

ENVIRONMENTAL IMPACT STATEMENT

**Use of Coastal Protection Works – Clarkes Beach, Byron Bay
Lot 410, DP 729062 – 1 Lighthouse Road, Byron Bay (being
Reflections Holiday Park – Clarkes Beach)**

Prepared for NSW Crown Holiday Parks Land Manager, trading as Reflections
Holiday Parks
By Planit Consulting Pty Ltd

October 2021 – Issue 1.1



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Declaration

Form	Submission of Environmental Impact Statement (EIS), prepared under the Environmental Planning and Assessment Act 1979
Prepared by	Joshua Townsend Bachelor of Urban and Regional Planning Master of Design (Urban Design) On behalf of: Planit Consulting Level 2, 11-13 Pearl Street Kingscliff, NSW
Responsible person	Nick Baker, Chief Executive Officer Reflections Holiday Parks. 1/17 Gipps Street, Carrington NSW 2294 C-/ Planit Consulting
Address of the land	1 Lighthouse Road, Byron Bay (Lot 410, DP 729062)
Description of the development	Use of Coastal Protection Works – The proposal seeks to retain, utilise and maintain existing sandbag walls on Clarks Beach for the purposes of Coastal Protection Works.
Assessment against Schedule 2 of the Environmental Planning and Assessment Regulation 2000	This EIS has been prepared to address the matters specified in Schedule 2 of the Environmental Planning & Assessment Regulation 2000. Based on the assessments commissioned by Reflections Holiday Parks and the information available, this EIS concludes that the proposal would have a minimal impact on the environment when considered against those matters.
Declaration	<p>I certify that I have prepared the contents of this Statement and to the best of my knowledge:</p> <ul style="list-style-type: none">• It is in accordance with Schedule 2 of the Environmental Planning and Assessment Regulation 2000,• The statement contains all available information that is relevant to the environmental assessment of the development, activity or infrastructure to which the statement relates; and• The information contained in the statement is neither false nor misleading.  <p>Josh Townsend 13 October 2021</p>

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Glossary of Terms

Abbreviation	Term
AHIP	Aboriginal Heritage Impact Permit
CMP	Coastal Management Program
EIS	Environmental Impact Statement
EP&A Act	Environmental Planning and Assessment Act 1979
EP&A Regs	Environmental Planning and Assessment Regulations 2000
Project Area	The spatial footprint that the project is confined to on the subject site
NPW Act 1974	National Parks and Wildlife Act 1974
SEPP	State Environmental Planning Policy
Subject Site	Lot 410 of DP729062, being 1 Lighthouse Road, Byron Bay

Supporting Studies

This EIS should be read in conjunction with the following supporting studies:

Report	Details
Coastal Assessment	Prepared by BMT
Geobag Walls at Clarks Beach, Byron Bay, dated September 2021	Prepared by University of New South Wales – Water Research Laboratory
Survey	Prepared by Kennedy Surveying
Planset (General Plan, Survey and Cross Sections), dated 06.09.2021	Prepared by Planit Consulting
Pre-Lodgement Community Consultation Submissions Report	Prepared by Planit Consulting
Clarks Beach Economic Benefit Report	Prepared by BDO
Aboriginal Cultural Heritage Assessment Report, dated August 2021	Prepared by Everick Heritage

Executive Summary

This Environmental Impact Statement (EIS) relates to the continued use of existing sandbag walls placed on Clarks Beach, Byron Bay by Reflections Holiday Parks. The retention of sandbag walls, placed as 2x 'walls', each approximately 60 – 70m long, for a period of 5x years provides coastal protection when Clarks Beach is in an eroded state/cycle. In addition, the temporary protection measures enable a series of strategic and environmental assessments to occur to identify suitable long-term solutions to the subject site, particularly its areas of Aboriginal cultural heritage, recreational and ecological value, as well as built assets and economic generation.

This EIS is specific to the sandbag walls placed on Clarks Beach by and for Reflections Holiday Parks, however has been prepared in coordination to a concurrent proposal by NSW Department of Planning, Industry and Environment (Crown Lands), which extends the western wall to a total length of approximately 160m. This coordination is to continue into the future through ongoing monitoring, project liaison and planning for the removal of the sandbag walls when appropriate.

Coastal Protection Works are permitted with consent by virtue of clause 19(2)(b) of *State Environmental Planning Policy (Coastal Management) 2018* (Coastal Management SEPP). The proposal is also identified as 'Designated Development' by clause 10 of the Coastal Management SEPP as the sandbag walls are located within land mapped as littoral rainforest. Accordingly, as per the provisions of *State Environmental Planning Policy (State and Regional Development) 2011*, the proposal is identified as 'Regionally Significant Development' and the Northern Regional Planning Panel is identified as the consent authority for this application.

This EIS has been prepared in accordance with both Schedule 1, Part 1 and Schedule 2 Parts 2 and 3 of the *Environmental Planning and Assessment Regulation 2000*, to identify the likely environmental impacts and proposed mitigation measures for the proposed development. This EIS includes an evaluation of the proposal against the matters for consideration established within section 4.15 of the *Environmental Planning and Assessment Act 1979* (the EP&A Act).

Subject Site

The subject site is Lot 410 DP729062, which is an approximately 3.9ha irregular shaped parcel. The subject site accommodates part of the Clarks Beach Holiday Park, a portion of Clarks Beach and extends into the Cape Byron Marine Park. Within the subject site, the proposed coastal protection works are confined to being the portions of Clarks Beach seaward of Reflections Holiday Parks – Clarks Beach Holiday Park which presently accommodate existing sandbag walls. For the purposes of this report, the spatial area proposed for coastal protection works is referred to as the 'Project Area'.

Project History

Clarks Beach, along with other stretches of the Byron coastline, have been subject to a series of extreme weather events since mid 2019, which has seen a rapid acceleration of coastal processes, including portions of erosion and loss of vegetation and beach access. To mitigate the coastal impacts of Tropical Cyclone Oma, 2x walls of sand bags were placed in front of the Clarks Beach Holiday Park as an emergency coastal protection response. The placement of sand bags provided protection to the Clarks Beach Holiday Park and afforded time to concurrently relocate a number of assets away from immediate threat. In addition, the sandbag walls have provided protection to 2x Aboriginal Middens, each identified as Aboriginal Objects under the *National Parks and Wildlife Act 1974* (NPW Act 1974). These Aboriginal Objects were identified through consultation with Arakwal Corporation representatives when the sand bags were placed. An Aboriginal Heritage Impact Permit (AHIP) has been obtained as the activity of removing the sandbag walls in anticipated to result in harm to the middens. Whilst not forming 'Integrated Development', an extension to the existing AHIP is to be sought separately, providing appropriate measures should extreme weather events or other instances arise where ongoing salvage is required, or harm may occur as a result of revegetation works. As at May 2021 it is understood that 3x active salvages ('collections') have occurred.

Whilst natural sand movement and subdued weather conditions afforded a time period of lower coastal hazard risk post Tropical Cyclone Oma, weather events experienced in the second half of 2020 again accelerated coastal erosion to the west of the Project Area, which were responded to by the placement of further sandbags and emergency works by Crown Lands. The works pursued by Crown Lands 'tie in' with the 2019 Reflections' (western) sandbag wall to provide an integrated wall extending beyond the subject site. The sandbag wall located beyond the subject site and project area are not subject to this proposal; however, regular communication and information sharing has and is continuing to be pursued to ensure a coordinated and holistic coastal management approach is maintained into the future.

The Proposal

The applicant is seeking approval for the continued placement and use of the sandbag walls, including their maintenance. The scope of the proposal resolves the current 'unauthorised' status of the sandbag walls, and provides development consent for their retention for a further 5x years. The approach and application serves the primary purpose of affording protection to existing built assets, ecological features and the 2x Aboriginal middens until such time that broader strategic investigations have been undertaken, including, but not limited to:

1. a masterplan for the Holiday Park developed and adopted in the form of a revised Plan of Management (PoM) for the site. The masterplan for the subject site will consider planned retreat, as well as other mitigation measures to address coastal hazard and risk.
2. the wider Coastal Management Program (CMP) for the Byron Bay embayment (or Clarks and Main Beaches specifically), currently being prepared by Byron Shire Council.

A definite timeline is not practical for either of these dependencies given the range of stakeholders and influences involved, generally it is anticipated that a 24 – 36-month period will be required. Following the finalisation of these strategic plans, further environmental assessments and approvals are anticipated to be required in order to implement their findings. Accordingly, the timespan of the proposal is prescribed as 5x years, along with monitoring of environmental conditions throughout.

Throughout the duration of the 5x year period, a monitoring and maintenance schedule will be implemented, including the following tasks:

- an initial UAV LiDAR/optical land survey undertaken at low tide, extending at least 500 m alongshore beyond the sandbag walls
- weekly photo data, as well as additional photos, inspections and survey should weather events expose or damage the sandbags
- monthly inspections to document environmental conditions and ensure any public safety risks are identified and mitigated
- 3x monthly assessment of end effects through high resolution photography, survey and mapping
- annual Reporting to collate the abovementioned information

Coastal assessment of the existing sandbag walls has confirmed their suitability for the site and timespan sought. In the event of a weather event affecting the sandbag walls, or surrounding public safety, a suite of maintenance measures may be pursued, as follows:

- erection of safety fencing
- beach nourishment
- retreat at-risk assets
- replacement of sandbags and/or rebuilding of the sandbag walls
- revegetation and/or other environmental protection works

The specific response pursued by Reflections Holiday Parks will be considered at the time, in consultation with Crown Lands, and in light of the monitoring data available to inform decision making. Whilst the scope of this application is considered to enable replacement of sandbags and/or rebuilding of the sandbag walls, the remainder of the potential activities identified are able to be pursued without consent, where outside the littoral rainforest mapping referenced by Coastal Management SEPP. The

provisions of the planning framework accordingly enable fit for purpose considerations which can respond to the particulars present should the need arise.

The specific removal of the sandbag walls at the conclusion of the 5x year period is not directly sought within the proposal. Whilst common project objectives and overall methodology is shared, this component represents a direct difference to the adjoining application being pursued by Crown Lands. The variation in approach primarily arises due to the extent and nature of built, cultural and environmental assets, and the need for Reflections to consider and balance these intricacies into the future.

Whilst the original environmental assessment prepared to place the sandbag walls on Clarks Beach also considered and provides the opportunity for their removal by cutting the bags, depositing the sand and removing the geotextile material, it is acknowledged that additional information regarding the site conditions has since become available. In this regard, the existing assessment and AHIP enables the removal of the sandbag walls should this activity be required (i.e. failure of the sandbag wall), however it is the intention of the proponent to supersede the historical assessment and pursue a coordinated strategy, supported by additional assessments. Specifically, cotemporary environmental assessments will be undertaken seaward of the immediate 2100 hazard line (as well as throughout the subject site more generally) to inform the masterplanning and PoM of the subject site and implement their findings. This process enables greater depth of monitoring of site conditions, reducing the spectrum of potential conditions and scenarios, and supports proponent confidence by resolving the existing unauthorised works.

Notwithstanding the formal removal of the sandbag walls not being sought at this time, it is understood that the existing sandbag walls are not fit for purpose to a permanent coastal protection purpose and that their removal will need to be:

- coordinated with the removal of the Crown Lands sandbag wall
- undertaken opportunistically to mitigate unnecessary environmental impacts
- supplemented with beach nourishment activities to replenish sand 'locked up' by the sandbag walls and therefore removed from the active littoral system.

Further, the ultimate methodology of sandbag walls removal is shared with Crown Lands, namely:

- use of the sandbag walls for a period of up-to 5x years.
- if the sandbag walls are buried at the close of the 5x year period, the bags shall remain in-situ unless exposed.
- after the 5x year timeline, should the sandbag walls become exposed, they are to be removed opportunistically, having regard to:
 - any recommendations by coastal and engineering specialists
 - the volume of sand in the beach profile, as well as the exposure and accessibility of the sandbags
 - the geotechnical stability of any structures within the area
 - meteorological, tidal and oceanic conditions
 - public safety risks and expected beach visitation (i.e. avoiding school holidays and the peak tourist where possible).

Potential Impacts

The assessment of the proposal has been supported by 2x Coastal Assessments, which consider the impact of the 2x walls on the physical coastal processes of Clarks Beach. In summary, the Coastal Assessments identify:

- the underlying drivers of the coastal processes experienced within the locality and influencing the subject site
- the sandbag walls has been effective at preventing further dune erosion and shoreline retreat
- the sandbag walls is currently in good condition, but it is under-designed for longer-term use given the site conditions and could fail in a 10-year ARI storm

- the most significant effect of the sandbag walls on coastal processes is the potential for 'end scour', though only very minor end scour has been observed to date during the storms of 2019 & 2020
- calculations estimating the potential extent of end scour/end effect impacts
- a monitoring program to mitigate the potential impact of end scour
- calculations estimating the sand budget 'locked up' by the sandbag walls and to be replenished via nourishment upon removal

Further, the Coastal Assessment prepared by BMT, in collectively considering the risk to built assets, coastal processes, public safety, vegetation, the Cape Byron Marine Park and alignment with the applicable coastal planning framework, identifies greater positive impacts, linked to the temporary nature of the proposal and the associated monitoring program.

The environmental qualities of the subject site and surrounding locale are identified as a key drawcard of existing character, lifestyle and Byron's tourism economy. These qualities are formalised by the identification of the Cape Byron Marine Park to the immediate north, Cape Byron National Park to the east and high biodiversity values (littoral rainforest) on the subject site. The retention of the sandbag walls provides a level of protection to the remaining areas of littoral rainforest, however is identified as restricting nesting habitat for turtles for the length of the sandbag walls (being approximately 120 – 140m). Whilst this linear space reduces suitable nesting habitat, the reduction for a period of 5x years is not considered to be of significance within the wider area of suitable habitat.

Accordingly, despite minor negative impact of visual amenity and turtle nesting habitat being likely, the direct and cumulative impact is not considered to be of significance, nor warrant refusal of the proposal. As outlined within this EIS, the proposal seeks the ongoing use of existing sandbag walls for a further 5x year period. The proposal is considered to support ongoing protection of Aboriginal cultural heritage and operations of the Reflections Holiday Park whilst the preparation of strategic plans for the subject site and wider Byron Bay embayment are pursued. In this regard, the proposal provides protection without undermining strategic analysis and is not identified as resulting in likely impacts of significance.

For the reasons outlined, the proposal is considered to be in accordance with the public interest, enables longer-term solutions for the subject site are explored, resolved and implemented and warrants approval, subject to the application of reasonable and relevant conditions.

Introduction

1.1 Project Overview

This Environmental Impact Statement (EIS) relates to the continued use of existing sandbag walls placed on Clarks Beach, Byron Bay by Reflections Holiday Parks. The retention of sandbag walls, placed as 2x 'walls', each approximately 60 – 70m long, for a period of 5x years provides coastal protection when Clarks Beach is in an eroded state/cycle. In addition, the temporary protection measures enable a series of strategic and environmental assessments to occur to identify suitable long-term solutions to the subject site, particularly its areas of Aboriginal cultural heritage, recreational and ecological value, as well as built assets and economic generation. The subject site of the proposal is Lot 410 DP729062, which is an approximately 3.9ha irregular shaped parcel. The subject site accommodates part of the Clarks Beach Holiday Park (including White's Cottage), a portion of Clarks Beach and extends into the Byron Bay, which is identified within the Cape Byron Marine Park. The extent of the subject Site is displayed in Figure 1.

The Clarks Beach Holiday Park, which is primarily accommodated on the subject site, serviced over 24,000 tourists in financial year 2019, and generates \$4.5 million in gross state product. In light of the underlying recreation and reserve intent of the subject site, its development and governance is guided by an endorsed Plan of Management (PoM). The current configuration and improvements on the subject site include a mixture of cabins and powered sites, as well as internal road, barbeque and deck viewing areas and White's Cottage.



Figure 1 – The Subject Site

Within the subject site, the coastal protection works are confined to being the portions of Clarks Beach seaward of Reflections Holiday Parks – Clarks Beach Holiday Park, which presently accommodate existing sandbags through 2x 'walls'. For the purposes of this report, the spatial area proposed for coastal protection works is referred to as the 'Project Area' and is accurately displayed on the survey plan prepared by Kennedy Surveying, dated 7 October 2020 and within the Planset (General Plan, Survey and Cross Sections) prepared by Planit Consulting and dated 6 September 2021.



Figure 2 – The Project Area

The project area does not require any works (such as clearing or earthworks) to facilitate the ongoing use. Physical works will only be pursued to undertake any maintenance necessary to ensure the integrity and safety of the coastal protection works and the immediate surrounds. The footprint of the proposal is not identified as overlapping with the Cape Byron Marine Park.

NSW Crown Holidays Parks Land Manager, trading as Reflections Holiday Parks is the formal proponent of the application, led by Nick Baker, Chief Executive Officer, Reflections Holiday Parks.

1.2 Project Objectives

The project seeks to fulfil the following objectives:

1. Enable the protection of the Reflections Holiday Park in the short-term (i.e. 5x years).
2. Enable the protection of the Aboriginal middens in the short-term (i.e. 5x years).
3. Implement a coastal protection strategy for the subject site until such time (i.e. 5x years) that a new PoM has been prepared and its implementation has commenced for the subject site. Of note, the PoM will consider coastal strategies (including planned retreat options) and liaison with Byron Shire Council as they develop their Coastal Management Program (CMP) applicable to the subject site.
4. Ensure safe workplace and safe environment for ongoing public access.

These objectives are met by:

- Retaining the sandbag walls already present on Clarks Beach to provide a layer of protection from coastal erosion and other coastal processes and not disturbing the sandbag walls if buried beyond the 5x year period sought.

1.3 Project History

On 24 July 2019, works were undertaken, supported by a Review of Environmental Factors (REF) to ensure best practice due diligence, to place 2x 'walls' of sandbags on Clarks Beach, Byron Bay. These works were undertaken as an immediate emergency response to the coastal impacts experienced from Tropical Cyclone Oma. The REF was prepared pursuant to section 19(2)(a)(iii) of *State Environmental Planning Policy (Coastal Management) 2018*, which permits the placing of sandbag walls without development consent for a period of not more than 90 days. Concurrent to the pre-planning and physical works, consultation was ongoing with the Arakwal Corporation, particularly as Aboriginal Heritage had been identified was within the vicinity of the proposed work area.

Post the physical works phase, it was identified through consultation with the Arakwal Corporation, that the sandbag walls had been placed within close proximity and seaward of 2x Aboriginal middens, being registered Aboriginal Objects (AHIMS #04-5-0358 & AHIMS #04-5-0359), as identified in Figure 2.

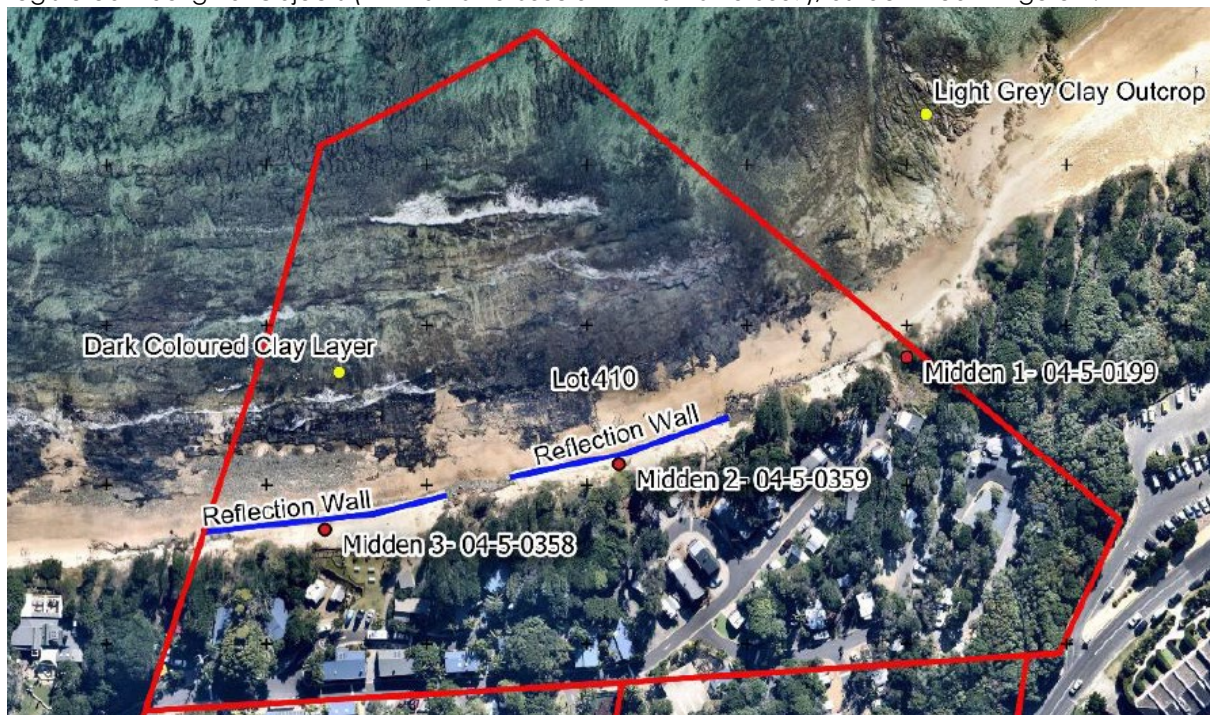


Figure 2 – Approximate Locations of the Aboriginal Middens

Reflections accordingly commenced pursuing an Aboriginal Cultural Heritage Assessment Report (ACHAR) immediately. Through the preparation of the ACHAR, it was determined that the removal of the sandbag walls, as per the environmental assessment determined, would result in harm to the Aboriginal middens, necessitating the need to obtaining an Aboriginal Heritage Impact Permit (AHIP). Recommendation 1 of the ACHAR concluded there is not Arakwal community support for the removal of the temporary sand bag system without an alternative long-term solution being put in place. After 5x month assessment process, a formal AHIP was issued by Office of Environment & Heritage (OEH) on 20 March 2020.

Within early 2020 the effects of the COVID 19 pandemic resulted in a nationwide 'lockdown', which resulted in limited travel and effectively paused the vast majority of Reflections business operations. As restrictions eased and business operations recommenced, planning investigations and strategies commenced to advance the immediate actions of coastal and asset protection and heritage impact, whilst also proceeding with longer term initiatives such as asset relocation and planned retreat masterplanning.

Whilst natural sand movement and subdued weather conditions afforded a time period of lower coastal hazard risk post Tropical Cyclone Oma, in the second half of 2020 weather events again accelerated coastal erosion to the west of the Project Area. The change in environmental conditions and coastal erosion threat was responded to by the placement of further sandbags and emergency works by NSW Department of Planning, Industry and Environment (Crown Lands), 'tying in' with the 2019 Reflections (western) sandbag wall, and continuing to the west. The sandbag wall located beyond the project area are not subject to this proposal, however their temporary retention is being pursued by Crown Lands. Whilst the continued coastal protection works are across 2x proposals and proponents, regular communication and information sharing has been and continues to be pursued to ensure a coordinated and holistic coastal management approach is maintained into the future. In this regard, coastal assessment has been undertaken for the extent of the sandbag wall intervention, monitoring measures to be pursued in collaboration and ultimate removal to be pursued in coordination. Finally, these

processes and actions highlight that whilst Tropical Cyclone Oma represents a peak event, the vulnerability of the locale to coastal erosion is sustained and anticipated to remain so for a period of time in excess of the 90-day time period prescribed within the planning framework.

In late 2020, a 'sand slug' had migrated along the embayment shoreline to Clarks Beach, providing additional protection to the cultural heritage and built assets on the subject site. At the time of writing (Revision 1) this protection has supported some sand accretion, limiting the exposed sandbags to less than 50%.



Photo 1 – Portion of the Project Area as at 28 March 2021

1.4 Project Description

The proposal is for the use of existing coastal protection works, being the retention of the existing sand bags within the Project Area on Clarks Beach. The 2x existing sandbag walls include 5x rows of bags at between 60 – 70m in length, as specifically detailed on the survey prepared by Kennedy Surveying, the Planset (General Plan, Survey and Cross Sections) prepared by Planit Consulting and dated 6 September 2021 and displayed in the images throughout this EIS.

The duration of the project is 5x years, however it is not proposed to remove the sandbag walls until a later date should they be buried at that time. No works are specifically prescribed at this time as the sand bags are already in place. Physical works will only be pursued to undertake any maintenance necessary to ensure the integrity and safety of the coastal protection works and the immediate surrounds.

The intention of the 5x year use of the sandbag walls serves the primary purpose of affording protection to existing built assets and Aboriginal middens until such time that:

1. The wider Coastal Management Plan is known for the Byron Bay embayment (or Clarks and Main Beaches specifically), and,
2. A strategic 'masterplan' and PoM is developed and assessed for the Clarks Beach Holiday Park assets, which will include consideration of planned retreat.

A definite timeline is not practical for either of these dependencies given the range of stakeholders and influences involved, however, generally it is anticipated that a 24 – 36-month period will be required. Following the finalisation of these strategic plans, further environmental assessments and approvals are anticipated to be required in order to implement their findings. Accordingly, the timespan of the proposal is prescribed as 5x years, along with monitoring of environmental conditions throughout.



Photo 2 – Existing Reflections Sandbag Walls within the Project Area

Throughout the duration of the 5x year period, the proposal includes implementation of a monitoring and maintenance schedule, including the following tasks:

- an initial UAV LiDAR/optical land survey undertaken at low tide, extending at least 500 m alongshore beyond the sandbags
- weekly photo data, as well as additional photos, inspections and survey should weather events expose or damage the sandbags
- monthly inspections to document environmental conditions and ensure any public safety risks are identified and mitigated
- 3x monthly assessment of end effects through high resolution photography, survey and mapping
- annual reporting to collate the abovementioned information

In the event of a weather or other event (such as vandalism) affecting the sandbag walls, or surrounding public safety, a suite of maintenance measures may be pursued, as follows:

- erection of safety fencing
- beach nourishment
- retreat at-risk assets
- replacement of sandbags and/or rebuilding of the sandbag wall
- revegetation and/or other environmental protection works

The specific response activity pursued by Reflections Holiday Parks will be considered at the time on the basis of professional advices, in consultation with Crown Lands, and in light of the monitoring data available to inform decision making. Whilst the scope of this application is considered to enable replacement of sandbags and/or rebuilding of the sandbag wall, the remainder of the potential activities identified are able to be pursued without consent, where outside the littoral rainforest mapping referenced by the Coastal Management SEPP. The provisions of the planning framework accordingly enable fit for purpose considerations which can respond to the particulars present should the need arise.

The specific removal of the sandbag walls at the conclusion of the 5x year period is not directly sought within the proposal. Whilst common project objectives and overall methodology is shared, this component represents a direct difference to the adjoining application being pursued by Crown Lands. The variation in approach primarily arises due to the extent and nature of built, cultural and environmental assets present within the Reflections Holiday Park site, and the need for Reflections to consider and balance these intricacies into the future. Specifically, the subject site includes a significantly greater volume of built assets, 2x known Aboriginal middens and larger tracts of high value mapped vegetation, each of which is forward of the 2100 coastal hazard line and susceptible to coastal erosion events.

The original environmental assessment and determination to place the sandbag walls on Clarks Beach also enables their removal. Notwithstanding a viable removal determination being in place, acknowledging the additional information being collected through the PoM process, it is intended to pursue additional, separate environmental assessment (and approvals where necessary) to remove and/or modify the sandbag walls prior to the conclusion of any development consent issued.



Photo 3 – Existing Reflections Sandbags within the Project Area

Notwithstanding that the removal of the sandbag walls is not being sought at this time, it is understood that the existing sandbags, and wall design, are not fit for purpose to a permanent coastal protection purpose and that their removal will need to be:

- coordinated with the removal of the Crown Lands sandbag wall
- undertaken opportunistically to mitigate unnecessary environmental impacts
- supplemented with beach nourishment activities to replenish sand 'locked up' by the sandbag walls and therefore removed from the active littoral system.

Further, the ultimate methodology of sandbag wall removal is shared with Crown Lands, namely:

- use of the sandbag walls for a period of up-to 5x years.
- if the sandbag walls are buried at the close of the 5x year period, the bags shall remain in-situ unless exposed.
- after the 5x year timeline, should the sandbag walls become exposed, they are to be removed opportunistically, having regard to:
 - any recommendations by coastal and engineering specialists
 - the volume of sand in the beach profile, as well as the exposure and accessibility of the sandbags
 - the geotechnical stability of any structures within the area
 - meteorological, tidal and oceanic conditions
 - public safety risks and expected beach visitation (i.e. avoiding school holidays and the peak tourist where possible).

1.5 Alternatives

The project has been considered alongside alternative strategies to facilitate the project objectives identified. The following table briefing surmises the consideration of alternatives:

Table 1: Assessment of Alternatives

Option	Commentary
Do Nothing	<p>The 'do nothing' alternative to the proposal involves removing the sandbag walls from the subject site and simultaneously removing the Aboriginal middens from the site. It is anticipated that should the proposed Coastal Protection Works not be supported that this option will likely be enacted promptly.</p> <p>Actioning a do nothing outcome will result in the Aboriginal middens being retrieved from the site, in accordance with the AHIP issued, however, and critically, not in accordance with the expressed desires of the Arakwal Corporation. This outcome is not ideal, particularly whilst other options are afforded which enable retention, even if ultimately time limited.</p> <p>The implementation of a do-nothing outcome will necessitate the placement of machinery on Clarks Beach to generally 'lift' each sandbag, allowing the geotextile bag to be cut, disposing the contained sand onto the beach and allowing the geotextile bag to be removed. Timing of this activity is sensitive to tidal movement and likewise is encouraged to be implemented outside of peak holiday periods. This recommendation acknowledges the strength of Clarks Beach as a tourism drawcard and the wider economic value of Byron Bay as a tourism product.</p> <p>Upon removal of the sandbag walls, the existing dune would likely slump and be exposed to further coastal erosion in key weather events and/or as the sand slug dissipates from its current position in front of subject site. The coastal erosion process is expected to be accelerated if not supplemented by other coastal protection interventions, such as beach nourishment works, to ensure sufficient angle of repose is achieved. Beach nourishment works are discussed further within the following option; however, this extent of beach nourishment is presently identified as:</p> <ol style="list-style-type: none"> 1. Cost ineffective 2. Involves constrained methods of transporting sand material to the project area given its position adjoining the Cape Byron Marine Park and the alternative method of trucking material in through the Byron Bay Town Centre.

	<p>3. Unsustainable given the anticipated volume of nourishment required, dynamic nature of coastal processes and the high-level of public activity, access and use within the subject land.</p> <p>Accordingly, removal of the sandbag walls is anticipated to result in the existing dune, which presently measures between 3 – 6m in height, being exposed to wave processes. Notwithstanding this potential exposure, protection in the immediate term would be afforded whilst the sand slug is still positioned at Clarks Beach.</p> <p>This would require further public safety considerations (and likely response) of:</p> <ol style="list-style-type: none"> 1. The dune potentially slumping. 2. The subsequent potential impact of vegetation and built assets at the top of the dune are anticipated to result in a portion of Clarks Beach being closed to public access and not allowing east-west pedestrian movement between Main Beach and Clarks Beach. <p>Removal of the sand bags is anticipated to accelerate the receding dune line and applicable Zone of Reduced Foundation. This acceleration may result in existing park assets, including White's Cottage potential being demolished as insufficient time is available to secure retreat and relocate options. The retention of the sandbag walls as the preferred approach enables time to mitigate zone of reduced foundation impacts and facilitate planned retreat planning and approvals.</p> <p>Further, assessment to-date indicates removal of the walls will expose the colonising dune vegetation and established vegetation within the Holiday Park (including littoral rainforest) to coastal erosion. Immediate effects may be witnessed as the dune slumps without the support of the wall. In this regard, retention of the sandbag walls is considered to support terrestrial biodiversity and values of the subject site, without generating a significant impact on aquatic ecology.</p>
<p>Pursue activities, such as beach scraping and beach nourishment as opposed to Coastal Protection Works via the existing sandbag walls</p>	<p>Beach nourishment is not individually defined as a land use within the <i>Environmental Planning and Assessment Act 1979</i> (the EP&A Act), the <i>Coastal Management Act 2016</i> (CM Act), or <i>State Environmental Planning Policy (Coastal Management) 2018</i> (Coastal Management SEPP). Beach nourishment is however defined as a form of Coastal Protection Works within the CM Act, and can be carried out without development consent if by a public authority under clause 19(2)(a)(ii) of the Coastal Management SEPP. Of note, NSW Crown Holidays Trust (trading as Reflections Holiday Parks) is both a public authority proponent (EP&A Act s5.3) and the determining authority (EP&A Act s. 5.1) for activities under Part 5 of the EP&A Act.</p> <p>Whilst beach nourishment is a theoretical option, either to supplement sandbag wall removal (as discussed above), or in concert with sandbag wall retention. Initial analysis suggests that this option is unviable in light of the:</p> <ul style="list-style-type: none"> • quantity of nourishment needed to be effective, • projected interface with public access along Clarks Beach and Cape Byron Marine Park • logistics of undertaking beach nourishment, • limited timeline of retention and effectiveness for the area <p>Beach 'scraping' is identified in Byron Shire Council's Coastal Management Plan (Stage 1) Scoping Study Cape Byron to South Golden Beach (Stage 1 CMP) as a very useful and cost-effective technique for rebuilding dunes or restoring beaches. Scraping accelerates the natural process of dune re-building by</p>

	<p>moving sand from the intertidal area of the beach and placing it on the dunes. It doesn't technically add sand reserves to the beach but does provide for existing sand reserves to be retained as an erosion buffer.</p> <p>The Stage 1 CMP identifies considering beach scraping at Clarks Beach (as well as other potential locations); however, the effectiveness of beach scraping is limited by the amount and accessibility of sand within the locality to 'scrap'. The availability of sand makes this option temporal as opposed to permanent, likewise the process of conducting such works through Cape Byron Marine Park is not favoured unless necessary.</p>
Pursue alternative 'engineered' Coastal Protection Works, such as seawalls	<p>The consideration of 'engineered' coastal protection works has not been seriously contemplated by the proponent at this time, despite it being an option and ultimately permissible with development consent. Specifically, this option has not been progressed in light of:</p> <ul style="list-style-type: none"> Concerns regarding misalignment with Council's long-held strategic direction of planned retreat and vision to promote the areas inherent natural values. Acknowledgement that any engineered solution would be better considered within a wider, strategic context and beyond the scope of the proposal. Investigations into a long-term solution, such as a revised PoM for the subject site or Council's CMP, being premature and preemptive of these strategic processes.

For the abovementioned reasons, the proposal forms the preferred outcome. Whilst the proposal is identified as Designated Development, facilitating the retention of the sandbag walls does not require removal, or generate impact to littoral rainforest and is considered extremely low impact given no works are necessary. The legislative identification of littoral rainforest is not dynamic and as such does not have 'live' regard to the historic processes and current on the ground environmental conditions.

1.6 Environmental Assessment Pathway

The proposal seeks the retention of the 2x existing 'walls' of sandbags as coastal protection works, as per clause 19(2)(b) of the Coastal Management SEPP. In addition, the sandbag walls are located within land mapped as littoral rainforest as per the Coastal Management SEPP, triggering, as per clause 10(2), the declaration of designated development for the purposes of the EP&A Act.

A request for Secretary's Environmental Assessment Requirements (SEARs) from NSW Department of Planning, Industry and Environment (DPIE) was made on 2 December 2020 and issued on 28 January 2021. The content of the SEARs issued is discussed further in Section 1.7 of this EIS.

The provisions of *State Environmental Planning Policy (State and Regional Development) 2011*, specifically, Schedule 7(8A), identify the proposal as 'Regionally Significant Development'. Accordingly, Council's assessment will be presented to the Northern Regional Planning Panel as the consent authority for the proposal.

As detailed previously, the scope of the proposal includes maintenance of the existing sandbag walls to ensure their integrity and public safety is upheld. The scope of the maintenance work is generally confined to the replacement of damaged/dislodged/deflated bags and/or rebuilding of the wall in response to a failure. Whilst other actions may be pursued to uphold the function and safety of the coastal protection works, such as the erection of signage, beach nourishment and the like, where outside of the Coastal Management SEPPs mapped littoral rainforest area, these activities are able to be pursued without consent and will be specifically assessed under Part 5 of the EP&A Act.

1.7 Secretary's Environmental Assessment Requirements

The following table details the Secretary's Environmental Assessment Requirements as issued and the relevant sections of the report addressing those requirements:

Table 2: Secretary's Environmental Assessment Requirements

SEAR	Location in the EIS
The Department of Planning, Industry and Environment (the Department) has reviewed the documentation submitted and confirms it has no specific requirements, except that the EIS must address the provisions of the <i>State Environmental Planning Policy (Coastal Management) 2018</i> .	Section 3.1.4.1
Ensure the EIS meets the minimum form and content requirements outlined in Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i> .	Declaration & throughout the EIS package.
Ensure the EIS is prepared in consultation with Byron Shire Council and any other relevant local, State and Commonwealth government authorities, service providers, community groups and surrounding landowners, and address any issues they raise in the EIS	Sections 3.1.4.4, 3.1.9 and the Pre Lodgement Community Consultation Submissions Report.

2. Strategic and Statutory Context

2.1 Strategic Context

The Byron Bay locality is world renowned for its stunning natural environment, surfing beaches, eclectic lifestyles and community. The subject site is located in the heart of Byron Bay, comprising a portion of Clarks Beach and immediately connected to Main Beach and the Town Centre to the west, and the Cape Byron State Conservation Area, The Pass, Wategos Beach and the Byron Bay Lighthouse to the east. Cape Byron Marine Park, immediately to the north of the subject site, not only includes the immediate beach area, but extends to Julian Rocks, a well-known diving location.

The collective of these natural and built assets forms the foundation of a strong tourism economy, with the Byron LGA identified as supporting 2.1 million total visits in 2019¹ second only in NSW to Sydney. The Byron Shire draft Sustainable Visitation Strategy 2020 – 2030 identifies visitor expenditure as \$776 million annually. Within this economic pillar, the subject site provides a variety of accommodation opportunities and serviced over 24,000 tourists in financial year 2019. Primarily servicing the domestic tourism market and including a strong visitation from interstate guests, the Reflections Holiday Park – Clarks Beach generates \$4.5 million in gross state product annually. Strategically, the continued use of the existing sandbag walls will support Reflections Holiday Parks rebound from the impacts of the COVID 19 pandemic as well as afford time to pursue a contemporary masterplan and commence implementation.

As detailed above and acknowledged through multiple State and local Government strategies, Byron's tourism market is closely connected to its natural assets, culture and sustainability initiatives and credentials. Directly and indirectly, these values are upheld through environmental strategies and management, including the future CMP, which will address coastal hazard risks, preserve habitats and cultural uses, and encourage sustainable economic and built development in the coastal zone. Being prepared over 5x stages, the CMP also provides a strategic framework to adapt to emerging issues such as population growth and climate change. At this time Council has finalised Stage 1 of the CMP, which includes a scoping study for Cape Byron to South Golden Beach, including Clarks Beach and the subject site. The remaining 4x stages are anticipated to be at least 24 – 36 months away from finalisation. Once adopted, the CMP will provide strategic direction regarding the use and 'treatment' of coastal areas, which considers documented risks, vulnerabilities and opportunities cumulatively for the Byron Bay embayment.

The activities and management of the subject site is guided by a PoM dated July 2009, which is made pursuant to the *Crown Lands Act 1989*. The PoM prescribes a review every 5x years or as required to ensure ongoing relevance with legislation and community expectation. In light of the changing environmental conditions and the time since previous review, Reflections Holiday Parks have commenced background analysis to directly inform a review of the existing PoM. This review process will provide the strategic direction for the subject site into the future through site investigations, masterplanning and consultation with the community and other stakeholders.

The proposal acknowledges and responds to its strategic context by enabling ongoing Holiday Park operations and beach safety, whilst not pre-empting the strategic investigations of the CMP and PoM, which will provide longer-term considerations.

¹ June YE data: IVS and NVS, Tourism Research Australia, DESTINATION NORTH COAST TOURISM RESEARCH PROJECT July 2020

2.2 Statutory Context

Table 3 identifies the applicable statutory framework of relevance to the proposal, and the location within this EIS of there assessment, if and where necessary.

Table 3: Applicable Statutory Provisions

Act, Regulation or Environmental Planning Instrument	Considerations	Location in the EIS
Environmental Biodiversity & Conservation Act 1997	Protection of nationally significant natural or cultural values and ensuring matters of national environmental significance are not exposed to impact of significance.	Section 3.2
Environmental Planning & Assessment Act 1979	Protection of the environment, promotion of orderly and economic use of the land and facilitating ecologically sustainable development.	Section 3.1
Coastal Management Act 2016	Protection of natural coastal processes, support of social and cultural values and promote sustainable land use planning decisions, particularly by maintaining public access and safety, as well as restoration of beach conditions should erosion occur.	Section 3.4
Biodiversity Conservation Act 2016	Maintain the diversity and quality of ecosystems can considering environmental conditions, key threatening processes and testing whether significant effects are likely.	Section 3.3
Marine Estate Management Act 2014	Protect the biologically diverse, healthy and productive Cape Byron Marine Park and ensure the continued economic, cultural social and recreational use is facilitated.	Section 3.5
State Environmental Planning Policy No. 55 – Remediation of Land	Ensuring the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment.	Section 3.1.4.1
State Environmental Planning Policy (Koala Habitat Protection) 2020	Encourage the proper conservation and management of areas of natural vegetation that provide habitat for koalas to ensure a permanent free-living population over their present range and reverse the current trend of koala population decline.	Section 3.1.4.1
State Environmental Planning Policy (Coastal Management) 2018	Management of development in the coastal zone to enable protection of the environmental assets of the coast	Section 3.1.4.1
State Environmental Planning Policy (State & Regional Development) 2011	Identify development that is State significant development, State significant infrastructure, critical State significant infrastructure and regionally significant development	Section 3.1.4.1
Byron Local Environmental Plan 1988	The aims and objectives of the Council and community towards environmentally sustainable development and intergenerational equality as expressed through land use provisions and built form controls.	Section 3.1.4.2
Water Management Act 2000	Clause 41 of the <i>Water Management (General) Regulation 2018</i> provides an exemption for public authorities in relation to controlled activity approvals on waterfront land. Notwithstanding, the temporary	No further assessment is considered to be required within the

Act, Regulation or Environmental Planning Instrument	Considerations	Location in the EIS
	use of existing sandbag walls for coastal protection purposes is considered to compliment the Objects of the <i>Water Management Act 2000</i> .	scope of this proposal.
Fisheries Management Act 1994	As the scope of the proposal is confined to use of the existing sandbag walls, the proposal does not specifically involve dredging or reclamation of water land. In this regard, dredging and reclamation works were technically pursued to place the sandbag walls initially, likewise, will be pursued as part of decommissioning the sandbag walls. In addition, should maintenance or beach nourishment type tasks be pursued into the future, consultation with NSW Department of Primary Industries (Fisheries) will be consulted in accordance with section 199 of the <i>Fisheries Management Act 1994</i> .	No further assessment is considered to be required within the scope of this proposal.

3. Environmental Impact Assessment

3.1 Environmental Planning and Assessment Act 1979

The proposal constitutes 'development' as defined by the EP&A Act. The type of Development prescribed under the EP&A Act in which the Development Application is seeking is development consent for the use of coastal protection works. Of note, the existing sandbag walls (being the coastal protection works) are located within an area of the beach mapped as littoral rainforest under the Coastal Management SEPP. Despite the Project Area being free of littoral rainforest, as per clause 10 of the Coastal Management SEPP, the proposal is not identified within a certified CMP, or a PoM and as such is Designated Development for the purposes of the EP&A Act.

Consideration and assessment applicable provision of the EP&A Act are identified within the following sections.

3.1.1 Section 1.3

Section 1.3 prescribes the Objects of the EP&A Act. Acknowledging the scope of the proposal being confined to the use of existing sandbag walls for a period of up to 5x years, the proposal is considered to make a minor contribution towards delivering the prescribed objects. Specifically, the proposal is considered to:

- promote the social and economic welfare of the community by maintaining protection of the Aboriginal middens
- promote the orderly and economic use and development of land by enabling a suitable timeline for the Holiday Park operations to be ongoing and strategic planning undertaken to respond to the erosion threat
- promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage)
- promote the proper maintenance of built improvements and access, including the protection of the health and safety of their occupants

3.1.2 Section 1.7

Acknowledging the relationship between the EP&A Act and Part 7 of *Biodiversity Conservation Act 2016* (BC Act) and Part 7A of *Fisheries Management Act 1994* (FM Act), further discussion is contained within section 3.3 of this EIS.

3.1.3 Section 4.14

Section 4.14 specifies that consent cannot be granted for the carrying out of development on bushfire prone land, unless the consent authority is satisfied that the development conforms to the specifications and requirements of *Planning for Bush Fire Protection*. Section 4.14 also specifies that consultation with the NSW Rural Fire Service is not a statutory requirement for this proposal, considering the proposal does not include subdivision nor constitute a special fire protection purpose.

The subject land and project area are identified as bushfire prone. Planning for Bush Fire Protection provides development standards for designing and building on bush fire prone land, particularly to limit people and new development from being exposed to high bushfire risk and to provide operational access and egress for emergency service personnel. In this regard, the proposal does not increase the sensitivity of the project area to bushfire risk, introduce additional people or vulnerable built assets, nor affect access and egress within the area. In light of the above, the proposal is considered to align with the aims, objectives and principles of Planning for Bush Fire Protection 2019.

3.1.4 Section 4.15

Section 4.15 establishes the assessment process applicable to development applications, which are addressed, in the same order, below.

3.1.4.1 State Environmental Planning Policies

State Environmental Planning Policy (Coastal Management) 2018

The Coastal Management SEPP applies to all land within the 4x coastal management areas that comprise the coastal zone and seeks to promote an integrated and coordinated approach to land use planning, in a manner consistent with the objects of the *Coastal Management Act 2016*. The coastal zone means the area of land comprised of the following coastal management areas:

- the coastal wetlands and littoral rainforests area;
- the coastal vulnerability area;
- the coastal environment area;
- the coastal use area.

The Project Area is within the littoral rainforest area (and proximity to littoral rainforest area), coastal environment area and coastal use area under the Coastal Management SEPP.

Despite the Project Area no longer possessing littoral rainforest vegetation due to previous coastal erosion events, as per clause 10 of the Coastal Management SEPP, the proposal is not identified within a certified CMP, or PoM and as such is defined as development which requires development consent. In addition, as per clause 10(2) of the Coastal Management SEPP, is declared Designated Development.

The proposal has been assessed to ensure the integrity and resilience of the biophysical, hydrological and ecological environments (including littoral rainforest) are upheld and no impacts of significance are identified on environmental values or coastal processes have been identified. Further, a monitoring program is proposed to enable necessary rectification works and ensure any unexpected coastal impacts which are mitigated before any significant impacts are experienced.

Specifically, the continued use of the sandbag walls provides additional protection to significant terrestrial vegetation, which otherwise will be exposed to coastal processes. No marine vegetation of note has been identified within the Project Area or its immediate surrounds. Further, the water quality of the Cape Byron Marine Park is not identified as likely to be affected by the continued placement of the geofabric sandbags.

The proposal is not anticipated to unreasonably impact access to or along the foreshore, cause overshadowing, wind funnelling, loss of views from public spaces and has been designed in direct response to the site's conditions and constraints. Whilst the retention of the sandbag walls is identified as resulting in a reduction in visual amenity along Clarks Beach by reducing the 'natural' appearance of the foreshore, this impact is not considered to be of incongruent or of significance to the foreshores visual qualities. The potential for adverse visual impact is further reduced in light of the restricted timeline of the proposal.

The proposal effectively provides protection to the 2x Aboriginal middens identified and registered to the site. Existing pedestrian access along and through the dune area has been restricted to further minimise disturbance of cultural heritage. Specific to this matter, an Aboriginal Cultural Heritage Assessment has been prepared by Everick Heritage, which involved consultation with representatives of the Arakwal Corporation. Likewise, the proposal does not include disturbance of adjoining parcels, nor influence pedestrian access through sensitive areas, such as the Cape Byron National Park to the east, which may result in damage to Aboriginal Objects outside the subject site.

Coastal Assessment has been undertaken to confirm that the proposal is not likely to cause increased risk of coastal hazards on that land or other land. It is noted that the retention of the sandbag walls will

ultimately possess end scour effects, however the extent of effects is anticipated to be minimal and is matched with an ongoing monitoring regime to track and respond to impacts. Specifically, the coastal assessment by University of New South Wales Water Research Laboratory includes calculations to model the anticipated impact of the Reflections sandbag walls, as well as the Reflections and Crown Lands sandbag walls together. Whilst a formal framework to guide responses is not yet established, it is anticipated that monitoring findings are shared with key stakeholders, such as Council and the Arakwal Corporation, and feedback obtained to assist determining any intervention activities needed to mitigate end scour impacts in a timely manner.

Beyond ongoing monitoring of impacts and intervention activities where necessary, beach nourishment is to occur to offset the sand 'lost' from the active littoral system by virtue of being 'locked up' by the sandbag walls. Clause 19(2) of the Coastal Management SEPP enables public authorities, such as the proponent, to pursue beach nourishment activities without development consent. Accordingly, the formal pursuit of beach nourishment will be undertaken in collaboration with Crown Lands, reflective of any applicable conditions of development consent imposed and assessed within Part 5 of the EP&A Act as the planning pathway. This approach allows for the specific timing, quantity and placement of sand to be responsive to the beach conditions at that time. Further, the pursuit of beach nourishment activities mitigates broader and cumulative impacts arising from sand lock up to the wider embayment.

No certified CMP applies to the subject site at this time, and future applications will have regard to the strategic processes being pursued, including but not limited to the preparation of a revised PoM and the CMP currently being developed by Byron Shire Council.

In considering the above, the proposed Coastal Protection Works is therefore considered to satisfy the relevant provisions of the Coastal Management SEPP.

State Environmental Planning Policy (Koala Habitat Protection) 2020

The provisions of the Koala Habitat Protection SEPP aim to encourage proper conservation and management of koala habitat to ensure the sustainability of the koala species. This aim is achieved through the preparation of plans of management, such as the State Government endorsed Byron Coast Comprehensive Koala Plan of Management, and land use zoning of core koala habitat areas.

The subject site is identified within the South Byron Coast Koala Management Area, but is outside of a Koala Management Precinct. The proposal does not seek to remove any vegetation, nor alter habitat conditions or threats (such as road strikes, dog attacks and the like) for koalas. In light of the above, the proposal is considered to be consistent with the Koala Habitat Protection SEPP.

State Environmental Planning Policy No 55—Remediation of Land

Clause 7 of SEPP 55 details that a consent authority must not consent to the carrying out of any development on land unless it has considered whether the land is contaminated, below identified thresholds of contamination and whether contamination poses an unacceptable risk to the intended use. In this regard, the proposal does not involve any physical works or site disturbance (unless repairs are necessary), nor introduce alternate or sensitive land uses. Further assessment in accordance with SEPP 55 – Remediation of Land is therefore not required and the SEPP satisfied.

State Environmental Planning Policy (State and Regional Development) 2011

Schedule 7 of the State and Regional Development SEPP identifies the suite of development types identified 'Regionally Significant Development', including 'Certain coastal protection works'. As the proposal does not satisfy the criteria established within clause 19(2)(a) of the Coastal Management SEPP, it meets the definition of 'Certain coastal protection works' and is declared, under Clause 20, as Regionally Significant Development.

3.1.4.2 Byron Local Environmental Plan 1988

The vast majority of the subject site and all of the project area is identified outside of the Land Application Map for the *Byron Local Environmental Plan 2014* and as such the *Byron Local Environmental Plan 1988* (Byron LEP 1988) applies. The following provisions provide an assessment of the clauses of key relevance to the proposal.

Clause 2 & 2A Aim, objectives and guiding principles

Clause 2 details a series of aims, objectives and guiding principles to further the objects of the EP&A Act. The proposal seeks to retain existing sandbag walls on Clarks Beach for a period of time to protect 2x Aboriginal middens located landward of the sandbag walls, as well as enable strategic processes to be pursued and guide future land use and composition of the land. Whilst the proposal is considered compatible with the prescribed aims, objectives and guiding principles, it is considered that proposal is specifically complimentary to the following:

Aims

- protecting ecological and cultural heritage
- the promotion and coordination of the orderly and economic use and development of land
- the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities and their habitats

Objectives

- to protect biodiversity, and re-establish and enhance essential ecological processes and life support systems

Guiding principles

- the precautionary principle

The proposal is considered compatible with Council's overarching settlement planning strategies and the Byron Shire Council Biodiversity Conservation Strategy 2020 – 2030, which provide more direct implementation of the overarching aims, objectives and guiding principles. Whilst clause 2A references a Coastline Management Plan, it is acknowledged that Council is currently developing its Coastal Management Program. Further, the proposal incorporates a time limitation to ensure the site-specific proposal does not pre-empt or undermine the strategy for the wider embayment, and enables consideration of the CMPs findings when completed.

In light of the above, the proposal is considered to satisfy the provisions of clauses 2 & 2A of the Byron LEP 1988.

Clause 9 Zone objectives and development control table

The majority of the subject site and all of the project area is identified within the 7F1 (Coastal Land) zone under the Byron LEP 1988.

The stated objectives of the zone include:

- the protection of environmentally sensitive coastal land
- enabling development where such development does not have a detrimental effect on the habitat, landscape or scenic quality of the locality
- preventing development which would adversely affect, or be adversely affected by, coastal processes
- enable the careful control of noxious plants and weeds

In this regard the proposal:

- directly seeks to protect environmentally sensitive land, including land accommodating 2x Aboriginal middens for a period of 5x years
- for a period of 5x years has a net positive effect on localised habitat by supporting the retention of terrestrial vegetation, whilst not having a significant impact on marine ecology
- mitigates long-term detrimental landscape and visual quality impacts by limiting the timespan of the proposal, noting that the landscape qualities are dynamic and as such the visual prominence of the proposal is anticipated to vary during the prescribed time period as accretion and erosion takes place.
- is of suitable design to not be significantly affected by coastal processes, nor result in negative impacts of significance by way of end scour or loss and sand from the active littoral system
- does not give rise to noxious plants and weeds, nor undermine the native ecosystem

A small suite of land uses are permitted with consent within the zone, including, but not limited to beach and coastal restoration works and environmental facilities. The definitions for each land use are detailed below, which identify broad alignment with the proposal, however stipulations in each which ultimately do not encompass the proposal appropriately.

beach and coastal restoration works means structures or works to restore the coastline from the effects of coastal erosion.

environmental facilities means a structure or work which provides for—

- a) nature or scientific study or display facilities such as walking tracks, cycleways, board walks, observation decks, bird hides or the like, or
- b) environmental management or restoration facilities such as those for bush regeneration, swamp restoration, erosion and run off prevention works, dunal restoration or the like.

In this regard, the provisions of the Coastal Management SEPP integrate the land use definition of 'coastal protection works' from the CM Act and, by way of clause 19, detail coastal protection works as permitted with or without consent. Accordingly, whilst the Byron LEP 1988 permits similar land uses with consent, these land uses are not considered to best reflect the proposal, rather, the land use definition provided through the CM Act and Coastal Management SEPP best fits the proposal. This results in the proposal formally be prohibited under the Byron LEP 1988, but permitted under the Coastal Management SEPP.

Clause 9 of the Byron LEP 1988 specifically outlines the objectives of each zone, what development is permitted with or without consent and prohibited, the application of exempt and complying development types and that Council shall not grant consent to the carrying out of development unless the carrying out of the development is consistent with the objectives of the zone. In this regard it is considered evident that the zone objectives are met by the proposal, as detailed above, and the provisions of clause 9 accordingly satisfied.

Division 2 Environmental Heritage

Division 2 of the Byron LEP 1988 does not apply to the subject proposal as the subject site is not identified as possessing an 'item of the environmental heritage' under the LEP framework. Notwithstanding, the proposal seeks to extend the protection of the Aboriginal middens, likewise, by rebuffing the opportunity for coastal erosion, also assists the longevity of White's Cottage. Whilst White's Cottage is not formally identified as a European heritage item, it was identified as possessing heritage value within Council's Community Based Heritage Study. No physical works are proposed beyond the retention and maintenance of the sandbag walls, as such no change to the significance of these items is anticipated. Accordingly, the provisions of Division 2 are considered to be upheld.

Clause 33 Development within Zone No 7 (f1) (Coastal Lands Zone)

Clause 33 prescribes a requirement for development consent and identifies heads of consideration to be considered by Council in its assessment. Specific to the proposal, the proposed temporary retention of the sand bags has been supported by 2x Coastal Assessments, which have confirmed a negligible effect on natural coastal processes. The sandbag walls in place are constructed to not be adversely

affected by routine coastal processes, likewise a monitoring program is proposed to ensure any displacement or repairs are rectified promptly and end-effects are monitored to protect the environment from impact. By retaining the sandbag walls, the dune area will continue to be protected, without unreasonably disrupting public access and activities on the beach.

Whilst the sandbag walls introduce a 'non-natural' element into the landscape, the scenic impact is ultimately considered to be low given the limited visual intrusion, underlying temporary nature and lack of detracting from the visual quality of the locale.

Finally, it is acknowledged that the retention of the sandbag walls results in a theoretical reduction of habitat for nesting turtles at the toe of the dune escarpment, and therefore reduction in environmental quality of the locality. This reduction is limited to approximately 140m within a broader coastal area which includes extensive tracts of suitable habitat. Further, this impact is confined to the time period/s where the sandbag walls are exposed. In addition, whilst a minor impact to turtle habitat is anticipated, during periods where the beach is in an eroded state, the sandbag walls possess the benefit of protecting a larger tract of vegetation and habitat by protecting the dune immediately behind the sandbag wall. Accordingly, a net positive environmental outcome is considered to be achieved.

In light of the above, the provisions of clause 33 are considered satisfied.

Clause 45 Provision of services

The proposed retention of existing sandbag walls does not alter the existing servicing arrangements of the site for sewerage, drainage or water services. The provisions of clause 45 are accordingly satisfied.

Clause 63 Development on land identified on the Acid Sulfate Soils Planning Map

Whilst the subject site is mapped as being potentially affected by Class 4 acid sulfate soils, the proposal involves no physical works to the existing sandbag walls placed on Clarks Beach, nor soil disturbance and as such an acid sulfate soils management plan is not considered to be warranted.

3.1.4.3 Proposed Environmental Planning Instruments

No draft Environmental Planning Instruments have been identified as relevant to the proposal.

3.1.4.4 Byron Development Control Plan 2010

Chapter 1: Part J Coastal Erosion Lands

The existing sandbag walls are located seaward of the Immediate 2100 hazard line, accordingly the provisions of 'Element – Precinct 1' within Part J are considered applicable to the proposal, as well as 'Element – Beach Protection'.

'Element – Precinct 1' provides a variety of controls confined to buildings and dwellings, broadly prescribing provisions to ensure works are designed to limit the impact of coastal processes, be temporary in nature and be able to be readily removed if necessary. In this regard the proposal upholds the underlying objective and performance criteria through its fit-for-purpose design, ability to be removed, and temporary placement. The proposal does not include or increase activities or assets within this vulnerable area, rather, provide continued protection for a sufficient time period to enable masterplanning of the Holiday Park to provide a long-term response to coastal hazards.

'Element – Beach Protection' provides objectives and performance criteria to ensure cumulative and offsite impacts are avoided. As has been discussed throughout this report, the proposal involves the retention of existing sandbag walls on Clarks Beach and does not involve any permanent or 'hard' engineering solutions to mitigate coastal hazards. The proposal is supported by Coastal Assessments which consider the impacts of the proposal, including end effects to adjoining land and cumulative impacts within the embayment. No impacts of significance have been identified through the Coastal

Assessments for the desired timeline of the proposal, further, a monitoring program is proposed to mitigate edge effects should they arise. These findings and the implementation of the monitoring program satisfies the objective and performance criteria detailed and Part J as a whole.

Chapter 17: Public Exhibition and Notification of Development Applications

Whilst Chapter 17 states it does not include public participation provisions relating to Designated Development, it does detail a pre-lodgement consultation process for development to be referred to the Regional Planning Panel (NRPP) for determination. This process also aligns with the Byron Community Participation Plan, which also calls for pre-lodgement consultation of applications to be determined by the NRPP.

A prelodgement consultation process was conducted for the proposal in January/February 2021. In accordance with an endorsed Community Engagement Strategy. This process has been documented within the Pre-Lodgement Consultation Submissions Report submitted with this application.

The issues raised throughout the pre-lodgement consultation highlighted the range of stakeholder interests and their interconnection. Most of the contributors were predominantly concerned:

- ensuring cultural and environmental outcomes where appropriate,
- acknowledging potential cumulative impacts of the wider locality and
- continuing to reflect the locales cultural, environmental and economic significance.

Through review of the submissions received the scope of the proposal has been refined to include a 5x year timeline, as opposed to being directly linked to the outcomes of the draft Coastal Management Program. Finally, the specialist assessments undertaken have also had regard for the feedback received during the pre-lodgement consultation process, as will the ongoing PoM investigations.

Post lodgement, additional community consultation will be undertaken by Byron Shire Council in accordance with the provisions of Chapter 17, the Byron Community Participation Plan and the *Environmental Planning and Assessment Regulation 2000*, enabling further community feedback regarding the proposal.

Chapter 21 Social Impact Assessment

Chapter 21 provides a framework for considering social impact to assist in achieving cohesive, sustainable and resilient communities within the Shire. By virtue of the proposal being Designated Development, Social Impact Assessment provisions of Chapter 21 are applicable. In light of the scale and temporary nature of the proposal, a full Social Impact Assessment is not deemed necessary. Notwithstanding, the following commentary is provided in addressing socioeconomic matters.

Transport

The proposal is confined to the retention of existing sandbag walls positioned at the toe of the dune on Clarks Beach. Accordingly, the proposal does not alter or impact vehicular, public or active transport demand, access or provisions. The temporary retention of the sandbag walls assists the continued operation of the Reflections Holiday Park, which in turn supports access and use of Clarks Beach.

Being positioned on the beach, the sandbag walls limit the extent of public access along the beach to a minor degree when Clarks Beach is in an eroded state. In this regard, during periods where the tide has met the sandbag walls, beach users have walked along the top of the sandbag walls to continue their journey, however the sandbag walls are not all abilities trafficable and are not encouraged to be walked on. Since the sand slug has been positioned in front of Clarks Beach the beach area has been significantly wider, reducing the interference of the sandbag walls and to public access. When considering the 5x year timeframe of the proposal, the impediment of the sandbag walls to public access is not considered to be unreasonable.

Accordingly, the proposal is anticipated to have a neutral transport impact.

Safety

The proposal does not change the safety of the subject site with regards to the opportunity for criminal or anti-social activity, nor crime prevention through environmental design provisions.

The retention of the sandbag walls is considered to promote site safety until such time that broader masterplanning is undertaken. Future masterplanning will consider planning for a desirable dune profile to promote safety, vegetation safety and tree fall risk, along with the position of Holiday Park assets to mitigate their exposure to coastal hazards. The retention of the sandbag walls also provides a safety barrier to Aboriginal middens, supporting in-situ retention whilst sustainable solutions are being analysed.

The sandbag walls themselves do present a minor trip hazard for beachgoers. To-date this has been addressed through signage discouraging walking or playing on the sandbag walls.

The proposal is anticipated to result in a positive safety impact to the site until such time that the Holiday Park is reconfigured and controlled post the sandbag wall removal being implemented.

Diversity

The proposal is not anticipated to have any notable impact upon human service facilities within the locale or wider Byron Shire.

The proposal will have no impact upon housing stock within the Byron Shire by way of availability, affordability, choice or provisions of special needs. The proposal maintains the operation of the Holiday Park whilst contemporary masterplanning is pursued, supporting ongoing provision of tourist accommodation. In this regard, the Reflections Holiday Park provides diversity of tourist accommodation within the site itself, as well as within the wider Byron Bay marketplace. The Holiday Park operation provides a variety of powered and unpowered sites, and various cabin options, which complement the wider suite of accommodation options within the heart of Byron Bay. These attributes, combined with immediate access to the beach, support a diverse visitor demographic and socioeconomic profile. As identified within the Economic Benefit Report prepared by BDO, limited opportunity is available for new caravan park development with comparable site assets due to the locality's high land value. In this regard, supporting the ongoing operation and appropriate transition of the Holiday Park via site masterplanning is critical to supporting the diversity of tourism accommodation and attraction within Byron Bay.

The subject proposal does not sterilise the land from future opportunities, though it is acknowledged that the environmental sensitivities and current planning framework only permits limited land use diversity beyond passive recreation and 'light touch' accommodation types.

The proposal is anticipated to result in a minor, but positive impact on diversity within the site and locality.

Amenity

Retention of the existing sandbag walls is expected to possess limited opportunity for amenity impacts on the site. By way of example:

- No additional traffic generation or changes will be experienced
- Pedestrian access routes are retained
- No additional noise generation is anticipated
- No change in the level of services and facilities to beach visitors is proposed.

The visual amenity of the subject site is considered to involve a minor negative impact by virtue of the sandbag walls, primarily as they introduce an 'engineered', non-natural element into the wider landscape scene. Whilst the sandbag walls do include a minor visual intrusion, their profile is low and colour is compatible with their surrounds. The ongoing establishment of supporting vegetation is also assisting the overall appearance of the dune face and base.

Whilst exposed sandbag walls are not visually desirable in a permanent state, the temporary retention of the sandbag walls is not considered to result in an excess or significant negative impact in terms of the subject sites level of amenity.

Employment and Training

The proposal provides the opportunity for ongoing operation of the Holiday Park, which supports the employment of 12x direct staff. In addition to direct staff employment, Reflections Clarks Beach is identified as contributing over 41,000 tourist accommodation nights to the immediate Byron Bay region annually, in-turn contributing to indirect employment within the tourism and retail sector within Byron Bay.

The proposal is not considered to result in any direct or tangible indirect reduction in employment or training potential. Accordingly, the proposal makes effective use of existing temporary coastal protection measures to uphold investment and employment within Byron Bay and as such possesses a positive socioeconomic benefit.

Culture

The proposal seeks to provide a level of ongoing protection to 2x listed Aboriginal middens located on the landside of the existing sandbag walls for a period of time to allow long-term planning of the subject site to be pursued. An existing Aboriginal Heritage Impact Permit is in place to facilitate the removal of the sandbag walls and retrieval of the middens, however by retaining the sandbag walls it is anticipated that the middens can remain in-situ at this time and retrieval confined to active salvages if and when necessary.

Whilst the sandbag walls comprise a foreign component within the landscape and do not provide permanent protection, we believe this proposal provides the best level of protection for the Aboriginal middens until such time that the longer terms outcomes are resolved. Accordingly, the proposal is considered to form a positive impact on culture within the site.

In light of the above, the proposal is considered to:

- provide transparency regarding the positive and negative social impacts
- maximises positive social impact by enabling a suitable timeline to review and reorganise the Reflections Holiday Park, enabling continued benefit of tourist accommodation, diversity of accommodation, as well as economic and employment generation.
- maximise positive social impact by providing ongoing protection of the aboriginal middens until such time that a coordinated, long-term outcome is resolved.
- minimise negative social impacts by maintaining public access to and along Clarks Beach,

Accordingly, the provisions of Chapter 21 are considered satisfied.

3.1.5 Planning Agreement

No Planning Agreements are identified as applicable to the site.

3.1.6 Environmental Planning and Assessment Regulation 2000

Clause 92 of the *Regulations* prescribe further matters that need to be considered by the consent authority.

(1) For the purposes of section 4.15 (1) (a) (iv) of the Act, the following matters are prescribed as matters to be taken into consideration by a consent authority in determining a development application:

- (a) (Repealed)
- (b) in the case of a development application for the demolition of a building, the provisions of AS 2601,
- (c) in the case of a development application for the carrying out of development on land that is subject to a subdivision order made under Schedule 7 to the Act, the provisions of that order and of any development plan prepared for the land by a relevant authority under that Schedule,
- (d) in the case of the following development, the Dark Sky Planning Guideline:
 - (i) any development on land within the local government area of Coonamble, City of Dubbo, Gilgandra or Warrumbungle Shire,
 - (ii) development of a class or description included in Schedule 4A to the Act, State significant development or designated development on land less than 200 kilometres from the Siding Spring Observatory,
- (e) in the case of a development application for development for the purposes of a manor house or multi dwelling housing (terraces), the Medium Density Design Guide for Development Applications published by the Department of Planning and Environment on 6 July 2018, but only if the consent authority is satisfied that there is not a development control plan that adequately addresses such development.

Note. A copy of the Guide is available on the website of the Department.

(2) In this clause:

AS 2601 means the document entitled Australian Standard AS 2601—1991: The Demolition of Structures, published by Standards Australia, and as in force at 1 July 1993.

For the purposes of Section 4.15(1)(a)(iv) of the EP&A Act, the following matters are prescribed as matters to be taken into consideration by a consent authority in determining a development application:

AS 2601-2001 The demolition of structures

The proposal does not seek approval for the demolition of the existing buildings onsite.

Subdivision Order & Plan of Development

No subdivision order made under Schedule 7 of the EP&A Act or development plan are applicable to the subject site or proposed development.

Dark Sky Planning Guideline

The proposed development is not located in on land within the local government area of Coonamble, City of Dubbo, Gilgandra or Warrumbungle Shire or on land located less than 200 kilometres from the Siding Spring Observatory.

Medium Density Design Guide for Development Applications

The proposed development is not for the purposes of a dual occupancy, manor house or multi dwelling housing (terraces).

3.1.7 The Likely Impacts

The proposal has been reviewed as holding a variety of positive impacts relating to cultural and economic matters, and a small number of negative impacts, primarily relating to the reduction of turtle nesting habitat and visual amenity. These likely impacts are discussed further below.

The retention of the sandbag walls for a duration of up to 5x years provides an opportunity for a revised PoM to be prepared and implementation commenced for the Reflections Holiday Park – Clarks Beach whilst existing operations are continued. This outcome facilitates ongoing employment of on-site Holiday Park staff, continued positive contribution to Byron's tourism economy and experiences, and enables asset relocation strategies to be implemented which acknowledge coastal erosion risks.

The continued use of the sandbag walls maintains protection to the Aboriginal middens located on-site. These two deep and extensive coastal shell middens are identified as being of spiritual and cultural heritage significance to Arakwal Traditional Owners. As identified throughout this report and the Aboriginal Cultural Heritage Assessment Report, the Arakwal Corporation have expressed that they do not support the removal and/or destruction of the middens. Accordingly, retaining the sandbag walls to

allow further exploration of suitable strategies which seek to preserve cultural heritage for the benefit the community is considered to be a positive impact of the proposal.

As discussed throughout this EIS and the wider application package, the proposal has not been identified as having a material impact on:

- context and setting of the subject site, locale or locality
- access, transport and traffic,
- housing supply, diversity or amenity,
- safety, security and crime prevention,
- noise, vibration, air or water quality
- waste generation or essential services

The retention of the sandbag walls provides a level of protection to the remaining areas of littoral rainforest, however is identified as restricting nesting habitat for turtles for the length of the sandbag walls (being approximately 120 – 140m). Whilst this linear space reduces suitable nesting habitat, the reduction for a period of 5x years is not considered to be of significance within the wider area of suitable habitat.

Acknowledging the visual qualities of the project area and broader Clarks Beach, the continued intervention within the space of a non-natural element, albeit of low profile and currently screened by sand accretion, is considered to result in a minor negative impact. Again, the time limitations on the proposal mitigate the extent of this minor impact.

As the scope of the proposal is confined to the use of the existing sandbag walls, no impacts of significance to air quality, odour, noise, vibration, topography, geology, groundwater or stormwater are anticipated. Should instances arise whereby maintenance to the sandbag walls is required, as is best practice, a Construction Environmental Management Plan (CEMP) will guide site works to ensure environmental impacts are limited and safety upheld. By way of example, the CEMP would include, but not be limited to, the following provisions:

- notification of key stakeholders
- Aboriginal site officers from the Bundjalung of Byron Bay Aboriginal Corporation be engaged as "spotters" during the works and site specific training of Aboriginal values provided to workers
- unexpected finds procedure
- site safety and security measures, including spill kits and plant inspections
- identification of hours of operation and use of plant provisions to ensure the amenity of the area is not adversely disrupted
- debris and site clean up procedures

Accordingly, despite minor negative impact of visual amenity and turtle nesting habitat being likely, the direct and cumulative impact is not considered to be of significance, nor warrant refusal of the proposal. Further, the retention of the sandbag walls is considered to possess greater positive impacts whilst longer-term solutions for the subject site are explored, resolved and implemented.

3.1.8 The Suitability of the Site for Development

Coastal Assessments have been prepared to assist determining the suitability of the site for the proposal, as well as the suitability of the sandbag walls for the proposed 5x year timeline. Further, the Coastal Assessments undertaken considers cumulative effects and end-scour effects. This assessment has concluded that:

- the use of the existing sandbag walls does not include an adverse probability of failure for the timespan sought,
- very minor 'lock up' of sediment behind the sandbag walls, and associated cumulative impact, is expected
- beach nourishment is to be pursued on a pro-rata basis to offset the sand lost from the active littoral system from sandbag wall 'lock up'

- end-scour impacts to-date have been limited and a monitoring and mitigation program be implemented accordingly

The continued use of the existing sandbag walls has not been identified as being unsuitable for the 5x year period sought, nor has consideration of the coastal processes and local environment resulted in the site being determined as unsuitable for the coastal intervention in place.

3.1.9 Submissions made

As detailed earlier in this EIS, a pre-lodgement consultation process was undertaken, and is documented within the Pre-Lodgement Consultation Report.

A further community consultation process will occur for the proposal soon after assessment is commenced, and submissions received will be reviewed by Council staff. The proponent also requests an opportunity to review the submissions received and provide relevant technical comment to the matters raised.

3.1.10 The Public Interest

As outlined within this EIS, the proposal seeks the ongoing use of existing sandbag walls for a further 5x year period. The proposal is considered to support ongoing protection of Aboriginal cultural heritage and operations of the Reflections Holiday Park whilst the preparation of strategic plans for the subject site and wider Byron Bay embayment are pursued. In this regard, the proposal provides protection without undermining strategic analysis and is not identified as resulting in likely impacts of significance.

For the reasons outlined, the proposal is considered to be in accordance with the public interest and warrants approval, subject to the application of reasonable and relevant conditions.

3.1.11 Division 4.8

The proposal is not identified as requiring integrated approval under any other Act. The findings of considering Acts of potential relevance are detailed below:

- No aquaculture, dredging or reclamation work or barriers to fish passage are proposed within the scope of the proposal; therefore, the *Fisheries Management Act 1994* is not applicable at this time. Notwithstanding, should maintenance or beach nourishment type tasks be required, as well as ahead of formulating the sandbag wall removal strategy, consultation with NSW Department of Primary Industries (Fisheries) will be consulted in accordance with section 199 of the *Fisheries Management Act 1994 (FM Act)*. Of note, section 201 of the FM Act exempts public authorities from needing a permit to carry out dredging or reclamation work, however consultation is required with the Minister prior to pursuing these works.
- An AHIP is already in place for sandbag wall removal and revegetation works. Retention of the sandbag walls is not identified as causing harm, and as such a further AHIP is not required to enable the proposal. Accordingly, the proposal does not require an approval from *National Parks and Wildlife Act 1974*. Of note, whilst integrated approval is not required, an extension to the existing AHIP timeline is proposed to be sought outside this application process as a safeguard should 'harm' be indispensable.
- Clause 41 of the *Water Management (General) Regulation 2018* provides an exemption for public authorities in relation to controlled activity approvals on waterfront land. The proposal is not identified as a 'Special Fire Protection Purpose' for the purpose of the *Rural Fires Act 1997*, and therefore does not require a bush fire safety authority under section 100B of that Act.

3.2 Environmental Protection & Biodiversity Conservation Act 1999

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) is a Commonwealth Act for the protection of nationally significant natural or cultural values or the regulation of certain nationally significant activities. These values are known as Matters of National Environmental Significance (MNES) and the regulated activities are known as Controlled Actions, being an action that will have, or is likely to have, a significant impact on any MNES. Chapter 2, Part 3 of the EPBC Act outlines the requirements for environmental approvals. An assessment of the proposal and the subject site against the provisions of Part 3 is outlined in Table 4 below

Table 4: EPBC Act Matters of National Environmental Significance

Matter of National Environmental Significance	Assessment of the Proposal & Site
World Heritage properties	The subject site is not located within a World Heritage site
National Heritage places	The subject site is not located within a National Heritage place.
Wetlands of international importance	The subject site is not located within, no identified to impact upon a declared Ramsar wetland
Listed threatened species and communities	<p>2x listed threatened ecological communities and 77x listed threatened species are identified as potentially being located within a 1km radius of the subject site.</p> <p>The 2x threatened ecological communities include:</p> <ul style="list-style-type: none"> Coastal Swamp Oak (<i>Casuarina glauca</i>) Forest of New South Wales and South East Queensland ecological community, and Littoral Rainforest and Coastal Vine Thickets of Eastern Australia. <p>Inspection of the subject site by a Planit ecologist has not identified the Coastal Swamp Oak on the subject site.</p> <p>Littoral rainforest is identified on the subject site through site inspection, as well as mapping under Coastal Management SEPP. The same mapped tracts are mirrored within the Biodiversity Values Map and Threshold Tool. It is noted that portions of the existing sandbag walls have been placed on land mapped as littoral rainforest, however the vegetation was lost to natural processes through earlier erosion events. Further, no vegetation removal was required to place, or is required for the continued use of the sandbag walls placed on the subject site.</p> <p>The opportunity for the proposal to have significant impact on the threatened ecological communities is considered low as:</p> <ol style="list-style-type: none"> no physical works are sought, other than minor works on an as-needs basis to maintain or reinstate the integrity of the existing sandbag walls the proposal maintains the coastal protection afforded landward of the sandbag walls, and therefore to the littoral rainforest area. <p>To improve natural protection, processes and resilience to coastal erosion revegetation opportunities are under consideration at the time of writing. As works of this nature can be pursued by Reflections as permitted without consent, their consideration and implementation</p>

	<p>where appropriate is independent to the need for development consent to retain the existing sand bags.</p> <p>In addition, investigations to-date have identified that removal of the sandbag walls holds increased opportunity and risk of vegetation to be lost to coastal processes, and therefore environmental, impact. In this regard, the removal of the sandbag walls in isolation of a wider coastal management strategy has the potential to expose the littoral rainforest to increased impact through erosion. Longer-term considerations through the masterplan and process of developing the PoM will involve consideration for natural hazard and coastal erosion projected, and analysis of the effects of reprofiling the dune should also be considered. Whilst any dune reprofiling is anticipated to involve vegetation removal, it may ultimately provide a more sustainable environmental condition for littoral rainforest to re-establish into the future.</p> <p>Of the listed threatened species are identified as potentially being located within a 1km radius of the subject site:</p> <ul style="list-style-type: none"> • 31x are bird species • 2x are fish species • 2x are frog species • 2x are insect species • 9x are mammal species • 1x are 'other' being the Mitchell's Rainforest Snail • 20x are plant species • 6x are reptile species • 3x are shark species <p>Acknowledging that the proposal does not involve physical works, broadly supports vegetation retention on the subject site, and the sandbag walls are located at the toe of the dune, the potential for significant ecological impact is largely confined to shorebirds and reptile species.</p> <p>Ecological research suggests the placement of sand bags reduces available habitat, particularly to nesting turtles.</p> <p>In considering the significance of impact on these threatened species, the following particulars are noted:</p> <ul style="list-style-type: none"> • the retention and use of the existing sandbag walls is limited to 2x 'walls' of 60 – 70m in length each • the existing sandbag walls are also within 10-20m of existing holiday cabins and communal deck viewing areas • Clarks Beach comprises a primary tourist location within Byron's year-round tourist economy • the timespan of the proposal is for 5x years <p>These project particulars identify the limited spatial area, limited timeline of the sandbag wall intervention, as well as the existing limitations of the subject land as a suitable habitat area. Accordingly, it is not considered that the proposal will have a significant impact on any threatened species identified under the EPBC Act.</p>
Listed migratory species	56x listed migratory species are identified as potentially being located within a 1km radius of the subject site.

	As discussed within the listed threatened species and communities' section above, the ecological impacts are identified as being confined to turtle species. Again, whilst the retention of the sandbag walls for a further 5x years comprises a reduction of habitat at the toe of the dune escarpment, the habitat temporarily 'lost' is not considered to comprise an impact of significance.
Protection of the environmental from nuclear actions	The proposal does not involve nuclear actions or any activity that may lead to extraction associated with nuclear activities.
Marine Environment	The subject site is not located within a Commonwealth Marine Area
Great Barrier Reef Marine Park	The subject site is not located within the Great Barrier Reef Marine Park
Protection of water resources from coal seam gas development and large coal mining	The proposal does not involve coal seam gas development or coal mining

In conclusion, whilst the subject site area accommodates listed threatened species, communities and migratory species, the proposal does not comprise any physical works. The retention of the sandbag walls supports the protection of vegetation and ecological attributes 'behind' the sandbag walls, however does present a barrier to habitat at the tow of the dune for nesting turtles. The construction material of the sandbag walls is identified as sufficiently durable for the timeline requested, whilst ongoing monitoring is proposed to ensure no ecological impacts are experienced from dislodgement or damage to the sandbag walls.

3.3 Biodiversity Conservation Act 2016

In addition to the EPBC Act, the *Biodiversity Conservation Act 2016* (BC Act) also provides various provisions to conserve and support biodiversity at bioregional and State scales. Specifically, the provisions of Section 7.3 of the BC Act 2016, the 'test of significance' is applied to assess any potentially adverse impacts of the site-proposal on threatened species, populations and/or communities occurring within the site or surrounding locality. The Assessment of Significance is not a 'pass/fail' test or technique based on a scoring system. Instead, the outcome of each factor needs to be considered as to whether effects are likely and whether they are significant (NPWS 1996a).

It is further noted that a positive finding in respect of one or more factors of the test of significance does not necessarily lead to the conclusion that an SIS is then required (Talbot in Gales Holdings Pty Ltd v Tweed Shire Council [2006] NSWLEC 212). Rather it allows consideration as to whether a particular effect may be present or occur as a result of the development and whether that effect is likely to be significant.

As the proposal involves no physical works, consideration of threatened species and communities against the test of significance is confined to marine turtle species and acknowledging that the extent of impact is limited to the exclusion of approximately 120 – 140m of potential nesting habitat along Clarks Beach. Acknowledging the limited spatial area, temporary nature of the proposal and broad habitat area available for nesting, it is considered unlikely that the proposal will disrupt the lifecycle of the local population of endangered or vulnerable turtles to the point that they are at risk of extinction. Further, due to the extremely low likelihood of impact to any of the listed threatened species, populations, ecological communities or their habitats, no Biodiversity Development Assessment Report is required in accordance with Section 7.7 of the BC Act 2016.

3.4 Coastal Management Act 2016

The CM Act provides a legislated framework to coordinate and balance the various environmental, economic, cultural and social influences of the NSW coastal environment through protection, support and facilitation. Specific to the proposal, an object of the CM Act is to facilitate ecologically sustainable development in the coastal zone and promote sustainable land use planning decision-making.

Section 27 of the CM Act prescribes the heads of consideration for granting development consent relating to coastal protection works. In considering the provisions of section 27, the following commentary is provided regarding the continued use of the existing sandbag walls, over the requested 'up to' 5x year consent period.

The use of the existing sandbag walls for 5x years will not result in public access to, along, or the use of Clarks Beach being unreasonably limited. As discussed within the University of New South Wales Water Research Laboratory assessment, the existing sandbag walls are located away from the primary swimming and surfing areas. The subject site has traditionally included 2x beach access points, noting however that they are located within the Holiday Park and as such are targeted towards guests and do not strictly form public access. Both access structures sustained significant damage from the erosion events of Tropical Cyclone Oma, though 1x access, adjacent to the western wall, has been reinstated. Opportunities to provide beach access will be reviewed through the masterplan and PoM process being pursued to inform the longer-term interface with Clarks Beach. Likewise, safe public beach access is conveniently located provided approximately 90m to the east and approximately 130m to the west.

Access along the Clarks Beach is maintained during periods where the sandbag walls are partially or wholly concealed by sand. However, during periods where Clarks Beach is in an eroded state, the sandbag walls do formally restrict access along Clarks Beach for a length of approximately 120 – 140m. Whilst beach conditions often involve a less than ideal engineered even and efficient surface, the sandbag walls are not designed to be trafficable, nor satisfy all abilities access provisions. Despite the reduction in access along Clarks Beach, constrained access is limited in physical length, as well as duration (being 5x years). In considering these matters, public access is not considered to be unreasonably limited during this period.

If required, and as detailed previously within this EIS, the process of removing the sandbag walls involves cutting open the geotextile bag, typically by an excavator, the sand returned to the beach system in the same position and the geotextile material disposed of appropriately. This process is implemented individually for each sandbag. Timing of sandbag wall removal is to be directed outside of peak holiday periods to minimise public disruption, further, depending on the beach condition at the time of removal, may be tide dependant. Should a site compound be needed to house machinery off the beach during the period of decommissioning, a short-term licence to utilise an area within the adjoining foreshore park will be obtained prior.

Notwithstanding the activity determination in place, acknowledging the additional information and analysis being undertaken since, it is intended that a coordinated strategy be pursued once the composition of the Holiday Park seaward of the immediate 2100 hazard line and interface with Clarks Beach is resolved.

End scour effects will be monitored on an ongoing basis and findings included within an annual report. This monitoring program will be in place through the duration of the time period and no end scour effects of significance are anticipated. Immediate response measures are detailed should end scour be identified to restore the adjacent beach area. Similarly, monitoring and mitigation measures are identified to uphold the integrity of the walls throughout the timespan of the proposal. In addition to these measures, beach nourishment will be pursue to replenish sand 'locked up' by the sandbag walls and therefore temporarily lost from the active littoral system. The beach nourishment will be pursue within its own environmental assessment, using suitable sand and replenished at a pro-rata rate which incorporates a precautionary buffer.

Appropriate conditions imposed on the consent are welcomed to ensure satisfactory arrangements have been made for the monitoring program, and both the existing determination and the future activity integrated with masterplanning of the Holiday Park. Any conditions may include arrangements to secure adequate funding through financial assurance, bond or the like.

In light of the above, the proposal is considered to satisfy the provisions of section 27 and upholds the objects of the CM Act.

3.5 Marine Estate Management Act 2014

The Marine Estate Management Act 2014 (MEM Act) provides for the declaration and ecologically sustainable management of marine parks and aquatic reserves in New South Wales. Under these provisions, the Cape Byron Marine Park, which immediately adjoins the Project Area and encompasses a large portion of the subject site, has been declared. The proposal is not identified being located within the Cape Byron Marine Park; however, its extents are dynamic to the mean high-water mark.

Complimenting the MEM Act, the Marine Estate Management (Management Rules) Regulation 1999 (MEM Regs) prescribe management rules for Marine Park Zones, as well as specific provision for each Marine Park. As the legislated provisions primarily seek to protect biodiversity, ecosystem integrity and support ongoing research and education, their provisions focus of managing fishing practices and limiting harm to the ecosystem.

Section 56 of the MEM Act relates to development affecting marine parks and aquatic reserves and prescribes consideration of the objects, permissible uses and management rules, as well as consultation requirements where applications are likely to have an effect on the plants or animals within.

The Project Area adjoins the 'Habitat Protection Zone' of Cape Byron Marine Park and as such the MEM Regs prescribe provisions for the protection of animals, plants and habitat, fishing limitations and aquaculture pathways. The proposal does not involve fishing activities or aquaculture, in addition, as discussed previously within this EIS, is not identified as causing harm to animals, plants, or damage habitat within the Habitat Protection Zone.

To strategically safeguard the NSW Marine Estate a 'Threat and Risk Assessment Report' (TARA) was finalised August 2017. The TARA includes identification of threats to marine estate values, risk assessment of those threats, and includes specific review of the 'North region', being Tweed Heads to Stockton. Within the TARA, beach nourishment and grooming is 1 of 26 threats to environmental assets for the North region and physical and wildlife disturbance identified as key stressors. Notwithstanding this finding the TARA also identifies environmental assets within the 'Central region' as high risk from this activity, whereas beaches and species within the North region are determined to be at moderate risk. Specific to the proposal, the continued use of the existing sandbag walls outside of the Cape Byron Marine Park is not identified as resulting of any impacts beyond minor consequence in relation to the relevant key stressors identified within the TARA, including but not limited to:

- impacts on water quality based on sediment resuspension
- no removal of seagrass and associated biota
- wildlife disturbance and physical disturbance to shore-based habitat
- removal of biota and removal of organic material which disrupts foodwebs

The risk of increased erosion of the beach or adjacent land from the sandbag walls has been reviewed through the submitted Coastal Assessment and the timeline of the proposal reflects assessment and consideration of the existing structures' design. Accordingly, the potential effects to the values of the Cape Byron Marine Park, such as local scouring, down drift erosion, the entry of pollutants or other unnatural material, and amenity have been considered and no impacts of significance identified.

In accordance with the above, the objects of the MEM Act, permissible uses under the MEM Regs and the potential impact on the Cape Byron Marine Park have been considered and the proposal found to satisfy the provisions of section 56.

4. Mitigation Measures

Acknowledging that physical works of the proposal are limited to effecting maintenance repairs to the existing sandbag walls, the need for prescribed mitigation measures through conditions of consent are also limited.

As detailed previously within this EIS, a monitoring program has been recommended within the submitted Coastal Assessments. The consolidated program of site inspections, photographic evidence, survey and annual reporting is detailed in Table 5 below.

Table 5: Consolidated Monitoring Actions

Monitoring Action

Static Action

An initial UAV LiDAR/optical land survey undertaken at low tide, extending at least 500 m alongshore beyond the sandbags

Programmed Actions

A **weekly** photo from the CoastSnap station or closer reference location by a designated party with basic analysis by Crown Lands.

If more than two courses of sandbags are exposed, or **the BoM issues warnings for dangerous surf, damaging surf or abnormally high tides**, additional daily high and low tide photos should be taken for Crown Lands by the Café proprietor (or a designated party) and forwarded to Crown Lands.

If the photos reveal substantially exposed sandbags or displaced sandbags, the works should be inspected as soon as practicable by a coastal engineer or competent person to assess for damage and/or hazardous sandbags (e.g. having incipient instability).

Subject to an assessment of the beach state, **a UAV survey consistent with the initial survey should be initiated** to assess sand and sandbag change.

Continued **monthly** site inspections, timed to be at low tide following the largest high tide event of the month. Site inspections to include:

- Standardised photography during inspections, documented consistent photo positions and angles so that temporal changes can be reviewed.
 - Photos to have complete coverage of walls and all end points
 - Photograph and document end scour and beach condition further to the west
- Record incidence and location of deflated or displaced bags, new erosion above/below sandbag walls.
- Identify public safety risks, e.g. unstable dune escarpments and notify land managers.

Although month by month inspections will identify any public safety risks, the daily Reflections Park site manager can perform this task on a daily basis ensuring the safety of Holiday Park customers.

Three monthly assessment of the evolution of the sandbag wall end effects using the following hierarchy of data sources, as they become available, and a minimum data frequency of once per month:

- Measured LiDAR/optical/photogrammetry land survey
- High resolution aerial or satellite photos

Monitoring Action

- Shoreline or vegetation mapping through a CoastSnap station
- Low resolution aerial or satellite photos

See case study attachment for further detail

Annual Reports

Findings of the monthly site inspections should be collated and reported in an annual report. The report should assess the current condition of the Reflections sandbag walls, its impact on surrounding areas, in particular end scour to the west and level of risk to structures in this area. This assessment should be supported by:

- Analysis of profile survey and air photo (publicly available data);
- Calculation of recession rates where evident; and
- Review of storm history.

Undertaking the recommended monitoring program will enable tracking of any end-scour effects experienced, and enable early intervention to minimise impact. A suite of actions are also identified as available to respond to any impacts.

Specific to mitigation and rectification actions, it is anticipated that maintenance works to the sandbag walls are included within the scope of this proposal, including but not limited to replacing displaced or deflated sandbag walls, or rebuilding sections of the wall should natural events undermine the integrity of the 'wall'. Should instances arise whereby maintenance to the sandbag walls is required, as is best practice, a Construction Environmental Management Plan (CEMP) will guide site works to ensure environmental impacts are limited and safety upheld. By way of example, the CEMP would include, but not be limited to, the following provisions:

- notification of key stakeholders
- Aboriginal site officers from the Bundjalung of Byron Bay Aboriginal Corporation be engaged as "spotters" during the works and site specific training of Aboriginal values provided to workers
- unexpected finds procedure
- site safety and security measures, including spill kits and plant inspections
- identification of hours of operation and use of plant provisions to ensure the amenity of the area is not adversely disrupted
- debris and site clean up procedures

Mitigation measures beyond maintenance, such as additional beach nourishment or asset relocation, are outside of the scope of this proposal, and if required, will be explored through further environmental assessment and the consent requirements of the EP&A Act.

5. Evaluation and Conclusion

Planit Consulting has been engaged by NSW Crown Holiday Parks Land Manager, trading as Reflections Holiday Parks to prepare an Environmental Impact Statement in relation to the proposed retention and use of existing sandbag walls on Clarks Beach for a period of 5 years. No physical works are proposed, other than to replace/reposition any sandbags that may become dislodged or damaged during the period of the approval.

The sandbag walls were originally placed on Clarks Beach by way of the permitted without consent provisions within *State Environmental Planning Policy (Coastal Management) 2018* to mitigate the impacts of Tropical Cyclone Oma. These works were subject to an environmental assessment under Part 5 of the *EP&A Act*, however the period of this assessment has been exhausted and the sandbag walls must now either be removed or additional approval obtained.

Throughout the period of preparing this EIS, the coastal condition has changed dramatically, largely due to a sand slug moving around the headland and presently being positioned within the Clarks Beach area. In this regard, at the time of commencing this environmental assessment, waves continued to lap at the toe of the sandbag walls and removal of the sand bags was anticipated to result in an imminent threat to the integrity of the dune, the built and natural assets behind and the aboriginal middens located on the site. Conversely, the sandbag walls are now, (as at the writing of Revision 1.0) buffered by approximately 10+m of beach before the water's edge. This dynamic relationship is anticipated to continue throughout the 5x year period sought to retain the sandbag walls and allow strategic planning of the site to be conducted, including the review of planned retreat options. Whilst the coastal condition is more favourable at present to facilitate sandbag wall removal, this does not form the preferred approach prior to the strategic processes of a revised PoM for the Holiday Park and Council's Coastal Management Program for the locality being undertaken.

The environmental qualities of the subject site and surrounding locale are identified as a key drawcard of existing character, lifestyle and Byron's tourism economy. These qualities are formalised by the identification of the Cape Byron Marine Park to the immediate north, Cape Byron National Park to the east and high biodiversity values (littoral rainforest) on the subject site. Despite no vegetation removal being proposed, the placement of the sandbag walls on land mapped as littoral rainforest has elevated the application's assessment to an EIS.

The application has been prepared in accordance with the provisions of the *EP&A Act*, the *EP&A Regs* and the relevant environmental planning instruments, such the *State Environmental Planning Policies* and the *Byron LEP 1988*. An assessment of the proposed development against the instruments reveals the proposed development complies with the planning intent and enables positive outcomes in alignment with State and local strategic guidelines.

The proposal exhibits compliance with Council's prescriptive controls, and upholds the aims, objectives and performance criteria of the applicable planning framework. Furthermore, no likely impacts of significance have been identified and the site considered suitable for the development as proposed.

Ultimately the proposal is considered a sympathetic scale and proposal in light of the existing site activities, presence of Aboriginal middens, juxtaposition with areas of environmental quality and contribution to Byron's tourism and connected economies.

For the reasons outlined, the proposal is considered to be in accordance with the public interest and warrants approval, subject to the application of reasonable and relevant conditions.