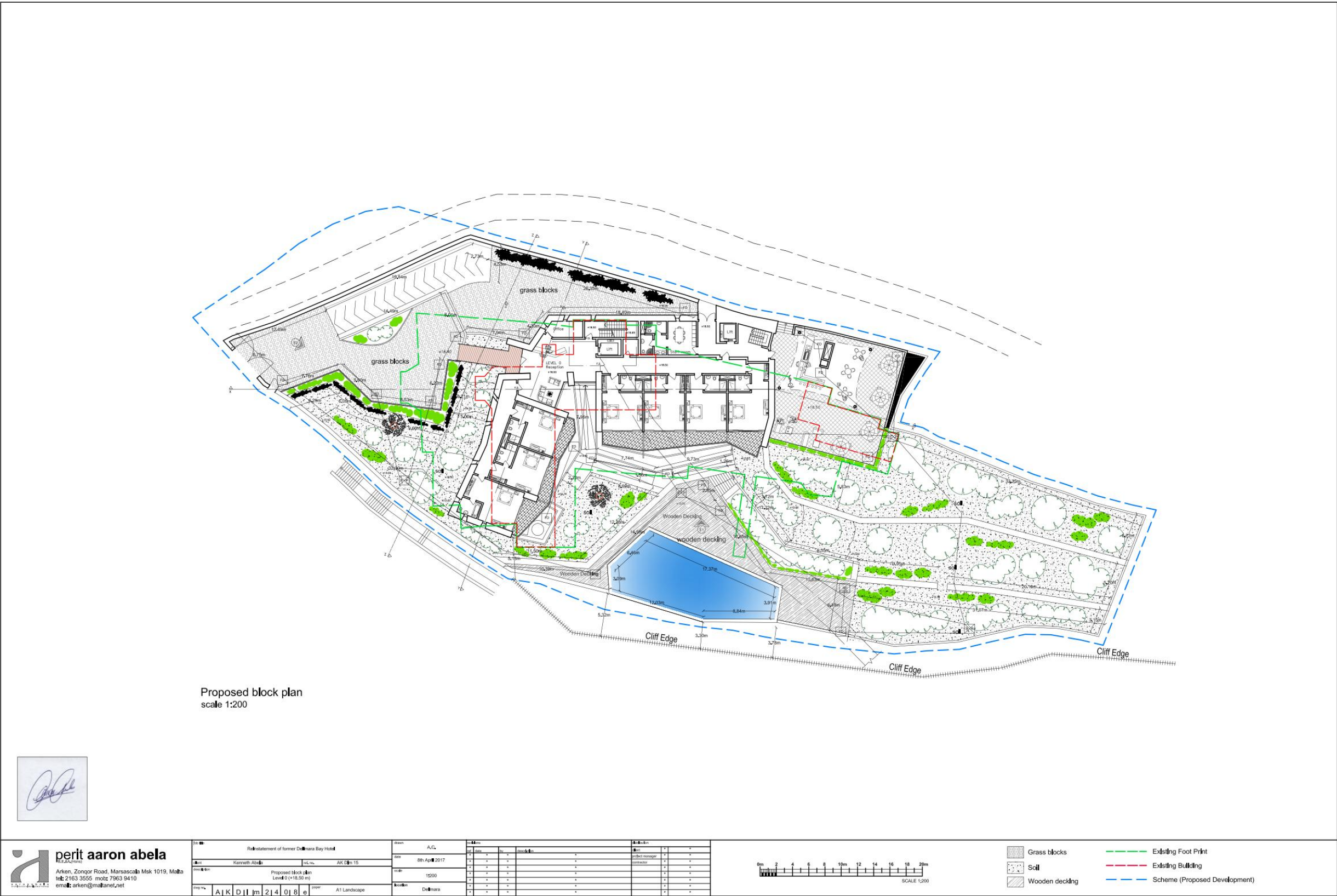


Figure 3.12: Proposed Plan Level 0

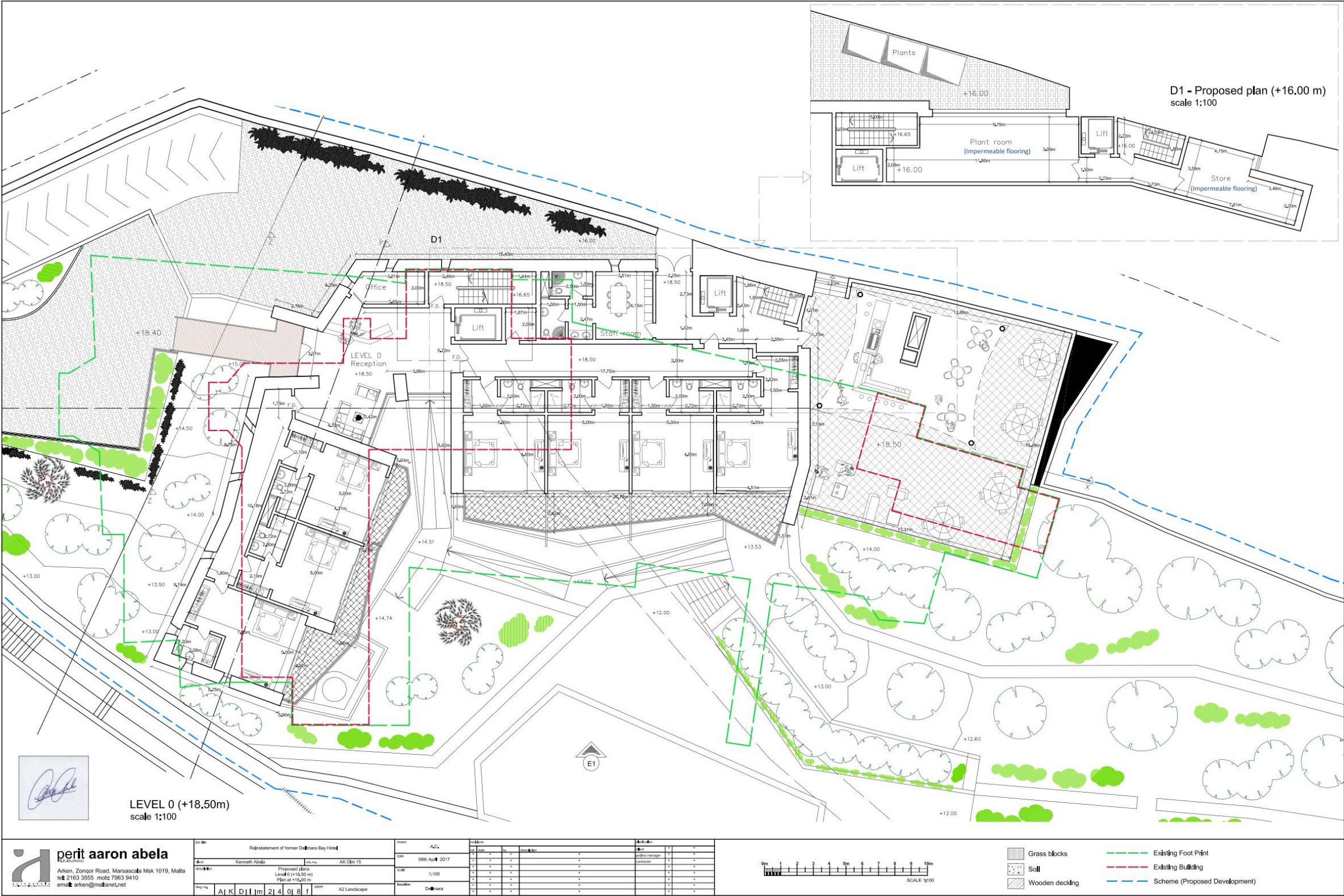


Figure 3.13: Proposed Plan Level 1

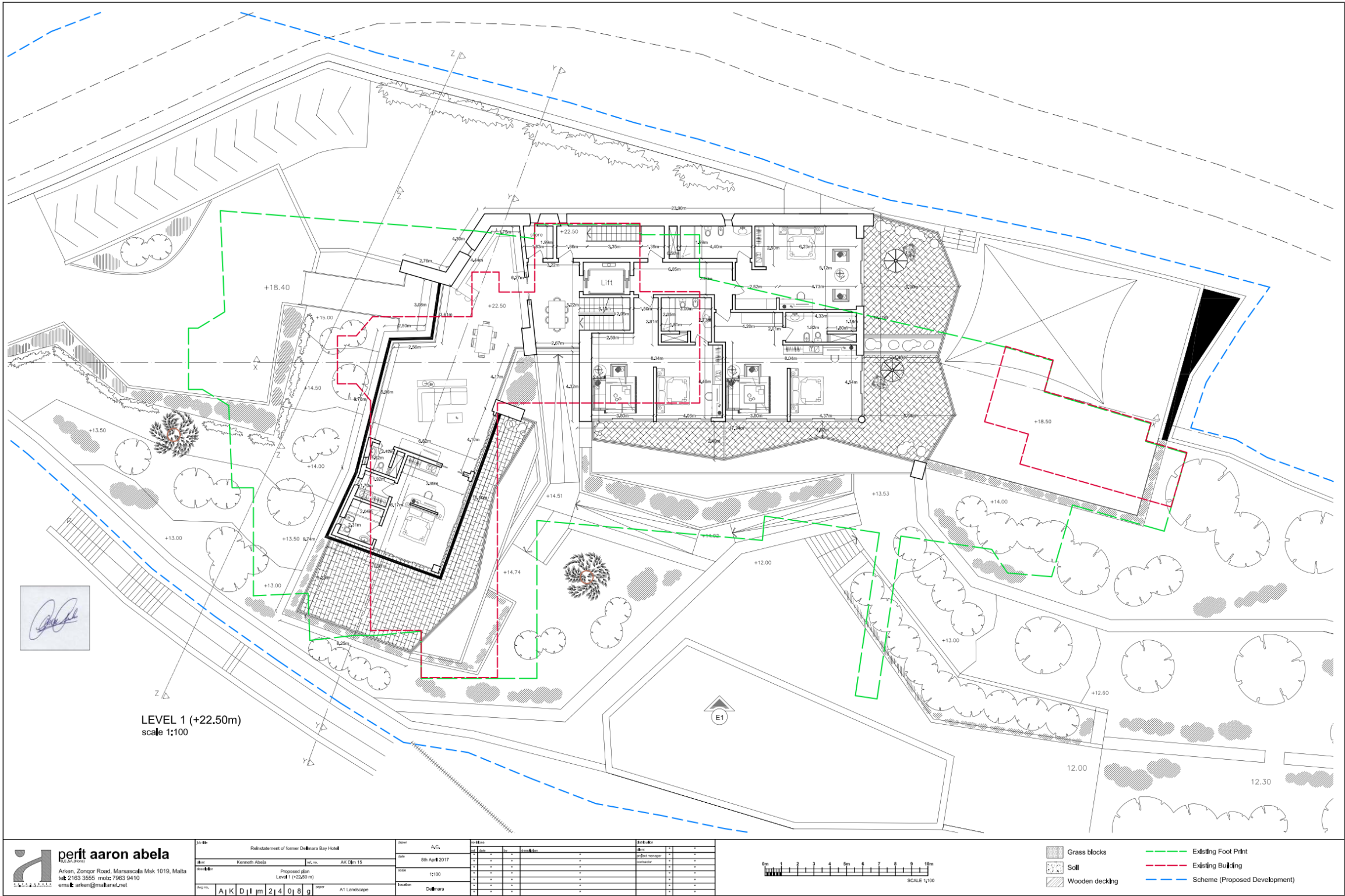
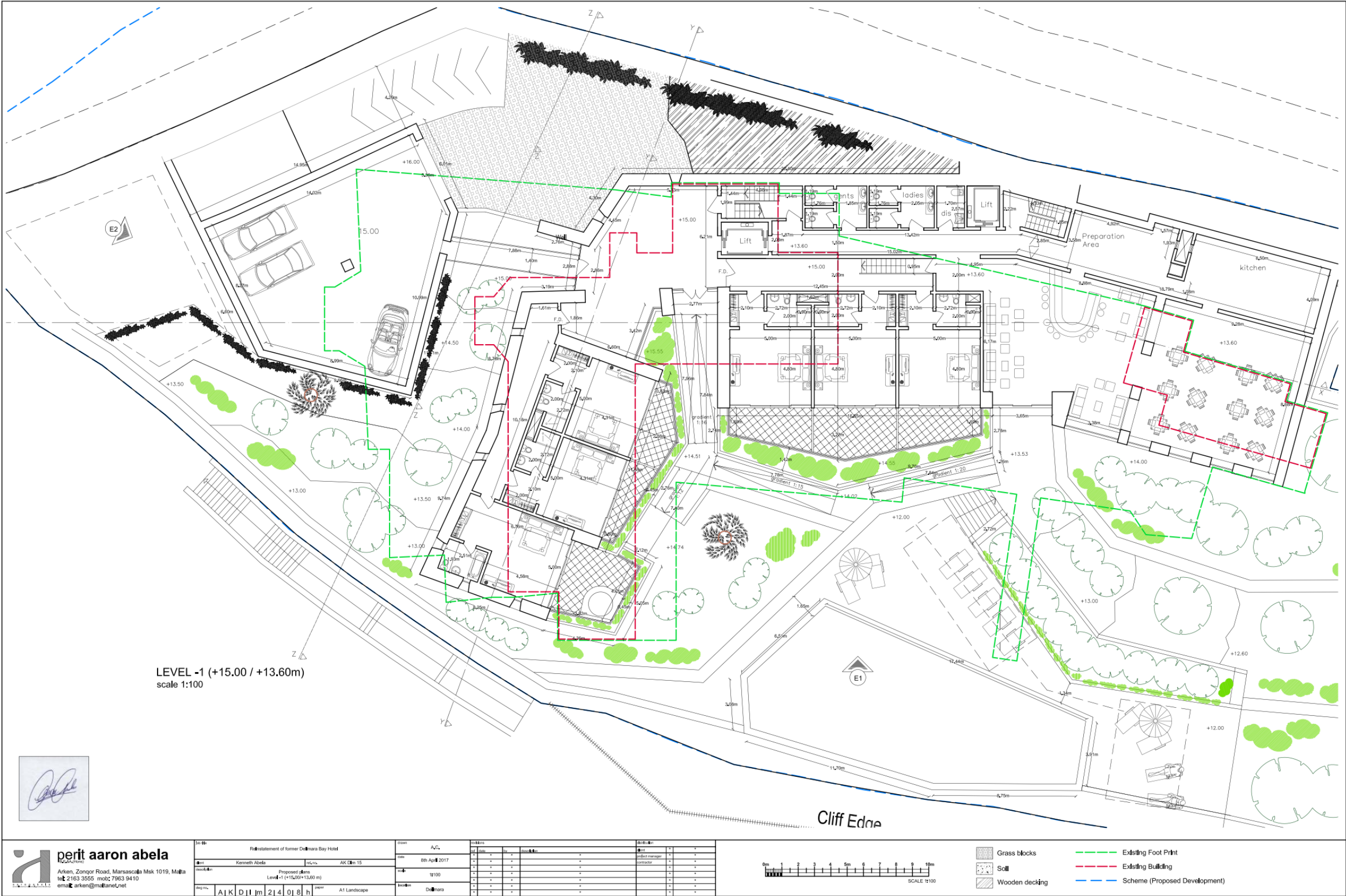


Figure 3.14: Proposed Plan Level -1



Appendix 2: Updated Landscaping Scheme

Delimara landscaping scheme

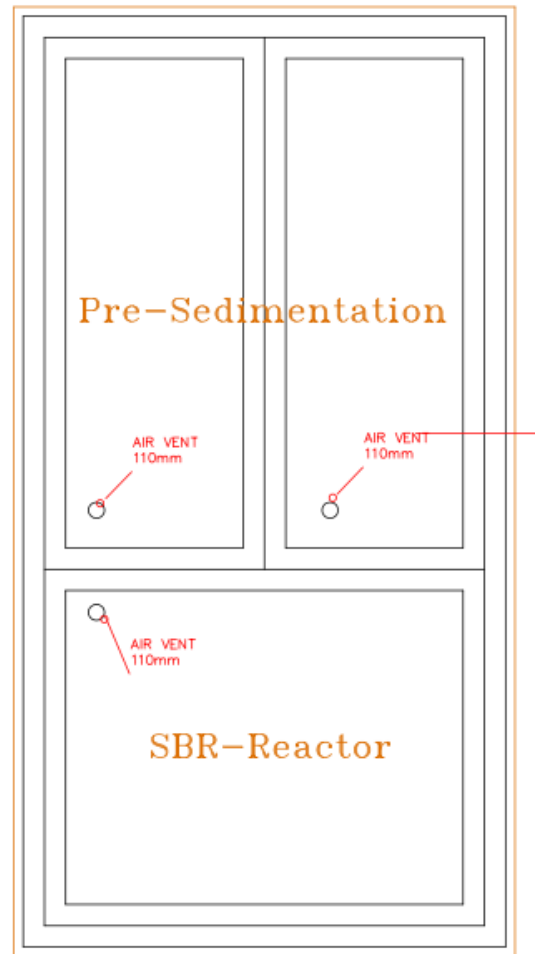
Species	Code	Form	Features
<i>Limbarda crithmoides</i>	Lc	Small shrub	Tolerant to sea spray, no need for irrigation and produces yellow flowers throughout the summer
<i>Coronilla valentina</i>	Cv	Small shrub	Tolerant to sea spray, no need for irrigation after first summer, and produces yellow flowers throughout spring
<i>Darniella melitensis</i>	Dm	Large shrub	Tolerant to sea spray, no need for irrigation, and can be pruned
<i>Tetraclinis articulata</i>	Ta	Large shrub, small tree	Relatively tolerant to sea spray, does not need irrigation once established, and forms dome-shaped trees when young, growing into a large tree with time
<i>Periploca angustifolia</i>	Pa	shrub	Tolerant to sea spray, and grows well in sheltered coastal garrigues
<i>Chamaerops humilis</i>	Ch	Shrub to small tree	Characteristic of coastal garrigues in the Mediterranean region
<i>Rhamnus alaternus</i>	Ra	Large shrub, small tree	Characteristic maquis species, is drought tolerant, and produces attractive black berries in early summer. Can tolerate pruning to form a hedge
<i>Pistacia lentiscus</i>	Pl	Large shrub, small tree	Characteristic maquis species, is drought tolerant, and produces attractive black berries in summer. Can tolerate pruning to form a hedge
<i>Myrtus communis</i>	Mc	shrub, small tree	Characteristic maquis species, produces attractive white flowers in spring and black berries in early summer.
<i>Lygeum spartum</i>	Ls	grass	Attractive ground cover, typically covers clay slopes in coastal areas
<i>Spartium junceum</i>	Sj	Large shrub	Typical of coastal areas, produces attractive yellow flowers throughout spring
<i>Ceratonia siliqua</i>	Cs	Tree	Drought tolerant once it is established. Tolerates sheltered coastal areas
<i>Olea europea</i>	Oe	Tree	Drought tolerant once it is established. Tolerates sheltered coastal areas

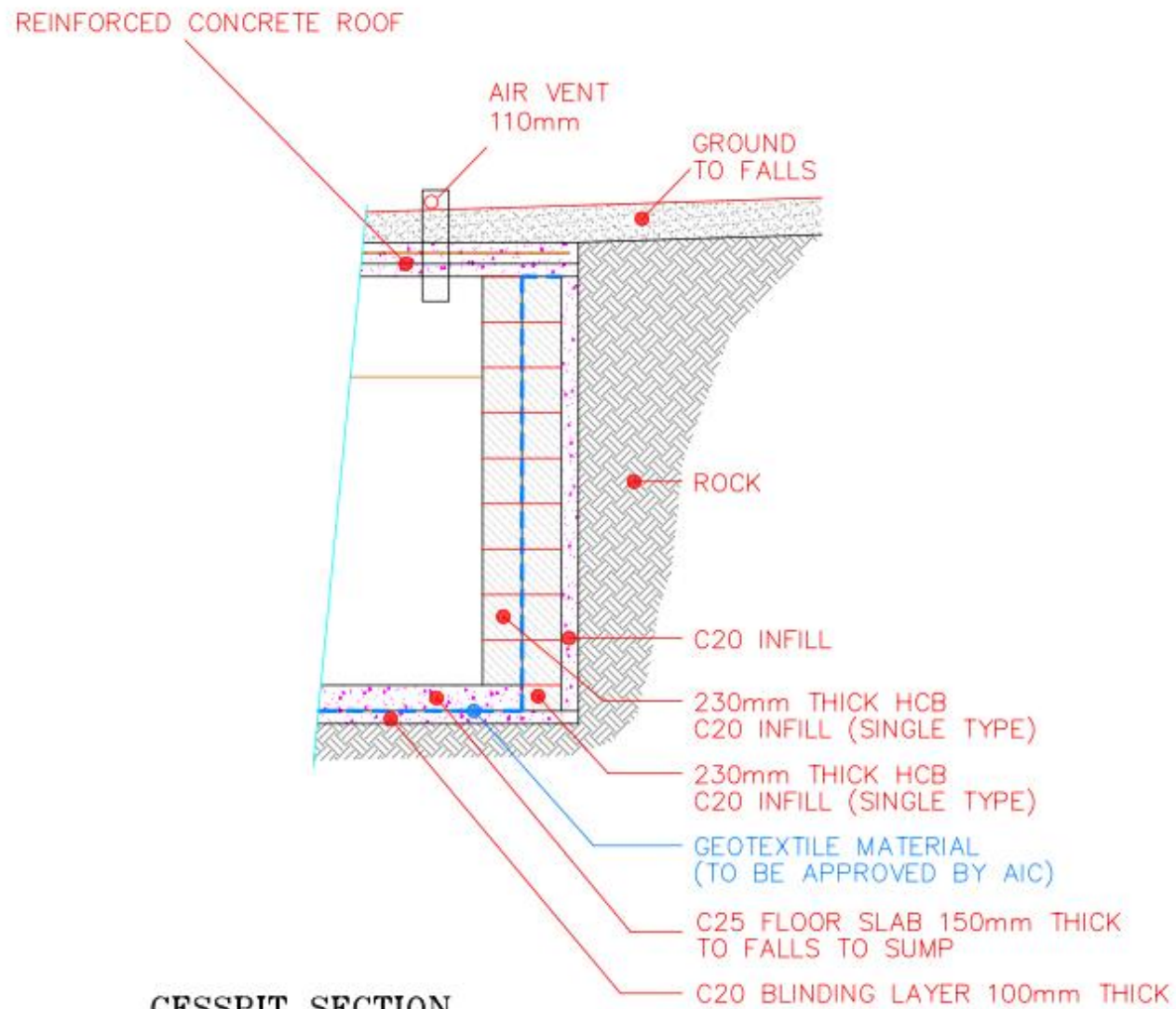
Appendix 3 – Operational Waste Management

Phase	Type of Waste	EWC Code	Estimated Quantities	Final disposal location
Operation	Municipal wastes - paper and cardboard; glass; biodegradable kitchen and canteen waste; edible oil and fat; detergents; batteries; electrical and electronic equipment	20 01 01 20 01 02 20 01 08 20 21 25 20 01 30 20 01 34 20 01 36 20 03 01	24,600 kg ²	Sant Antrnin Recycling Facility / oil recycling facility (e.g. Vernons Ltd or Thomas Nevola) / Ghallis non-hazardous landfill

² Assuming 600 kg annually per resident (34 beds) and 300 kg annually per 14 staff working per 12-hour shift, having regard to the *Waste Management Plan for the Maltese Islands: A Resource Management Approach 2014 – 2020*

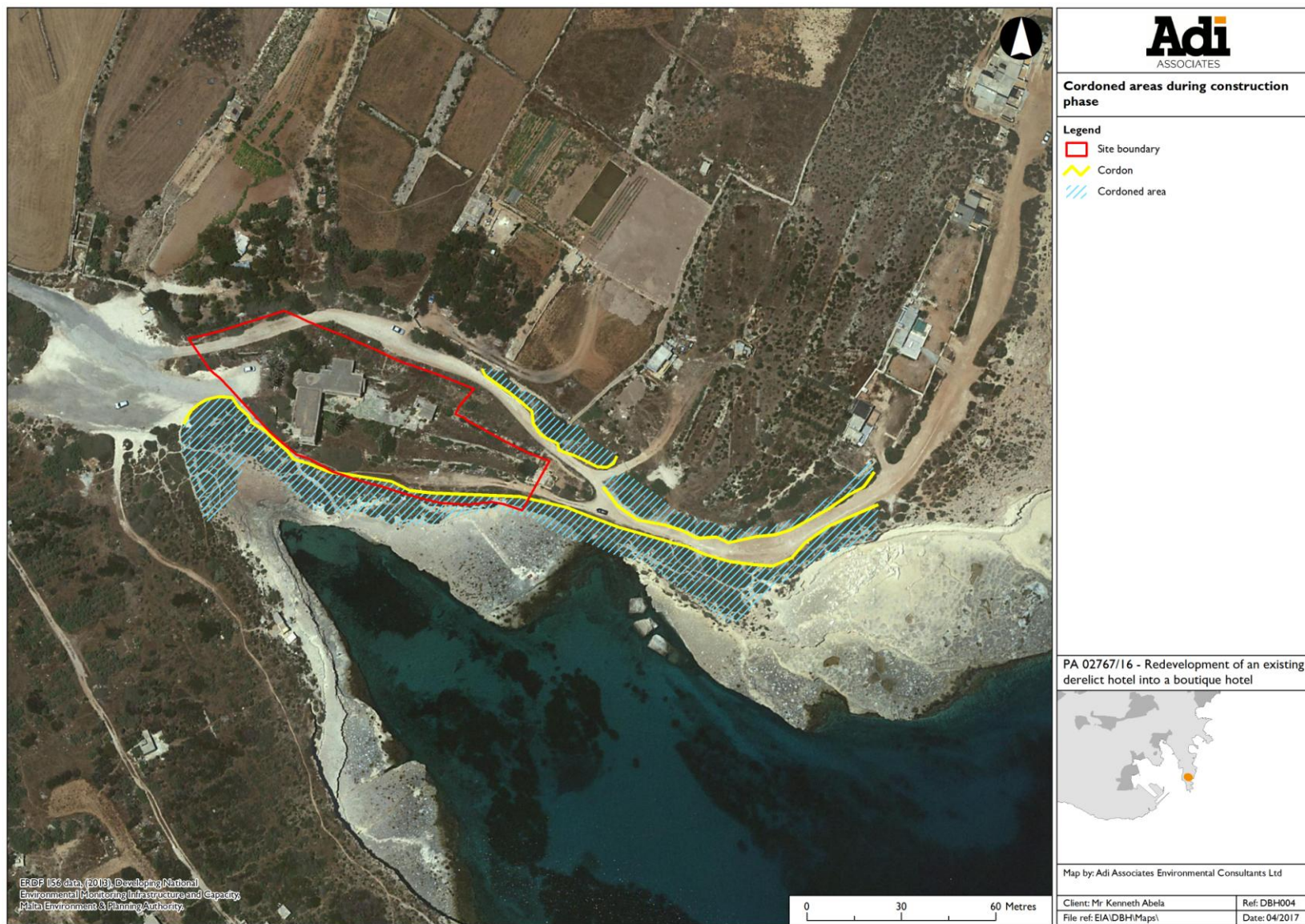
Appendix 4 – Cesspit plans





CESSPIT SECTION

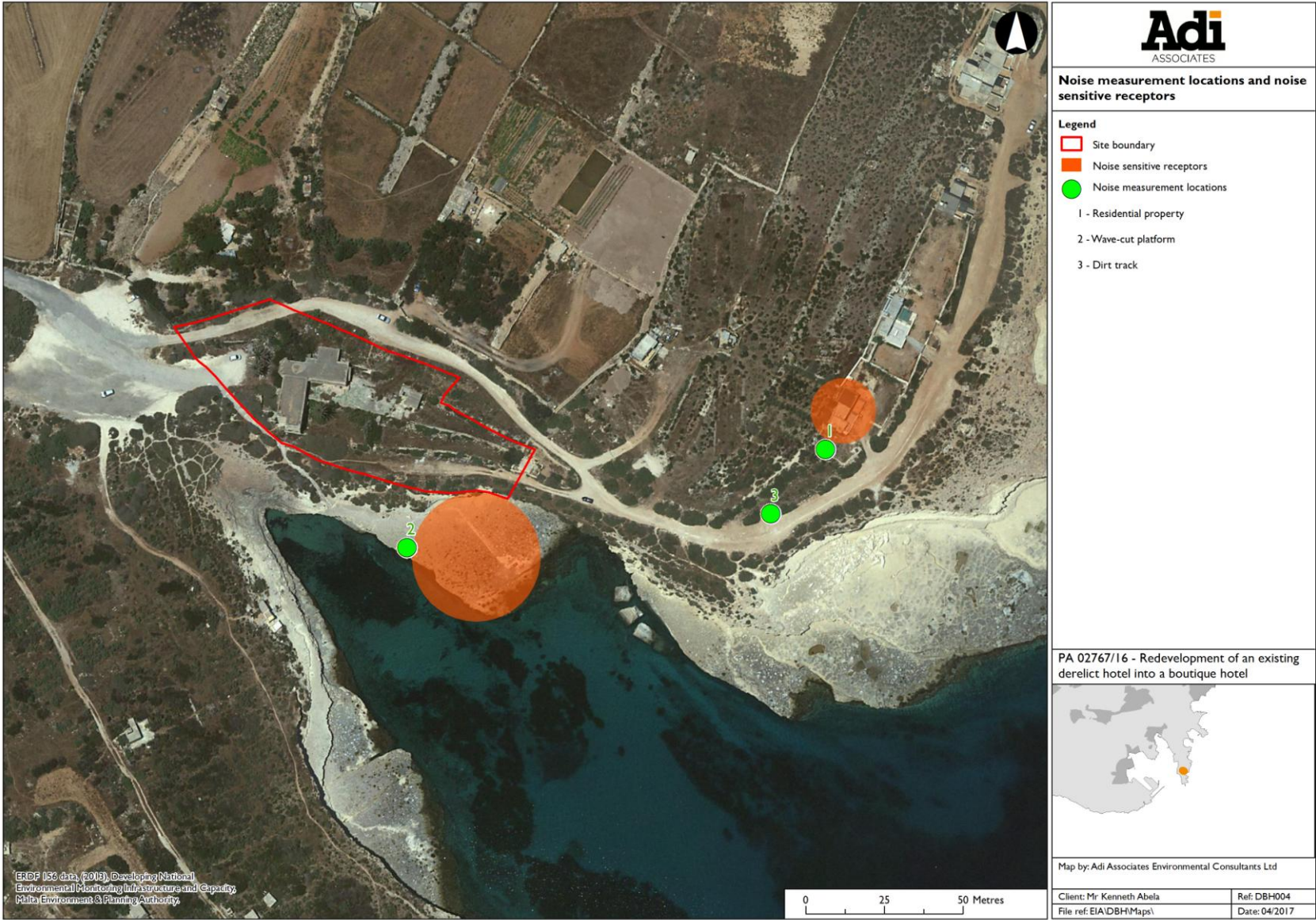
Appendix 5 – Cordoned off habitats during construction



INDICATIVE ONLY - Not to be used for direct interpretation

Appendix 6 – Noise sensitive receptors

Figure 9.2: Noise sensitive receptors



Appendix 7 – Ecology wet season



PA 02767/16

**REDEVELOPMENT OF AN EXISTING DERELICT HOTEL AT TA' KALANKA,
DELIMARA**

WET SEASON ECOLOGY SURVEY – SPECIES UPDATE

Version 1: April 2017



Report Reference:

Adi Associates Environmental Consultants Ltd, 2017. Redevelopment of an Existing Derelict Hotel at Ta' Kalanka, Delimara (PA 02767/16). Wet Season Ecology Survey – Species Update. San Gwann, April 2017; v + 6pp + 2 Appendices.

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Quality Assurance

Redevelopment of an Existing Derelict Hotel at Ta' Kalanka, Delimara Wet Season Ecology Survey - Species Update

April 2017

Report for: Delimara Bay Hotel Ltd

Revision Schedule

Rev	Date	Details	Report prepared by:	Checked by:	Approved by:
00	Apr 2017	Submission to client	Krista Farrugia Senior Environmental Consultant	Rachel Xuereb Director	Adrian Mallia Managing Director

File ref: G:_Active Projects\EIA\DBH004 - Boutique hotel at Delimara\EPS\ERA comments\Wet season Ecology survey_Delimara.docx



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I. WET SEASON ECOLOGY – SPECIES UPDATE

INTRODUCTION

- I.1. This report has been prepared as part of the Environmental Impact Assessment (EIA) process underway on PA 02767/16 Redevelopment of an Existing Derelict Hotel at Ta' Kalanka, Delimara. Although, as part of the EIA, an ecology survey was carried out in accordance with the Terms of Reference issued by the Environment and Resources Authority (ERA), during consultation on the draft Environmental Planning Statement (EPS), comments from consultees highlighted that the report would benefit from the inclusion of a wet season survey to support the findings of the dry season ecology survey. The Consultants are in agreement with this observation, and the Applicant agreed that the survey would be repeated in the wet season, with particular emphasis on habitats of conservation interest within the surroundings of the Scheme site.

SCOPE OF STUDY

- I.2. To this end, the Area of Study was revisited in March 2017 by Krista Farrugia of Adi Associates and Edwin Lanfranco. The aim of the survey was largely to build on the species list that was drawn up during the dry season survey; it focussed on the habitats of interest within the surroundings of the Scheme. During the survey, the Consultants focussed on recording those species that were abundant enough to affect the landscape as well as those that were not so frequent, or had a restricted distribution, were rare or endemic.
- I.3. The Hyblaeo-Maltese sea cliff communities along il-Kalanka t-Tawwalija, il-Ponta tat-Tawwalija, and Ghar Bella; the Maltese rdum communities on the Delimara fortress, and on the east side of the il-Kalanka t-Tawwalija Bay; and the sea cliff and rocky shore aerohaline community on the headland of il-Kalanka t-Tawwalija; and the site itself were all revisited.

FINDINGS

- I.4. The list of species recorded during the survey is presented in **Table I**. The March 2017 survey confirmed all the main species noted during the dry season survey.
- I.5. Species of interest recorded during the wet season survey included the endemic *Anthemis urvilleana*, *Carlina involucrata*, the rare *Diplotaxis viminea*, *Euphorbia exigua*, and the orchid (of frequent distribution) *Ophrys bombyliflora*. **Figure I** presents some photographs taken during the spring survey.

Hyblaeo-Maltese Sea-cliff Communities

- I.6. *Anthemis urvilleana* is a typical species of the I240 community and was recorded within this habitat type as mapped during the dry season survey (see **Figure I**) along Kalanka it-Tawwalija, Ghar Bella and ix-Xaghra where it was noted to be frequent. Other frequent species recorded from the habitat at ix-Xaghra during the wet season survey included *Limbarda crithmoides* (dominant), *Asparagus aphyllus*, *Matthiola tricuspidata* (coastal species, an annual, not recorded in dry season survey), *Limonium*

melitense, *Romulea variicolor*, *Crucianella rupestris*, *Lygeum spartum*, *Suaeda vera*, *Urginea pancration*, *Mesembryanthemum nodiflorum*, *Salsola melitensis*, and *Lotus cytisoides*.

Figure I shows the habitat at Ix-Xaghra.

- I.7. Thus, it can be noted that the habitat structure did not vary significantly from that recorded during the dry season survey, although it is important to note the presence of a couple of additional species not recorded during the dry season. From a conservation point of view, it should be noted in particular that *Anthemis urvilleana*, a frequent / common species, is an endemic and is a typical species of this habitat type.
- I.8. The wet season survey confirmed the habitat quality evaluation in that the I240 community at Ix-Xaghra is the best preserved example in the A of I whereas the I240 community at Il-Kalanka t-Tawwalija Bay has a relatively poor quality given the relatively high presence of opportunistic species. At Il-Kalanka t-Tawwalija, species more typical of garrigue and steppe were also noted including *Ophrys bombyliflora*, *Moraea sisyrinchium*, and *Carlina involucrata*. Other opportunistic species were also recorded including *Hedysarum glomeratum*, *Fedia graciliflora*, *Leontodon tuberosus*, and *Lotus tetragonolobus*. Their cover frequently resulting in the classification of habitat I240 in this area as poor. **Table I** includes a list of species recorded during the March 2017 survey.

Maltese Rdm Communities

- I.9. Similar to the findings from the dry season survey, *Salsola melitensis* remains the dominant species of this habitat type, for which the population overall is relatively healthy. Other species associated with this habitat type, however, were again largely not present during the wet season survey.
- I.10. There were thus no changes to the dry season survey findings.

Sea-cliff and Rocky Shore Aerohaline Communities

- I.11. This habitat was described in the dry season survey as being a combination of the previous two communities described. It is the least widespread habitat. *Anthemis urvilleana* was also recorded in this area during the March survey. The habitat was characterised by *Suaeda vera*, *Atriplex halimus*, *Limbarda crithmoides* and *Salsola melitensis* as the most frequent species.
- I.12. Overall, there were no changes to the dry season survey findings and the quality of this habitat remains good.

Table 1: List of Species (for details on Schedules see Appendix)

Species	Vernacular name	LN 311 of 2006 (Flora, Fauna and Natural Habitats Protection Regulations)	LN 200 of 2011 (Trees and Woodlands Protection Regulations)	RDB status
<i>Acacia cyclops</i>	Western Coastal Wattle		Schedule III	
<i>Acacia saligna</i>	Blue-leaved Acacia		Schedule III	
<i>Agave americana</i>	American Agave			
<i>Anthemis urvilleana</i>	Maltese Sea Chamomile	Schedule X		Endemic
<i>Arisarum vulgare</i>	Small Lords-and- Ladies			
<i>Asparagus aphyllus</i>	Mediterranean Asparagus			
<i>Astragalus boeticus</i>	Milk-Vetch			
<i>Atriplex halimus</i>	Shrubby Orache			
<i>Capparis orientalis</i>	Caper Bush	Schedule VIIIb		
<i>Carlina involucrata</i>	Clustered Carline- thistle			Rest (MED)
<i>Cichorium spinosum</i>	Spiny chicory			
<i>Crucianella rupestris</i>	Rock Crosswort			
<i>Cuscuta epithymum</i>	Dodder			
<i>Daucus carota</i>	Wild Carrot			
<i>Daucus gingidium</i>	Sea Carrot			
<i>Diplotaxis viminea</i>	Southern Rocket			
<i>Erodium malacoides</i>	Glandular Storksbill			
<i>Euphorbia exigua</i>	Maltese Dwarf Spurge	Schedule X		Rest (MED)
<i>Euphorbia helioscopia</i>	Sun Spurge			
<i>Euphorbia pinea</i>	Pine Spurge			
<i>Fedia graciliflora</i>				
<i>Frankhenia hirsuta</i>	Sea-heath			
<i>Fumaria sp.</i>				
<i>Glebionis coronaria</i>	Crown Daisy			
<i>Hedysarum glomeratum</i>	Clustered Sulla			

Species	Vernacular name	LN 311 of 2006 (Flora, Fauna and Natural Habitats Protection Regulations)	LN 200 of 2011 (Trees and Woodlands Protection Regulations)	RDB status
<i>Hirschfeldia incana</i>	Hoary Mustard			
<i>Leontodon tuberosus</i>	Tuberous Hawkbit			
<i>Limbarda crithmoides</i>	Golden Samphire			
<i>Limonium melitense</i>	Maltese Sea Lavender	Schedule III		Endemic
<i>Lotus cytisoides</i>	Grey Birdsfoot Trefoil			
<i>Lotus edulis</i>	Edible Birdsfoot Trefoil			
<i>Lotus tetragonolobus</i>	Winged Pea			
<i>Lygeum spartum</i>	Esparto Grass			
<i>Matthiola tricuspidata</i>	Mediterranean Stocks			
<i>Medicago littoralis</i>	Strand Medic			
<i>Mesembryanthemum nodiflorum</i>	Lesser Crystal Ice Plant			
<i>Moraea sisyrinchium</i>	Barbary Nut Iris			
<i>Olea europaea</i>	Olive		Schedule II	Rest (MI) (?)
<i>Ophrys bombyliflora</i>	Bumble-bee Orchid			
<i>Opuntia ficus-indica</i>	Prickly Pear			
<i>Opuntia stricta</i>	Common Prickly Pear			
<i>Orobanche mutellii</i>	Dwarf Broomrape			
<i>Orobanche pubescens</i>	Hairy Broomrape			
<i>Phoenix dactylifera</i>	Date Palm		Schedule II	
<i>Plantago coronopus</i>	Buck's-horn Plantain			
<i>Plantago lagopus</i>	Mediterranean Plantain			
<i>Plantago serraria</i>				

Species	Vernacular name	LN 311 of 2006 (Flora, Fauna and Natural Habitats Protection Regulations)	LN 200 of 2011 (Trees and Woodlands Protection Regulations)	RDB status
<i>Punica granatum</i>	Pomegranate			
<i>Rhodalsine geniculata</i>	Woody Sandwort			
<i>Salsola melitensis</i>	Maltese Salt Tree			Endemic
<i>Suaeda vera</i>	Shrubby seablite			
<i>Tamarix africana</i>	African Tamarisk		Schedule II	R, Rest (MED + MI)
<i>Urginea panceration</i>	Sea Squill	Schedule VIII		
<i>Valantia muralis</i>	Wall Valantia			

Figure I: Habitats and their quality within the A of I

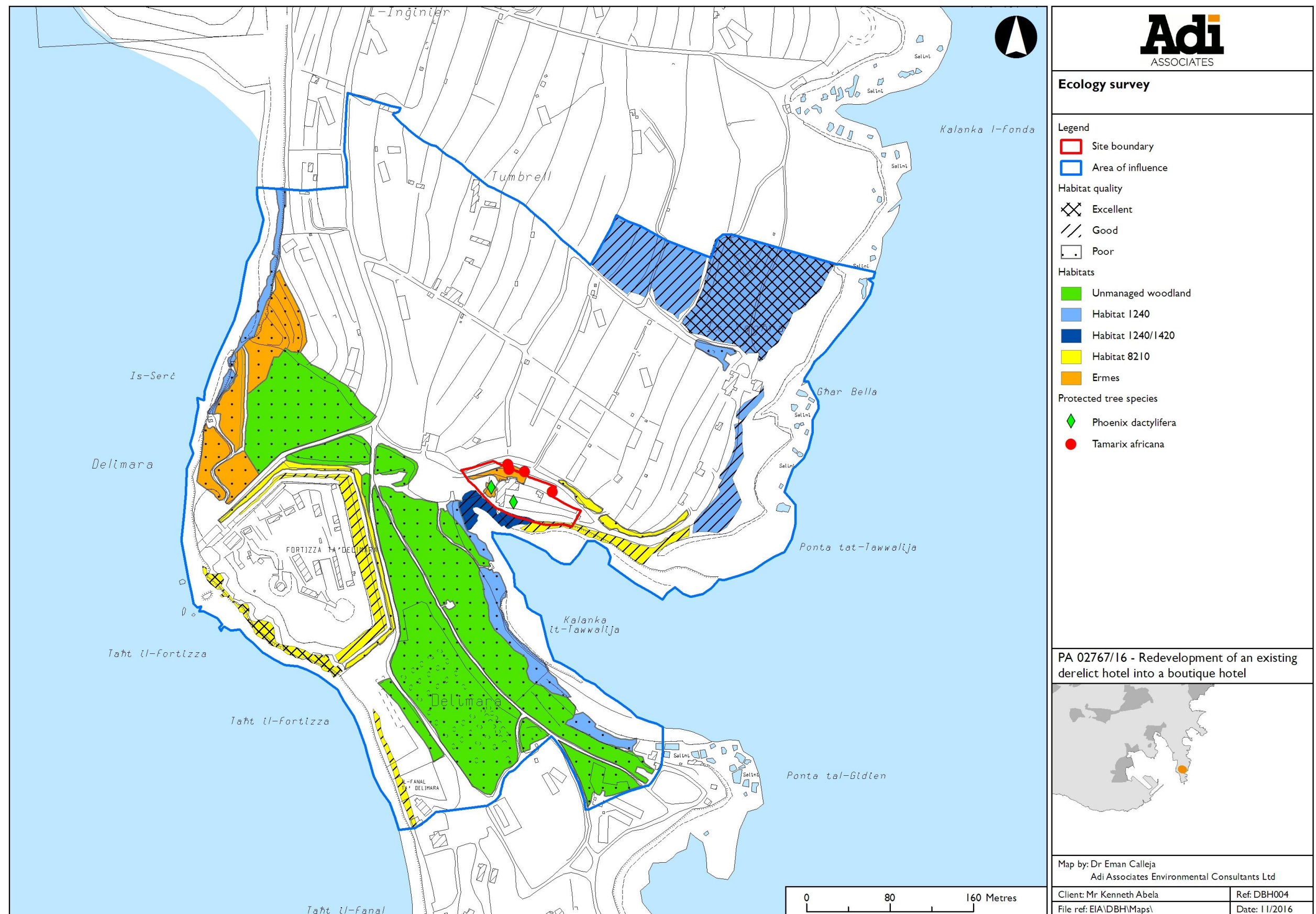





Figure 2: Wet season survey recordings

		
<p><i>Ophrys bombyliflora</i></p>	<p>Habitat 1240 at Ix-Xaghra</p>	<p><i>Anthemis urvilleana</i> and <i>Suaeda vera</i></p>

		
<p><i>Matthiola tricuspidata</i></p>	<p><i>Orobanche pubescens</i> with host plant <i>Glebionis coronaria</i></p>	<p><i>Anthemis urvilleana</i></p>

Appendix I: Schedules to LN 200 of 2011 and LN 311 of 2006

Table A1: Schedules listed in Legal Notice 200 of 2011: Trees and Woodlands (Protection) Regulations

Schedule	Scope
Schedule I	Strictly protected trees
Schedule II	Trees Protected in Selected Areas
Schedule III	Invasive, Alien or Environmentally-Incompatible Species

Table A2: Schedules listed in Legal Notice 311 of 2006: Flora, Fauna and Natural Habitats Protection Regulations

Schedule	Scope
Schedule I	Natural habitat types whose conservation requires the designation of special areas of conservation
Schedule II	Animal and plant species of community interest whose conservation requires the designation of special areas of conservation
Schedule III	Animal and plant species of national interest whose conservation requires the designation of special areas of conservation
Schedule IV	Criteria for selecting sites eligible for identification as sites of national importance and of international importance and designation as special areas of conservation
Schedule V	Animal and plant species of community interest in need of strict protection
Schedule VI	Animal and plant species of national interest in need of strict protection
Schedule VII	Animal and plant species of community interest whose taking in the wild and exploitation may be subject to management measures
Schedule VIII	Animal and plant species of national interest whose taking in the wild and exploitation may be subject to management measures
Schedule IX	Identification and monitoring
Schedule X	Endemic species not covered by Regulation 26

Appendix 2: Red Data Book Keys

Table A3: Key to Red Data Book categories

Code	Criterion
Endemic	Taxon endemic to the Maltese Islands
X	Taxon extinct from the Maltese Islands
E	Taxon is endangered in the Maltese Islands
R	Taxon is rare in the Maltese Islands
RR	Taxon is very rare in the Maltese Islands
I	Status of taxon in the Maltese Islands is not known
Rest(MI)	Taxon has a restricted distribution in the Maltese Islands
Rest(MED)	Taxon has a restricted distribution in the Mediterranean region
?	Following any other symbol signifies uncertainty in the information given

Table A4: Scope of categories

Category	Scope
Endangered	Taxon is in danger of extinction due to populations having become severely depleted or due to a drastic reduction in habitat
Vulnerable	Taxon is likely to become endangered in the near future if the factors threatening it continue to operate (over-exploitation, extensive destruction of habitat, environmental disturbance)
Rare	Taxon is not at present endangered or vulnerable but because of its rarity in the Maltese Islands is at risk
Very rare	Taxon is at risk because it is very rare in the Maltese Islands either because it is restricted to a particular locality or to a habitat type itself rare in the Maltese Islands or because it is thinly scattered
Indeterminate	Taxon may or may not be under threat but insufficient information is currently available