



**Browse Liquefied Natural Gas
Downstream Development
Referral Form**

November 2012



Environmental Protection Authority

GOVERNMENT OF
WESTERN AUSTRALIA

Referral of a Proposal by the Proponent to the Environmental Protection Authority under Section 38(1) of the *Environmental Protection Act 1986*.

EPA REFERRAL
FORM
PROPONENT

PURPOSE OF THIS FORM

Section 38(1) of the *Environmental Protection Act 1986* (EP Act) provides that where a development proposal is likely to have a significant effect on the environment, a proponent may refer the proposal to the Environmental Protection Authority (EPA) for a decision on whether or not it requires assessment under the EP Act. This form sets out the information requirements for the referral of a proposal by a proponent.

Proponents are encouraged to familiarise themselves with the EPA's *General Guide on Referral of Proposals* [see Environmental Impact Assessment/Referral of Proposals and Schemes] before completing this form.

A referral under section 38(1) of the EP Act by a proponent to the EPA must be made on this form. A request to the EPA for a declaration under section 39B (derived proposal) must be made on this form. This form will be treated as a referral provided all information required by Part A has been included and all information requested by Part B has been provided to the extent that it is pertinent to the proposal being referred. Referral documents are to be submitted in two formats – hard copy and electronic copy. The electronic copy of the referral will be provided for public comment for a period of 7 days, prior to the EPA making its decision on whether or not to assess the proposal.

CHECKLIST

Before you submit this form, please check that you have:

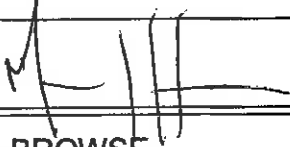
	Yes	No
Completed all the questions in Part A (essential).	✓	
Completed all applicable questions in Part B.	✓	
Included Attachment 1 – location maps.	✓	
Included Attachment 2 – additional document(s) the proponent wishes to provide (if applicable).	✓	
Included Attachment 3 – confidential information (if applicable).		✓
Enclosed an electronic copy of all referral information, including spatial data and contextual mapping but excluding confidential information.	✓	

Following a review of the information presented in this form, please consider the following question (a response is optional).

Do you consider the proposal requires formal environmental impact assessment? √ No (Request that it be declared a Derived Proposal against the approved Browse LNG Precinct)
If yes, what level of assessment? <input type="checkbox"/> Assessment on Proponent Information <input type="checkbox"/> Public Environmental Review

PROPONENT DECLARATION (to be completed by the proponent)

I,Michael Hession....., (*full name*) declare that I am authorised on behalf of...Woodside Energy Limited.... (being the person responsible for the proposal) to submit this form and further declare that the information contained in this form is true and not misleading.

Signature: 	Name: Michael Hession
Position: SVP BROWSE	Company: WOODSIDE ENERGY LTD
Date 26/11/2012	

PART A - PROPONENT AND PROPOSAL INFORMATION

(All fields of Part A must be completed for this document to be treated as a referral)

1 PROPONENT AND PROPOSAL INFORMATION

1.1 Proponent

Name	Woodside Energy Limited
Joint Venture parties (if applicable)	Browse Joint Venture Participants: <ul style="list-style-type: none">• BP Developments Australia Pty Ltd• BHP Billiton Petroleum (North West Shelf) Pty Ltd• Japan Australia LNG (MIMI Browse) Pty Ltd• Shell Developments (Australia) Pty Ltd• Woodside Browse Pty Ltd
Australian Company Number (if applicable)	005 482 986
Postal Address (where the proponent is a corporation or an association of persons, whether incorporated or not, the postal address is that of the principal place of business or of the principal office in the State)	Woodside Energy Ltd PO Box D188 Perth WA 6840
Key proponent contact for the proposal: <ul style="list-style-type: none">• name• address• phone• email	Anthony McMullen Woodside Plaza 240 St Georges Terrace Perth WA 6000 AUSTRALIA 9348 6397 anthony.mcmullen@woodside.com.au
Consultant for the proposal (if applicable): <ul style="list-style-type: none">• name• address• phone• email	

1.2 Proposal

Title	Browse LNG Downstream Development
Description	<p>The Browse LNG Downstream Development involves the phased construction and operation of a 25 Mtpa liquefied natural gas processing facility and associated infrastructure to be located in the Browse LNG Precinct on the Dampier Peninsula, 60 km north of Broome in Western Australia.</p> <p>Onshore processing facilities will comprise:</p> <ul style="list-style-type: none">• Gas pre-treatment, CO₂ removal facilities, conditioning, compressing and liquefaction processing trains• MEG treatment facilities• Hydrocarbon storage (LNG, condensate fuel and refrigerants)• Power generation and other utilities to support the Downstream Development• Flare and fuel systems

	<ul style="list-style-type: none"> • Administration facilities and other plant buildings • Workers accommodation • Effluent treatment and discharge facilities • Support infrastructure including access and haul roads, laydown and storage areas and drainage and flood mitigation works. <p>Key marine structures include:</p> <ul style="list-style-type: none"> • Pipelines (including supporting facilities e.g. fibre optic cable) • Shipping channel, turning basins and associated navigation aids • Export jetty facilities with product loading berths • Breakwaters to protect the export jetties and loading berths • An integrated marine facility providing a material offloading facility, tug mooring and supply boat facilities
Extent (area) of proposed ground disturbance.	1528 ha
Timeframe in which the activity or development is proposed to occur (including start and finish dates where applicable).	Construction of the first three-train LNG facility and associated infrastructure will take approximately five to six years. Work will commence following FID, and is currently scheduled for 1 April 2013.
Details of any staging of the proposal.	Woodside proposes to phase the construction of LNG production facilities, in response to customer demand.
Is the proposal a strategic proposal?	No
Is the proponent requesting a declaration that the proposal is a derived proposal? If so, provide the following information on the strategic assessment within which the referred proposal was identified: <ul style="list-style-type: none"> • title of the strategic assessment; and • Ministerial Statement number. 	<p>Yes</p> <p>Browse Liquefied Natural Gas (LNG) Precinct</p> <p>Ministerial Statement No.917</p>
Please indicate whether, and in what way, the proposal is related to other proposals in the region.	The Browse Downstream Development is based on the recovery of hydrocarbons from Breknock, Calliance and Torosa gas fields in the Browse Basin. The Browse Basin is located entirely offshore bounded by Cape Leveque in the south, the Kimberley Block to the east, Ashmore Platform and Scott Plateau to the north, and the offshore Canning Basin to the southwest. The offshore or "upstream" facilities that are located greater than 3 nautical miles from the coast do not form part of the scope of this referred proposal. Approval for these facilities is proceeding under the Commonwealth EPBC Act.
Does the proponent own the land on which the proposal is to be established? If not, what other arrangements have been established to access	<p>The facility will be located in the Government of Western Australia's Browse LNG Precinct.</p> <p>Land tenure within the Browse LNG Precinct</p>

<p>the land?</p>	<p>would ultimately be granted by the State of Western Australia to individual commercial proponents in the form of leases, easements or licences, granted through the State land management body LandCorp under the <i>WA Land Authority Act 1992</i> and the Broome Port Authority (BPA) which would be responsible for management of the Port under the <i>Port Authority Act 1999</i>. Freehold land would not be granted to individual commercial proponents.</p>
<p>What is the current land use on the property, and the extent (area in hectares) of the property?</p>	<p>The land required for the Browse LNG Precinct is comprised entirely of unallocated Crown land, which includes the seabed out to the three nautical mile State territorial limit. It is located on part of the land and adjacent waters subject to a registered claim under the <i>Commonwealth Native Title Act 1993</i> (NTA) by the Goolarabooloo Jabirr Jabirr native title claimant group.</p>

1.3 Location

Name of the Shire in which the proposal is located.	Shire of Broome
For urban areas: <ul style="list-style-type: none"> street address; lot number; suburb; and nearest road intersection. 	
For remote localities: <ul style="list-style-type: none"> nearest town; and distance and direction from that town to the proposal site. 	The Browse LNG Precinct is located on the Dampier Peninsula, 60 km north of Broome in Western Australia.
Electronic copy of spatial data - GIS or CAD, geo-referenced and conforming to the following parameters: <ul style="list-style-type: none"> GIS: polygons representing all activities and named; CAD: simple closed polygons representing all activities and named; datum: GDA94; projection: Geographic (latitude/longitude) or Map Grid of Australia (MGA); format: Arcview shapefile, Arcinfo coverages, Microstation or AutoCAD. 	Spatial data included on attached CD-ROM

1.4 Confidential Information

Does the proponent wish to request the EPA to allow any part of the referral information to be treated as confidential?	No
If yes, is confidential information attached as a separate document in hard copy?	

1.5 Government Approvals

Is rezoning of any land required before the proposal can be implemented? If yes, please provide details.	Yes												
Is approval required from any Commonwealth or State Government agency or Local Authority for any part of the proposal? If yes, please complete the table below.	Yes												
<table border="1"> <thead> <tr> <th>Agency/Authority</th> <th>Approval required</th> <th>Application lodged Yes / No</th> <th>Agency/Local Authority contact(s) for proposal</th> </tr> </thead> <tbody> <tr> <td>Commonwealth Department of Sustainability, Environment, Water, Population and Community</td> <td>Environmental approval under the <i>Environment Protection and Biodiversity Conservation Act 1999</i></td> <td>Yes</td> <td></td> </tr> <tr> <td>Commonwealth</td> <td><i>Environmental Protection</i></td> <td>Yes</td> <td></td> </tr> </tbody> </table>	Agency/Authority	Approval required	Application lodged Yes / No	Agency/Local Authority contact(s) for proposal	Commonwealth Department of Sustainability, Environment, Water, Population and Community	Environmental approval under the <i>Environment Protection and Biodiversity Conservation Act 1999</i>	Yes		Commonwealth	<i>Environmental Protection</i>	Yes		
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Commonwealth	<i>Environmental Protection</i>	Yes											

Department of Sustainability, Environment, Water, Population and Community	<i>(Sea Dumping) Act 1981</i>		

PART B - ENVIRONMENTAL IMPACTS AND PROPOSED MANAGEMENT

2. ENVIRONMENTAL IMPACTS

Describe the impacts of the proposal on the following elements of the environment, by answering the questions contained in Sections 2.1-2.11:

- 2.1 flora and vegetation;
- 2.2 fauna;
- 2.3 rivers, creeks, wetlands and estuaries;
- 2.4 significant areas and/ or land features;
- 2.5 coastal zone areas;
- 2.6 marine areas and biota;
- 2.7 water supply and drainage catchments;
- 2.8 pollution;
- 2.9 greenhouse gas emissions;
- 2.10 contamination; and
- 2.11 social surroundings.

These features should be shown on the site plan, where appropriate.

For all information, please indicate:

- (a) the source of the information; and
- (b) the currency of the information.

2.1 Flora and Vegetation

2.1.1 Do you propose to clear any native flora and vegetation as a part of this proposal?

✓ Yes

2.1.2 How much vegetation are you proposing to clear (in hectares)?

1528 ha

2.1.3 Have you submitted an application to clear native vegetation to the DEC (unless you are exempt from such a requirement)?

✓ No

2.1.4 Are you aware of any recent flora surveys carried out over the area to be disturbed by this proposal?

✓ Yes

Please refer to Section 1, Part 4, of Browse Liquefied Natural Gas Precinct Strategic Assessment Report (DSD 2010)

2.1.5 Has a search of DEC records for known occurrences of rare or priority flora or threatened ecological communities been conducted for the site?

✓ Yes

Please refer to Section 1, Part 4, of Browse Liquefied Natural Gas Precinct Strategic Assessment Report (DSD 2010)

2.1.6 Are there any known occurrences of rare or priority flora or threatened ecological communities on the site?

✓ Yes

Please refer to Section 1, Part 4, of Browse Liquefied Natural Gas Precinct Strategic Assessment Report (DSD 2010)

2.1.7 If located within the Perth Metropolitan Region, is the proposed development within or adjacent to a listed Bush Forever Site? (You will need to contact the Bush Forever Office, at the Department for Planning and Infrastructure)

N/A

2.1.8 What is the condition of the vegetation at the site?

Please refer to Section 1, Part 4 of Browse Liquefied Natural Gas Precinct Strategic Assessment Report (DSD 2010)

2.2 Fauna

2.2.1 Do you expect that any fauna or fauna habitat will be impacted by the proposal?

✓ Yes

Please refer to Section 2.6, Part 4 of Browse Liquefied Natural Gas Precinct Strategic Assessment Report (DSD 2010)

2.2.2 Describe the nature and extent of the expected impact.

Please refer to Section 2.6, Part 4 of Browse Liquefied Natural Gas Precinct Strategic Assessment Report (DSD 2010)

2.2.3 Are you aware of any recent fauna surveys carried out over the area to be disturbed by this proposal?

✓ Yes

Please refer to Section 1, Part 4 of Browse Liquefied Natural Gas Precinct Strategic Assessment Report (DSD 2010)

2.2.4 Has a search of DEC records for known occurrences of Specially Protected (threatened) fauna been conducted for the site?

✓ Yes

2.2.5 Are there any known occurrences of Specially Protected (threatened) fauna on the site?

✓ Yes

2.3 Rivers, Creeks, Wetlands and Estuaries

2.3.1 Will the development occur within 200 metres of a river, creek, wetland or estuary?
(please tick)

✓ No **If no**, go to the next section.

2.3.2 Will the development result in the clearing of vegetation within the 200 metre zone?

Yes No **If yes**, please describe the extent of the expected impact.

2.3.3 Will the development result in the filling or excavation of a river, creek, wetland or estuary?

Yes No **If yes**, please describe the extent of the expected impact.

2.3.4 Will the development result in the impoundment of a river, creek, wetland or estuary?

Yes No **If yes**, please describe the extent of the expected impact.

2.3.5 Will the development result in draining to a river, creek, wetland or estuary?

✓ No

2.3.6 Are you aware if the proposal will impact on a river, creek, wetland or estuary (or its buffer) within one of the following categories? (please tick)

Conservation Category Wetland	✓ No
Environmental Protection (South West Agricultural Zone Wetlands) Policy 1998	✓ No
Perth's Bush Forever site	✓ No
Environmental Protection (Swan & Canning Rivers) Policy 1998	✓ No
The management area as defined in s4(1) of the <i>Swan River Trust Act 1988</i>	✓ No
Which is subject to an international agreement, because of the importance of the wetland for waterbirds and waterbird habitats (e.g. Ramsar, JAMBA, CAMBA)	✓ No

2.4 Significant Areas and/ or Land Features

2.4.1 Is the proposed development located within or adjacent to an existing or proposed National Park or Nature Reserve?

No **If yes**, please provide details.

2.4.2 Are you aware of any Environmentally Sensitive Areas (as declared by the Minister under section 51B of the EP Act) that will be impacted by the proposed development?

Yes **If yes**, please provide details.

Please refer to Section 2.4, Part 4 of Browse Liquefied Natural Gas Precinct Strategic Assessment Report (DSD 2010)

2.4.3 Are you aware of any significant natural land features (e.g. caves, ranges etc) that will be impacted by the proposed development?

No **If yes**, please provide details.

2.5 Coastal Zone Areas (Coastal Dunes and Beaches)

2.5.1 Will the development occur within 300metres of a coastal area?

Yes

2.5.2 What is the expected setback of the development from the high tide level and from the primary dune?

Please refer to Section 5, Part 2 of Browse Liquefied Natural Gas Precinct Strategic Assessment Report (DSD 2010).

2.5.3 Will the development impact on coastal areas with significant landforms including beach ridge plain, cusped headland, coastal dunes or karst?

Yes

2.5.4 Is the development likely to impact on mangroves?

No

2.6 Marine Areas and Biota

2.6.1 Is the development likely to impact on an area of sensitive benthic communities, such as seagrasses, coral reefs or mangroves?

✓ Yes

Please refer to Section 1, Part 3 of Browse Liquefied Natural Gas Precinct Strategic Assessment Report (DSD 2010).

Further information is provided in SAR Part 7 (Supplementary Information) and the Section 43a (including updated project footprint and dredge volumes)

2.6.2 Is the development likely to impact on marine conservation reserves or areas recommended for reservation (as described in *A Representative Marine Reserve System for Western Australia*, CALM, 1994)?

✓ No

If yes, please describe the extent of the expected impact.

2.6.3 Is the development likely to impact on marine areas used extensively for recreation or for commercial fishing activities?

✓ Yes

Please refer to Section 4, Part 5 of Browse Liquefied Natural Gas Precinct Strategic Assessment Report (DSD 2010)

2.7 Water Supply and Drainage Catchments

2.7.1 Are you in a proclaimed or proposed groundwater or surface water protection area? (You may need to contact the Department of Water (DoW) for more information on the requirements for your location, including the requirement for licences for water abstraction. Also, refer to the DoW website)

✓ Yes

If yes, please describe what category of area.

Roebuck sub-area of the Broome Groundwater Area.

Broome Groundwater Management Plan Area 1994 (Water Corporation)

2.7.2 Are you in an existing or proposed Underground Water Supply and Pollution Control area?

(You may need to contact the DoW for more information on the requirements for your location, including the requirement for licences for water abstraction. Also, refer to the DoW website)

✓ No

If yes, please describe what category of area.

2.7.3 Are you in a Public Drinking Water Supply Area (PDWSA)?

(You may need to contact the DoW for more information or refer to the DoW website. A proposal to clear vegetation within a PDWSA requires approval from DoW.)

No **If yes**, please describe what category of area.

2.7.4 Is there sufficient water available for the proposal?

(Please consult with the DoW as to whether approvals are required to source water as you propose. Where necessary, please provide a letter of intent from the DoW)

Yes (please tick)

2.7.5 Will the proposal require drainage of the land?

Yes Please refer to Section 5.7, Part 2 of the Browse Liquefied Natural Gas Precinct Strategic Assessment Report (DSD 2010).

2.7.6 Is there a water requirement for the construction and/ or operation of this proposal?

Yes

2.7.7 What is the water requirement for the construction and operation of this proposal, in kilolitres per year? Water supply for construction up to a total of 3 GL per annum. Water supply to supply operational requirements up to a total of 3 GL per annum

2.7.8 What is the proposed source of water for the proposal? (e.g. dam, bore, surface water etc.) Water supply for construction by groundwater abstraction and/or desalination. Water supply to supply operational requirements by desalination.

2.8 Pollution

2.8.1 Is there likely to be any discharge of pollutants from this development, such as noise, vibration, gaseous emissions, dust, liquid effluent, solid waste or other pollutants?

Yes

2.8.2 Is the proposal a prescribed premise, under the Environmental Protection Regulations 1987?

Yes Cat 10, Cat 52, Cat 54 and Cat 54A

2.8.3 Will the proposal result in gaseous emissions to air?

Yes Please refer to Section 2.8, Part 4 of the Browse Liquefied Natural Gas Precinct Strategic Assessment Report (DSD 2010)

2.8.4 Have you done any modelling or analysis to demonstrate that air quality standards will be met, including consideration of cumulative impacts from other emission sources?

✓ Yes

Please refer to Section 2.8, Part 4 of the Browse Liquefied Natural Gas Precinct Strategic Assessment Report (DSD 2010)

2.8.5 Will the proposal result in liquid effluent discharge?

✓ Yes

Please refer to Section 2.3, Part 3 of the Browse Liquefied Natural Gas Precinct Strategic Assessment Report (DSD 2010)

2.8.6 If there is likely to be discharges to a watercourse or marine environment, has any analysis been done to demonstrate that the State Water Quality Management Strategy or other appropriate standards will be able to be met?

✓ Yes

Please refer to Section 2.3, Part 3 of the Browse Liquefied Natural Gas Precinct Strategic Assessment Report (DSD 2010)

2.8.7 Will the proposal produce or result in solid wastes?

✓ Yes

Please refer to Section 5.15, Part 2 of the Browse Liquefied Natural Gas Precinct Strategic Assessment Report (DSD 2010)

2.8.8 Will the proposal result in significant off-site noise emissions?

✓ No

If yes, please briefly describe.

2.8.9 Will the development be subject to the Environmental Protection (Noise) Regulations 1997?

✓ Yes

If yes, has any analysis been carried out to demonstrate that the proposal will comply with the Regulations? Please attach the analysis.

Noise emissions will be managed by the licensing process in accordance with Part V of the EP Act prior to commissioning and operations

2.8.10 Does the proposal have the potential to generate off-site, air quality impacts, dust, odour or another pollutant that may affect the amenity of residents and other "sensitive premises" such as schools and hospitals (proposals in this category may include intensive agriculture, aquaculture, marinas, mines and quarries etc.)?

✓ Yes

Please refer to Section 2.8, Part 4 of the Browse Liquefied Natural Gas Precinct Strategic Assessment Report (DSD 2010)

2.8.11 If the proposal has a residential component or involves "sensitive premises", is it located near a land use that may discharge a pollutant?

✓ No

2.9 Greenhouse Gas Emissions

2.9.1 Is this proposal likely to result in substantial greenhouse gas emissions (greater than 100 000 tonnes per annum of carbon dioxide equivalent emissions)?

✓ Yes

Please refer to Section 2.9, Part 4 of the Browse Liquefied Natural Gas Precinct Strategic Assessment Report (DSD 2010)

2.9.2 Further, if yes, please describe proposed measures to minimise emissions, and any sink enhancement actions proposed to offset emissions.

Please refer to Section 2.9, Part 4 of the Browse Liquefied Natural Gas Precinct Strategic Assessment Report (DSD 2010)

2.10 Contamination

2.10.1 Has the property on which the proposal is to be located been used in the past for activities which may have caused soil or groundwater contamination?

✓ No

2.10.2 Has any assessment been done for soil or groundwater contamination on the site?

✓ No

2.10.3 Has the site been registered as a contaminated site under the *Contaminated Sites Act 2003*? (on finalisation of the CS Regulations and proclamation of the CS Act)

✓ No

2.11 Social Surroundings

2.11.1 Is the proposal on a property which contains or is near a site of Aboriginal ethnographic or archaeological significance that may be disturbed?

✓ Yes

Please refer to Section 3, Part 5 the Browse Liquefied Natural Gas Precinct Strategic Assessment Report (DSD 2010)

2.11.2 Is the proposal on a property which contains or is near a site of high public interest (e.g. a major recreation area or natural scenic feature)?

✓ Yes

Please refer to Section 3, Part 5 the Browse Liquefied Natural Gas Precinct Strategic Assessment Report (DSD 2010)

2.11.3 Will the proposal result in or require substantial transport of goods, which may affect the amenity of the local area?

✓ Yes

Please refer to Section 2, Part 5 the Browse Liquefied Natural Gas Precinct Strategic Assessment Report (DSD 2010)

3. PROPOSED MANAGEMENT

3.1 Principles of Environmental Protection

3.1.1 Have you considered how your project gives attention to the following Principles, as set out in section 4A of the EP Act? (For information on the Principles of Environmental Protection, please see EPA Position Statement No. 7, available on the EPA website)

1. The precautionary principle. ✓ Yes
2. The principle of intergenerational equity. ✓ Yes
3. The principle of the conservation of biological diversity and ecological integrity. ✓ Yes
4. Principles relating to improved valuation, pricing and incentive mechanisms. ✓ Yes
5. The principle of waste minimisation. ✓ Yes

3.1.2 Is the proposal consistent with the EPA's Environmental Protection Bulletins/Position Statements and Environmental Assessment Guidelines/Guidance Statements (available on the EPA website)?

✓ Yes

3.2 Consultation

3.2.1 Has public consultation taken place (such as with other government agencies, community groups or neighbours), or is it intended that consultation shall take place?

✓ Yes

If yes, please list those consulted and attach comments or summarise response on a separate sheet.

See Section 5 of Attachment 2.

Attachment 1 – Location Map of Browse LNG Precinct



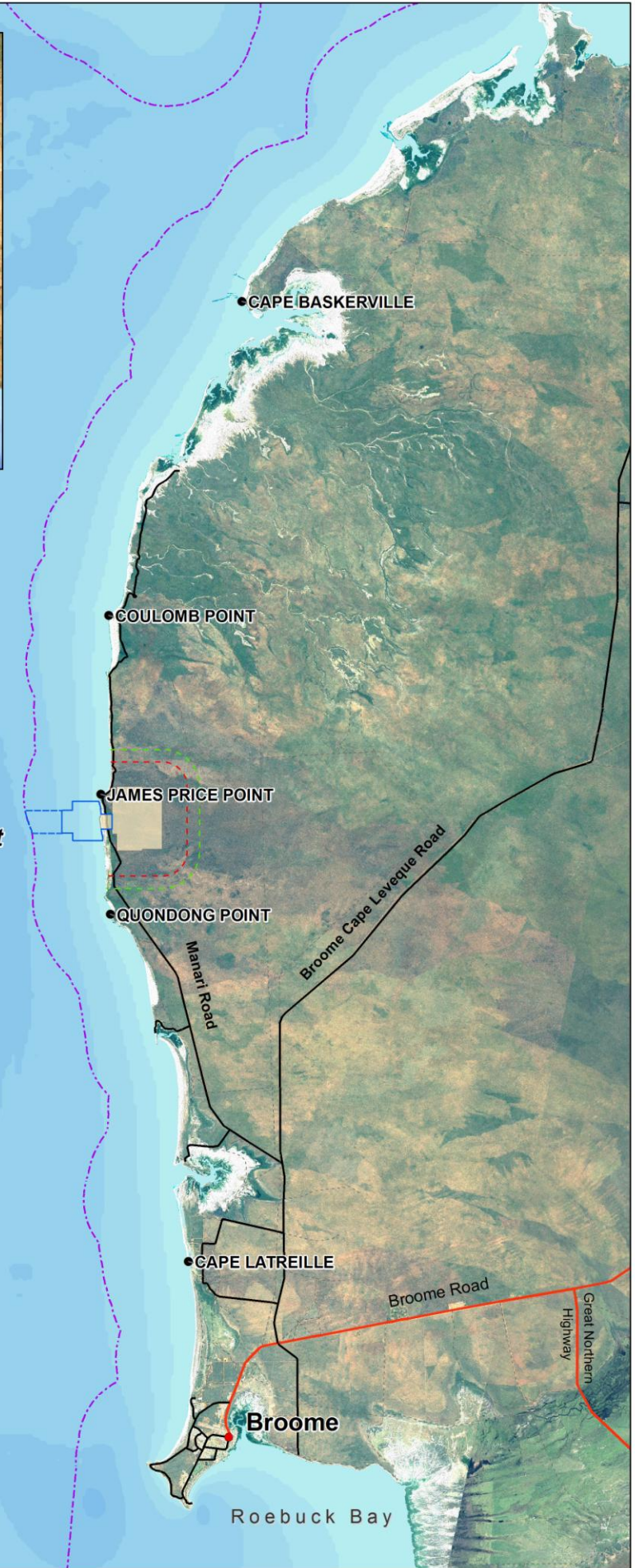
**BLNG
Precinct**

Legend

- LNG Precinct
- Port Precinct
- Shipping Channel
- Industrial Land Use Buffer
- Sensitive Land Use Buffer
- Outer Limit of Coastal Waters (3nmiles)



Datum: GDA 1994 MGA Zone 51



Attachment 2 – Browse LNG Downstream Development Referral Document



Browse Liquefied Natural Gas Downstream Development Referral Document

November 2012

Document Number JA0006RH00000018

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1. Introduction and Background

Woodside Energy Limited (Woodside), on behalf of the Browse Joint Venture Participants; Woodside Browse Pty Ltd, BP Developments Australia Pty Ltd, BHP Billiton Petroleum (North West Shelf) Pty Ltd, Japan Australia LNG (MIMI Browse) Pty Ltd (MIMI) and Shell Developments (Australia) Pty Ltd, refers the downstream components of the proposed Browse Liquefied Natural Gas (LNG) Development (the Browse LNG Downstream Development) to the Environmental Protection Authority (EPA) under Section 38 of the *Environmental Protection Act 1986* (the EP Act). In accordance with Section 39B(i) of the EP Act, Woodside requests that the proposal be declared a derived proposal in the context of the approved Browse LNG Precinct (Ministerial Statement 917, dated 19 November 2012). The structure and content of this referral document has been developed in line with advice provided by the EPA.

Following referral of the Browse LNG Downstream Development, the EPA will consider it as a derived proposal if:

- The referred proposal was identified in the strategic proposal that has been assessed by the EPA; and
- A decision was made that the strategic proposal could be implemented.

The EPA may choose to not declare the proposal derived if:

- The environmental issues raised by the referred proposal were not adequately assessed when the strategic proposal was assessed (Section 39B (4)(a) of the EP Act);
- There is significant new or additional information that justifies reassessment of the issues raised by the referred proposal (Section 39B (4)(b) of the EP Act); and
- There has been a significant change in the relevant environmental factors since the strategic proposal was assessed (Section 39B (4)(c) of the EP Act).

If the EPA declares the referred proposal to be a derived proposal, there will be no further assessment by the EPA, however the EPA may inquire, under Section 39B (6) of the EP Act, into whether or not the implementation conditions relating to the proposal, or any of them, should be changed.

Woodside's interpretation of the intent of Section 39B(4) of the EP Act is to capture significant environmental changes which may have occurred post the EPA assessment of a strategic proposal and, where such changes have occurred, to evaluate if they are of sufficient significance to require a full reassessment of the referred proposal.

The assessment undertaken by the EPA of the Browse LNG Precinct considered the strategic assessment report prepared by the Department of State Development (DSD), public submissions on that report, response to those submissions by the proponent, additional detailed environmental and precinct design information (including Section 43A applications addressing an increase in dredging volume and an inland integrated marine facility) and third party reports and investigations which became available during the assessment period. Section 3 of this referral document provides an assessment against the criteria in Section 39B (4) of the EP Act, and this assessment indicates that the proposal would not have a significant detrimental effect on the environment in addition to, or different from, the effects assessed for the strategic proposal.

In its Report and Recommendations, the EPA considers all key environmental factors to have been adequately addressed. Furthermore, the Minister for Environment endorsed the EPA's consideration of the key environmental factors in the appeals decision, whilst the issue of Ministerial Statement 917 confirmed and conditioned around these key environmental factors. Subsequent to the assessment of the Browse LNG Precinct Strategic Proposal there have been no changes in policy, legislation or guidance statements which have changed the status of the environmental factors considered by the EPA to be relevant to the Browse LNG Precinct. Furthermore, there is no new information to indicate that the referred proposal raises new environmental factors not already considered in the strategic assessment.

Consultation for the Browse LNG Downstream Development with relevant stakeholders will occur through the process outlined in Section 5 of this referral document.

2. The Proposal

Woodside, as operator of the Browse LNG Downstream Development, plans to commercialise the Browse Joint Venture's three gas and condensate fields, Brecknock, Calliance and Torosa, 425 km north of Broome off the Kimberley coast. Gas and liquids from these fields will be extracted using offshore facilities then brought to an onshore liquefied natural gas facility capable of processing up to 25 million tonnes per annum (Mtpa) of LNG. The Browse LNG Downstream Development processing facilities and associated infrastructure will be located at the Western Australian Government's Browse LNG Precinct, near James Price Point, about 60 km north of Broome in Western Australia.

The terrestrial boundary of the Browse LNG Precinct as presented in the Strategic Assessment Report (SAR) has been modified to reflect the Notice of Intent to Take (NOITT) issued by the Western Australian Government. **Figure 1** illustrates the revised precinct boundaries defined by the NOITT and also illustrates the Precinct Layout originally defined in the SAR and included as Figure 1 of Ministerial Statement 917. The revisions accommodate the excision of Area H and a reduction in width of the shore crossing and pipeline corridors. All Precinct infrastructure will be confined within the NOITT boundary and are either wholly contained within the coordinates of disturbance footprint boundaries defined in Schedule 2 of Ministerial Statement 917, or form part of the permitted infrastructure and corridor developments, activities and uses within 13 km of the boundary of Area B, as defined in Schedule 2 of Ministerial Statement 917.

Indicative layouts of the terrestrial and near shore marine infrastructure are presented in **Figure 2** and **Figure 3**, respectively.

The onshore processing facilities will comprise:

- Gas pre-treatment, CO₂ removal facilities, conditioning, compressing and liquefaction processing trains
- MEG treatment facilities
- Hydrocarbon storage (LNG, condensate fuel and refrigerants)
- Power generation and other utilities to support the Browse LNG Downstream Development
- Flare and fuel systems
- Administration facilities and other plant buildings
- Workers accommodation
- Effluent treatment and discharge facilities
- Support infrastructure including access and haul roads, laydown and storage areas and drainage and flood mitigation works.

Key marine structures include:

- Pipelines (including supporting facilities e.g. fibre optic cable)
- Shipping channel, turning basins and associated navigation aids
- Export jetty facilities with product loading berths
- Breakwaters to protect the export jetties and loading berths
- An integrated marine facility providing a material offloading facility, tug mooring and supply boat facilities.

Each of the above developments, activities or changes in land use, is in accordance with those listed as permitted for future proposals in Column 2 of Table 1, in Schedule 1 of Ministerial Statement 917.

A description of developments and activities and their maximum limits/extents for future proposals within the Browse LNG Precinct, are listed in Schedule 1 of Ministerial Statement 917, and reproduced as Columns 2 and 3 of **Table 1** in this referral document. The corresponding descriptions for the proposed Browse LNG Downstream Development are listed in Column 4 of **Table 1** in this referral document. As demonstrated in **Table 1**, none of the developments, activities, operations and change in land use proposed for the Downstream Development exceed the permissible limits/extents defined in Column 3 of Table 1 in Schedule 1 of Ministerial Statement 917.

Woodside proposes to phase the construction of LNG production facilities, in response to customer demand. It is anticipated that construction of the first three trains of the Browse LNG Downstream Development will commence following the making of a final investment decision to proceed with the Browse LNG Downstream Development. Construction of the first three-train LNG facility and associated infrastructure will take approximately five to six years.

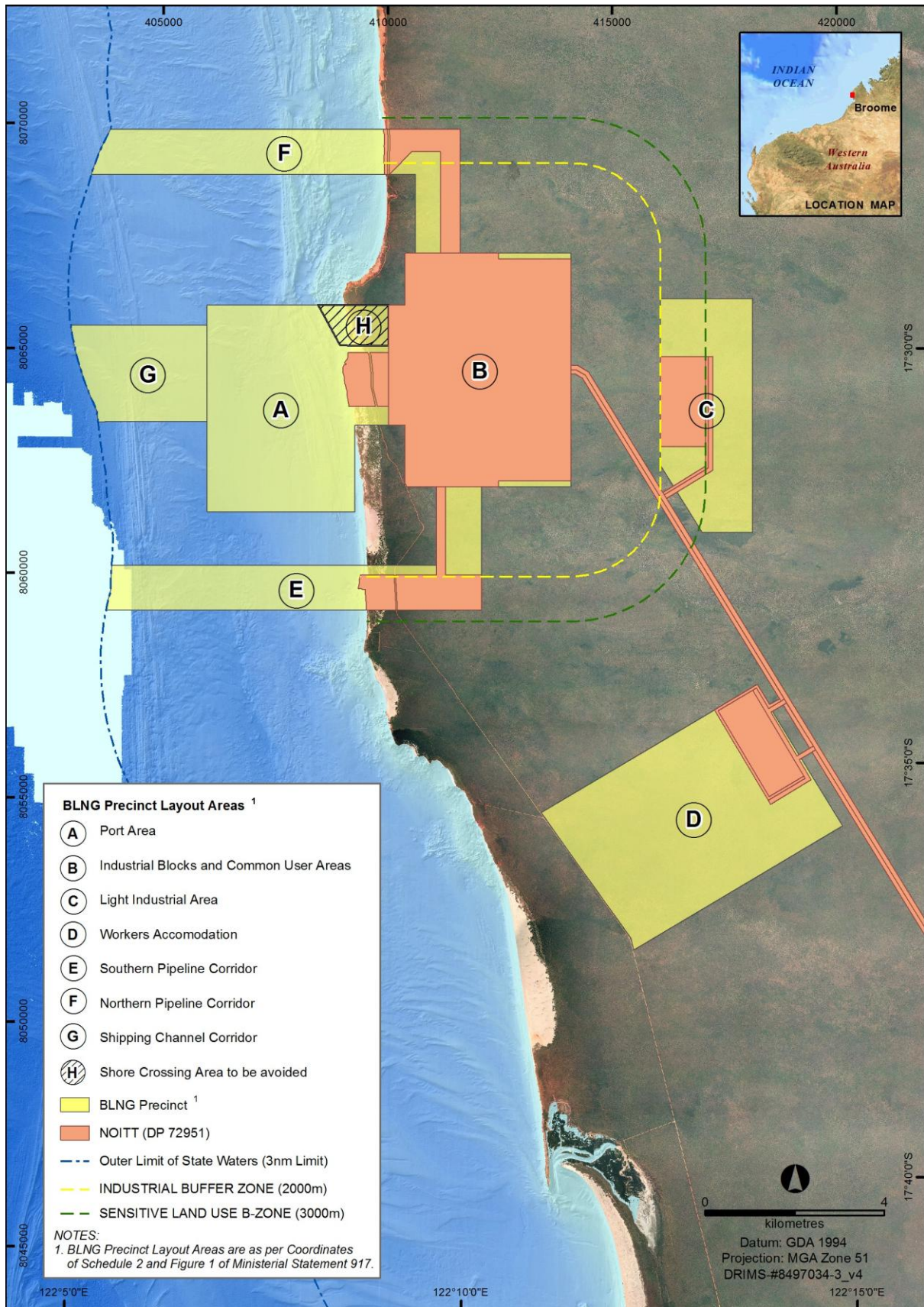


Figure 1 Precinct NOITT overlaid on Browse LNG Precinct boundary (from Figure 1 of Ministerial Statement 917)

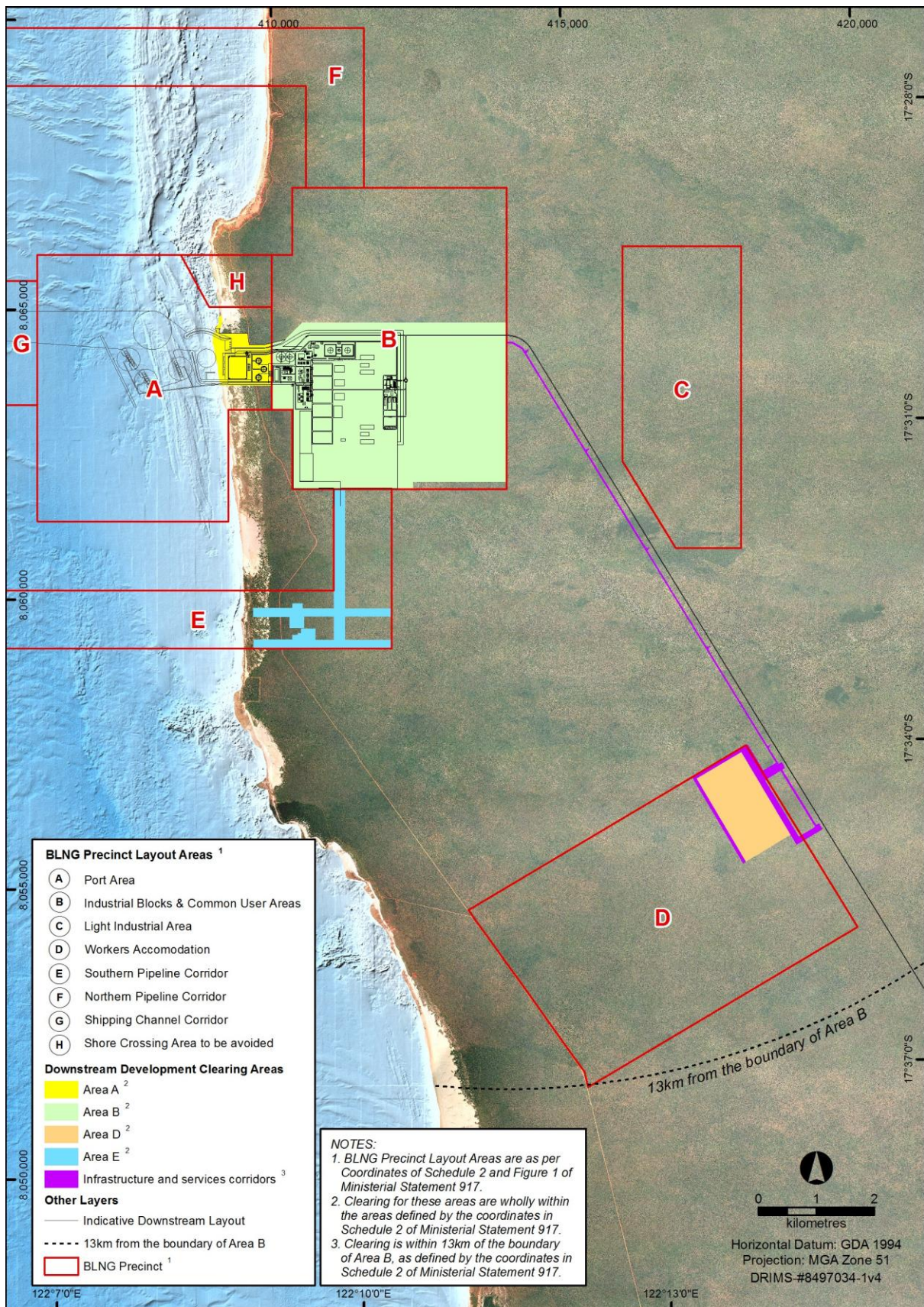


Figure 2 Indicative Terrestrial Layout and Clearing Area

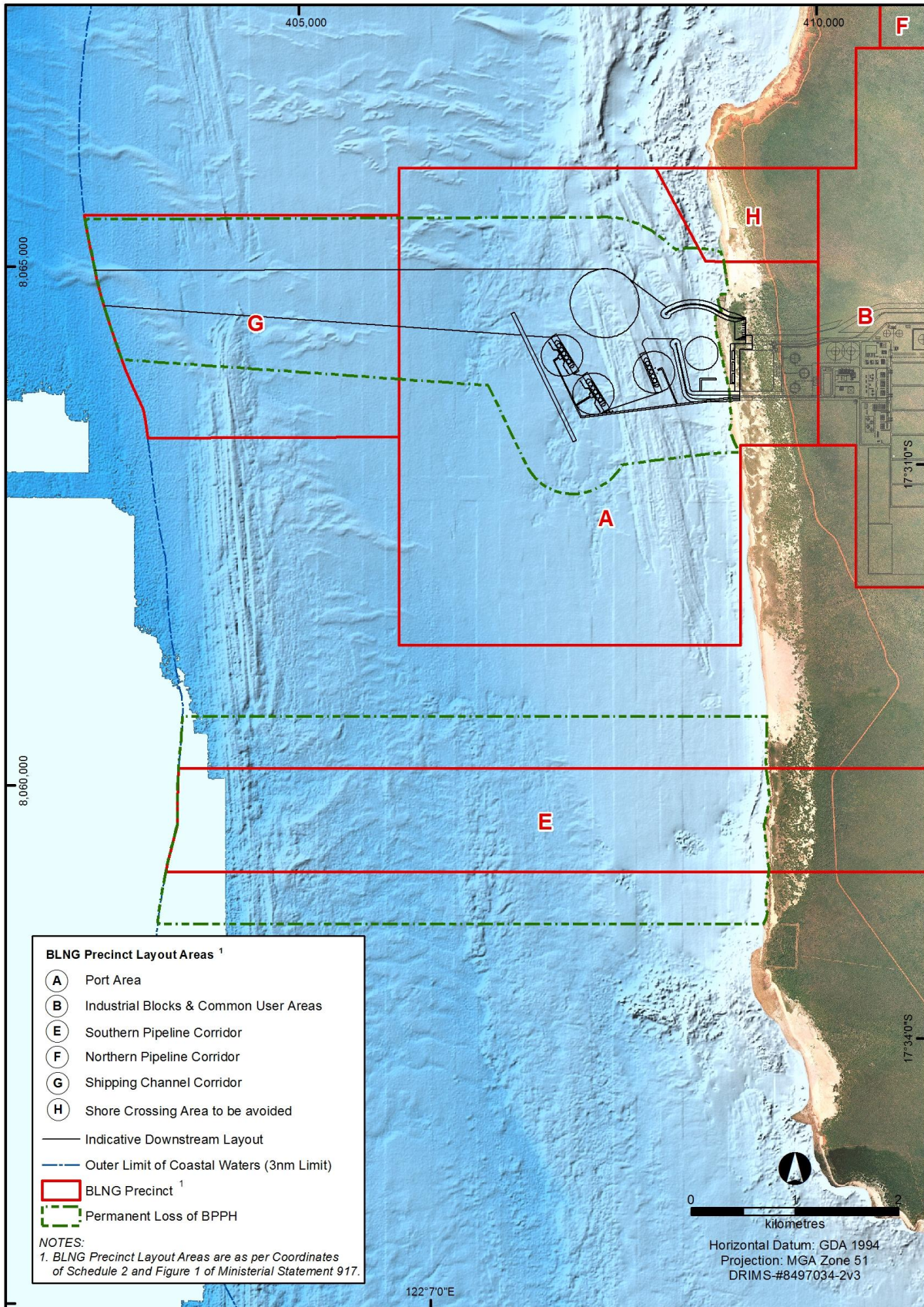


Figure 3 Indicative Marine Layout and BPPH Loss Area

Table 1 Comparison of the Permitted Developments/Activities/Change in Land Use and their Maximum Limits/Extents for the Browse LNG Precinct with the proposed Browse LNG Downstream Development

Item No.	Developments/ Activities/ Change in Land Use	Description of Limits/Extent	
		Browse LNG Precinct (Note: References to Figure 1 Relate to Ministerial Statement No. 917)	Browse LNG Downstream Development (25 Mtpa) Woodside
1	Hydrocarbon processing area	<p>Maximum of two heavy industrial areas of up to approximately 500 ha each (in total up to 1,000 ha) to be located within Area B identified in Figure 1 – Precinct Layout.</p> <p><u>Permitted Use and Development:</u></p> <ul style="list-style-type: none"> Facilities for the conversion of natural gas to produce up to 50 Mtpa of LNG (plus associated LPG, condensate, other hydrocarbon products (excluding petrochemicals)), storage and export at variable rates, flare structures, other ancillary facilities and facilities for carbon dioxide export offsite. Any relevant supporting infrastructure – including wastewater treatment facilities, water supplies, desalination water production facility (if required), electricity generation plants, concrete batching plants, rock screening and crushing facilities, relevant administration buildings and offices, internal access and haul roads. Clearing of terrestrial native vegetation directly related to permitted uses and developments but not exceeding the areas listed in item 11. 	<p>One heavy industrial area up to 500 ha located in Area B (as identified in Figure 1 of this document).</p> <p><u>Proposed Use and Development:</u></p> <ul style="list-style-type: none"> Facilities for the conversion of natural gas to produce up to 25 Mtpa of LNG (plus associated LPG, condensate, other hydrocarbon products (excluding petrochemicals)) storage and export at variable rates, flare structures, other ancillary facilities and facilities for carbon dioxide export offsite. Any relevant supporting infrastructure – including wastewater treatment facilities, water supplies, desalination water production facility (if required), electricity generation plants, concrete batching plants, rock screening and crushing facilities, relevant administration buildings and offices, internal access and haul roads. Clearing of terrestrial native vegetation directly related to proposed uses and developments will not exceed the areas listed in item 11 of this table.
2	Common user area	<p>Up to approximately 980 ha for the common user area within Area B as identified in Figure 1 – Precinct Layout.</p> <p><u>Permitted Use and Development:</u></p> <ul style="list-style-type: none"> Lay down areas and internal buffer areas between the industrial facilities. Administration and plant buildings. Internal access roads. Wastewater pipes. Temporary stockpiles. Contractor offices. Concrete batch plant. Trucking, parking and assembly areas. Flood management works. 	<p>Up to 587 ha for the common user area within Area B (as identified in Figure 1 of this document).</p> <p><u>Proposed Use and Development:</u></p> <ul style="list-style-type: none"> Lay down areas and internal buffer areas between the industrial facilities. Administration and plant buildings. Internal access roads. Wastewater pipes. Temporary stockpiles. Contractor offices. Concrete batch plant. Trucking, parking and assembly areas. Flood management works.

Item No.	Developments/ Activities/ Change in Land Use	Description of Limits/Extent	
		Browse LNG Precinct (Note: References to Figure 1 Relate to Ministerial Statement No. 917)	Browse LNG Downstream Development (25 Mtpa) Woodside
		<ul style="list-style-type: none"> Clearing for bush fire management. Service utilities. Clearing of terrestrial native vegetation directly related to permitted uses and developments but not exceeding the areas listed in item 11. 	<ul style="list-style-type: none"> Clearing for bush fire management. Service utilities. Clearing of terrestrial native vegetation directly related to proposed uses and developments will not exceed the areas listed in item 11 of this table.
3	Light industrial area (LIA)	<p>Up to approximately 200 ha within area C as identified in Figure 1– Precinct Layout.</p> <p><u>Permitted Use and Development:</u></p> <ul style="list-style-type: none"> Developments and uses permitted in light industrial area include all those developments and uses permissible in the Industrial Zone referred to in the Shire of Broome Town Planning Scheme No. 4 (for example fuel and transport depot and warehouses), subject to any buffer zone restrictions, as identified in Figure 1- Precinct Layout. Clearing of terrestrial native vegetation directly related to permitted uses and developments but not exceeding the areas listed in item 11. 	<p>Whilst use of the LIA is likely to be required for industrial uses to support the Browse LNG Precinct, it is not part of Woodside’s foundation proposal.</p>
4	Port Area	<p>Up to approximately 1,100 ha within Area A identified in Figure 1 – Precinct Layout.</p> <p><u>Permitted Use and Development:</u></p> <ul style="list-style-type: none"> Loading berths and load out infrastructure. Multi-user shipping channel. Desalination seawater intake and brine outlet. Flood management works. Tug pens. Support vessel area. Storage tanks (diesel, LNG, LPG, condensate). Marine flares. Pipelines. Roads. Lay down areas. Piled jetties. Turning basin(s). Breakwater(s) (as required in final design). Wastewater disposal pipelines and diffusers. 	<p>Up to approximately 930 ha within Area A (as identified in Figure 1 of this document).</p> <p><u>Proposed Use and Development</u></p> <ul style="list-style-type: none"> Loading berths and load out infrastructure. Multi-user shipping channel. Desalination seawater intake and brine outlet. Flood management works. Tug pens. Support vessel area. Storage tanks (diesel, LNG, LPG, condensate). Marine flares. Pipelines. Roads. Lay down areas. One piled multi-spur jetty. Turning basins. One breakwater (as required in final design). Wastewater disposal pipelines and diffusers.

Item No.	Developments/ Activities/ Change in Land Use	Description of Limits/Extent	
		Browse LNG Precinct (Note: References to Figure 1 Relate to Ministerial Statement No. 917)	Browse LNG Downstream Development (25 Mtpa) Woodside
		<ul style="list-style-type: none"> Capital and maintenance dredging. Integrated Marine Facilities (IMF), including connecting causeway(s), support vessel harbours, marine support facilities, marine offloading facilities (MOF) and roll-on, roll-off facilities (RORO). Breakwater(s)/seawall(s) (as required). Clearing of terrestrial native vegetation directly related to permitted uses and developments but not exceeding the areas listed in item 11. Total permanent loss of Benthic Primary Producers and Benthic Primary Producer Habitat directly related to permitted uses and developments, but not exceeding the area of loss listed in item 12. 	<ul style="list-style-type: none"> Capital and maintenance dredging. Integrated Marine Facilities (IMF), including connecting causeway(s), support vessel harbours, marine support facilities, marine offloading facilities (MOF) and roll-on, roll-off facilities (RORO). Two breakwaters/seawalls associated with IMF. Clearing of terrestrial native vegetation directly related to proposed uses and developments listed in item 11 of this table. Total permanent loss of Benthic Primary Producers and Benthic Primary Producer Habitat directly related to proposed uses and developments will not exceed the areas listed in item 12 of this table.
5	Shipping Channel Area	<p>Shipping channel within Area G (identified in Figure 1– Precinct Layout) up to 550m wide and extending from the limit of Port Area A to the limit of State Waters.</p> <p><u>Permitted Use and Development:</u></p> <ul style="list-style-type: none"> Multi-user shipping channel. 	<p>Shipping channel within Area G (as identified in Figure 1 of this document) up to 550 m wide and extending from the limit of Port Area A to the limit of State Waters.</p> <p><u>Proposed Use and Development</u></p> <ul style="list-style-type: none"> Multi-user shipping channel.
6	Pipeline Corridor Areas	<p>Areas E and F identified in Figure 1– Precinct Layout. Up to 250 ha in aggregate may be utilised for pipelines and their operating/ service corridors.</p> <p><u>Permitted Use and Development:</u></p> <ul style="list-style-type: none"> Construction of up to a maximum of 16 pipelines in total in Areas E and F for natural gas, mono-ethylene glycol, liquids, services and potentially carbon dioxide export. Support facilities. Clearing of terrestrial native vegetation directly related to permitted uses and developments but not exceeding the areas listed in item 11. Total permanent loss of Benthic Primary Producers and Benthic Primary Producer Habitat directly related to permitted uses and developments, but not exceeding the area of loss listed in item 12. 	<p>Up to 132 ha within Area E for the use of pipelines and operating/service corridors (as identified in Figure 1 of this document).</p> <p><u>Proposed Use and Development</u></p> <ul style="list-style-type: none"> Construction of up to 8 pipelines in Area E for natural gas, mono-ethylene glycol, liquids, services (e.g. fibre optic cable) and potentially carbon dioxide export. Support facilities Clearing of terrestrial native vegetation directly related to proposed uses and developments will not exceed the areas listed in item 11. Total permanent loss of Benthic Primary Producers and Benthic Primary Producer Habitat directly related to proposed uses and developments will not exceed the areas listed in item 12.

Item No.	Developments/ Activities/ Change in Land Use	Description of Limits/Extent	
		Browse LNG Precinct (Note: References to Figure 1 Relate to Ministerial Statement No. 917)	Browse LNG Downstream Development (25 Mtpa) Woodside
7	Accommodation Area	<p>Up to approximately 200 ha within Area D identified in Figure 1 – Precinct Layout.</p> <p><u>Permitted Use and Development:</u></p> <ul style="list-style-type: none"> Accommodation and associated support facilities. Clearing of terrestrial native vegetation directly related to permitted uses and developments but not exceeding the areas listed in item 11. 	<p>Up to 150 ha within Area D (as identified in Figure 1 of this document).</p> <p><u>Proposed Use and Development:</u></p> <ul style="list-style-type: none"> Accommodation and associated support facilities. Clearing of terrestrial native vegetation directly related to proposed uses and developments will not exceed the areas listed in item 11 of this table.
8	Infrastructure and services corridors	<p>Up to a total of 297 ha located within 13 km from the boundary of Area B identified in Figure 1- Precinct Layout.</p> <p><u>Permitted Use and Development:</u></p> <ul style="list-style-type: none"> Borefield. Electricity transmission services corridors. Pipelines from borefield to Precinct Borefield access and service roads Manari Road diversion. Service facilities. Firebreaks. Clearing of terrestrial native vegetation directly related to permitted uses and developments but not exceeding the areas listed in item 11. 	<p>Up to 80 ha located within 13 km from boundary of Area B (as identified in Figure 1 of this document).</p> <p><u>Proposed Use and Development</u></p> <ul style="list-style-type: none"> Borefield (including groundwater, surface water and vegetation monitoring locations). Electricity transmission services corridors. Pipelines from borefield to Precinct. Borefield access and service roads. The Manari Road diversion is not part of this referral. Service facilities (including utilities, fencing, minor access roads and drainage). Firebreaks. Clearing of terrestrial native vegetation directly related to proposed uses and developments will not exceed the areas listed in item 11 of this table.
9	Industrial land use buffer zone	<p>Area extending 2000 m from the boundary of Area B identified in Figure 1- Precinct Layout. The outer boundary of the industrial land use buffer zone is indicated by broken yellow line in Figure 1- Precinct Layout.</p> <p><u>Permitted Use and Development:</u></p> <ul style="list-style-type: none"> No permanent land uses or activities are permitted save for the infrastructure and service corridor developments and activities (see item 8). 	<p>Area extending 2,000 m from the boundary of Area B (as identified in Figure 1 of this document).</p> <p><u>Proposed Use and Development</u></p> <ul style="list-style-type: none"> As per item 8 above.
10	Sensitive land use buffer zone	<p>Area between 2,000 m and 3,000 m from the boundary of Area B identified in Figure 1- Precinct Layout. The outer boundary of the sensitive land use buffer zone is indicated by broken green line on</p>	<p>Area between 2,000 m and 3,000 m from the boundary of Area B (as identified in Figure 1 of this document).</p>

Item No.	Developments/ Activities/ Change in Land Use	Description of Limits/Extent	
		Browse LNG Precinct (Note: References to Figure 1 Relate to Ministerial Statement No. 917)	Browse LNG Downstream Development (25 Mtpa) Woodside
		<p>Figure 1- Precinct Layout.</p> <p><u>Permitted Use and Development:</u></p> <ul style="list-style-type: none"> No sensitive land uses are permitted (for example accommodation). Compatible light industry uses and development permissible. 	<p><u>Proposed Use and Development</u></p> <ul style="list-style-type: none"> As per item 8 above.
11	Clearing of terrestrial native vegetation across all areas shown in Figure 1– Precinct Layout	<p>Total clearing of terrestrial native vegetation permissible for all future development, activities and changes of land uses is up to a maximum of 3,037 ha in the Areas and amounts as specified below:</p> <ul style="list-style-type: none"> Area A up to 110 ha, Area B up to 1,980 ha, Area C up to 200ha, Area D up to 200 ha, Areas E and F up to 250 ha in aggregate. Within 13 km of the boundary of Area B an area of up to 297 ha in addition to the limits to clearing provided for in Areas A, B, C, D, E and F identified by coordinates in Schedule 1. <p>Within the total area of permissible clearing no more than a maximum of 83 ha in the implementation foundation proposal or 110 ha in the implementation of any combination of derived proposals of Monsoon Vine Thicket Threatened Ecological Community to be cleared either directly or indirectly (e.g. as a consequence of groundwater drawdown).</p>	<p>Clearing of terrestrial native vegetation up to a maximum of 1,528 ha, excluding clearing for fuel reduction activities and clearing for fire access. Areas and corresponding clearing amounts are as follows:</p> <ul style="list-style-type: none"> Area A up to 81 ha Area B up to 1,085 ha Area C up to 0 ha Area D up to 150 ha Area E up to 132 ha Within 13 km of the boundary of Area B up to 80 ha (excluding provision of fire breaks) <p>Within the total area of permissible clearing 83 ha of Monsoon Vine Thicket Threatened Ecological Community to be cleared either directly or indirectly.</p>
12	Permanent loss of Benthic Primary Producers and Benthic Primary Producer Habitat	<p>Permanent loss of Benthic Primary Producers and Benthic Primary Producer Habitat directly related to permitted uses and developments in:</p> <ul style="list-style-type: none"> Port Area A. Marine portions of the Pipeline Corridor Areas E and F. Shipping Channel Area G. <p>to be confined to the Zone of High Impact.</p>	<p>Permanent loss of Benthic Primary Producers and Benthic Primary Producer Habitat directly related to proposed uses and developments in:</p> <ul style="list-style-type: none"> Port Area A. Marine portions of the Pipeline Corridor Area E. Shipping Channel Area G. <p>to be confined to the Zone of High Impact (as shown as area of permanent loss of BPPH on Figure 3).</p>
13	Construction and operation of hydrocarbon processing facilities for converting natural gas to LNG (plus	<ul style="list-style-type: none"> Located within Port Area A and/or heavy industrial areas located in Area B. Up to a maximum combined operating capacity of 50 Mtpa. LNG, condensate and LPG storage tanks commensurate with a 50 Mtpa 	<ul style="list-style-type: none"> Located within Port Area A and/or heavy industrial areas located in Area B. Up to 25 Mtpa operating capacity. LNG, condensate and LPG storage tanks commensurate with a 25 Mtpa

Item No.	Developments/ Activities/ Change in Land Use	Description of Limits/Extent	
		Browse LNG Precinct (Note: References to Figure 1 Relate to Ministerial Statement No. 917)	Browse LNG Downstream Development (25 Mtpa) Woodside
	associated LPG, condensate, other hydrocarbon products).	<p>LNG development.</p> <ul style="list-style-type: none"> Clearing of terrestrial native vegetation directly related to permitted uses and developments but not exceeding the areas listed in item 11. 	<p>LNG development.</p> <ul style="list-style-type: none"> Clearing of terrestrial native vegetation directly related to proposed uses and developments will not exceed the areas listed in item 11 of this table.
14	Construction and operation of supporting developments and activities.	<ul style="list-style-type: none"> Located within Port Area A and/or heavy industrial area in Area B. Discharge from wastewater treatment facilities and wastewater outfalls of up to a total of 30 GL per annum of produced water, condensed water, desalination brine, sewage and greywater. First flush stormwater to be captured and treated and all captured water to be used on site or discharged via marine outfall. Water supply by groundwater abstraction and/or desalination of up to a combined total of 8 GL per annum. All supporting infrastructure necessary for LNG production developments/activities contained within Precinct boundaries A to F and the borefield within 13 km of the boundary of Area B, identified in Figure 1- Precinct Layout. 	<ul style="list-style-type: none"> Located within Port Area A and heavy industrial areas in Area B. Discharge from wastewater treatment facilities and wastewater outfalls of up to 15 GL per annum of produced water, condensed water, desalination brine, sewage and greywater. First flush stormwater will be captured and treated and all captured water to be used on site or discharged via marine outfall. Water supply for construction by groundwater abstraction and/or desalination of up to a combined total of 3 GL per annum. Water supply to supply operational requirements by desalination of up to a total of 3 GL per annum. All supporting infrastructure necessary for LNG production developments/activities contained within Precinct boundaries A to E and the borefield within 13 km of the boundary of Area B (as identified in Figure 1 of this document).
15	Construction and operation of a marine and terrestrial port and port infrastructure.	<p>Up to 1,100 ha within Port Area A (identified in Figure 1- Precinct Layout) comprising:</p> <ul style="list-style-type: none"> Up to 6 loading berths. Up to 3 piled jetties extending up to 3 km west from the current location of the Lowest Astronomical Tide. One multi-user shipping channel to limit of Area A as identified in Figure 1- Precinct Layout. Turning basins. 	<p>Up to 930 ha within Port Area A (as identified in Figure 1 of this document), comprising:</p> <ul style="list-style-type: none"> 3 loading berths. One piled multi-spur jetty. extending up to 2 km west from the current location of the Lowest Astronomical Tide One multi-user shipping channel to limit of Area A (as identified in Figure 1 of this document). Turning basins.

Item No.	Developments/ Activities/ Change in Land Use	Description of Limits/Extent	
		Browse LNG Precinct (Note: References to Figure 1 Relate to Ministerial Statement No. 917)	Browse LNG Downstream Development (25 Mtpa) Woodside
		<ul style="list-style-type: none"> Breakwaters extending up to 3 km west from the current location of the Lowest Astronomical Tide. Wastewater pipelines and diffusers with up to 30GL per annum capacity. Up to 34 million m³ of capital dredging – (more details see item 19 below). 	<ul style="list-style-type: none"> One breakwater and smaller breakwaters / seawalls extending up to 2 km west from the current location of the Lowest Astronomical Tide. Wastewater pipelines and diffusers with up to 15 GL per annum capacity. Up to 21 Mm³ of capital dredging.
16	Construction and operation of the Multi-user Shipping Channel.	Multi-user shipping channel in Area G identified in Figure 1 - Precinct Layout. <ul style="list-style-type: none"> Up to 550 m wide and extending from the western limit of Port Area A to the limit of State Waters. 	Multi-user shipping channel in Area G, (as identified in Figure 1 of this document). <ul style="list-style-type: none"> Up to 550 m wide and extending from the western limit of Port Area A to the limit of State Waters.
17	Construction and operation of the Integrated Marine Facilities (IMF).	Contained within Area A identified in Figure 1 - Precinct Layout. <ul style="list-style-type: none"> Onshore excavation (if required) shall not extend more than 330 m east from current location of Highest Astronomical Tide. Clearing of terrestrial native vegetation related to IMF is included in the 110 ha of permissible clearing in Area A at item 11 above. 	Contained within Area A (as identified in Figure 1 of this document). <ul style="list-style-type: none"> Onshore excavation extending up to 330 m east from current location of Highest Astronomical Tide. Clearing of terrestrial native vegetation related to IMF is included in the 81 ha of permitted clearing in Area A at item 11 of this table.
18	Construction and use of accommodation village.	<ul style="list-style-type: none"> Clearing of terrestrial native vegetation directly related to permitted uses and developments but not exceeding the areas listed in item 11. All access to and from accommodation village to be via Browse LNG Precinct Road (not part of this proposal). 	<ul style="list-style-type: none"> Clearing of terrestrial native vegetation directly related to permitted land uses and developments will not exceed the areas listed in item 11 of this table. All access to and from accommodation village to be via Browse LNG Precinct Road (not part of this referred proposal).
19	Dredging and spoil disposal activities.	<ul style="list-style-type: none"> Up to 34 million cubic metres of capital dredge material plus periodic maintenance dredging as required. No dredge spoil disposal in State Waters. 	<ul style="list-style-type: none"> Up to 21 Mm³ of capital dredging plus periodic maintenance dredging as required (includes capital dredging required for IMF). No dredge spoil disposal in State Waters.
20	Infrastructure and Services Corridor development activities.	<ul style="list-style-type: none"> Groundwater production limited to up to 8 GL per annum. Clearing up to 297 ha directly related to activities in this item within 13 km of the boundary of Area B indicated in Figure 1– Precinct Layout. 	<ul style="list-style-type: none"> Groundwater production limited to up to 3 GL per annum. Clearing up to 80 ha directly related to activities in this item within 13 km of the boundary of Area B (as identified in Figure 1 of this document).

Item No.	Developments/ Activities/ Change in Land Use	Description of Limits/Extent	
		Browse LNG Precinct (Note: References to Figure 1 Relate to Ministerial Statement No. 917)	Browse LNG Downstream Development (25 Mtpa) Woodside
21	Pipeline corridors for gas, mono-ethylene glycol, liquids, and potentially carbon dioxide export and communications	<ul style="list-style-type: none"> • Within Areas E and F identified in Figure 1– Precinct Layout. • Clearing of terrestrial native vegetation directly related to permitted uses and developments, but not exceeding the areas listed in item 11. 	<ul style="list-style-type: none"> • Pipeline corridors contained within Area E (as identified in Figure 1 of this document). • Clearing of terrestrial native vegetation directly related to permitted uses and developments will not exceed areas listed in item 11 of this table.

Table 1 demonstrates that the Browse LNG Downstream Development does not exceed the limits and extents of permitted land uses, developments or activities listed in Table 1 of Schedule 1 of Ministerial Statement 917. All infrastructure is either wholly contained within the coordinates of disturbance footprint boundaries defined in Schedule 2 of Ministerial Statement 917, or form part of the permitted infrastructure and corridor developments within 13 km of the boundary of Area B, as defined in Schedule 2 of Ministerial Statement 917.

3. Environmental Outcomes

Table 2 lists the environmental factors considered by the Browse LNG Precinct SAR and compares them to the nine key factors identified by the EPA from its consideration of the SAR and submissions received, in conjunction with the proposal characteristics. The key environmental factors considered in this referral are the nine identified by the EPA and as listed in the Report and Recommendations for the Browse LNG Precinct (EPA Report 1444). As a potential foundation proponent for the precinct, Woodside progressed the engineering design and continued, and/or collated baseline studies in parallel with the assessment and approval of the Browse LNG Precinct. Results (where relevant) were made available to the EPA and the Appeals Convenor throughout the assessment and appeals process. Given the short period of time which has elapsed since the EPA assessment of the Browse LNG Precinct strategic proposal, as well as the comprehensive nature of the key factors, these factors are considered to also be key to the referred proposal and no new key environmental factors require consideration.

Table 2 Definition of Environmental Factors Considered in Referral

Environmental Factors considered by SAR	Environmental Factors identified as Key by EPA	Considered within this Referral
Tidal Regimes, Wave Climate, Currents and Hydrodynamics	Yes – considered part of Landscape Processes	Yes
Marine Sediments	Yes – considered part of Marine Environmental Quality	Yes
Marine Water Quality		Yes
Benthos	Yes – considered part of Benthic Habitats	Yes
Marine Fish	Yes – considered part of Marine Fauna	Yes
Marine Mammals		
Marine Reptiles		
Marine Ecosystem Integrity		
Soils and Geomorphology	Yes - considered part of Landscape Processes	Yes
Surface Water	Yes – considered part of Surface and Groundwater	Yes
Groundwater		
Terrestrial Flora and Vegetation	Yes – addressed under Terrestrial Biota	Yes
Species of Ethno-biological Significance		
Terrestrial Fauna		
Terrestrial Ecosystem Integrity	Yes – considered as part of: <ul style="list-style-type: none"> • Terrestrial Biota; and • Surface and Groundwater 	Yes
Air Quality	Yes – considered part of Air Emissions	Yes

Light emissions		
Greenhouse Gas Emissions	Yes – considered part of Greenhouse Gases	Yes
Noise and vibration emissions	Yes – considered as part of: <ul style="list-style-type: none"> • Marine Fauna; and • Air Emissions 	Yes
Aboriginal heritage	Yes - considered as part of Heritage	Yes
Palaeontology		
Waste	No - did not require further EPA evaluation	No
Visual Amenity, light and landscape character	No – did not require further EPA evaluation	No
Environmental Heritage and Conservation Areas	No - did not require further EPA evaluation	No
Colonial Heritage	No - did not require further EPA evaluation	No
Commercial fishing	No - did not require further EPA evaluation	No
Aquaculture and pearling	No - did not require further EPA evaluation	No
Tourism	No – to be dealt with through other processes and other Government agencies	No
Sports, recreation and landuse	No – to be dealt with through other processes and other Government agencies	No
Human health	No - to be dealt with through other processes and other Government agencies	No

A number of factors considered by the SAR, such as visual amenity, pests and weeds were viewed by the EPA as being relevant to the strategic proposal, however, not requiring further evaluation beyond that presented in the SAR. In addition, the EPA noted that, as waste produced by the Browse LNG Precinct will be dealt with through management plans and in accordance with the appropriate regulatory requirements, including works approval and licensing under Part V of the EP Act, then further EPA evaluation was not necessary. The EPA's Report and Recommendations provides details of each key environmental factor, why it is relevant to the strategic proposal and how it will be affected by it. As presented in **Table 3**, the advances in engineering design and the continuation, or collation, of baseline studies conducted by Woodside support the EPA's evaluation of each key environmental factor.

The SAR pays considerable attention to social issues including recreational fishing, mining and tourism which are outside the scope of the EP Act. In its Report and Recommendations, the EPA acknowledges these social factors are very important for the strategic proposal and need to be included to satisfy the requirements of the Commonwealth Government's assessment process under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The EPA has only addressed issues that are within its jurisdiction. Issues outside the EPA's jurisdiction will be dealt with by other Government agencies through their processes and therefore they have not been considered within this referral.

Table 3 addresses each of the derived proposal decision criteria for the environmental outcome predicted for each key environmental factor, and demonstrates that the decision criteria for the EPA to declare the referred proposal to be derived in the context of the Browse LNG Precinct are satisfied.

Table 3 Demonstration of Compliance with S39B of EP Act

Environmental Factor	S39B 4(a) Have Environmental Issues Been Adequately Assessed in the Approved Strategic Proposal?	S39B 4(b) Does Significant New or Additional Information Exist that Justifies Reassessment?	S39B 4(c) Is There Significant Change in Relevant Environmental Factors Since the Strategic Proposal was Assessed?
Key Factor - Marine Fauna			
Humpback Whales	<p>Yes – The EPA considers Marine Fauna has been adequately addressed and the strategic proposal can meet the EPA's objectives for this factor provided the following conditions are imposed on the proponents for the strategic proposal and any subsequent derived proposal:</p> <ul style="list-style-type: none"> • Condition 9 relating to a Marine Fauna and Impact Zones Plan • Condition 10 relating to a Dredging, Marine Facilities and Pipeline Installation Environmental Monitoring and Management Program • Condition 11 relating to State of the Marine Environment Surveys 	<p>No significant new or additional information since the issue of EPA Report 1444 that justifies reassessment.</p> <p>Aerial surveys providing both within-season and across-season comparability of abundance and distribution of humpback whales in the James Price Point coastal area have been undertaken annually since 2009. The data from the 2009 surveys were presented in the SAR, and subsequent surveys have been collated to inform this referral (RPS 2012a).</p> <p>The baseline data collated from 2009 to 2011 (RPS 2012a) support previous observations presented in the SAR, Response to Submissions, and the Report and Recommendations (EPA 2012), in particular, while humpback whales traverse James Price Point coastal area to and from northern breeding grounds, James Price Point coastal area is not predominately used as a breeding, mating, feeding or resting ground. The annual migration occurs between May and November, with peak breeding and calving taking place around Camden Sound between mid-August and early September. The baseline studies (as summarised in Table 2 of the RPS report) show consistency in the shape of the migration corridor and suggest there is only minor variation in the distribution of humpback whales within the migration corridor across years off the coast of the Dampier Peninsula (RPS 2012a).</p>	No
Dolphins	<ul style="list-style-type: none"> • Condition 13 relating to Marine Environmental Quality and Marine Outfalls • Condition 15 relating the Marine Fauna Interaction – Marine Pile Driving, Dredging and Marine Construction Vessels and Light Sources • Condition 16 relating to Marine Drilling and Blasting Activities 	<p>No significant new or additional information since the issue of EPA Report 1444 that justifies reassessment.</p> <p>The vessel and aerial survey work undertaken on dolphins between 2009 and 2011 has been collated into a standalone nearshore dolphin report (RPS 2012b). The conclusions of this document support previous observations and are consistent with information presented in the SAR and Response to Submissions and confirm the EPA's assessment that the dolphin assemblage of the James Price Point nearshore coastal area is dominated by Indo-Pacific bottlenose dolphins. Indo-Pacific humpback dolphins and Australian snubfin dolphins are encountered sporadically and are considered to be uncommon in the James Price Point nearshore coastal area.</p>	No
Turtles	<ul style="list-style-type: none"> • Condition 17 relating to Introduced Marine Pests • Condition 24 relating to Decommissioning. <p>(page 36, Section 3.1, Report and Recommendation of the Environmental Protection Authority Browse Liquefied Natural Gas Precinct (EPA 2012))</p>	<p>No significant new or additional information since the issue of EPA Report 1444 that justifies reassessment.</p> <p>A review of unpublished third party observations on turtle nesting over the 2011/2012 season was undertaken (RPS 2012c). The review concluded that the turtle nests along this section of the coast do not represent a significant number for hawksbill or flatback turtles in terms of their wider population. Furthermore, it is unlikely that the estimated four turtles found attempting to nest in sub-optimal habitat play a significant role in the wider Western Australian population and possibly represent isolated nesting events. These conclusions support previous observations and are consistent with information presented in the SAR and Response to Submissions.</p>	No
Fish		<p>No significant new or additional information since the issue of EPA Report 1444 that justifies reassessment.</p> <p>The EPA Report concluded that given the widespread distribution of fish off the Dampier Peninsula, the absence of site specific forms and the absence of prominent reefs or other structure on which fish may be especially dependent, some impacts on fish may occur but stocks are not likely to be significantly affected at a regional scale. Therefore no additional studies or investigations beyond those presented in the SAR were deemed to be required to further inform this referral.</p>	No

Environmental Factor	S39B 4(a) Have Environmental Issues Been Adequately Assessed in the Approved Strategic Proposal?	S39B 4(b) Does Significant New or Additional Information Exist that Justifies Reassessment?	S39B 4(c) Is There Significant Change in Relevant Environmental Factors Since the Strategic Proposal was Assessed?
Key Factor - Benthic Habitats			
Benthic Habitats	<p>Yes – The EPA considers Benthic Habitats has been adequately addressed and the strategic proposal can meet the EPA's objectives for this factor provided the following conditions are imposed on the proponents for the strategic proposal and any subsequent derived proposal:</p> <ul style="list-style-type: none"> • Condition 9 relating to a Marine Fauna and Impact Zones Plan • Condition 10 relating to a Dredging, Marine Facilities and Pipeline Installation Environmental Monitoring and Management Program • Condition 11 relating to State of the Marine Environment Surveys • Condition 12 relating to Coastal Processes • Condition 14 relating to Pipeline Shore Crossing Management and Monitoring Program • Condition 24 relating to Decommissioning. <p>(page 90, Section 3.2, Report and Recommendation of the Environmental Protection Authority Browse Liquefied Natural Gas Precinct (EPA 2012))</p>	<p>No significant new or additional information since the issue of EPA Report 1444 that justifies reassessment.</p> <p>No additional studies or investigations beyond those presented in the SAR, Response to Submissions and Section 43A, to inform this referral were deemed to be necessary. Additional simulation modelling incorporating specific mitigation measures and management of turbidity generating activities, will be submitted as part of the Marine Facilities and Impact Zones Plan, in accordance with Ministerial Condition 9.</p>	No
Key Factor – Marine Environmental Quality			
Water Quality	<p>Yes – The EPA considers Marine Environmental Quality has been adequately addressed and the strategic proposal can meet the EPA's objectives for this factor provided the following conditions are imposed on the proponents for the strategic proposal and any subsequent derived proposal:</p> <ul style="list-style-type: none"> • Condition 13 relating to Marine Environmental Quality and Marine Outfalls. <p>(page 102, Section 3.3, Report and Recommendation of the Environmental Protection Authority Browse Liquefied Natural Gas Precinct (EPA 2012))</p>	<p>No significant new or additional information since the issue of EPA Report 1444 that justifies reassessment.</p> <p>The low ecological protection area will not extend beyond 70 m from the wastewater pipe diffuser, as required by Ministerial Condition 13-5.</p>	No
Sediment Quality	<p>(page 102, Section 3.3, Report and Recommendation of the Environmental Protection Authority Browse Liquefied Natural Gas Precinct (EPA 2012))</p>	<p>No significant new or additional information since the issue of EPA Report 1444 that justifies reassessment.</p> <p>No additional studies or investigations beyond those presented in the SAR were deemed to be required to further inform this referral.</p>	No

Environmental Factor	S39B 4(a) Have Environmental Issues Been Adequately Assessed in the Approved Strategic Proposal?	S39B 4(b) Does Significant New or Additional Information Exist that Justifies Reassessment?	S39B 4(c) Is There Significant Change in Relevant Environmental Factors Since the Strategic Proposal was Assessed?
Key Factor – Terrestrial Biota			
Flora and Vegetation	<p>Yes – The EPA considers Terrestrial Biota has been adequately addressed and the strategic proposal can meet the EPA's objectives for this factor provided the following conditions are imposed on the proponents for the strategic proposal and any subsequent derived proposal:</p> <ul style="list-style-type: none"> • Condition 5 relating to a Terrestrial Facilities and Disturbance Footprint Plan • Condition 6 relating to a Terrestrial Baseline State Report • Condition 7 relating to a Terrestrial Environmental protection Program • Condition 8 relating to a Terrestrial Environment Monitoring Program. <p>(page 115, Section 3.4, Report and Recommendation of the Environmental Protection Authority Browse Liquefied Natural Gas Precinct (EPA 2012))</p>	<p>No significant new or additional information since the issue of EPA Report 1444 that justifies reassessment.</p> <p>Surveys separate from the Strategic Assessment process, determined presence of Priority flora (<i>Eriachne</i> sp. Dampier Peninsula, <i>Gomphrena pusilla</i>, <i>Lophostemon grandiflorus</i> subsp. <i>grandiflorus</i> and <i>Pittosporum moluccanum</i>) that are outside of the proposed footprint of the project area (Biota 2011). As the proposal will not impact these additional flora, their identification does not represent new or additional information which would mean that the referred proposal might have a significant detrimental effect in addition to, or different from, the effects assessed for the Browse LNG Precinct strategic proposal.</p> <p>A review appraisal of the James Price Point Monsoon Vine Thicket and Drainage Basin Vegetation Water Dependence – Addendum NDVI was undertaken (SKM 2012). The conclusions of this review support previous observations and are consistent with information presented in the SAR and Response to Submissions.</p>	No
Fauna	<p>(page 115, Section 3.4, Report and Recommendation of the Environmental Protection Authority Browse Liquefied Natural Gas Precinct (EPA 2012))</p>	<p>No significant new or additional information since the issue of EPA Report 1444 that justifies reassessment.</p> <p>A regional pilot study identified the presence of stygofauna in the Browse LNG Downstream Development area and broader Dampier Peninsula. While one species (the <i>Syncairid Kimberlybathynella</i> sp. B1) has not been recorded outside of the Browse LNG Downstream Development area, review of the hydrogeology indicates that the stygofauna community is likely to be widespread as the Broome aquifer is an unconfined aquifer which covers much of the Dampier Peninsula (Rockwater 2012a). Therefore, the habitat and stygofauna species present are unlikely to be restricted to the Browse LNG Downstream Development area.</p> <p>It is unlikely that subterranean species will be significantly affected at a regional scale, and the identification of stygofauna in the Browse LNG Downstream Development area does not represent new or additional information which would mean that the referred proposal might have a significant detrimental effect in addition to, or different from, the effects assessed for the Browse LNG Precinct strategic proposal.</p> <p>A targeted Bilby (<i>Macrotis lagotis</i>) survey of the Quondong Point Area was conducted (ENV Australia 2012), separate from the Strategic Assessment process. The conclusions of this survey support previous observations and are consistent with information presented in the SAR.</p>	No

Environmental Factor	S39B 4(a) Have Environmental Issues Been Adequately Assessed in the Approved Strategic Proposal?	S39B 4(b) Does Significant New or Additional Information Exist that Justifies Reassessment?	S39B 4(c) Is There Significant Change in Relevant Environmental Factors Since the Strategic Proposal was Assessed?
Key Factor – Landscape Processes			
Coastal Processes	Yes – The EPA considers Landscape Processes has been adequately addressed and the strategic proposal can meet the EPA’s objectives for this factor provided the following conditions are imposed on the proponents for the strategic proposal and any subsequent derived proposal: <ul style="list-style-type: none"> • Condition 10 relating to a Dredging, Marine Facilities and Pipeline Installation Environmental Monitoring and Management Program • Condition 11 relating to State of the Marine Environment Surveys • Condition 12 relating to Coastal Processes • Condition 14 relating to Pipeline Shore Crossing Management and Monitoring Program. (page 121, Section 3.5, Report and Recommendation of the Environmental Protection Authority Browse Liquefied Natural Gas Precinct (EPA 2012))	No significant new or additional information since the issue of EPA Report 1444 that justifies reassessment.	No
Soils and Geomorphology		No additional studies or investigations beyond those presented in the SAR were deemed to be required to further inform this referral.	
Key Factor – Surface and Groundwater			
Surface water	Yes – The EPA considers Surface and Groundwater has been adequately addressed and the strategic proposal can meet the EPA’s objectives for this factor provided the following conditions are imposed on the proponents for the strategic proposal and any subsequent	No significant new or additional information since the issue of EPA Report 1444 that justifies reassessment. There is increased engineering knowledge regarding the design and construction methodology for southern pipeline shore crossing. The increased knowledge does not represent new or additional information which would mean that the referred proposal might have a significant detrimental effect on surface water additional to, or different from, the effects assessed for the Browse LNG Precinct strategic proposal.	No

Environmental Factor	S39B 4(a) Have Environmental Issues Been Adequately Assessed in the Approved Strategic Proposal?	S39B 4(b) Does Significant New or Additional Information Exist that Justifies Reassessment?	S39B 4(c) Is There Significant Change in Relevant Environmental Factors Since the Strategic Proposal was Assessed?
Groundwater	derived proposal: <ul style="list-style-type: none"> • Condition 18 relating to Surface and Groundwater Management and Monitoring • Condition 20 relating to Rehabilitation • Condition 14 relating to Decommissioning. (page 128, Section 3.6, Report and Recommendation of the Environmental Protection Authority Browse Liquefied Natural Gas Precinct (EPA 2012))	No significant new or additional information since the issue of EPA Report 1444 that justifies reassessment. Falling head tests were undertaken on groundwater bores completed within the Browse LNG Precinct (Rockwater 2012b), and an aerial electromagnetic survey has inferred that as expected, a wedge of saline water is present. Groundwater abstraction will be managed under the <i>Rights in Water and Irrigation Act 1914</i> and information concerning environmental impacts, sustainable yields, abstraction rates, maintenance of water quality, the design of the production borefield and monitoring networks will be submitted in support of the licence application.	
Key Factor – Heritage			
Palaeontology	Yes – The EPA considers Heritage has been adequately addressed and the strategic proposal can meet the EPA's objectives for this factor provided the following conditions are imposed on the proponents for the strategic proposal and any subsequent derived proposal:	No significant new or additional information since the issue of EPA Report 1444 that justifies reassessment. No additional studies or investigations beyond those presented in the SAR were deemed to be required to further inform this referral.	No
Aboriginal heritage	any subsequent derived proposal: <ul style="list-style-type: none"> • Condition 12 relating to Coastal Processes • Condition 14 relating to Pipeline Shore Crossing Management and Monitoring Program • Condition 20 relating to Rehabilitation • Condition 23 relating to Fossil Heritage Management • Condition 24 relating to Decommissioning. (page 136, Section 3.7, Report and Recommendation of the Environmental Protection Authority Browse Liquefied Natural Gas Precinct (EPA 2012))	No significant new or additional information since the issue of EPA Report 1444 that justifies reassessment. There have been no significant changes in the understanding of Aboriginal Heritage values of the Browse LNG Downstream Development area since the approved Strategic Proposal was assessed.	

Environmental Factor	S39B 4(a) Have Environmental Issues Been Adequately Assessed in the Approved Strategic Proposal?	S39B 4(b) Does Significant New or Additional Information Exist that Justifies Reassessment?	S39B 4(c) Is There Significant Change in Relevant Environmental Factors Since the Strategic Proposal was Assessed?
Key Factor – Air Emissions			
Atmospheric emissions	Yes – The EPA considers Air Emissions have been adequately addressed and the strategic proposal can meet the EPA's objectives for this factor provided the following conditions are imposed on the proponents for the strategic proposal and any subsequent derived proposal:	No significant new or additional information since the issue of EPA Report 1444 that justifies reassessment. Additional studies or investigations specifically relating to gaseous emissions are not deemed necessary to further inform this referral. A full description of the design of the processing facility and corresponding predicted emissions will be submitted with the works approval application in accordance with Ministerial Condition 21. Air emissions will be managed by the licensing process in accordance with Part V of the EP Act prior to commissioning and operations.	No
Noise	<ul style="list-style-type: none"> Condition 21 relating to Emissions to Air. (page 147, Section 3.8, Report and Recommendation of the Environmental Protection Authority Browse Liquefied Natural Gas Precinct (EPA 2012))	No significant new or additional information since the issue of EPA Report 1444 that justifies reassessment. There is no new or additional information beyond that considered during assessment of BLNG Precinct which would mean that the referred proposal might have a significant detrimental effect on ambient noise additional to, or different from, the effects assessed for the Browse LNG Precinct strategic proposal. Noise emissions will be managed by the licensing process in accordance with Part V of the EP Act prior to commissioning and operations.	
Light		No significant new or additional information since the issue of EPA Report 1444 that justifies reassessment. Additional studies or investigations specifically relating to light emissions were not deemed necessary to further inform this referral, as management of light spill will be achieved through application of EPA Guideline Number 5 during the design of facilities associated with the Browse LNG Downstream Development.	
Key Factor – Greenhouse Gases			
Greenhouse Gases	Yes – The EPA considers Greenhouse Gases have been adequately addressed and the strategic proposal can meet the EPA's objectives for this factor provided the following conditions are imposed on the proponents for the strategic proposal and any subsequent derived proposal: <ul style="list-style-type: none"> Condition 22 relating to Greenhouse Gas. (page 151, Section 3.9, Report and Recommendation of the Environmental Protection Authority Browse Liquefied Natural Gas Precinct (EPA 2012))	No significant new or additional information since the issue of EPA Report 1444 that justifies reassessment. No additional studies or investigations specifically relating to greenhouse gas emissions were deemed to be required to further inform this referral.	No

4. Environmental Management

The potential environmental impacts of the Browse LNG Downstream Development will be mitigated and managed through a combination of:

- Woodside's Environmental Management System
- The Browse LNG Downstream Development environmental management framework, including various plans, programs and systems
- Relevant environmental licences
- Implementation of the Ministerial conditions
- DSD Governance structure established through DSD's Strategic Assessment process.

The Woodside Environmental Management System (EMS) provides the framework for which environmental commitments, standards and other environmental requirements are implemented throughout the project, with the aim of driving continual improvement. Woodside will translate the management commitments identified from the Browse LNG Precinct SAR prepared by DSD, Ministerial Statement Number 917, regulatory requirements, Woodside's operation experience and stakeholder consultation, into a series of practicable management strategies, supported by detailed management plans/approaches and contract documents to minimise the key environmental impacts associated with the referred proposal.

The SAR contains commitments for the development and implementation of management programs and other obligations that any future derived proponent would be required to meet. These commitments are supplemented by additional undertakings in the Proponent's response to submissions (DSD 2011) and are referred to within Ministerial Condition 26-3.

The various environmental management plans and programs which will be implemented by Woodside (and its contractors) to satisfy the various commitments and regulatory requirements to mitigate potential impacts are listed in **Table 4** to **Table 9**. The plans and programs have been consolidated to align with the Draft Management Strategies presented in Annexure 4 of the response to submissions (DSD 2011), as required by Condition 26-3, or as otherwise advised as being required by the Browse LNG Precinct Proponent. It is anticipated that further alignment with the final Precinct Strategies will occur when they have been finalised. The tables also indicate whether the program addresses Matters of National Environmental Significance (MNES).

All plans, programs and surveys required under the Browse LNG Precinct Ministerial Statement will be publicly available.

Table 4 Plans and Programs which Support the Browse LNG Precinct Air Quality Management Strategy

Draft BLNG Precinct Air Quality Management Strategy		
Relevant SAR Plan	Air Quality Management Plan	
Relevant Ministerial Conditions	<ul style="list-style-type: none"> • Condition 21 Emissions to Air • Condition 22 Greenhouse Gas Emissions 	
Addresses MNES		
Browse LNG Downstream Development Environmental Program	Air Quality Management Program (to be submitted in support of Works Approval application)	No
	Greenhouse Gas Annual Monitoring Report	No

Table 5 Plans and Programs which Support the Browse LNG Precinct Emergency Response Strategy

Draft BLNG Precinct Emergency Response Strategy		
Relevant SAR Plan	Emergency Response Plan	
Relevant Ministerial Condition	Not addressed via a Ministerial Condition	
Addresses MNES		
Browse LNG Downstream Development Environmental Program	Emergency Response Plan	No
	Oil Spill Response Plan	No

Table 6 Plans and Programs which Support the Browse LNG Precinct Terrestrial Ecological Management Strategy

Draft BLNG Precinct Terrestrial Ecological Management Strategy	
Relevant SAR Plan	<ul style="list-style-type: none"> • Ecological Surface Water Requirements Management Plan • Construction Environmental Management Plan • Groundwater Abstraction Management Plan • Terrestrial Fauna Management Plan • Terrestrial Weed Management Plan • Terrestrial Quarantine Management Plan • Hydrocarbon and Chemical Spill Management Plan • Greater Bilby Management Plan • Waste Management Plan • Rehabilitation Plan
Relevant Ministerial Condition	<ul style="list-style-type: none"> • Condition 5 Terrestrial Facilities and Disturbance Footprint Plan • Condition 6 Terrestrial Baseline State Report • Condition 7 Terrestrial Environment Protection Program • Condition 8 Terrestrial Environment Monitoring Program • Condition 14 Pipeline Shore Crossing Management and Monitoring Program (terrestrial component)

Draft BLNG Precinct Terrestrial Ecological Management Strategy		
	<ul style="list-style-type: none"> • Condition 18 Surface and Groundwater Management and Monitoring • Condition 19 Weeds • Condition 20 Rehabilitation • Condition 23 Fossil Heritage Management • Condition 25 Residual Impacts and Risk Management Measures 	
Addresses MNES		
Browse LNG Downstream Development Environmental Program	Terrestrial Facilities and Disturbance Footprint Plan	No
	Terrestrial Baseline State Report	Yes
	Terrestrial Construction and Environmental Management Program	Yes
	Fossil Heritage Management Program	Yes
	Residual Impacts and Risk Management Measures Program	Yes

Table 7 Plans and Programs which support the Browse LNG Precinct Surrounds Fire Management Strategy

Draft BLNG Precinct Surrounds Fire Management Strategy		
Relevant SAR Plan	Emergency Response Plan	
Relevant Ministerial Condition	Not addressed via a Ministerial Condition	
Addresses MNES		
Browse LNG Downstream Development Environmental Program	Fire Management Measures included within the Terrestrial Construction and Environmental Management Program	No

Table 8 Plans and Programs which support the Browse LNG Precinct Preliminary Closure and Decommissioning Strategy

Draft BLNG Precinct Preliminary Closure and Decommissioning Strategy		
Relevant SAR Plan	<ul style="list-style-type: none"> • Final Closure Plan • Rehabilitation Plan • Waste Management Plan • Visual Amenity Management Plan 	
Relevant Ministerial Condition	<ul style="list-style-type: none"> • Condition 24 Decommissioning • Condition 20 Rehabilitation 	
Browse LNG Downstream Development Environmental Program	Decommissioning and Rehabilitation measures required by conditions to be included in Plans/Programs not required until after operations have commenced	

Table 9 Plans and Programs which support the Browse LNG Precinct Port Environmental Management Strategy

Draft BLNG Precinct Port Environmental Management Strategy		
Relevant SAR Plan	<ul style="list-style-type: none"> • Port Facilities Construction Environmental Management Plan • Emergency Response Plan • Hydrocarbon and Chemical Spill Response Plan • Dredging and Spoil Disposal Management Plan • Vessel Management Plan • Invasive Marine Species Management Plan • Quarantine Management Plan 	
Relevant Ministerial Condition	<ul style="list-style-type: none"> • Condition 8A Marine Fauna Survey and Management Program • Condition 9 Marine Facilities and Impact Zones Plan • Condition 10 Dredging, Marine Facilities and Pipeline Installation Environmental Monitoring and Management Program • Condition 11 State of Marine Environment Surveys • Condition 12 Coastal Processes Monitoring and Management Program • Condition 13 Marine Environmental Quality and Marine Outfalls • Condition 14 Pipeline Shore Crossing Management and Monitoring Program (marine components) • Condition 15 Marine Fauna Interaction – Marine Pile-driving, Dredging and Marine Construction Vessels and Light Sources • Condition 16 Marine Drilling and Blasting Activities • Condition 17 Introduced Marine Pests • Condition 25 Residual Impacts and Risk Management Measures 	
Addresses MNES		
Browse LNG Downstream Development Environmental Program	Marine Facilities and Impact Zones Plan (included in Marine Construction Environmental Management Plan)	No
	State of the Marine Environment Survey Reports	No
	Marine Fauna Survey and Management Program	Yes
	Dredging and Spoil Disposal Monitoring Program	Yes
	Marine Construction Environmental Management Plan	Yes
	Port Environmental Quality Management Program	No
	Residual Impacts and Risk Management Measures Program	Yes

Woodside recognises that the Downstream Development cannot be constructed and operated without some environmental impact and has endeavoured to reduce that impact through the application of best practice principles in the design, during construction and operation of the facilities and commit to diligent adherence to the management plans and programs detailed above.

5. Consultation

Stakeholder engagement and consultation is an integral part of Woodside's environmental assessment and approvals process.

Stakeholder engagement will occur on the Environmental Management Plans and Programs (EMPs) identified in Ministerial Statement 917 and prepared for the Browse LNG Downstream Development and this will be structured in a way that best manages the diverse range of stakeholders and their varying levels of accountability and/or interest in the proposed Browse LNG Downstream Development. This engagement will be premised on three key areas:

- Consult
- Engage
- Inform.

Table 10 lists the Environmental Management Plans and Programs associated with the referred proposal which will be the subject of stakeholder consultation, and the form of engagement that the consultation will take. **Figure 4** provides indicative steps for the consultation process and how it fits into the approval process for the EMPs. The following plans will not form part of the initial consultation process as they are not required for the construction phase of the Browse LNG Downstream Development:

- Air Quality Management
- Port Environmental Quality Management.

Where there is a commitment within the SAR or a requirement stated in a Ministerial Condition for particular plans/programs to be developed in consultation with specific Decision Making Authorities (DMAs) this may occur prior to the wider stakeholder engagement process detailed in this Section.

Consult

An invitation to participate in consultation for the Browse LNG Downstream Development will be extended by Woodside to those DMAs, interested parties and other identified key stakeholders/groups. The consultation process will be based on a briefing on the Derived Proposal with a focus on the EMP/s specific to their area of jurisdiction/interest. An anticipated Stakeholder Mapping Matrix for the EMPs is provided in **Table 10**.

Stakeholders will be provided with a copy of the relevant EMP 7 days prior to each briefing and then allowed 14 days following the briefing to review and provide comment. Woodside will determine if and how the comment is addressed in the EMP, or provide a rationale for not incorporating the feedback. A record of consultation, including how each comment is addressed, will be maintained. Stakeholders who provide comment will receive written notification outlining how the comment has been addressed in the relevant EMP, or the rationale as to why the comment was not incorporated.

A list of stakeholders identified as being consulted in **Table 10** will be made publicly available via the Woodside website.

Engage

This category encompasses stakeholders who will participate in Woodside's ongoing stakeholder engagement process or who are part of the Browse LNG Precinct Governance Structure. The engagement process will take the form of a briefing to large or small groups on the relevant EMPs, as well as a briefing on the Derived Proposal. These briefings are

likely to contain less technical material than that provided to stakeholders who have been consulted.

Stakeholder comments are not invited through this process. It is envisaged that stakeholders in this group that wish to make further comment may do so via stakeholders identified in **Table 10** as being consulted.

Inform

With the high level of interest that has been generated by the proposed Browse LNG Downstream Development, the Derived Proposal and associated EMPs will be made publicly available via the Woodside website upon referral to the EPA and submission for approval to the OEPA, respectively.

Stakeholder comment is not invited through this process. It is envisaged that stakeholders in this group that wish to make further comment may do so via stakeholders identified in **Table 10** as being consulted.

A proposed schedule of the indicative process for stakeholder consultation on the EMPs is shown in

Figure 4, including review by the Precinct Management Committee (PMC) and the Precinct Control Group (PCG). It is envisaged that any consultation that occurs prior to a declaration of a Derived Proposal would constitute pre-consultation, and may not be taken to constitute the consultation requirements specified in this document.

The timing of this process and need to commence consultation as soon as practicable post declaration of the Browse LNG Downstream Development to be a Derived Proposal has been identified as critical to achieving approval of these EMPs prior to anticipated commencement of construction of the Browse LNG Downstream Development.

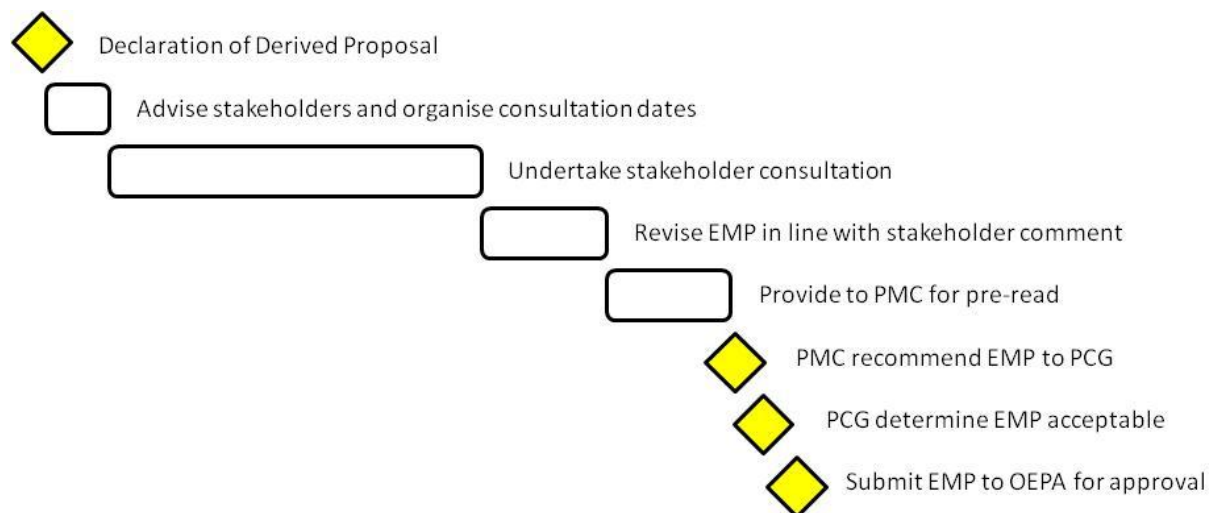


Figure 4 Indicative Process for Stakeholder Consultation

Table 10 Stakeholder Mapping Matrix for Management Plans and Programs

Stakeholder category		Environment Management Plans & Programs													
		Pre-construction									Pre-operations				
		Hydrocarbon Spill Response Plan	Terrestrial Facilities and Disturbance Footprint	Terrestrial Construction Environmental Management	Terrestrial Environmental Monitoring	Fossil Heritage Management	Marine Facilities and Impact Zones	Marine Construction Environmental Management	Dredging and Spoil Disposal Monitoring and Management	Coastal Processes Monitoring and Management	Residual Impacts and Risk Management Measures	Port Environmental Quality Management	Air Quality Management		
Precinct Governance Structure	C	Precinct Control Group													
	C	Goolarabooloo Jabirr Jabirr	x	x	x	x	x	x	x	x	x	x	x	x	x
	C	Department of State Development	x	x	x	x	x	x	x	x	x	x	x	x	x
	C	LandCorp (CEO & Minister)		x	x	x	x								
	C	Broome Port Authority	x	x	x	x	x	x	x	x	x			x	
	C	Precinct Management Committee	Engagement will address overall approval and associated plans												
	C	Technical Working Group	Refer to separate section below												
	I	Social Management Committee	Derived Proposal and EMPs will be made publicly available												
	I	Community Reference Group	Derived Proposal and EMPs will be made publicly available												
	DMAs as per EPA Report 1444	C	Department of Mines and Petroleum (CEO & Minister)		x	x	x	x	x	x	x	x	x		
C		Department of Environment and Conservation (CEO & Minister)	x	x	x	x	x	x	x	x	x	x	x	x	x
C		Shire of Broome	x	x	x	x	x	x	x	x	x	x		x	x
C		Office of Environmental Protection Authority	x	x	x	x	x	x	x	x	x	x	x	x	x
C		Conservation Commission & Marine Parks and Reserves Authority							x	x	x			x	
C		Department of Indigenous Affairs (CEO & Minister)			x	x	x	x	x	x		x			x
C		Department of Agriculture and Food WA			x	x	x	x		x					
C		Fire and Emergency Services	x	x	x	x	x	x							
C		Department of Water (CEO & Minister)			x	x	x	x		x					
C		Heritage Council of WA								x					
Precinct Technical Working Group	C	Department of Fisheries							x	x	x	x			
	C	Department of Health													x
	C	Department of Transport (CEO & Minister)	x	x	x	x	x	x	x						
	I	Broome and broader Kimberley / WA community	Derived Proposal and EMPs will be made publicly available												
	C	Browse Marine Users Working Group							x	x	x				x
	C	Clipper Pearls							x	x	x			x	x
	C	Willie Creek Pearls							x	x	x				x
	C	ENGOS (The Wilderness Society, Conservation Council of WA, Environs Kimberley, WWF and Aust Conservation Foundation)	x	x	x	x	x	x	x	x	x	x	x	x	x
	E	Australia's North West Tourism	Engagement will address overall approval and associated plans												
	E	Broome Chamber of Commerce	Engagement will address overall approval and associated plans												
Woodside stakeholders	E	Waardi Limited		x	x	x	x	x	x	x	x	x		x	x
	C	Goolarabooloo Jabirr Jabirr Environment and Cultural Heritage Team		x	x	x	x	x	x	x	x	x		x	
	C	Goolarabooloo Jabirr Jabirr Native Title Claim - Named applicants			x					x					
	C	Nyamba Buru Yawuru			x					x					
	C	Yawuru Registered Native Title Body Corporate			x	x				x	x			x	x
	E	Kimberley Aboriginal Law and Culture Centre	Engagement will address overall approval and associated plans												
	E	Kimberley Land Council	Engagement will address overall approval and associated plans												
	E	Guimbarr Limited (GJJ Corporate Trustee)	Engagement via Precinct Governance Structure												
	E	Aarnja Limited (Regional Body established under the RBA)	Engagement via Precinct Governance Structure												
	E	Kimberley Language Resource Centre	Engagement will address overall approval and associated plans												
	E	Wunan Foundation	Engagement will address overall approval and associated plans												
	E	Beagle Bay Community	Engagement will address overall approval and associated plans												
	E	One Arm Point Community	Engagement will address overall approval and associated plans												
	E	Djarindjin Community	Engagement will address overall approval and associated plans												
	E	Lombadina Community	Engagement will address overall approval and associated plans												

Definitions

Consult: EMPs made available for comment supported by a technical briefing.

Engage: Briefing on relevant environmental aspects. Comments can be made via stakeholders identified as consultees.

Inform: Access to publicly available information. Comments can be made via stakeholders identified as consultees.

6. Applicable Ministerial Conditions

In line with Sections 40B and 45 of the EP Act, upon declaration that the referred proposal is a derived proposal, subject to the Minister for Environment's identification of relevant conditions under Section 45A(3) of the Act, the implementation of the proposal will be subject to the conditions and procedures listed in the Ministerial Statement.

Under Section 46(4) of the EP Act 1986, the EPA may inquire into whether or not the implementation conditions relating to the proposal, or any of them, should be changed.

Woodside consider that none of the conditions set for the Browse LNG Precinct require modification under Section 46(4) at this time.

7. References

The previously unpublished references provided in this table are publically accessible via <http://www.woodside.com.au/Our-Business/Browse/publications/Pages/Reports.aspx>

Biota Environmental Sciences (Biota) 2011, James Price Point Vegetation Monitoring Program - Phase 1 Data Report. Report produced for Sinclair Knight Merz on behalf of Woodside Energy Ltd, Perth Western Australia.

Department of State Development (DSD) 2010, Browse Liquefied Natural Gas Precinct — Strategic Assessment Report, Part 1 through to Part 6 inclusive, Department of State Development, Perth, Western Australia, December 2010.

Department of State Development (DSD) 2011, Browse Liquefied Natural Gas Precinct — SAR Response to Submissions, Department of State Development, Perth, Western Australia, September 2011.

ENV Australia 2012, A targeted Bilby (*Macrotis lagotis*) Survey of the Quondong Point Area Report, produced for Sinclair Knight Merz on behalf of Woodside Energy Ltd, Perth Western Australia.

Environmental Protection Authority (EPA) 2012, Report 1444, Browse Liquefied Natural Gas Precinct, Minister for State Development — Report and Recommendations of the Environmental Protection Authority, July 2012, Western Australian Environmental Protection Authority, Perth, Western Australia.

Rockwater Proprietary Limited (Rockwater) 2012a, Browse Project Stygofauna Survey Final Report (2011/2012). Report produced for Woodside Energy Ltd.

Rockwater Proprietary Limited (Rockwater) 2012b, James Price Point Monitoring Bore Completion Report. Report produced for Woodside Energy Ltd.

RPS 2012a, Browse Project Humpback Whale Survey Report: Marine Megafauna Study 2011, report produced for Woodside Energy Ltd, 43 pp.

RPS 2012b, Browse Project Dolphin Studies 2009-2011, report, produced for Woodside Energy Ltd.

RPS 2012c, Browse LNG Precinct: Turtles at James Price Point, Review of Lindsay et al (2012), report produced for Woodside Energy Ltd.

SKM 2012, Appraisal of the James Price Point Monsoon Vine Thicket and Drainage Basin Vegetation Water Dependence – Addendum NDVI, report produced for Woodside Energy Ltd.