

# Advanced Environmental Dynamics

## Specialist Consultants

### Memorandum

**To:** Bruce Loxton (Graystone)  
**From:** Darlene Heuff (AED)  
**Date:** 29 January 2015  
**Subject:** Proposed Child Care Centre – Northshore Hamilton

PLANS AND DOCUMENTS  
referred to in the PDA APPROVAL

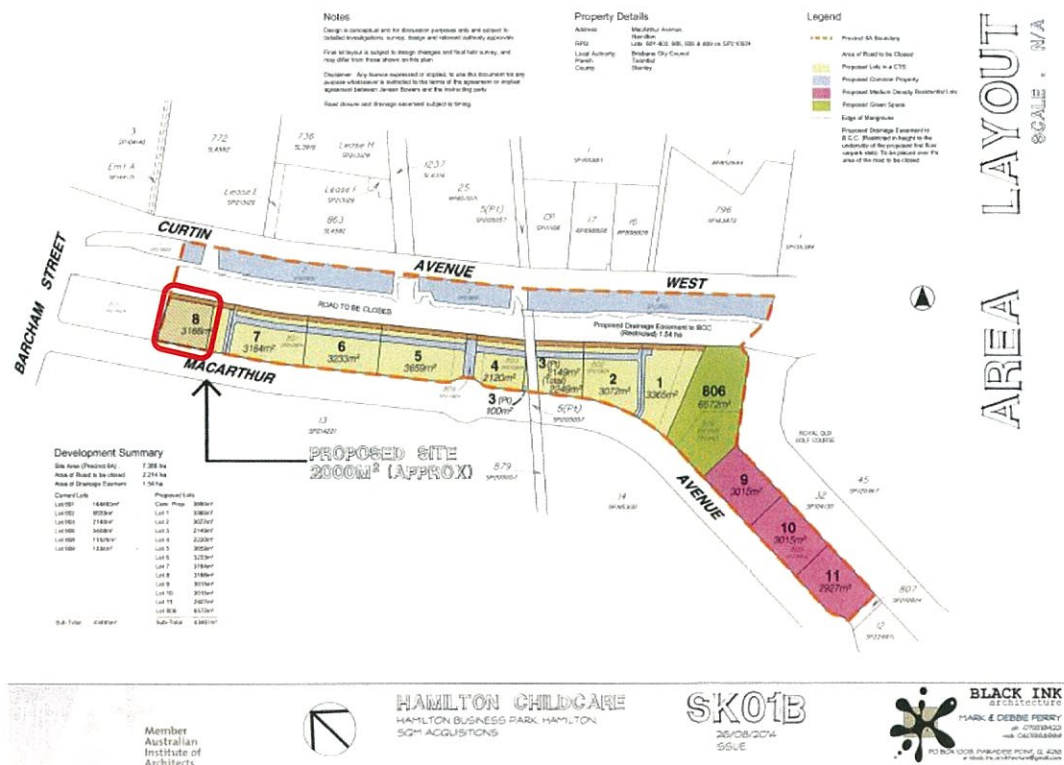
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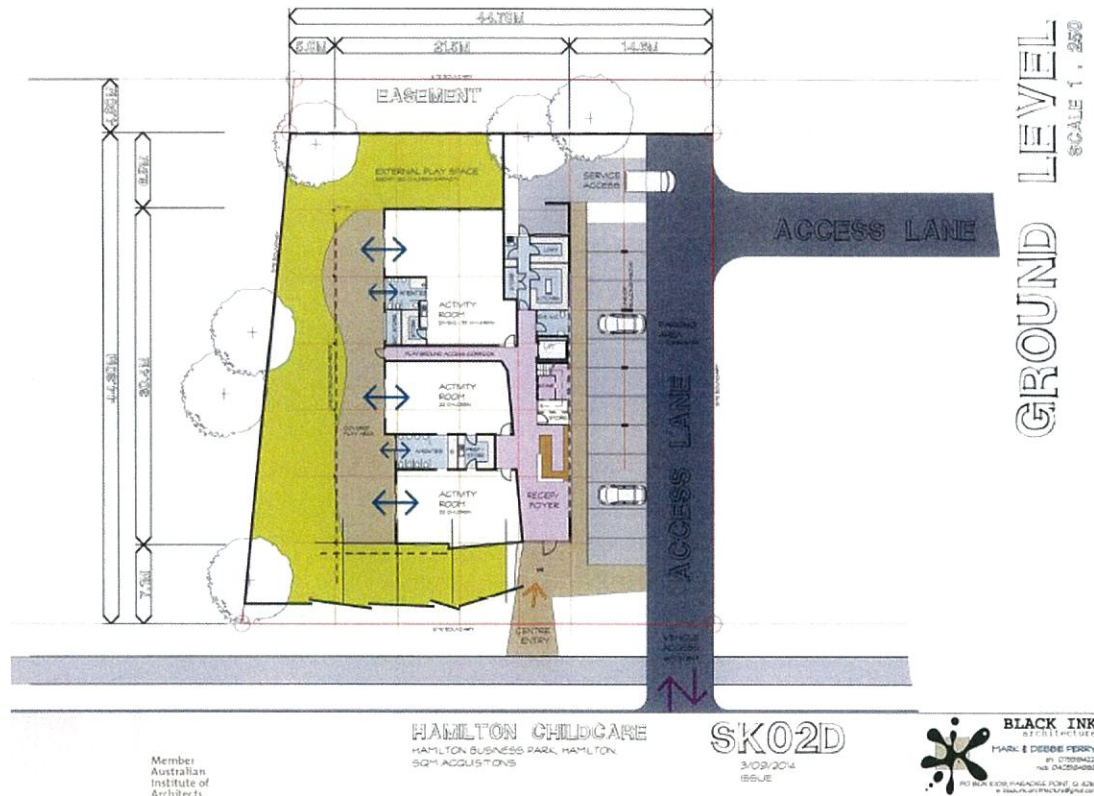
Based on information provided by Bruce Loxton of Graystone (email dated 14/01/2015), AED understands that Graystone Pty Ltd are proposing to develop a child care centre (CCC) on lot 8 of Figure 1, located within the Northshore Hamilton (NSH) Urban Development Area (UDA).

The proposed layout of the CCC is depicted in Figure 2.

**Figure 1: Location of Proposed Child Care Centre within the Northshore Hamilton UDA.**



**Figure 2: Layout of the Proposed Child Care Centre. (Source: Graystone)**



AED further understands that in relation to air quality and the proposed development, the Queensland Government Department of State Development, Infrastructure and Planning have provided the following request for additional information (DSDIP):

#### Air Quality

6. The subject site is identified in the Development Scheme as being impacted by the following:
  - Fuel storage facilities (Map 8)
  - Asphalt and concrete batching plants (Map 9)
  - Chrome plating facility (Map 10)

Section 3.2.7 of the submitted air quality report states that "south of Curtin Avenue, we conservatively recommended that day care and/or aged care facilities not be located within 200m of the BCC asphalt plant, Boral Whinstanes facility, CP Plating or as per the requirement of the regulating authorities." Please provide a scaled plan and/or map demonstrating that the proposed child care centre is located at least 200m from these facilities, or further advice supporting the development's encroachment within the recommended 200m buffer.



In 2012, AED undertook on an air quality constraints assessment of the Northshore Hamilton airshed on behalf of the Urban Land Development Authority (now Economic Development Queensland) (AED, 2012). This study was updated in October of 2014 (AED, 2014). It is Section 3.2.7 of the aforementioned report that is referred to in the correspondence from DSDIP.

Due to our involvement in the study, Graystone has requested AED to elaborate on the statement *'South of Curtin Avenue, we conservatively recommend that day care and/or aged care facilities not be located within 200 m of the BCC asphalt plant, Boral Whinstanes facility, CP Plating or as per the requirement of the regulating authorities'*.

Our advice on interpretation of this statement is as follows:

- We would advise that a measurement of 200m be the minimum distance between air pollutant emission source(s) of interest and the non-transient location of sensitive receptors.

With respect to the CCC, we would consider the measurement to be to the nearest outdoor play area, outdoor eating area, open-able window, and/or building air intake etc. but excluding temporary spaces, for example parking areas or temporarily accessed areas of the grounds such as walkways (should these exist).

With respect to the BCC asphalt plant and the Boral Whinstanes facility, due to the mobile nature of some of the emission sources of interest, we would recommend that the measurement of distance occur from the site boundary.

With respect to CPP plating, the emission sources of primary interest are associated with the main building which houses the plating operation as well as the stack located on the northwest corner of the main building which is associated with spray painting activities. Emission sources of interest do not currently extend to the boundary of the site. Assuming that changes to the footprint of key plating and/or spray painting activities at the site would require regulatory approval we would advise that it would be reasonable to consider a separation distance measured from the location of the nearest corner of the main plating building and not necessarily the site boundary.

I trust you will not hesitate to contact me should you require any additional information or clarification.

References:

- AED (2012): Northshore Hamilton Urban Development Area. Air Quality Constraints Assessment. Project # 951003. Prepared for the Urban Land Development Authority. Dated 2 October 2012.
- AED (2012): Northshore Hamilton Urban Development Area. Air Quality Constraints Assessment and Update. Project # 951003. Prepared for Alceon Group Pty Ltd and Economic Development Queensland. Dated 4 October 2012.