



Environmental Protection Authority

EPA REFERRAL
FORM
PROPONENT

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

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?	
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
<input type="checkbox"/> Not sure	
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, Stephen Elliott, (full name) declare that I am authorised on behalf of..... (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 <u>sg Elliott</u>	Name (print) <u>STEPHEN ELLIOTT</u>
Position <u>SOLE DIREC/COM SEC</u>	Company <u>SAGH Pty Ltd</u>
Date <u>22/12/2014</u>	

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	SAGH Pty Ltd
Joint Venture parties (if applicable)	
Australian Company Number (if applicable)	166 570 636
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)	PO Box 739 Como Western Australia 6952
Key proponent contact for the proposal: <ul style="list-style-type: none">• name• address• phone• email	Stephen Elliott 4/127 Melville Parade, Como, WA 6152 08 9368 1299 Stephen@urbanresources.com.au
Consultant for the proposal (if applicable): <ul style="list-style-type: none">• name• address• phone• email	PGV Environmental Belinda Heath Unit 1, 61 Guthrie Street, Osborne Park, WA 6017 0429 500 027 belinda@pgv.net.au

1.2 Proposal

Title	Sand Mining Proposal – 253 Yangedi Road Hopeland, WA
Description	Sand Extraction Project 765,000tonnes
Extent (area) of proposed ground disturbance.	18ha
Timeframe in which the activity or development is proposed to occur (including start and finish dates where applicable).	Three years from date of approval.
Details of any staging of the proposal.	Approximately 6ha/year
Is the proposal a strategic proposal?	Yes
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.	No
Please indicate whether, and in what way, the proposal is related to other proposals in the region.	No relation to other proposals in the region
Does the proponent own the land on which the proposal is to be established? If not, what other arrangements have been established to access the land?	The Proponent does not currently own the land but has an option to purchase 253 Yangedi Road.
What is the current land use on the property, and	The total area of 253 Yangedi Road is 72ha

the extent (area in hectares) of the property?	of which the development proposal area is 18ha. The site is currently used for pasture cropping and grazing.
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1.3 Location

Name of the Shire in which the proposal is located.	Shire of Serpentine Jarrahdale
For urban areas: <ul style="list-style-type: none"> street address; lot number; suburb; and nearest road intersection. 	253 Yangedi Road Lot 810 Hopeland Yangedi Road – Karnup Road
For remote localities: <ul style="list-style-type: none"> nearest town; and distance and direction from that town to the proposal site. 	
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. 	Enclosed?: Yes Proposal Area Extraction Footprint

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?	No

1.5 Government Approvals

Is rezoning of any land required before the proposal can be implemented? If yes, please provide details.		No	
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	
Agency/Authority	Approval required	Application lodged Yes / No	Agency/Local Authority contact(s) for proposal
Shire Serpentine Jarrahdale	Yes	Yes	Gillian French
Department of Environment	Yes	No	N/A
Department of Environment Regulation	Unsure	Yes	Sarah McEvoy

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;

The proposal will impact on 18ha of which 12ha is re-growth native vegetation. The condition of the re-growth vegetation is Degraded to Very Good. The vegetation was completely cleared in the mid-1970s and grazed extensively until the mid-1990s. Some native vegetation has returned however stock still access sections and the understorey in these sections is largely weeds.

A Level 2 Vegetation and Flora Survey was undertaken by PGV Environmental, (2014a). The total number of species recorded in the six quadrats sampled ranged from 5-36. A total of 98 plant species was recorded including 80 native and 18 (20%) introduced species. The low species richness overall and in the quadrats reflects the general poor quality of most of the vegetation.

None of the species recorded on the site is a Threatened (Declared Rare) flora or Priority species.

The survey identified 5 separate vegetation types on the site including two woodland vegetation types on the sandy ridge and three wetland vegetation types on low-lying areas as follows (Figure 6):

Dryland vegetation types

EmBi *Eucalyptus marginata/Banksia ilicifolia* Low Open Forest over *Hibbertia hypericoides* Open Low Heath

BmBaEm *Banksia menziesii/B. attenuata/Eucalyptus marginata* Low Open Woodland over *Hibbertia hypericoides/Allocasuarina humilis* Open Low Heath

Wetland vegetation types

MpAf *Melaleuca preissiana* Low Open Woodland over *Astartea fascicularis* Closed Heath

Kg *Kunzea glabrescens* Tall Open Scrub

ErAf *Eucalyptus rudis* Low Open Forest over *Astartea fascicularis* Shrubland

The vegetation in the area proposed to be cleared consisted of:

- pockets of Jarrah woodland among Jarrah/Banksia woodland over low closed native heath dominated by *Hibbertia hypericoides*. *Banksia attenuata* and *B. menziesii* are the dominant Banksia species however the presence of the Holly-leaved Banksia (*B. ilicifolia*) around the margin of the vegetation on the central ridge indicates the presence of groundwater less than 10m deep. The native small tree Woody Pear (*Xylomelum occidentale*) is prevalent on the site.
- Parkland cleared native trees scattered over pasture.

Analysis of the Floristic Community Types was undertaken by comparing the species in each quadrat to the species-Community type table 12 in Gibson *et al.* (1994). The analysis produced a strong correlation for the upland Banksia/Jarrah woodland vegetation types with FCT 28 'Spearwood *Banksia attenuata* woodlands or *Banksia attenuata* – *Eucalyptus* woodland' however this FCT normally occurs on Spearwood

sands. Of the FCTs that occur on Bassendean Sands the vegetation is most similar to FCT 23a 'Central *Banksia attenuata* – *B. menziesii* woodlands'. The Jarrah/*Banksia ilicifolia* vegetation type also had strong similarities to FCT 21a 'Central *Banksia attenuata* – *Eucalyptus marginata* woodlands'.

None of the FCTs is listed as a Threatened or Priority Ecological Community.

The vegetation on the site is adjacent to, but not within, one of the Regional Linkages identified in the Shire of Serpentine-Jarrahdale Local Biodiversity Strategy.

2.2 fauna;

As the site has been cleared of native vegetation and grazed for a number of years the fauna habitat has greatly reduced values. The fauna assemblage is expected to be highly modified due to the presence of introduced feral predators and grazers.

A Black Cockatoo Assessment identified approximately 12ha of Black Cockatoo foraging habitat and potential roosting and nesting habitat, however there was no evidence of the latter when surveyed in Spring 2014 (PGV Environmental, 2014b).

2.3 rivers, creeks, wetlands and estuaries;

The site contains five wetlands (1 Conservation, 1 Resource Enhancement and 3 Multiple Use) as shown in the *Geomorphic Wetlands of the Swan Coastal Plain Database*. The Resource Enhancement wetland is protected under the *Environmental Protection (Swan Coastal Plain Lakes) Policy (EPP) 1992*.

The Conservation and Resource Enhancement Wetlands and associated 50m management buffers are not within the proposal footprint and are unlikely to be impacted by the development (PGV Environmental, 2014b).

2.4 significant areas and/ or land features;

N/A

2.5 coastal zone areas;

N/A

2.6 marine areas and biota;

N/A

2.7 water supply and drainage catchments;

The site is located in the Serpentine River Catchment and contains a number of small largely artificial drainage lines that feed into the Punrack Drain which downstream has its confluence with the Serpentine River.

The surface drains are located to the east and south of the proposal area and will not be impacted by the proposal.

2.8 pollution;

Dust and Noise Management strategies will implemented under the extractive industry license. Development will comply with the *Environmental Protection (Noise) Regulations 1997*.

2.9 greenhouse gas emissions;

N/A

2.10 contamination; and

The extractive industry license conditions will manage any potential impacts from any accidental spills. The proposal area will be surrounded by management berms.

2.11 social surroundings.

The proposal area is located in a remote rural zoned area adjacent to the Serpentine Airfield.

Intermittent views of the extraction area will be visible from Yangedi Road as the remnant vegetation is partially cleared. SAGH Pty Ltd will retain the existing vegetation in the 40m setback along Yangedi Road and supplement this with spread of topsoil to establish native vegetation where it is currently absent. Supplementary planting will be carried out to improve the screening of the site from the road.

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?

[A proposal to clear native vegetation may require a clearing permit under Part V of the EP Act (Environmental Protection (Clearing of Native Vegetation) Regulations 2004)]. Please contact the Department of Environment and Conservation (DEC) for more information.

(please tick) ☒ Yes

If yes, complete the rest of this section.

☐ No

If no, go to the next section

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

The proposal area is 18ha of which approximately 12ha contains native vegetation that will be cleared.

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

☒ Yes

☐ No

If yes, on what date and to which office was the application submitted of the DEC?

Submitted in parallel with this submission on the 23 December 2014 to the Swan Office.

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

☒ Yes

☐ No

If yes, please attach a copy of any related survey reports and provide the date and name of persons / companies involved in the survey(s).

PGV Environmental

Dr Paul van der Moezel

September 2014

If no, please do not arrange to have any biological surveys conducted prior to consulting with the DEC.

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

☐ No

If you are proposing to clear native vegetation for any part of your proposal, a search of DEC records of known occurrences of rare or priority flora and threatened ecological communities will be required. Please contact DEC for more information.

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

☐ Yes

☒ No

If yes, please indicate which species or communities are involved and provide copies of any correspondence with DEC regarding these matters.

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)

☒ Yes

☐ No

If yes, please indicate which Bush Forever Site is affected (site number and name of site where appropriate).

Bush Forever Site No. 378 is located approximately 600m south west of the proposal area. Yangedi Road separates the proposal area from the Bush Forever Site.

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

The vegetation was cleared in the mid-1970s and heavily grazed until the mid-1990s. The re-growth vegetation in the proposal area is in a Degraded to Very Good condition (PGV Environmental, 2014a).

2.2 Fauna

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

(please tick)

☒ Yes

If yes, complete the rest of this section.

☐ No

If no, go to the next section.

2.2.2 Describe the nature and extent of the expected impact.

Clearing of approximately 12ha of the vegetation on the site will reduce foraging habitat for Black-Cockatoos, however this clearing is unlikely to have a significant impact on any of the Black Cockatoos when assessed in terms of the Commonwealth Government Significant Impact Guidelines 1.1 (DoE, 2013a) and the criteria listed in the *EPBC Referral Guidelines for Black Cockatoos* (SEWPaC, 2012).

Foraging habitat is available in the vicinity of the site such as Bush Forever Site No's 378, 352, 343 and 325. These sites are all within 0.5-5km of the site and contain suitable foraging habitat.

There is no breeding or roosting habitat listed as occurring on the site and the site (DoP, 2011). There are six roosting sites within a 5km radius of the site and one nesting site located in Karnup to the south west of the site (DoP, 2011).

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

☒ Yes

☐ No

If yes, please attach a copy of any related survey reports and provide the date and name of persons / companies involved in the survey(s).

[Black Cockatoo Assessment](#)

[PGV Environmental 2014c](#)

[Level 1 Fauna Assessment](#)

[PGV Environmental 2014b](#)

If no, please do not arrange to have any biological surveys conducted prior to consulting with the DEC.

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

☒ Yes

☐ No

(please tick)

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

☒ Yes

☐ No

If yes, please indicate which species or communities are involved and provide copies of any correspondence with DEC regarding these matters.

Black Cockatoos visit the site to forage

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)

☒ Yes

If yes, complete the rest of this section.

☐ 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.

A small conservation category wetland (UFI 14706) is located to the north of the proposal area. The vegetation in the wetland was completely cleared in the mid- 1970s but has been allowed to re-establish over time. The vegetation as recorded by PGV Environmental (2014a) consists of Paperbark (*Melaleuca preissiana*) woodlands, Spearwood (*Kunzea glabrescens*) Scrub and a Flooded Gum (*Eucalyptus rudis*) woodland. The condition of the wetland vegetation was assessed as being Very Good.

Clearing of native vegetation to the south of the Conservation Wetland will occur outside of the 50m management buffer to the wetland.

Clearing of native vegetation outside of the 50m management buffer to the Resource Enhancement Wetland will occur. The buffer to this wetland is currently cleared and is largely pasture.

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?

☐ Yes

☒ No

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

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

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?

☐ Yes

☒ 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

☒ No

If yes, please provide details.

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?

☐ Yes

☒ 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?

(please tick)

☐ Yes

If yes, complete the rest of this section.

☒ No

If no, go to the next section.

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

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

☐ Yes

☐ No

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

2.5.4 Is the development likely to impact on mangroves?

☐ Yes

☐ No

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

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

☒ No

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

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)?

☐ Yes

☒ 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

☒ No

If yes, please describe the extent of the expected impact, and provide any written advice from relevant agencies (e.g. Fisheries WA).

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 ☒ No **If yes**, please describe what category of area.
- 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)
☐ Yes ☒ 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.)
☐ Yes ☒ 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 ☐ No (please tick)
- 2.7.5 Will the proposal require drainage of the land?
☐ Yes ☒ No **If yes**, how is the site to be drained and will the drainage be connected to an existing Local Authority or Water Corporation drainage system? Please provide details.
- 2.7.6 Is there a water requirement for the construction and/ or operation of this proposal?
(please tick) ☒ Yes **If yes**, complete the rest of this section.
 ☐ No **If no**, go to the next section.
- 2.7.7 What is the water requirement for the construction and operation of this proposal, in kilolitres per year? 40 000KI per annum
- 2.7.8 What is the proposed source of water for the proposal? (e.g. dam, bore, surface water etc.) Bore

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?

(please tick)

☒ Yes

If yes, complete the rest of this section.

☐ No

If no, go to the next section.

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

(Refer to the EPA's *General Guide for Referral of Proposals to the EPA under section 38(1) of the EP Act 1986* for more information)

☐ Yes

☒ No

If yes, please describe what category of prescribed premise.

2.8.3 Will the proposal result in gaseous emissions to air?

☐ Yes

☒ No

If yes, please briefly describe.

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

☒ No

If yes, please briefly describe.

2.8.5 Will the proposal result in liquid effluent discharge?

☐ Yes

☒ No

If yes, please briefly describe the nature, concentrations and receiving environment.

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

☒ No

If yes, please describe.

2.8.7 Will the proposal produce or result in solid wastes?

☐ Yes

☒ No

If yes, please briefly describe the nature, concentrations and disposal location/ method.

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

☐ Yes

☒ No

If yes, please briefly describe.

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

☒ Yes

☐ No

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

Please attach the analysis.

No. An Acoustic Assessment has not been undertaken at the time of this submission.

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

☐ No

If yes, please describe and provide the distance to residences and other “sensitive premises”.

The nearest rural residence is approximately 500m from the proposal area boundary.

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?

☐ Yes

☒ No

☐ Not Applicable

If yes, please describe and provide the distance to the potential pollution source

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

☒ No

If yes, please provide an estimate of the annual gross emissions in absolute and in carbon dioxide equivalent figures.

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

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?

☐ Yes

☒ No

☐ Unsure

If yes, please describe.

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

☐ Yes

☒ No

If yes, please describe.

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)

☐ Yes

☒ No

If yes, please describe.

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

☒ No

☐ Unsure

If yes, please describe.

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

☒ No

If yes, please describe.

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

☒ Yes

☐ No

If yes, please describe.

The proposal will result in approximately 100 truck movements per day during periods of sand extraction.

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. | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| 2. The principle of intergenerational equity. | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| 3. The principle of the conservation of biological diversity and ecological integrity. | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| 4. Principles relating to improved valuation, pricing and incentive mechanisms. | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| 5. The principle of waste minimisation. | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |

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 ☐ No

3.2 Consultation

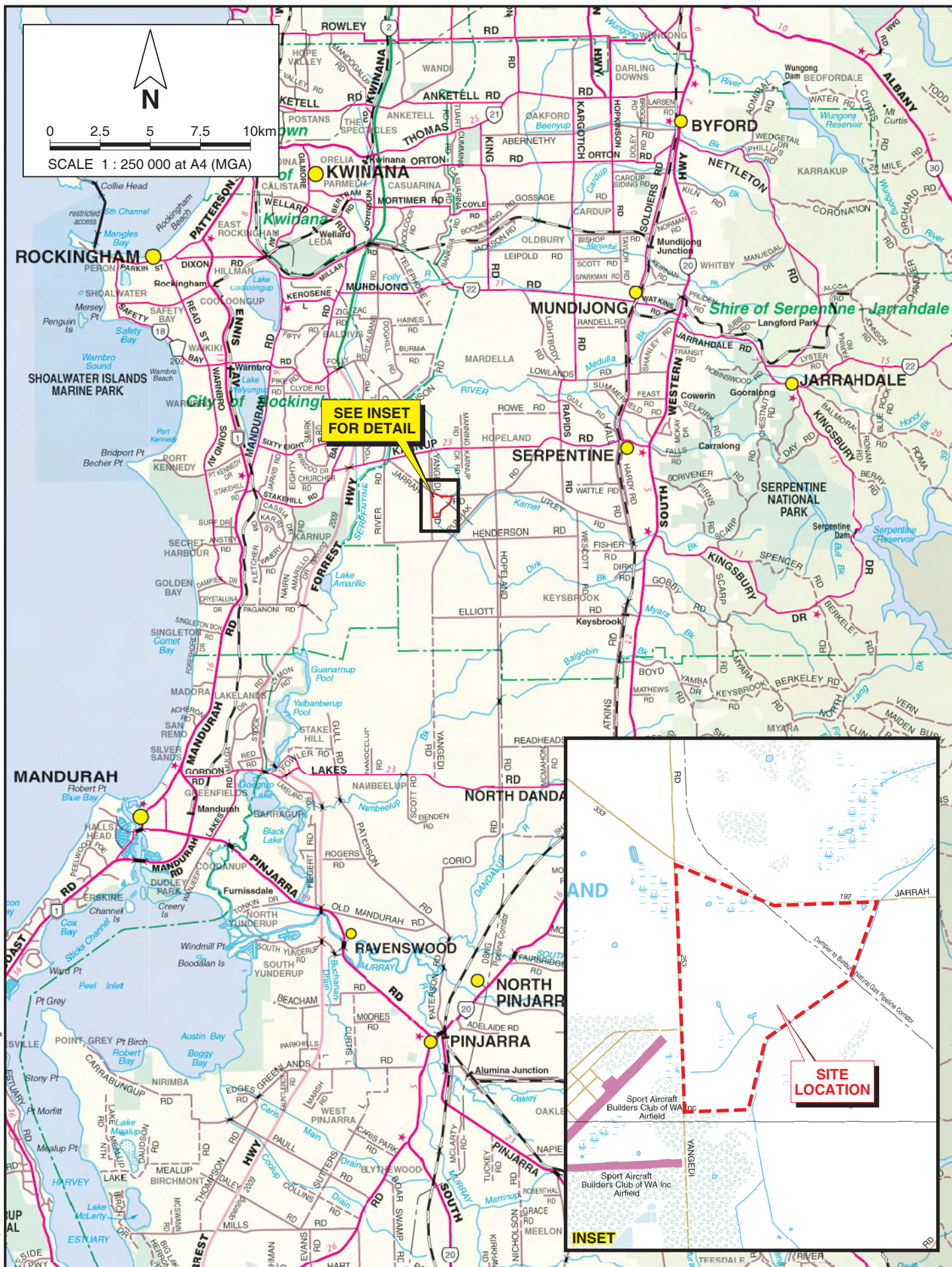
3.2.1 Has public consultation taken place (such as with other government agencies, community groups or neighbours), or is it intended that consultation shall take place?

☐ Yes ☒ No

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

Consultation with relevant agencies will occur as required.

Attachment 1
Location Maps



PINPOINT CARTOGRAPHICS (08) 9562 7136 2014-158-101.dgn

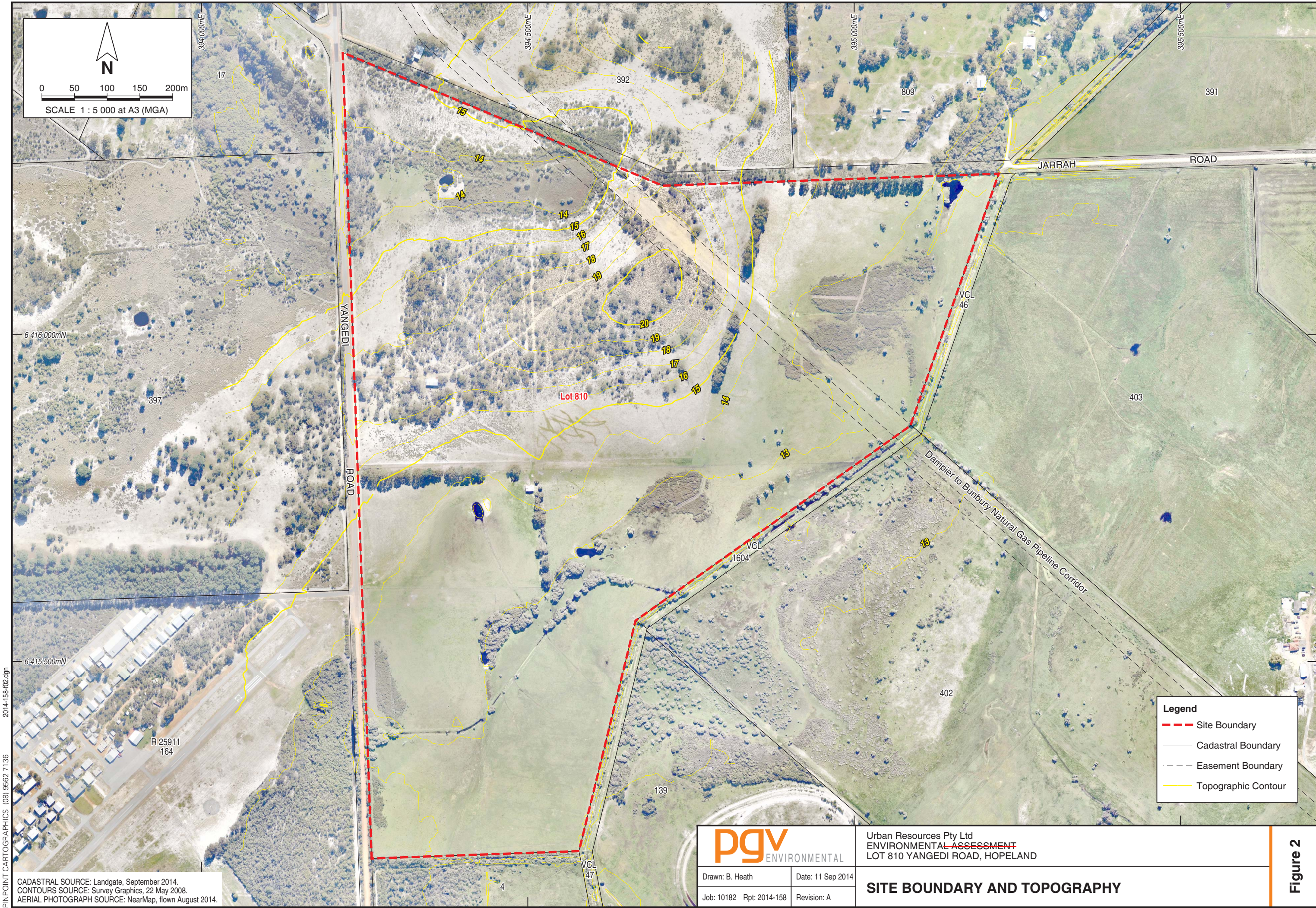
pgv ENVIRONMENTAL

Urban Resources Pty Ltd
ENVIRONMENTAL ASSESSMENT
LOT 810 YANGEDI ROAD, HOPELAND

Drawn: B. Heath	Date: 11 Sep 2014
Job: 10182 Rpt: 2014-158	Revision: A

SITE LOCATION

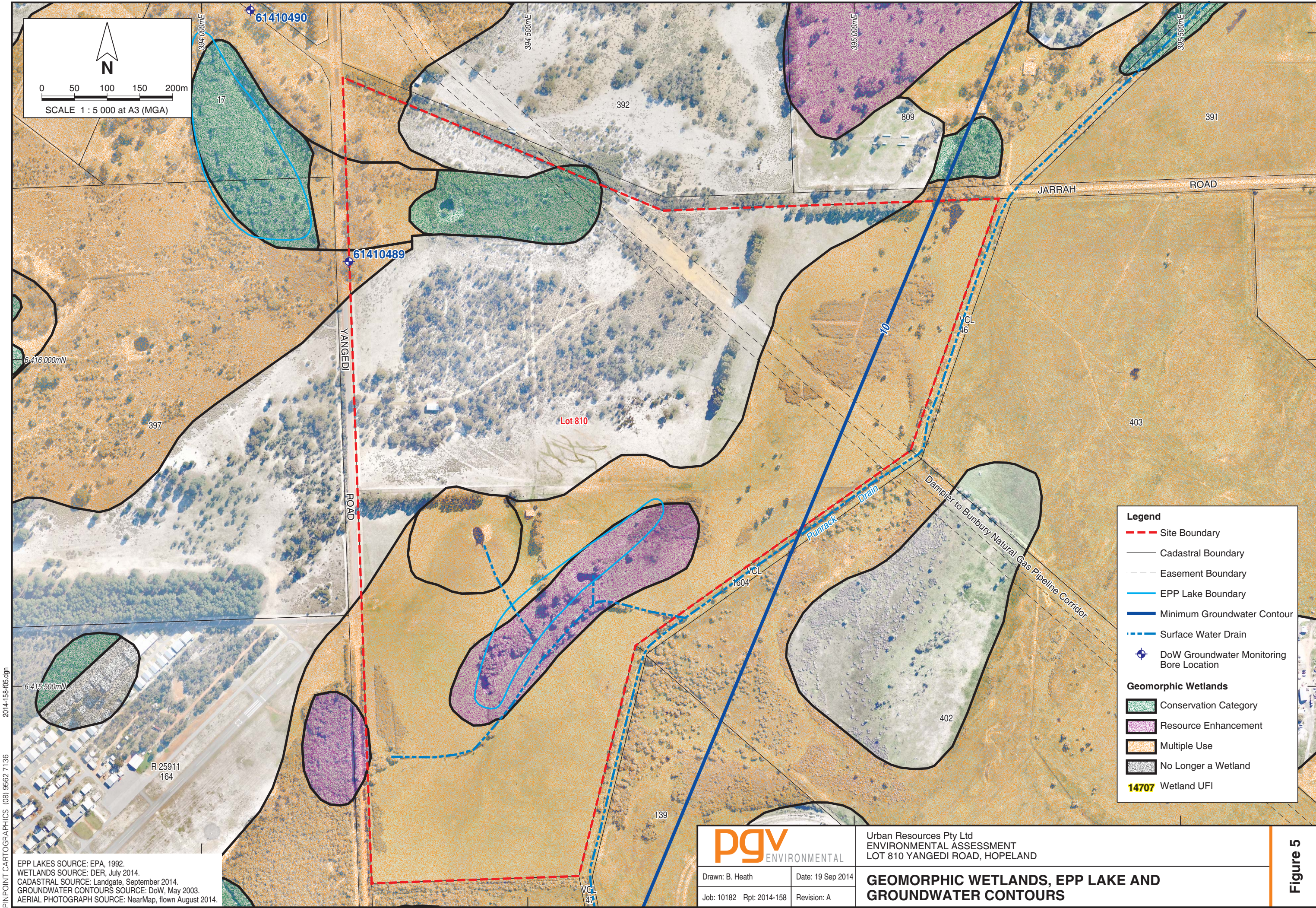
Figure 1



CADASTRAL SOURCE: Landgate, September 2014.
CONTOURS SOURCE: Survey Graphics, 22 May 2008.
AERIAL PHOTOGRAPH SOURCE: NearMap, flown August 2014.

PINPOINT CARTOGRAPHICS (08) 9562 7136
2014-158-102.dgn

Figure 2



EPP LAKES SOURCE: EPA, 1992.
WETLANDS SOURCE: DER, July 2014.
CADASTRAL SOURCE: Landgate, September 2014.
GROUNDWATER CONTOURS SOURCE: DoW, May 2003.
AERIAL PHOTOGRAPH SOURCE: NearMap, flown August 2014.

		Urban Resources Pty Ltd ENVIRONMENTAL ASSESSMENT LOT 810 YANGEDI ROAD, HOPELAND	
Drawn: B. Heath	Date: 19 Sep 2014	GEOMORPHIC WETLANDS, EPP LAKE AND GROUNDWATER CONTOURS	
Job: 10182 Rpt: 2014-158	Revision: A		

Figure 5

PINPOINT CARTOGRAPHICS (08) 9562 7136
2014-158-105.dgn

True Area: 180297.44 m²
Planar Area: 179861.67 m²

192

253

LOT 402

620

201

BATTERS 1:3

STAGE 3
4.56ha

DESIGN
14.1m AHD

DESIGN
14.1m AHD

STAGE 2
6.27ha

WETLAND - RESOURCE ENHANCEMENT

253

399

1. THE VOLUMES ON THIS PLAN HAVE BEEN CALCULATED USING INFORMATION SUPPLIED BY THE CLIENT.
THE ACCURACY OF THESE VOLUMES DEPENDS ON THE QUALITY OF THE DATA SUPPLIED.
2. THE VALUES ON THIS PLAN HAVE BEEN CALCULATED USING GRIDDED DATA INTERPOLATED FROM THE ORIGINAL SURVEYS
3. FILL VALUES SHOWN 3 IN METRES
CUT VALUES SHOWN -3 IN METRES

HORIZONTAL GDA 94



HOPELANDS - 253 YANGEDI ROAD
PROPOSED EXCAVATION STAGING PLAN

DRAWING NUMBER UR 143.18 - 02 - 01

REV	A
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A	18/11/14	INITIAL ISSUE	GKB	
REV	DATE	AMENDMENT	DRN	CKD
ORIG SIZE A1.	ARCHIVE UR143_18-02-01A			

Volume Report

Original Surface: YAN-NS
Design Surface: YAN-Des

Cut Factor: 1.0000
Fill Factor: 1.0000

VOLUME NS TO DESIGN

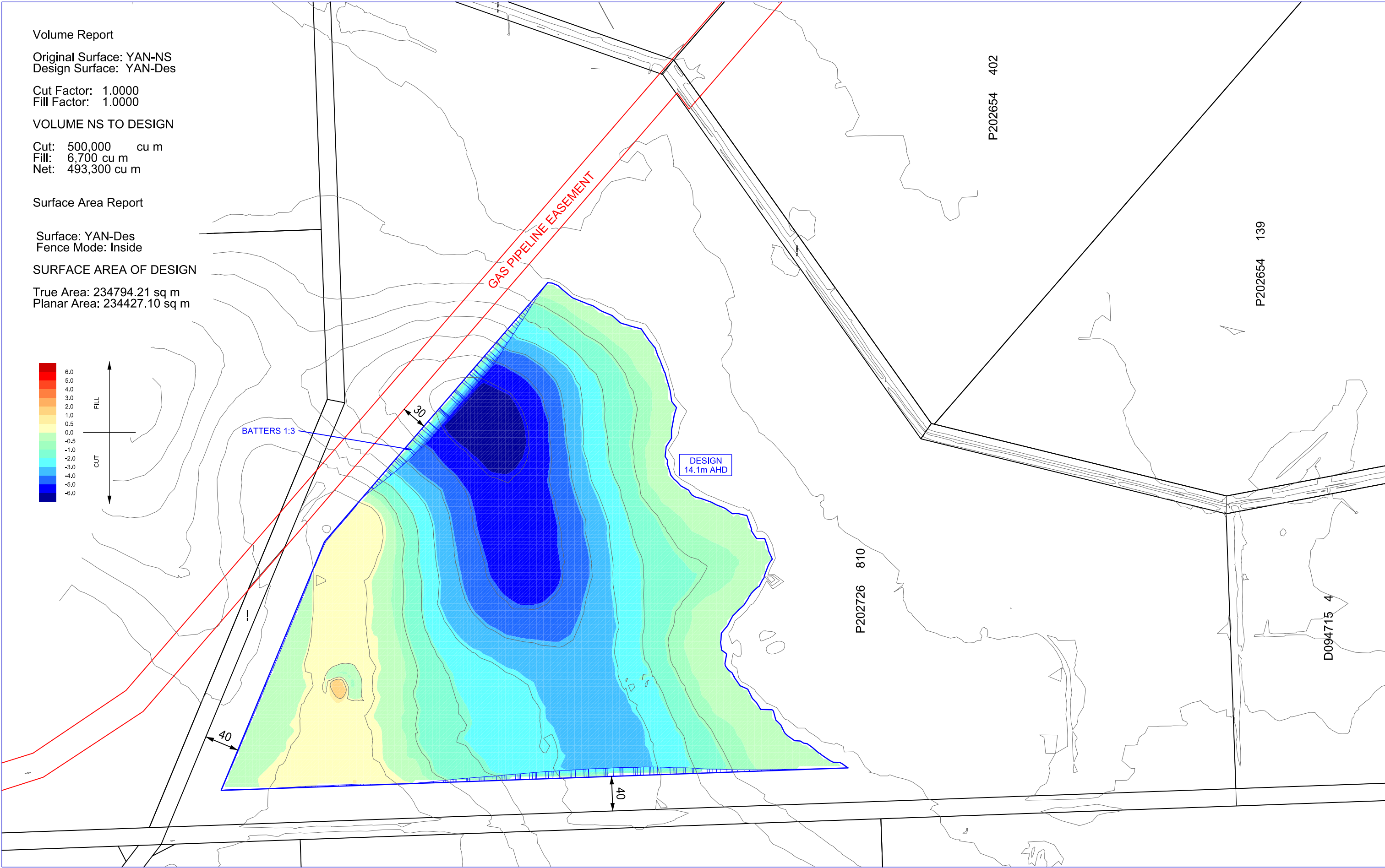
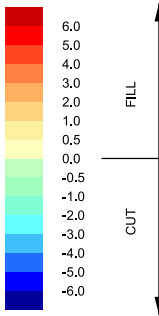
Cut: 500,000 cu m
Fill: 6,700 cu m
Net: 493,300 cu m

Surface Area Report

Surface: YAN-Des
Fence Mode: Inside

SURFACE AREA OF DESIGN

True Area: 234794.21 sq m
Planar Area: 234427.10 sq m



REV	DATE	AMENDMENT	DRN	CKD
A	15/08/14	INITIAL ISSUE	CJL	
ORIG SIZE	ARCHIVE			
A1	UR143_18-01-02A			

- NOTES
1. THE VOLUMES ON THIS PLAN HAVE BEEN CALCULATED USING INFORMATION SUPPLIED BY THE CLIENT. THE ACCURACY OF THESE VOLUMES DEPENDS ON THE QUALITY OF THE DATA SUPPLIED.
 2. THE VALUES ON THIS PLAN HAVE BEEN CALCULATED USING GRIDDED DATA INTERPOLATED FROM THE ORIGINAL SURVEYS
 3. FILL VALUES SHOWN 3 IN METRES
CUT VALUES SHOWN -3 IN METRES



DATUM
VERTICAL AHD
HORIZONTAL GDA 94



URBAN RESOURCES
HOPELANDS - 253 YANGEDI ROAD
BULK EARTHWORKS
NATURAL SURFACE TO DESIGN
COLOUR CODED DIFFERENCES

DRAWING NUMBER UR 143.18 - 01 - 02

REV A