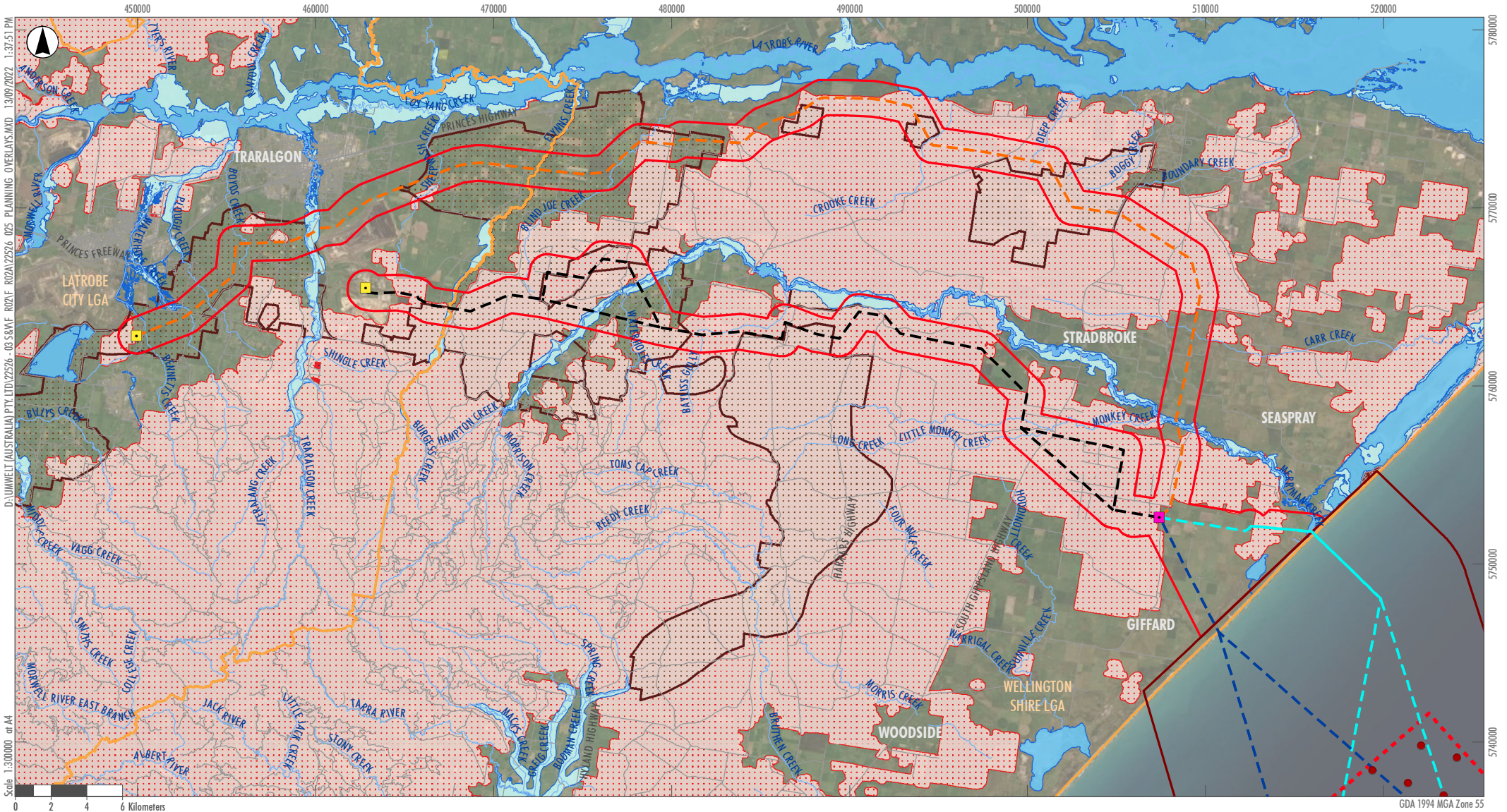


Legend

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|------------------------------|--|-------------------------------|-------------------------------------|---------------------------------------|--------------------------------------|
| Offshore Study Area boundary | Greater Gippsland Offshore Wind Project Area consists of: | Potential turbine layout | Planning Zones in Study Area | Public Conservation and Resource Zone | Road Zone - Category 1 |
| Onshore Study Area boundary | Greater Gippsland Offshore Wind Project Area | Existing onshore substation | Farming Zone | Public Park and Recreation Zone | Road Zone - Category 2 |
| | Overhead transmission route option 1a and 1b | Indicative onshore substation | Farming Zone - Schedule 1 | Public Use Zone - Local Government | Rural Conservation Zone - Schedule 1 |
| | Overhead transmission route option 2 | Road | Low Density Residential Zone | Public Use Zone - Service and Utility | Special Use Zone - Schedule 1 |
| | Subsea cabling option 1 | Drainage line | | | Township Zone |
| | Subsea cabling option 2 | | | | |

FIGURE 8.2
Planning Zones

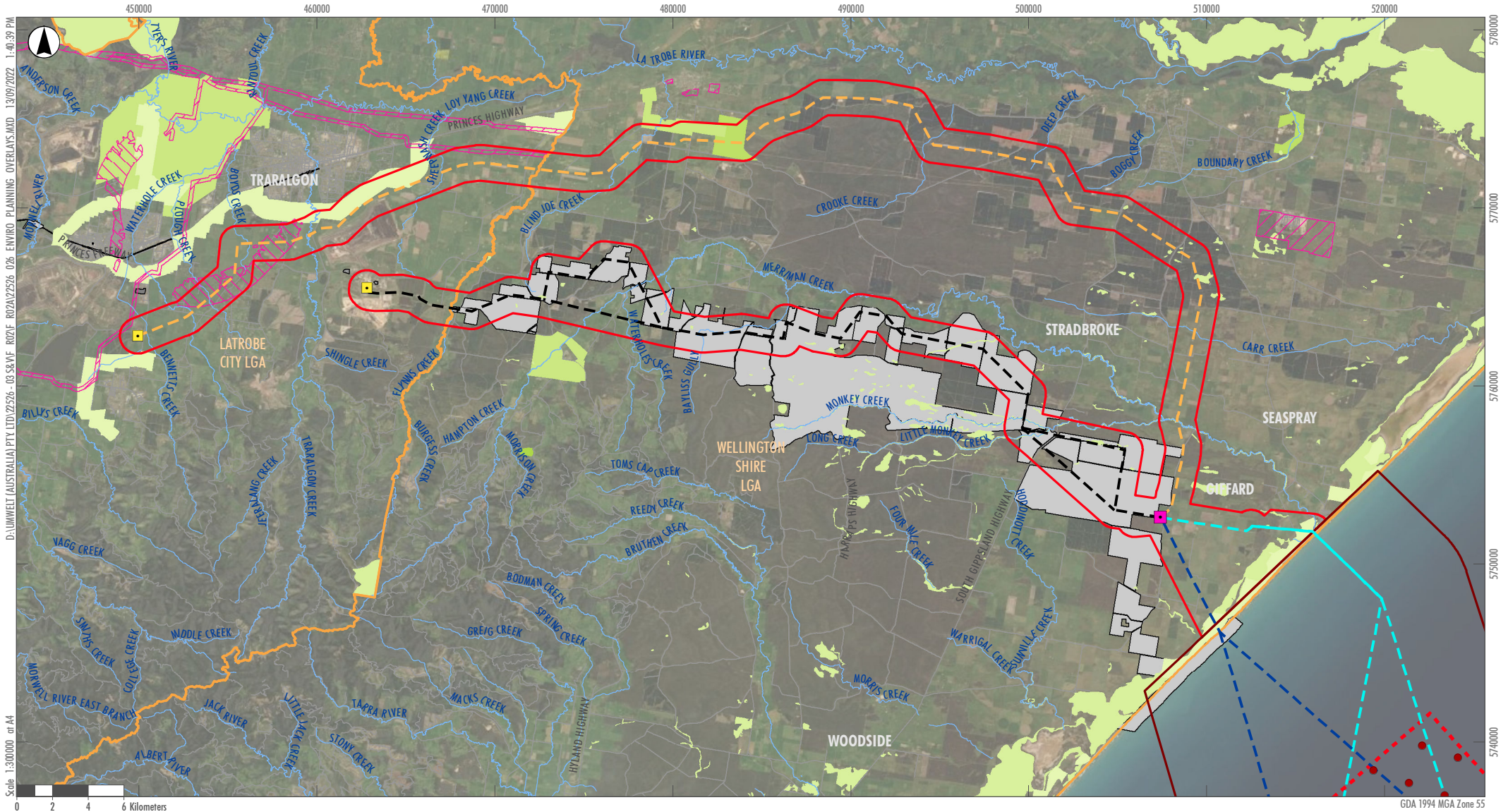


Legend

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| Offshore Study Area boundary | Greater Gippsland Offshore Wind Project Area consists of: | Potential turbine layout | Land Management Planning Overlays | Bushfire Management Overlay - Schedule 2 |
| Onshore Study Area boundary | Greater Gippsland Offshore Wind Project Area | Existing onshore substation | Bushfire Management Overlay | Floodway Overlay |
| | Overhead transmission route option 1a and 1b | Indicative onshore substation | Bushfire Management Overlay - Schedule 1 | Land Subject to Inundation Overlay |
| | Overhead transmission route option 2 | Local Government boundary | Road | State Resource Overlay 1 |
| | Subsea cabling option 1 | Road | Drainage line | |
| | Subsea cabling option 2 | | | |

Image Source: ESRI Basemap (2022) Data source: VIC Data (2022); DELWP (2022)

FIGURE 8.3
Planning Overlays



Legend

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|--|---|--|---|---|--|
| <ul style="list-style-type: none"> Offshore Study Area boundary Onshore Study Area boundary | <p>Greater Gippsland Offshore Wind Project Area consists of:</p> <ul style="list-style-type: none"> Greater Gippsland Offshore Wind Project Area Overhead transmission route option 1a and 1b Overhead transmission route option 2 Subsea cabling option 1 Subsea cabling option 2 | <ul style="list-style-type: none"> ● Potential turbine layout Existing onshore substation Indicative onshore substation Local Government boundary Road Drainage line | <p>Environment and Landscape and Other Planning Overlays</p> <ul style="list-style-type: none"> Design and Development Overlay - Schedule 1 Design and Development Overlay - Schedule 11 Environmental Significance Overlay - Schedule 1 | <ul style="list-style-type: none"> Environmental Significance Overlay - Schedule 2 Environmental Significance Overlay - Schedule 3 Environmental Significance Overlay - Schedule 7 Environmental Significance Overlay - Schedule 8 | <ul style="list-style-type: none"> Significant Landscape Overlay - Schedule 1 Specific Controls Overlay - Schedule 1 Specific Controls Overlay - Schedule 2 Specific Controls Overlay - Schedule 4 Specific Controls Overlay - Schedule 5 |
|--|---|--|---|---|--|

FIGURE 8.4
Planning
Overlays

A summary of the land use desktop assessment outcomes is provided in **Table 8.4**.

Table 8.4 Summary of Desktop Assessment Outcomes – Land Use

Summary of Assessment Outcomes
<ul style="list-style-type: none"> • Land uses within the onshore component are predominantly agriculture and forestry plantation, with areas of conservation reserves. These types of land use are generally compatible with the Project infrastructure. • There are several areas of public land that intersect with the onshore component, comprising parks, reserves, Indigenous protected areas, plantations, and permanent streams. Public land should be avoided, or where not feasible or prudent, potential impacts on public land should be minimised. • The onshore component of the Study Area is subject to the Wellington and Latrobe Planning Scheme, with majority of the Study Area located within the Farming Zone with land along the coastline within the Public Conservation and Resource Zone. • Planning permissions under the <i>Planning and Environment Act 1987</i> will be required. This may be in the form of permit(s), or via a planning scheme amendment.

8.2 Potential Impacts

Following definition of the existing environmental context of the Project Area and surrounding area, potential land use impacts have been identified with consideration of the Project design, construction, operation, and decommissioning activities in the context of the existing conditions. An overview of these potential impacts is provided in **Table 8.5**.

Table 8.5 Potential Impacts – Land Use

Impact	Project Component	Phase
Construction, operation and decommissioning activities result in disturbance and/or disruption to existing land uses. This includes potential disruption (temporary or permanent) to public land uses and public infrastructure, including land uses relating to conservation and recreation.	Onshore	Construction Operation Decommissioning
Disruption to public land management practices such as bushfire management, road maintenance, and timber harvesting during construction, operation and decommissioning	Onshore	Construction Operation Decommissioning
Project infrastructure results in land use changes that are incompatible or inconsistent with existing land uses and local and/or regional policy, or future land uses for public and private land	Onshore	Operation

9.0 Landscape and Visual

9.1 Existing Conditions

The offshore component of the Project will be located off the coastline of Gippsland, adjacent to the Ninety Mile Beach which is known for its vast untouched beaches that offer a range of recreational activities. The Ninety Mile Beach is a popular holiday destination with several coastal towns including Woodside Beach and Seaspray, as well as a number of camping grounds and caravan parks located along the coastline. Swimming, fishing, boating, walking, and surfing are popular activities undertaken along the Ninety Mile Beach coastline.

The coastline of the onshore Study Area is affected by the Environmental Significance Overlay (Schedule 1 – Coastal and Gippsland Lakes Environs) under the Wellington Planning Scheme. The schedule to this overlay recognises the environmental significance of the Ninety Mile Beach and Gippsland Lakes and their environs as some of the most significant environmental, landscape, and recreational areas within the State of Victoria.

The onshore component of the Project will be located primarily alongside the existing Basslink, through agricultural land and plantations. There are limited sensitive receptors through the transmission line corridor however, there are some conservation and recreation areas.

The offshore component of the Project will be visible from a number of locations along the coastline during operation. Preliminary visual simulations prepared by BFE have considered key viewpoints along the coastline where the offshore wind turbines will be visible. An overview of these key viewpoints and simulated views from these locations is provided in **Table 9.1**. The magnitude of visual impacts on these viewpoints will be assessed in Phase 2 of the Project. The location of these key viewpoints as well as other public spaces and recreation areas that may experience views of the offshore wind turbines during project operation are shown in **Figure 9.1**.

Table 9.1 Key Viewpoints

Key viewpoint	Description
Golden Beach	Golden Beach is a coastal community located approximately 33 km north-east of the nearest offshore wind turbine. Golden Beach is located adjacent to the Gippsland Lakes Ramsar Wetlands and provides for a number of recreation activities including foreshore camping areas, picnic grounds, coastal walks, boating and fishing. The viewing platform on the shoreline provides panoramic views of the coastline. Preliminary visual simulations from Golden Beach indicate that the offshore wind turbines will be only slightly visible in the distance when looking south from the coastline and do not appear to be a dominant feature of the coastal landscape.
Seaspray	Seaspray is a coastal community located approximately 20 km north of the nearest turbine within the offshore area of the Project. The underground cabling will land onshore just south of the Seaspray township. Ninety Mile Beach is the main attraction within Seaspray, with other public open spaces including picnic grounds. Preliminary visual simulations from the viewing deck at Seaspray Surf Life Saving Club indicate that the offshore wind turbines will be visible when looking south from this location.

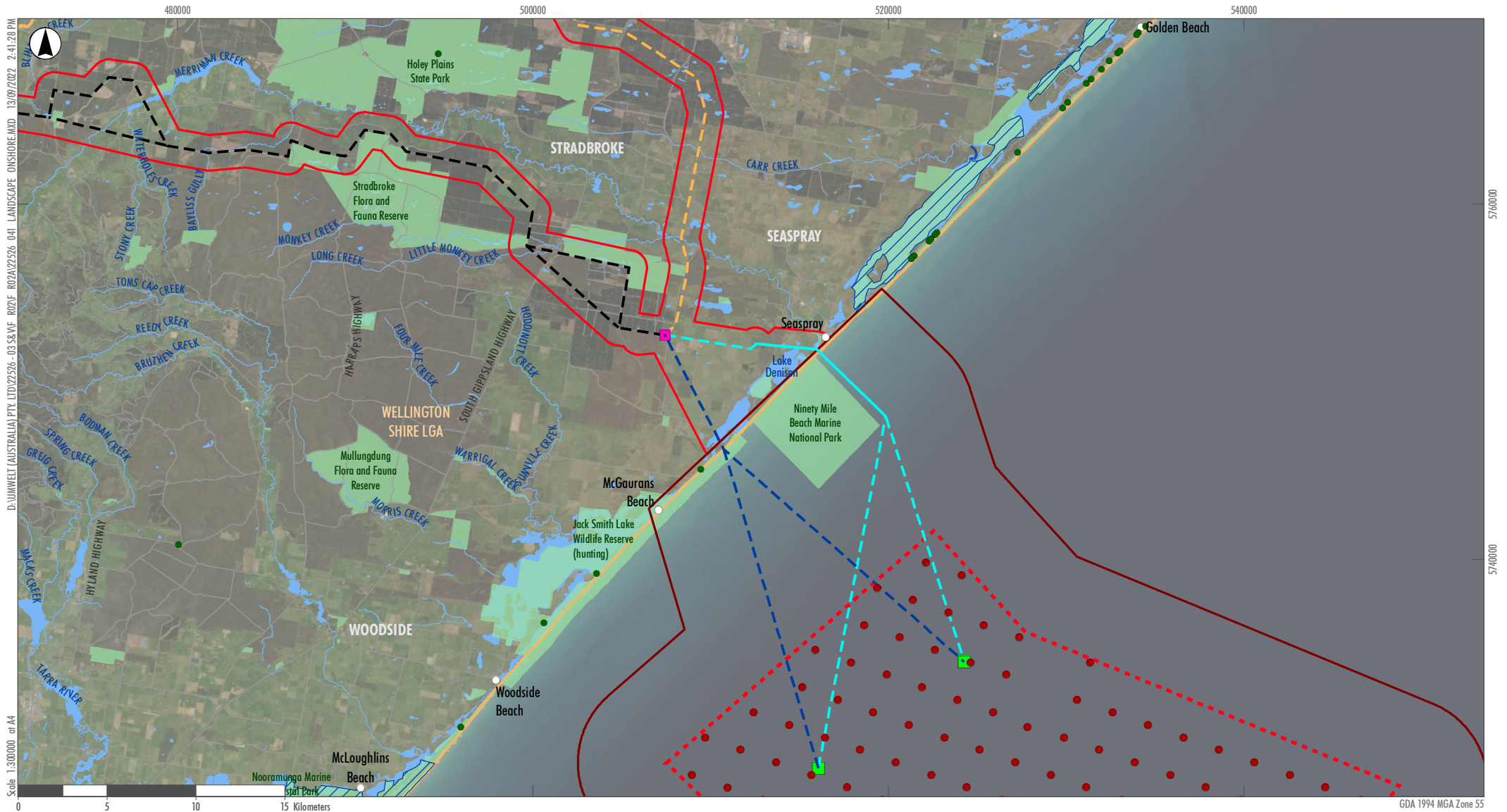
Key viewpoint	Description
McGaurans Beach	McGaurans Beach is located within the McLoughlins Beach – Seaspray Coastal Reserve approximately 12 km from the nearest offshore turbine and is known for providing beachfront camping with direct ocean views. The coastline in this area is undeveloped and provides panoramic views of the seascape and coastline. Preliminary visual simulations from McGaurans Beach indicate that that offshore wind turbines will be visible from the coastline when looking east directly out to sea. Based on these simulations, the offshore wind turbines have the potential to be a dominant feature of the coastal landscape from this viewpoint.
Woodside Beach	Woodside Beach is at the southern end of the Ninety Mile Beach and is approximately 12 km from the nearest offshore turbine. Woodside Beach provides for swimming, fishing, boating and surfing activities as well as coastal walks. Visual simulations from Woodside Beach indicate that that offshore wind turbines have the potential to be visible from the coastline when looking east directly out to sea. Based on these simulations, the offshore wind turbines have the potential to be a dominant feature of the coastal landscape from this viewpoint.
McLoughlins Beach	McLoughlins Beach is one of the southernmost beaches within the Ninety Mile Beach and is located within the Corner Inlet Ramsar Wetlands. It is approximately 17 km from the nearest offshore wind turbine. McLoughlins Beach provides for fishing, boating, and surfing activities as well as coastal walks and camping. Visual simulations from McLoughlins Beach indicate that that offshore wind turbines will be visible from the coastline when looking north-east out to sea. Based on these simulations the offshore wind turbines have the potential to be a prominent feature of the coastal landscape from this viewpoint.

9.1.1 Neighbouring Offshore Wind Farms

Three other offshore wind farms have been announced within proximity to the Project - Star of the South, Great Eastern and Seadragon. Star of the South and Great Eastern Offshore Wind Farm are proposed to be located south-west of the Project Area. As shown in **Figure 9.2**, Star of the South is proposed to be located approximately 7 km- 25 km off the coast, with Great Eastern proposed adjacent to Star of the South approximately 22 km - 45 km off the coast. Seadragon is proposed to be located north-east of the Project Area. Development of these offshore wind projects in addition to the Project have the potential to result in cumulative visual impacts along the Gippsland coastline. Potential cumulative visual impacts would require consideration in the impact assessment for Phase 2 of the Project.

Pursuant to the *Offshore Electricity Infrastructure Act 2021*, the Commonwealth Minister for Climate Change and Energy has proposed the first declared area, in the Commonwealth Waters of Bass Strait off Gippsland, Victoria for offshore renewable energy projects. This area encompasses the Project Area. Consultation on this proposal closed on 7 October 2022 and are currently being considered. The area is expected to be declared before the end of 2022 with applications for feasibility licenses opening after that.

Development of the Project in accordance with this declaration is important in the context on managing potential cumulative impacts.

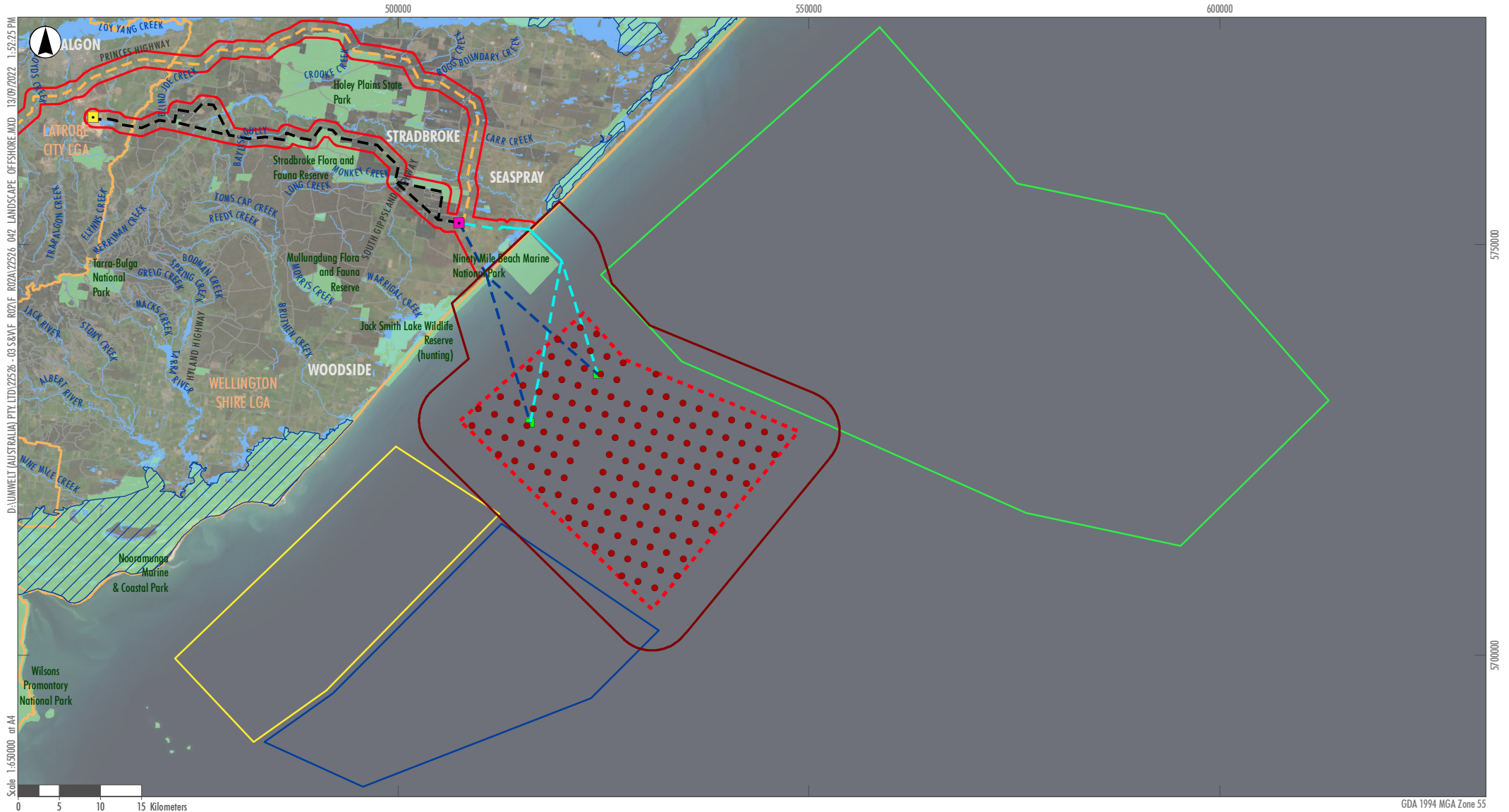


Legend

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|------------------------------|--|-------------------------------|--|
| Offshore Study Area boundary | Greater Gippsland Offshore Wind Project Area consists of: | RAMSAR Sites | Local Government boundary |
| Onshore Study Area boundary | Greater Gippsland Offshore Wind Project Boundary | Offshore substation | State Forest, National Parks, Reserves |
| | Overhead transmission route option 1a and 1b | Indicative onshore substation | Road |
| | Overhead transmission route option 2 | Potential turbine layout | Drainage line |
| | Subsea cabling option 1 | Campgrounds | |
| | Subsea cabling option 2 | | |

Image Source: ESRI Basemap (2022) Data source: VIC Data (2022)

FIGURE 9.1
Onshore Landscape and Visual Existing Conditions



Legend

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|------------------------------|--|--|-------------------------------|--|
| Offshore Study Area boundary | Greater Gippsland Offshore Wind Project Area consists of: | Great Eastern Offshore Wind Boundary | Offshore substation | Local Government boundary |
| Onshore Study Area boundary | Greater Gippsland Offshore Wind Project Boundary | Star of the South Boundary | Existing onshore substation | State Forest, National Parks, Reserves |
| | Overhead transmission route option 1a and 1b | Seadragon Offshore Wind Project Boundary | Indicative onshore substation | Road |
| | Overhead transmission route option 2 | RAMSAR Sites | Potential turbine layout | Drainage line |
| | Subsea cabling option 1 | | | |
| | Subsea cabling option 2 | | | |

Image Source: ESRI Basemap (2022) Data source: VIC Data (2022)

FIGURE 9.2
Offshore Landscape and Visual Existing Conditions

A summary of the landscape and visual desktop assessment outcomes is provided in **Table 9.2**.

Table 9.2 Summary of Desktop Assessment Outcomes – Landscape and Visual

Summary of Assessment Outcomes
<ul style="list-style-type: none"> • The offshore wind farm component of the Project will be visible from a number of public and private viewpoints along Ninety Mile Beach and other areas along the coastline, which are associated with a range of recreational activities and uses. • The onshore transmission line would require the addition of new transmission infrastructure within the landscape. Locating the transmission line adjacent to BassLink may reduce potential landscape and visual impacts. Further studies to identify a feasible and prudent transmission route are required, which should also be informed by consultation with stakeholders and the community. • There are potential cumulative landscape and visual impacts associated with the wind turbines and the transmission infrastructure with nearby proposed offshore wind projects in the declared Gippsland zone. These should be assessed in a coordinated and integrated manner to the extent possible, having regard to information availability and timing.

9.2 Potential Impacts

Following definition of the existing environmental context of the Project Area and surrounding area, potential landscape and visual impacts have been identified with consideration of the Project design, construction, operation, and decommissioning activities in the context of the existing conditions. An overview of these potential impacts is provided in **Table 9.3**.

Table 9.3 Potential Impacts – Landscape and Visual

Impact	Project Component	Phase
Temporary visual impacts on surrounding public open space and/or sensitive receptors during construction and decommissioning of the project.	Onshore and Offshore	Construction Decommissioning
Visual impacts from the overhead transmission line and onshore substation on public open space and/or sensitive receptors during project operation.	Onshore	Operation
Visual impacts from offshore wind turbines on public open space and/or sensitive receptors during project operation.	Offshore	Operation
Impact on the landscape value of the Gippsland coastline from offshore wind turbines during project operation.	Onshore and Offshore	Operation
Cumulative visual impact on the Gippsland coastline from the Project and other neighbouring proposed offshore wind farms.	Onshore and Offshore	Operation
Cumulative visual impact from the overhead transmission line with Basslink.	Onshore	Operation

10.0 Coastal Issues and Soils

10.1 Existing Conditions

10.1.1 Soil Landscape

A review of Victorian soil type mapping (Agriculture Victoria, 2000 and 2003) indicated that the transmission route varies between multiple soil types. The main soil types and definitions found in the Study Area are as follows (and are shown in Figure 2.2 of the Preliminary Hydrology Constraints Assessment report):

- Gf – Giffard Soil Type: Level plain landform with a geology of late tertiary deposits. Dominant soils are sandy loams to loamy sands and clay subsoils.
- Go – Gormandale Soil Type: Dunefield with a geology of Pleistocene to recent aeolian sediments. Dominant soils are podosols/sandy rudosols and some sodosols (very deep sandy).
- La – La Trobe River Soil Type: Floodplain with a geology of recent sediments from the La Trobe River. Dominant soils are deep loams to clay loams with medium clays at depth.
- Ly – Loy Yang Soil Type: Undulating plain with geology of alluvial sediments. Dominant soils are sandy loams to sandy clay loams overlying medium to heavy clays.
- Ma – Maryvale Soil Type: Rolling low hills to undulating rises with a geology of late tertiary sediment (Pliocene) Dominant soils are fine sandy loams on a clay subsoil.
- Sd – Stockdale Soil Type: Undulating plain with a geology of tertiary sediments. Dominant soils are variable: grey and brown solodols/kurosols/chromosols (sandy).
- Sd/Gf – Stockdale with Giffard Soil Types.
- Sd/Go – Stockdale with Gormandale Soil Types.
- Wd – Woodside Soil Type: Gently undulating plain with a geology of mostly Pleistocene alluvium, some areas of recent alluvium and recent aeolian sediments. Dominant soils are sands and loams on sandy clays or medium clays.
- Yn – Yinnar Soil Type: Stagnant alluvial plain with a geology of late Pleistocene alluvial sediments. Dominant soils are fine sandy loams to silty clay loams overlying light to medium clays.

10.1.2 Acid Sulfate Soils

Coastal acid sulfate soils (CASS) occur naturally along many parts of Victoria's coastal zone, including Gippsland, and are largely benign if left undisturbed. However, if disturbed they can react with oxygen and produce sulfuric acid. This can be detrimental to the environment through impacts such as acidification of water and soil, de-oxygenation of water, and poor water quality. The generation of acid through inappropriate management of acid sulfate soils can also result in damage to concrete and steel. Coastal

acid sulfate soils may be encountered both onshore and offshore depending on geological and historical conditions of the Project Area.

A review of the Victorian Coastal Acid Sulfate Soil (VCASS) maps for Gippsland indicates the coastline within the onshore Study Area has potential to contain acid sulfate soils, as this area is mapped as 'prospective'.

Figure 10.1 shows the location of prospective acid sulfate soils within the onshore Study Area.

A review of the Australian Soil Resource Information System (ARIS) Atlas of Australian Acid Sulfate Soils (AAASS) mapping indicates the potential for acid sulfate soil occurrence is low probability (with very low confidence) across most of the onshore Study Area. Along the coastal area of the Study Area, ARIS AAASS mapping indicates the potential for acid sulfate soil occurrence is extremely low probability (with very low confidence) with some areas of high probability (with very low confidence) surrounding Lake Denison. The Seaspray township is mapped as having low probability (with moderate confidence) of acid sulfate soil occurrence.

There is no mapping available to identify the presence of acidic or contaminated soils within the Victorian marine environment. Further environmental and geotechnical investigations would be required to determine the presence of offshore contamination and/or acid sulfate soils, and if so, the potential for impacts to occur.

Figure 10.2 shows the potential for acid sulfate soil occurrence within the onshore Study Area as classified by ARIS AAASS mapping.

10.1.3 Potential Sources of Contamination

There are no existing landfills located within the onshore Study Area, however, there is one historic landfill located within the boundary of the Seaspray township within the onshore Study Area, as shown in **Figure 10.2**. This landfill was an uncontrolled landfill, meaning there was no supervision over the waste type received on site. It was closed in the early 1990s and rehabilitation of the site has since been completed (Gippsland Waste and Resource Recovery Group, 2017). The site is currently used as a waste transfer station, which is designed as a drop off facility for waste and recyclable materials which are then sorted and transferred to a specialised recycling or hazardous waste facility. No reprocessing activities are undertaken at the transfer station.

Most of the onshore Study Area is used for agricultural and forestry practices which are generally considered to be a low risk of contamination. Broad acre application of fertilisers, pesticides, or herbicides, have potential to result in contamination of soil and groundwater. A review of the EPA Priority Sites Register did not identify any priority sites within the onshore Study Area. Further assessment would be required to determine the presence of contamination within the onshore Study Area and the potential for impacts to occur.