

Blue Lagoon

Stormwater Management works

Final for submission

23 February 2022



ERA Planning Pty Ltd trading as ERA Planning and Environment

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1 Introduction

1.1 Purpose of the report

ERA Planning and Environment have been engaged by Sorell Council to provide a supporting planning report for the stormwater works proposed at Blue Lagoon in Dodges Ferry. The location is part of the broader Bally Park which is between Kannah Street, Tiger Head Road and Carlton Beach Road.

The site is currently used as open space, including a playground to the north, and a natural area, including the lagoon directly to the east of Red Ochre Beach.

1.2 Name of Planning Authority

The Planning Authority is Sorell Council.

1.3 Statutory controls

The site is subject to the provisions of the *Sorell Interim Planning Scheme 2015* (the Scheme).

1.4 Title documentation

The works will be predominantly within the CT 165813/1 which is in the ownership of Sorell Council and the title can be found in *Appendix A*. However, an outfall will be constructed at Red Ochre beach as marked below.



Figure 1 The subject site highlighted. The star marks the approximate location of the proposed outfall.

As Red Ochre Beach is in the ownership of the Crown, consent from Property Services will be required and has been provided in Appendix A.

1.5 Enquiries

Enquiries relating to this planning report should be directed to:

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2 Proposal

The Blue Lagoon area of Dodges Ferry has been subject to frequent flooding events in recent years. This is in part due to a La Nina weather pattern, resulting in more frequent heavy rainfall events following a period of dry weather. This is also a reflection of increasing urbanisation in the Dodges Ferry area resulting in greater pressures on existing stormwater infrastructure which may not have been designed for that load. Inadequate stormwater infrastructure has in turn resulted in localised flooding which can close adjoining roads and impact upon private properties.

The proposal involves the construction of new stormwater infrastructure to drain the lagoon in heavy rainfall events, to reduce the risk of flooding to the surrounding area. Specifically the works will include:

- Construction of a concrete headwall, outlet and screen structure. The headwall will accommodate a pipe size of 600mm and will have a height of 1.04m and width at its widest point of 1.7m;
- Installation of a 600mm diameter outlet pipe towards the beach which will be trenched in one section then direction drilled through the dunes;
- Provide for a stormwater outlet to the beach which will be above mean high tide level and disguised with rock pitching and endemic plantings.

Additional ancillary works include construction of fencing, extending an existing gravel carpark area to form a hard stand for emergency maintenance access, reinstating walking tracks on the site once the works are completed, reshaping of existing open channels in some areas of the site to ensure the water is directed to the lagoon storage, and some localised reshaping of the lagoon floor to provide for a clear line of discharge.

Full proposal plans are found within *Appendix B*.

2.1 Application Documentation

To support this application, a number of documents are provided which address the engineering requirements for the works, as well as the necessary environmental requirements. These are as follows:

- Blue Lagoon Flood Mitigation Project, proposal plans, by Sustainable Engineering, issued 30 January 2022 (Appendix B);
- Blue Lagoon preliminary pipe sizing concept, by Entura, dated 7 July 2021 (Appendix D);
- Natural Values Assessment by ERA Planning and Environment dated 22 February 2022 (Appendix C).

3 Site description and surrounds

3.1 Site description

The Blue Lagoon site is located at Dodges Ferry, to the south east of the cluster of shops at Dodges Ferry, and adjacent to Red Ochre Beach which has a westerly orientation over Frederick Henry Bay towards 7 Mile Beach.

The lagoon site itself is immediately west of Bally Park, or the Boat Park, in Dodges Ferry, and the lagoon and park make up a broader open space area, leading down to Red Ochre Beach. The lagoon is filled with water during times of heavy or consistent rainfall and attracts birdlife to the area. However, during times of drought, the lagoon can be almost entirely dry.

The lagoon also acts as a detention basin for some of the nearby Dodges Ferry catchments. While the retention of stormwater within a waterway or wetland area is appropriate and can provide for positive stormwater management outcomes, the volume of water that drains to this site can result in localized flooding and this has become more problematic in recent years with further housing development in the Dodges Ferry area. This flooding can extend beyond the lagoon site, into the playground, and across roads and to lower lying dwellings near by.

An aerial image of the site is provided in Figure 1 above.

3.2 Surrounding area

As mentioned, to the south west of the site is Red Ochre Beach and to the north east of the site is the formalised playground of Bally Park. In addition to this, the parent title for the lagoon also includes the local ambulance station on the corner of Tiger Head Road and Carlton Beach Road.

To the north and south of the site is residential housing off Kannah Street (north) and Carlton Beach Road (south). In addition the site broadly is bounded by streets on three sides, with only the western side with Red Ochre beach exempt from this.

3.3 Site Photos



Figure 2 Looking from the northern end of the lagoon across the lagoon towards Red Ochre Beach.



Figure 3 The approximately location for the stormwater headwall.



Figure 4 The existing carpark will be slightly expanded to provide a further gravel area for maintenance vehicles.



Figure 5: The outfall onto the beach will be in this approximately location.

4 Planning assessment

4.1 Statutory controls

The site is subject to the provisions of the Sorell Interim Planning Scheme 2015 (the Scheme). Specifically, the site is zoned Environmental Management where the majority of the works will occur, and Recreation, over the area which is currently a playground. This is shown below in Figure 6.



Figure 6: The subject site highlighted, showing Environmental Management Zone in teal, Recreation zone in green and Low Density Residential zone in pink.

4.2 Use status

The proposed works are classified as a Utilities use, which is defined as:

use of land for utilities and infrastructure including:

- (a) telecommunications;*
- (b) electricity generation;*
- (c) transmitting or distributing gas, oil, or power;*
- (d) transport networks;*
- (e) collecting, treating, transmitting, storing or distributing water; or*
- (f) collecting, treating, or disposing of storm or floodwater, sewage, or sullage.*

Examples include an electrical sub-station or powerline, gas, water or sewerage main, optic fibre main or distribution hub, pumping station, railway line, retarding basin, road, sewage treatment plant, storm or flood water drain, water storage dam and weir.

Within the Environmental Management Zone, without a Reserve Management plan, the use is discretionary.

4.2.1 Environmental Management Zone Purpose Statements

The zone purpose statements for the Environmental Management Zone are as follows:

29.1.1.1 To provide for the protection, conservation and management of areas with significant ecological, scientific, cultural or aesthetic value, or with a significant likelihood of risk from a natural hazard.

29.1.1.2 To only allow for complementary use or development where consistent with any strategies for protection and management.

29.1.1.3 To facilitate passive recreational opportunities which are consistent with the protection of natural values in bushland and foreshore areas.

29.1.1.4 To recognise and protect highly significant natural values on private land.

29.1.1.5 To protect natural values in un-developed areas of the coast.

29.1.1.6 To protect the environmental values of the internationally significant Pitt Water and Orielton Lagoon Ramsar wetland site.

The proposed works, while utilities in nature, will assist in the conservation and management of areas which are currently at risk from the natural hazard of inundation. These works will enable excess stormwater to be redirected to Red Ochre Beach in a controlled manner, reducing flooding risk to this site and surrounding area. While this site does not have specific strategies for protection or management, the stormwater improvement works will complement the broader objectives of conservation and appropriate management on site. There will be no impact to the existing passive recreation opportunities on the site. The natural values of the coast will be predominantly retained, with the only impact being at the outfall location. This outfall will only be in use for drainage during times of heavy rainfall, and otherwise will sit in situ with no impact upon the coastal zone.

4.3 Use standards

PLANNING SCHEME REQUIREMENTS	
Acceptable Solutions	Performance Criteria
29.3.1 Use Standards for Reserved Land	
<p>A1</p> <p><i>Use is undertaken in accordance with a reserve management plan.</i></p>	<p>P1</p> <p><i>Use must satisfy all of the following:</i></p> <p><i>(a) be complementary to the use of the reserved land;</i></p> <p><i>(b) be consistent with any applicable objectives for management of reserved land provided by the National Parks and Reserves Management Act 2002;</i></p>

	(c) not have an unreasonable impact upon the amenity of the surrounding area through commercial vehicle movements, noise, lighting or other emissions that are unreasonable in their timing, duration or extent..
<p><u>Planner response</u></p> <p>There is no reserve management plan applicable for this site, and the site is not listed within the <i>National Parks and Reserves Management Act 2002</i>. However, in considering the works proposed, there will be no unreasonable impact on the surrounding area through commercial vehicle movements, noise, lighting or other emissions. The improved stormwater infrastructure will be employed during times of heavy rainfall and will see stormwater safely drain from the lagoon site to Red Ochre Beach. The only time commercial vehicles will visit the site is when maintenance vehicles are required to undertake cleaning or maintenance, and these visits will be infrequent and irregular. The application meets the performance criteria.</p>	

4.4 Development standards for buildings and works

PLANNING SCHEME REQUIREMENTS	
Acceptable Solutions	Performance Criteria
29.4.1 Building Height	
<p>A1</p> <p>Building height comply with any of the following:</p> <p>(a) as proscribed in an applicable reserve management plan;</p> <p>(b) be no more than 7.5 m.</p>	<p>P1</p> <p>Building height must satisfy all of the following:</p> <p>(a) be consistent with any Desired Future Character Statements provided for the area or, if no such statements are provided, have regard to the landscape of the area;</p> <p>(b) be sufficient to prevent unreasonable adverse impacts on residential amenity on adjoining lots by:</p> <p>(i) overlooking and loss of privacy;</p> <p>(ii) visual impact when viewed from adjoining lots, due to bulk and height;</p> <p>(c) be reasonably necessary due to the slope of the site or for the functional requirements of infrastructure.</p>
<p><u>Planner response</u></p> <p>The application meets the acceptable solution as the maximum height of the headwall is 1.04m. Complies.</p>	

PLANNING SCHEME REQUIREMENTS	
Acceptable Solutions	Performance Criteria
29.4.2 Setback	
<p>A1</p> <p><i>Building setback from frontage must comply with any of the following:</i></p> <p>(a) <i>as proscribed in an applicable reserve management plan;</i></p> <p>(b) <i>be no less than 30 m.</i></p>	<p>P1</p> <p><i>Building setback from frontage must satisfy all of the following:</i></p> <p>(a) <i>be consistent with any Desired Future Character Statements provided for the area or, if no such statements are provided, have regard to the landscape;</i></p> <p>(b) <i>minimise adverse impact on the landscape as viewed from the road;</i></p> <p>(c) <i>be consistent with the prevailing setbacks of existing buildings on nearby lots;</i></p> <p>(d) <i>minimise loss of native vegetation within the front setback where such vegetation makes a significant contribution to the landscape as viewed from the road.</i></p>
<p><u>Planner response</u></p> <p>The proposed culvert is close to 40m from Kannah Street, over 270m from Tiger Head Road and over 180m from Carlton Beach Road. Complies.</p>	
<p>A2</p> <p><i>Building setback from side and rear boundaries must comply with any of the following:</i></p> <p>(a) <i>as proscribed in an applicable reserve management plan;</i></p> <p>(b) <i>be no less than 30 m.</i></p>	<p>P2</p> <p><i>Building setback from side and rear boundaries must satisfy all of the following:</i></p> <p>(a) <i>be consistent with any Desired Future Character Statements provided for the area or, if no such statements are provided, have regard to the landscape;</i></p> <p>(b) <i>be sufficient to prevent unreasonable adverse impacts on residential amenity on adjoining lots by:</i></p> <p>(i) <i>overlooking and loss of privacy;</i></p> <p>(ii) <i>visual impact, when viewed from adjoining lots, through building bulk and massing.</i></p>
<p><u>Planner response</u></p> <p>The building (the headwall) is over 60m from the side boundary with Red Ochre Beach. Complies.</p>	

<p>A3</p> <p><i>Buildings and works must be setback from land zoned Environmental Living no less than 30 m.</i></p>	<p>P3</p> <p><i>Buildings and works must be setback from land zoned Environmental Living to satisfy all of the following:</i></p> <p><i>(a) there is no unreasonable impact from the development on the environmental values of the land zoned Environmental Living;</i></p> <p><i>(b) the potential for the spread of weeds or soil pathogens onto the land zoned Environmental Living is minimised;</i></p> <p><i>(c) there is minimal potential for contaminated or sedimented water runoff impacting the land zoned Environmental Living;</i></p> <p><i>(d) there are no reasonable and practical alternatives to developing close to land zoned Environmental Living;</i></p> <p><i>(e) be no less than 10m or if there is an existing building setback less than this distance, the setback must not be less than the existing building.</i></p>
<p><u>Planner response</u></p> <p>There is no land zoned Environmental Living within 30m of the site. Complies.</p>	
<p>A4</p> <p><i>Building setback for buildings for sensitive use (including residential use) must comply with all of the following:</i></p> <p><i>(a) be sufficient to provide a separation distance from land zoned Rural Resource no less than 100 m;</i></p> <p><i>(b) be sufficient to provide a separation distance from land zoned Significant Agriculture no less than 200 m.</i></p>	<p>P4</p> <p><i>Building setback for buildings for sensitive use (including residential use) must satisfy all of the following:</i></p> <p><i>(a) be sufficient to prevent potential for land use conflict that would fetter resource development use of adjoining land;</i></p> <p><i>(b) be sufficient to provide a separation distance no less than:</i></p> <p><i>40 m from land zoned Rural Resource or if there is an existing building with a separation distance less than this distance, the separation distance must not be less than the existing building;</i></p> <p><i>80 m from land zoned Significant Agriculture or if there is an existing building with a separation distance less than this distance, the separation distance must not be less than the existing building.</i></p>
<p><u>Planner response</u></p>	

The works do not include buildings for sensitive use, and there is no Rural Resource or Significant Agriculture land within 200m of the site. This standard does not apply.

A5

Buildings setback from the Tasmanian Wilderness World Heritage Area must comply with any of the following:

- (a) as proscribed in an applicable reserve management plan;*
- (b) be no less than 500 m.*

P5

Building setback from the Tasmanian Wilderness World Heritage Area must satisfy all of the following:

- (a) there is no significant impact from the development on the environmental values of the land within the World Heritage Area;*
- (b) the potential for the spread of weeds or soil pathogens onto the land within the World Heritage Area is minimised;*
- (c) there is minimal potential for contaminated or sedimented water runoff impacting the land within the World Heritage Area;*
- (d) there are no reasonable and practical alternatives to developing close to the land within the World Heritage Area.*

Planner response

All works are more than 500m from land in the Tasmanian Wilderness World Heritage Area. Complies.

PLANNING SCHEME REQUIREMENTS

Acceptable Solutions

Performance Criteria

29.4.3 Design

A1

The location of buildings and works must comply with any of the following:

- (a) be located on a site that does not require the clearing of native vegetation and is not on a skyline or ridgeline;*
- (b) be located within a building area, if provided on the title;*
- (c) be an addition or alteration to an existing building;*
- (d) as proscribed in an applicable reserve management plan.*

P1

The location of buildings and works must satisfy all of the following:

- (a) be located in an area requiring the clearing of native vegetation only if:*
 - (i) there are no sites clear of native vegetation and clear of other significant site constraints such as access difficulties or excessive slope;*
 - (ii) the extent of clearing is the minimum necessary to provide for buildings, associated works and associated bushfire protection measures;*
 - (iii) the location of clearing has the least environmental impact;*
- (b) be located on a skyline or ridgeline only if:*

	<p>(i) there are no sites clear of native vegetation and clear of other significant site constraints such as access difficulties or excessive slope;</p> <p>(ii) there is no significant impact on the rural landscape;</p> <p>(iii) building height is minimised;</p> <p>(iv) any screening vegetation is maintained(c) be consistent with any Desired Future Character Statements provided for the area or, if no such statements are provided, have regard to the landscape.</p>
<p><u>Planner response</u></p> <p>The works are located on a site that is not on a skyline or ridgeline, but do involve the clearance of native vegetation; there are no building areas specified on the title; the works are not an addition to an existing building; and as there is no reserve management plan applicable. Therefore, the works cannot comply with the acceptable solution and the performance criteria must be considered.</p> <p>The chosen location includes native vegetation as identified within the Natural values report, including predominantly Freshwater aquatic sedgeland and rushland, <i>Acacia longifolia</i> coastal scrub and some marram grasslands (introduced species). Given the operational requirements for this development, the site constraints necessitate that the works be located in this area. The level of impact on the native freshwater aquatic sedgeland and rushland is considered to be insignificant and a minor incursion on the population in that area as a whole (as noted in the NVA). The marram grass and the pine trees are introduced species, and therefore are not afforded the same level of protection. On balance the impact to native vegetation is considered to be negligible and therefore the application meets the performance criteria.</p>	
<p>A2</p> <p><i>Exterior building surfaces must be coloured using colours with a light reflectance value not greater than 40 percent.</i></p>	<p>P2</p> <p><i>Exterior building surfaces must avoid adverse impacts on the visual amenity of neighbouring land and detracting from the contribution the site makes to the landscape, views and vistas.</i></p>
<p><u>Planner response</u></p> <p>The exterior of the structures will be grey concrete, or otherwise buried. This meets the light reflectance value of less than 40 percent. Complies.</p>	
<p>A3</p> <p><i>Fill and excavation must comply with all of the following:</i></p> <p>(a) <i>height of fill and depth of excavation is no more than 1 m from natural ground level, except where required for building foundations;</i></p>	<p>P3</p> <p><i>Fill and excavation must satisfy all of the following:</i></p> <p>(a) <i>there is no adverse impact on natural values;</i></p> <p>(b) <i>does not detract from the landscape character of the area;</i></p>

<p><i>(b) extent is limited to the area required for the construction of buildings and vehicular access.</i></p>	<p><i>(c) does not impact upon the privacy for adjoining properties;</i></p> <p><i>(d) does not affect land stability on the lot or adjoining land</i></p>
<p><u>Planner response</u></p> <p>The works will involve some excavation. In particular, to get the structures in place, and also to run the piping from the lagoon through to Red Ochre Beach. Once the piping is run through the dune system, it will be covered again, and in due course, revegetated to minimise the visual impact and improve soil stability. The works do not involve buildings which people will use to relax within, therefore, there will be no privacy impact. The works are located relatively centrally within the site so there will be no impact upon land stability on the subject lot or on the adjoining land. The works meet the performance criteria.</p>	

5 Codes

5.1 Applicable codes

The following codes apply spatially to the area where works are occurring:

- Bushfire Prone Areas Code;
- Stormwater Management Code;
- Waterway and Coastal Protection Code;
- Inundation Prone Areas Code;
- Coastal Erosion Hazard Code;

5.2 Bushfire Prone Areas Code

The works do not propose a hazardous or vulnerable use, nor do they propose a subdivision, therefore irrelevant of the spatial application, the standards within this Code do not apply.

5.3 Stormwater Management Code

The relevant standards for the Stormwater Management Code are considered below:

PLANNING SCHEME REQUIREMENTS	
Acceptable Solutions	Performance Criteria
E7.7.1 Stormwater Drainage and Disposal	
<p>A1</p> <p><i>Stormwater from new impervious surfaces must be disposed of by gravity to public stormwater infrastructure.</i></p>	<p>P1</p> <p><i>Stormwater from new impervious surfaces must be managed by any of the following:</i></p> <p>(a) <i>disposed of on-site with soakage devices having regard to the suitability of the site, the system design and water sensitive urban design principles</i></p> <p>(b) <i>collected for re-use on the site;</i></p> <p>(c) <i>disposed of to public stormwater infrastructure via a pump system which is designed, maintained and managed to minimise the risk of failure to the satisfaction of the Council.</i></p>
<p><u>Planner response.</u></p> <p>There will be no new impervious surfaces that will requiring draining to a public stormwater system. Complies with A1.</p>	
A2	P2

<p>A stormwater system for a new development must incorporate water sensitive urban design principles R1 for the treatment and disposal of stormwater if any of the following apply:</p> <p>(a) the size of new impervious area is more than 600 m²;</p> <p>(b) new car parking is provided for more than 6 cars;</p> <p>(c) a subdivision is for more than 5 lots.</p>	<p>A stormwater system for a new development must incorporate a stormwater drainage system of a size and design sufficient to achieve the stormwater quality and quantity targets in accordance with the State Stormwater Strategy 2010, as detailed in Table E7.1 unless it is not feasible to do so.</p>
<p><u>Planner response.</u></p> <p>The project does not include a new impervious area more than 600m², nor does it involve new carparks, or a subdivision. This standard does not apply.</p>	
<p>A3</p> <p>A minor stormwater drainage system must be designed to comply with all of the following:</p> <p>(a) be able to accommodate a storm with an ARI of 20 years in the case of non-industrial zoned land and an ARI of 50 years in the case of industrial zoned land, when the land serviced by the system is fully developed;</p> <p>(b) stormwater runoff will be no greater than pre-existing runoff or any increase can be accommodated within existing or upgraded public stormwater infrastructure.</p>	<p>P3</p> <p>No Performance Criteria.</p>
<p><u>Planner response.</u></p> <p>The purpose of this project is to provide for improved stormwater infrastructure. However, it is of note that the land serviced is not fully developed. Therefore, (a) is not applicable. The stormwater runoff will be no greater than pre-existing runoff. Therefore, (b) is complied with. Notwithstanding this, an analysis of Stormwater runoff and the necessary pipe size and infrastructure has been undertaken and can be found within Appendix D.</p>	

5.4 Waterway and Coastal Protection Code

The relevant standards within the Waterway and Coastal Protection Code are considered below:

PLANNING SCHEME REQUIREMENTS	
Acceptable Solutions	Performance Criteria
E11.7.1 Development Standards – Buildings and Works	

<p>A1</p> <p><i>Building and works within a Waterway and Coastal Protection Area must be within a building area on a plan of subdivision approved under this planning scheme.</i></p>	<p>P1</p> <p><i>Building and works within a Waterway and Coastal Protection Area must satisfy all of the following:</i></p> <ul style="list-style-type: none"> <i>(a) avoid or mitigate impact on natural values;</i> <i>(b) mitigate and manage adverse erosion, sedimentation and runoff impacts on natural values;</i> <i>(c) avoid or mitigate impacts on riparian or littoral vegetation;</i> <i>(d) maintain natural streambank and streambed condition, (where it exists);</i> <i>(e) maintain in-stream natural habitat, such as fallen logs, bank overhangs, rocks and trailing vegetation;</i> <i>(f) avoid significantly impeding natural flow and drainage;</i> <i>(g) maintain fish passage (where applicable);</i> <i>(h) avoid landfilling of wetlands;</i> <i>(i) works are undertaken generally in accordance with 'Wetlands and Waterways Works Manual' (DPIWE, 2003) and "Tasmanian Coastal Works Manual" (DPIPWE, Page and Thorp, 2010), and the unnecessary use of machinery within watercourses or wetlands is avoided.</i>
<p><u>Planner response.</u></p> <p>There is no building area located on the title. Therefore, the acceptable solution can not be complied with. However, as has been demonstrated through the Natural Values Assessment and its recommendations, there will be minimal impact on natural values, with a requirement to have a minimum level of water provided in the lagoon system at all times. It is highlighted that the decision to plant pines has impacted the natural processes of the water course (ie. During times of heavy rainfall a natural drainage channel goes through the dune system) as the pines retain the water through their deep roots. Undertaking these works, and removing the pines if possible, should ensure the natural values of the lagoon system are retained. The habitat around the lagoon itself will not be impacted from the works. There will be no landfilling of the wetland or lagoon. Complies.</p>	
<p>A4</p> <p><i>Development must involve no new stormwater point discharge into a watercourse, wetland or lake.</i></p>	<p>P4</p> <p><i>Development involving a new stormwater point discharge into a watercourse, wetland or lake must satisfy all of the following:</i></p> <ul style="list-style-type: none"> <i>(a) risk of erosion and sedimentation is minimised;</i>

	<p>(b) any impacts on natural values likely to arise from erosion, sedimentation and runoff are mitigated and managed;</p> <p>(c) potential for significant adverse impact on natural values is avoided.</p>
<p><u>Planner response.</u></p> <p>The works involve a stormwater discharge point along the coast being installed. The design of this discharge point, going through the dune, has been to minimise the erosion and sedimentation of the foreshore and the dune system. In effect it will mimic the previously established stormwater discharge from the lagoon prior to the introduction of pines and other establishing vegetation like marram grass. It is considered that the potential for impacts upon natural values will be avoided. Complies.</p>	

5.5 Inundation Prone Areas Code

The medium landslide hazard overlay applies to the land, however, none of the standards within the Code are applicable as they apply to habitable buildings, and outbuildings.

5.6 Coastal Erosion Hazard Code

The Coastal Erosion Hazard Code applies to a section of the site where the piping will be placed. The works are not for a habitable building, therefore, the use standards are not applicable. However, the following development standard requires consideration:

E16.7.1 Development Standards – Buildings and Works	
PLANNING SCHEME REQUIREMENTS	
Acceptable Solutions	Performance Criteria
<p>A1</p> <p>No acceptable solution.</p>	<p>P1</p> <p>Buildings and works must satisfy all of the following:</p> <p>(a) not increase the level of risk to the life of the users of the site or of hazard for adjoining or nearby properties or public infrastructure;</p> <p>(b) erosion risk arising from wave run-up, including impact and material suitability, may be mitigated to an acceptable level through structural or design methods used to avoid damage to, or loss of, buildings or works;</p> <p>(c) erosion risk is mitigated to an acceptable level through measures to modify the hazard where these measures are designed and certified by an engineer with suitable experience in coastal, civil and/or hydraulic engineering;</p>

	<p><i>(d) need for future remediation works is minimised;</i></p> <p><i>(e) health and safety of people is not placed at risk;</i></p> <p><i>(f) important natural features are adequately protected;</i></p> <p><i>(g) public foreshore access is not obstructed where the managing public authority requires it to continue to exist;</i></p> <p><i>(h) access to the site will not be lost or substantially compromised by expected future erosion whether on the proposed site or off-site;</i></p> <p><i>(i) provision of a developer contribution for required mitigation works consistent with any adopted Council Policy, prior to commencement of works;</i></p> <p><i>(j) not be located on an actively mobile landform.</i></p>
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Planner response.

The proposed development does not include works for a habitable building. Therefore, provisions around protection of buildings and health and safety of people and buildings is not relevant.

The works will be piping under the sand dune, and have been designed as an outflow for excess water during times of heavy rainfall. In effect it acts as an emergency drainage point. The erosion risk is minimal through the works, and the impact of erosion on the works is likely to be negligible. There will be no change in the access arrangements to the public foreshore. The developer for these works is the Sorell Council, therefore, they will remain responsible for any future mitigation works as they currently are. In confirming with LIST data, the site is not an actively mobile landform. The application complies with the performance criteria.

6 Conclusion

This application proposes the installation of stormwater infrastructure to assist in the management of flooding in the Dodges Ferry area. This flooding comes about during heavy rainfall events, with Blue Lagoon filling beyond capacity, and there being no areas for the water to drain to. Historically the lagoon system would have drained to the foreshore, however, with the establishment of vegetation, much of which is introduced and invasive species, these natural drainage processes are no longer taking place.

This project will enable the lagoon to drain to the foreshore, while retaining a level of water within the lagoon system itself for the health of that ecosystem. The works that will be visible are limited to the stormwater headwall, and in effect the stormwater piping as it exits the headwall and as it drains to the beach. Revegetation will occur with native species where appropriate to minimise any visual impact.

The application requests discretions in relation to the following Clauses:

- Clause 29.3.1, P1, Use standards for Reserved Land;
- Clause 29.4.3, P1 and P3, Design;
- Clause 11.7.1, P1 and P4, Waterway and Coastal Protection Areas;
- Clause 16.7.1, Coastal Erosion Hazard Code.

As is demonstrated within this report, the works can meet the necessary performance criteria and the application is recommended to Council for approval.