

Our Ref: L12088

Email: [ben.hollyock@rpsgroup.com.au](mailto:ben.hollyock@rpsgroup.com.au)

Date: 11 May 2012

Murray Hogarth  
Office of the Environmental Protection Authority  
Locked Bag 33, Cloisters Square  
PERTH WA 6850

Dear Murray

**S38 Referral – Potential Impact on EPP Lake from Cockburn Central Stage 2 Drainage**

Further to our briefing to Hans Jacob on 6 March 2012, please accept this formal referral for potential impacts to a lake protected under the *Environmental Protection (Swan Coastal Plain Lakes) Policy 1992* on Lot 9504 Beeliar Drive as part of the management of drainage and improvement of wetland functions for Cockburn Central Stage 2. A copy of the *Drainage and Wetland Management Plan Stage 2 Cockburn Central* (RPS, 2012) is attached that details the Cockburn Central project and existing approvals, the values of the wetland on Lot 9504 (including the EPP lake), drainage design, management of impacts from drainage and the wetland rehabilitation works that will be undertaken.

A summary of the key aspects of *Drainage and Wetland Management Plan Stage 2 Cockburn Central* (RPS, 2012) is provided below to assist in considering the proposed activities in and adjacent to an EPP lake:

- Cockburn Central Stages 1 and 2 have subdivision approval and development of Stage 2 requires decommissioning of the temporary drainage basin and completion of the permanent drainage solution;
- A stormwater treatment system has been designed in the area originally designated for drainage on the west side of Midgegooroo Avenue;
- Department of Environment and Conservation's geomorphic wetland database shows a Resource Enhancement wetland that occurs on the west and east sides of Midgegooroo Avenue (the portion across Midgegooroo Av and eastern portion have been filled and developed for the construction of the road and urban development respectively);
- An EPP lake also is mapped across a portion of the RE wetland;
- The drainage design will impact on the mapped EPP lake area by some excavation and filling (bund walls) that requires EPA approval under the *Environmental Protection (Swan Coastal Plain Lakes) Policy 1992*.
- The drainage design captures stormwater run-off from the Cockburn Central Town Centre mixed use development's roads and features a GPT, large detention / infiltration



basin that will be planted out with native wetland species, an overflow weir and treatment train that discharges to the wetland.

- Detention / infiltration basin will cater for up to 1 in 1 year rainfall event (including catering for anticipated drainage from the future Cockburn Central West project site). The overall drainage and treatment system has been designed to manage 1 in 100 year rainfall events.
- The existing wetland is not managed and is in very poor due to historical agricultural use and heavy weed infestation. No flora or fauna species of conservation significance were identified in or near the wetland.
- The existing basin will be treated for weeds and rehabilitation works of the riparian zone will commence immediately following the Stage 2 civil works have been completed. The project offers an opportunity for a net positive outcome in the basin's environmental function and potential creation of bird and amphibian habitat.
- As a result of the Cockburn Central West development (currently undergoing Structure Plan design), the wetland area will be isolated within an urban environment with no hydrological or ecological links. Beeliar Regional Park is approximately 1.4 km to the west.

LandCorp requests that the EPA assess the proposal to modify an EPP lake in accordance with *Environmental Protection (Swan Coastal Plain Lakes) Policy 1992*. Details of the proposal, impacts and management measures are provided in the attached *Drainage and Wetland Management Plan Stage 2 Cockburn Central* (RPS, 2012).

The DEC (Jacqui Maguire) and Department of Water (Brett Dunn) have been briefed on the project and their comments have been requested on the attached Management Plan.

If you require any further information please do not hesitate to call Ben McCarthy at LandCorp or the undersigned.

Yours sincerely

**RPS**



**BEN HOLLYOCK**

Technical Director

Attached: *Drainage and Wetland Management Plan Stage 2 Cockburn Central*







## Environmental Protection Authority

### 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:

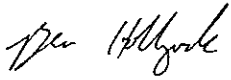
	Yes	No
Completed all the questions in Part A (essential).	X	
Completed all applicable questions in Part B.	X	
Included Attachment 1 – location maps.	X	
Included Attachment 2 – additional document(s) the proponent wishes to provide (if applicable).	X	
Included Attachment 3 – confidential information (if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

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, ...Benjamin James Hollyock., (*full name*) declare that I am authorised on behalf of.....Ben McCarthy of LandCorp..... (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 (print) - Ben Hollyock
Position - Technical Director	Company – RPS Environment and Planning
Date – 11 May 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	LandCorp
Joint Venture parties (if applicable)	
Australian Company Number (if applicable)	
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)	Level 6 Wesfarmers House 40 The Esplanade PERTH WA 6000
Key proponent contact for the proposal: <ul style="list-style-type: none"><li>• name</li><li>• address</li><li>• phone</li><li>• email</li></ul>	<ul style="list-style-type: none"><li>• Ben McCarthy</li><li>• As above</li><li>• 9482 7475</li><li>• Ben.McCarthy@landcorp.com.au</li></ul>
Consultant for the proposal (if applicable): <ul style="list-style-type: none"><li>• name</li><li>• address</li><li>• phone</li><li>• email</li></ul>	<ul style="list-style-type: none"><li>• Ben Hollyock</li><li>• 38 Station Street, Subiaco WA 6008</li><li>• 9288 0865</li><li>• Ben.hollyock@rpsgroup.com.au</li></ul>

#### 1.2 Proposal

Title	Drainage and Wetland Management - Stage 2 Cockburn Central.
Description	Drainage works for Cockburn Central development impacting on EPP lake.
Extent (area) of proposed ground disturbance.	1.5 ha (approximately).
Timeframe in which the activity or development is proposed to occur (including start and finish dates where applicable).	Works to commence July 2012. Drainage function is ongoing.
Details of any staging of the proposal.	Single stage.
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"><li>• title of the strategic assessment; and</li><li>• Ministerial Statement number.</li></ul>	No.
Please indicate whether, and in what way, the proposal is related to other proposals in the region.	N/A.
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?	WAPC owned. Project is supported by WAPC.

What is the current land use on the property, and the extent (area in hectares) of the property?	Wetland area historically used for agriculture, currently unmanaged. Lot is 21.6 ha.
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### 1.3 Location

Name of the Shire in which the proposal is located.	City of Cockburn
For urban areas: <ul style="list-style-type: none"> <li>• street address;</li> <li>• lot number;</li> <li>• suburb; and</li> <li>• nearest road intersection.</li> </ul>	<ul style="list-style-type: none"> <li>• 9504 Beeliar Drive</li> <li>• Lot 9504</li> <li>• Cockburn Central</li> <li>• Midgegooroo Ave and Beeliar Drive</li> </ul>
For remote localities: <ul style="list-style-type: none"> <li>• nearest town; and</li> <li>• distance and direction from that town to the proposal site.</li> </ul>	
Electronic copy of spatial data - GIS or CAD, geo-referenced and conforming to the following parameters: <ul style="list-style-type: none"> <li>• GIS: polygons representing all activities and named;</li> <li>• CAD: simple closed polygons representing all activities and named;</li> <li>• datum: GDA94;</li> <li>• projection: Geographic (latitude/longitude) or Map Grid of Australia (MGA);</li> <li>• format: Arcview shapefile, Arcinfo coverages, Microstation or AutoCAD.</li> </ul>	Enclosed?: No

### 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.	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/LG contact(s) for proposal
City of Cockburn	Development Application	Yes	



## 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?

[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)?

0.33 ha.

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?

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).

**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).

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

Degraded

## 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.

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).

**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.

### 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.

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?

2.7.8 What is the proposed source of water for the proposal? (e.g. dam, bore, surface water etc.)

## 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.

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".

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.**

### 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.

The Department of Water and Department of Environment and Conservation have both been briefed on the proposal. Both have been sent copies of the *Drainage and Wetland Management Plan Stage 2 Cockburn Central* (RPS, 2012) seeking formal comment. This comment has not yet been received.