Agreement No: LD 2009 - 014

ENVIRONMENTAL PROTECTION AGREEMENT

Between

John Holland Pty Ltd
ABN No: 11 004 282 268

at

Level 6, 235 Pyrmont Street
PYRMONT NSW 2009

And

the ENVIRONMENT PROTECTION AUTHORITY

PURPOSE OF THE ENVIRONMENTAL PROTECTION AGREEMENT

This Environmental Protection Agreement ("Agreement") is an agreement between **John Holland Pty Ltd** and the Environment Protection Authority (EPA) concerning:

major land development or construction activities, being-

(i) land development, or the construction of a commercial building, on a site of 0.3 hectares or more and including the construction of associated public infrastructure; or
(ii) the construction of public infrastructure on a site of 0.3 hectares or more.

The aim of this agreement is to ensure that the land development sites achieve a consistently high level of environmental management.

TIME PERIOD COVERED

This Agreement is current for a period of three (3) years from the date of signing or until one month after written notice is provided by one party to the other party that it wishes to withdraw from the Agreement.

Any significant changes in the nature, location or ownership of the company during that period must be notified to the **EPA**.

RELATIONSHIP OF THE AGREEMENT TO LEGISLATIVE REQUIREMENTS

The *Environment Protection Act 1997* (the Act) provides for the protection of the environment and includes a provision in section 38 for the **EPA** to enter into an Environment Protection Agreement.

TERMINATION OF AGREEMENT

The EPA will terminate the agreement for consistent non-compliance with the conditions of the agreement or the legislation one month after written notice is provided by the EPA to the other party.

The EPA will terminate the agreement immediately upon the other party being convicted of an offence causing serious or material environmental harm under the Act.

ENVIRONMENTAL MANAGEMENT

Preamble

Land development and construction often involves two stages: the design stage and the construction stage. Because these stages are closely linked and may be carried out by the same or different organisations, this agreement includes the elements of both stages.

In this agreement the following definitions will apply:

- **Developer** – the organisation that is primarily responsible for a land development or construction project; and
- **Construction Manager** – the organisation that is primarily responsible for the construction of a land development or construction project.

John Holland Pty Ltd agrees to be responsible for the relevant sections of Schedules 1 to 4 depending whether **John Holland Pty Ltd** undertakes the **Developer** or **Construction Manager** functions. **John Holland Pty Ltd** agrees to implement an awareness program for their staff members to ensure that the relevant practices referred to in Schedules 1 to 4 is implemented on their sites.

SCHEDULE 1 - WATER

1.1 EROSION AND SEDIMENT CONTROL PLANS 0.3 TO 1 HECTARE

1.1.1 Design

For sites of 0.3 to 1 hectares, the **Developer** agrees to arrange the provision of an erosion and sediment control plan to be approved by the **EPA** prior to the commencement of construction. This may be undertaken by the **Construction Manager** but is the responsibility of the **Developer**.

Content of plans:

- proposed activities;
- existing topography including contour lines and catchment boundaries, catchment areas, adjacent areas including creeks and buildings;
- location of permanent stormwater inlets, pipes, outlets, and other permanent drainage facilities;
- vegetative buffer areas to be protected by fencing;

- details of proposed erosion and sediment control measures appropriate for the site in accordance with the **"Environment Protection Guidelines for Construction and Land Development in the ACT"** (the **Guidelines**);
- proposed timetable for construction activity and installation of erosion and sediment controls; and surface stabilisation measures; and
- the developer agrees to arrange the provision of a water plan to be provided to the EPA prior to the commencement of construction; and content of water plans will include:
    - Water source (where water is to be sourced from a waterway, approval is required from the Water Resource Unit, contact 13 22 81);
    - Length of time water source is required;
    - Recycling of water;
    - Usage of storage dams on site;
    - Other methods used to minimise water use (i.e. an alternative for dust suppression may be to minimise the disturbed area during construction through staging of works).

1.1.2 Construction

The **Construction Manager** agrees to minimise suspended solids in site run-off to protect the quality of water entering the stormwater system, stream rivers and lakes by:

- minimising the area of disturbance to retain the maximum area of natural vegetation cover;
- installing erosion control devices including silt fences, stormwater inlet sediment traps and stormwater retention structures in accordance with the erosion and sediment control plan, prior to commencement of works;
- diverting clean water away from areas of disturbance as necessary;
- restricting traffic to a stabilised entry/exit point;
- chemically dosing turbid water to settle out suspended solids as necessary to achieve <60 mg/L suspended solids prior to discharging wastewater from its sites;
- maintaining adjacent gutters and road surfaces free of soil and building materials;
- inspecting and managing any sediment and erosion controls on a weekly basis.

1.2 EROSION AND SEDIMENT CONTROL PLANS > 1 HECTARE

1.2.1 Design of Land Development

For sites over 1 hectare the **Developer** agrees to arrange for the provision of an erosion and sediment control plan to the **EPA** at the design stage for approval prior to tenders being called in order to allow contractors to incorporate the cost of sediment and erosion control measures.

Content of plans:

- proposed activities;
- existing topography including contour lines and catchment boundaries, catchment areas, adjacent areas including creeks and buildings;

- existing and final drainage patterns;
- proposed shaping;
- staging of the development;
- limits of clearing and grading, including vegetative buffer areas to be fenced off;
- details and specifications of proposed erosion and sediment control measures including retention ponds, spillways outlet pipes, diversion channels, and sediment traps;
- location of permanent stormwater inlets, pipes, outlets, and other permanent drainage facilities;
- proposed timetable for construction activities and installation of erosion and sediment controls;
- surface stabilisation measures including seeding and mulching rates; and
- the developer agrees to arrange the provision of a water plan to be provided to the EPA prior to the commencement of construction; and content of water plans will include:
    - Water source (where water is to be sourced from a waterway, approval is required from the Water Resource Unit, contact 13 22 81);
    - Length of time water source is required;
    - Recycling of water;
    - Usage of storage dams on site;
    - Other methods used to minimise water use (i.e. an alternative for dust suppression may be to minimise the disturbed area during construction through staging of works).

Considerations at the design stage

Plan the development to fit the site by:

- assessing the physical characteristics of the site to determine how it can be developed with the smallest risk of environmental damage;
- minimising land reshaping by using the existing topography wherever possible.

Determine limits of land clearing and shaping by:

- deciding exactly which areas must be disturbed to accommodate the proposed construction, and which areas can remain untouched;
- paying special attention to critical areas (for example, steep slopes, highly erodible soils, surface water borders, wetlands and the like); and
- considering staged clearing and construction as an alternative to mass clearing and construction.

Divide the site into natural drainage areas by:

- determining how run-off will drain from the site;
- considering how erosion and sedimentation can be controlled in each small drainage area or sub-catchment before looking at the entire site, sediment retention ponds or sediment traps;
- remembering that it is more advantageous to control erosion at the source and prevent problems than to design perimeter controls to trap sediment; and
- identifying stable and preferred water disposal areas.

Select erosion and sediment control practices by:

- determining sediment control measures appropriate for the site in accordance with the **Guidelines;**
- including key dimensions and specifications in construction details;
- liasing as necessary with an authorised officer and obtain agreement to the adequacy of the proposed measures; and
- constructing and maintaining structural measures in accordance with standards and specifications set out the **Guidelines** .

Stormwater system

The stormwater system can control run-off during earthwork construction in the following ways:

- stormwater which can arise from higher up the catchment, above the area being worked, can be effectively controlled;
- diversions, catch drains and drains can be terminated at silt traps located near access holes which can in turn be used as entry points to the stormwater system;
- both underground stormwater and residual surface run-off can be discharged from the site via a sediment retention pond where practical; if new stormwater trunk mains are needed to carry sediment-laden flows they should not be connected directly to the existing downstream drainage network. In the interim, it should be made clear in the erosion and sediment control plan that they should be connected to an off-stream sediment retention pond.

1.2.2 Construction stage

The **Construction Manager** agrees to:

(a) seek approval by the **EPA** for any changes to the approved erosion and sediment control plan prior to the commencement of construction;

(b) advise the **EPA** of commencement of works; and

(c) minimise suspended solids in site run-off to protect the quality of water entering the stormwater system, streams, rivers and lakes by:

- minimising the area of disturbance to retain the maximum area of natural vegetation cover;
- diverting clean water away from areas of disturbance;
- restricting traffic to a stabilised entry/exit point;
- installing erosion control devices including silt fences, stormwater inlet sediment traps and stormwater retention structures in accordance with the erosion and sediment control plan prior to commencement of associated works;
- diverting sediment-laden water to stormwater retention structures (if new stormwater trunk mains are needed to carry sediment-laden flows they should not be connected directly to the existing downstream drainage network. They should be connected to a stormwater sediment retention pond until the site is stabilised.);
- maintaining adjacent gutters and road surfaces free of soil and building materials;
- inspecting and managing any sediment and erosion controls on a weekly basis, and notifying the EPA of waste water discharge procedures and modifications to controls; and

- chemically dosing turbid water to settle out suspended solids as necessary to achieve <60 mg/L suspended solids prior to discharging wastewater from its sites.

SCHEDULE 2 - SOIL

2.1 Removal of Soil

As part of a submitted sediment and erosion control plan the **Construction Manager** must provide the following details regarding the removal of soil from the proposed work area. Details required are;

- The quantity of soil to be removed,
- Destination of the removed soil, (if delivering to more than one site all site are to be identified),
- Description of soil ie virgin excavated natural material (VENM). If not refer to note below for more information,
- The contractor transporting soil

Note; To remove soil that is not VENM the Construction Manager must seek written approval from Environment Protection prior to the soil being removed from site. Advice can be obtained by contacting the Environment Protection Authority on 13 22 81.

VENM : virgin excavated natural material (eg clay, gravel, sand and rock) that is not mixed with any other waste and that:

A) has been excavated from areas that are not contaminated, as a result of industrial, commercial, mining or agricultural activities, with manufactured chemicals and that does not contain sulphuric ores or soils, or
B) consists of excavated natural materials that meet such criteria as may be approved by the Environment Protection Authority.

SCHEDULE 3 - AIR

All steps should be taken that are practical and reasonable to minimise dust pollution on land development and construction sites.

Open Air Fires

Burning of materials is not permitted on construction sites.

SCHEDULE 4 - NOISE

Noise generating construction activity is permitted during the following hours:

	Zones A and B Area	**Residential Any other area < 2 weeks**	**Residential Any other area > 2 weeks**
Monday to Saturday	6am to 8pm	7am to 8pm	7am to 6pm
Sunday or Public Holidays	6am to 8pm	8am to 8pm	None

Note: Zones A & B: Industrial (as per Territory Plan)
City Centre (as per Territory Plan)
Town Centre (as per Territory Plan)
Central National Area (City) (as per National Capital Plan)

Any relevant noise reduction measures specified in, AS 2436 must be implemented.

Guideline:

Environment Protection Guidelines for Construction and Land Development in the ACT located at:
www.tams.act.gov.au/work/environment_for_business_and_industry/environmentprotectionpoliciesandguidelines

ENVIRONMENTAL PROTECTION AGREEMENT

Between

John Holland Pty Ltd **at** **Level 6, 235 Pyrmont Street PYRMONT NSW 2009**

And

the ENVIRONMENT PROTECTION AUTHORITY

This agreement has been signed for and on behalf of the parties on the 15th day of May 2009.

Signed for and **on behalf**
John Holland Pty Ltd
Level 6, 235 Pyrmont Street
PYRMONT NSW 2009

Sign: ----------

Print full name: Hamish Manzi

Title: Regional Environmental Manager

In the presence of

Sign: ----------

Print full name: Steve Thomas

Signed by the
Environment Protection Authority,
Department of Environment, Climate Change, Energy and Water

Sign: ----------

Print full Name : Daniel Walters
Title:(Delegate) **Environment Protection Authority**

In the presence of

Sign: ----------

Print full name: VIKTORIA NOVAK