

31 October 2013

Director General  
Department of Planning and Infrastructure  
23-33 Bridge Street  
SYDNEY NSW 2000

Dear Sir,

## Energy from Waste Electricity Generation Plant - Preliminary Environmental Impact Statement

### 1 Introduction

We write on behalf of the ACN 114 842 452 Pty Ltd as owner of the subject site.

The Next Generation NSW Pty Ltd (TNG) the proponent for the above proposal, propose the construction and operation of Energy from Waste (EFW) electricity generation Plant. The EFW will receive unsalvageable and economic residue waste from the adjoining Genesis Material Processing Centre (MPC) and Waste Transfer Station (WTS) for thermal conversion and the consequential generation of electrical power.

Fuel waste would be transferred directly from the Genesis Facility via a covered electrically powered conveyor and by truck to the adjacent EFW, with an ability to accept up to 800,000 to 1,000,000 tonnes of waste per annum.

The project aims to manage and convert to energy non-recyclable but combustible waste loads, operating the EFW facility: 24 hours per day and seven days per week.

The proposal has been designed to utilise non-recyclable or non-recoverable materials for combustion under conditions which comply with the draft NSW EPA policy in relation to the generation of energy from waste to generate both electrical energy and heat energy.

The proposal will also include the following ancillary infrastructure:

- Internal roadways;
- Staff amenities and ablutions; and
- Staff parking facilities.
- Water detention basins.

The proposal is State Significant Development; as such the purpose of this letter is to:

- Identify the proposal as a State Significant Development and request that the Minister direct the Director General to be the Responsible Planning Authority, pursuant to Section 54(2) of the EP&A Act 1979.
- Provide support information to assist the Director General to:
  - Prepare Director General Requirements in relation to the State Significant Development application.

The letter includes the following support information:

- Project rationale and relevant background.
- Details of the site and context.
- Details of the proposal.
- Identification of the relevant planning policies applicable to the site and the proposed development, including discussion on the State Significance of the proposal.
- Outline of the anticipated key issues associated with the proposal.
- Discussion of the approach to be adopted to address these key issues within the Environmental Impact Statement (EIS).

Site investigations have confirmed that the site is largely free of major constraints and that there are no likely environmental effects associated with the future development of the land that cannot be suitably mitigated through further design development.

## 2 Project Rationale

### 2.1 VISION FOR THE SITE

The proposal to construct and operate NSW's largest Energy from Waste Plant using as fuel, residual waste which would otherwise be landfilled will allow for a 'green' electricity generation facility which is synergistic with an existing waste disposal and recycling facility and will facilitate the power and heat and cooling generated to provide a level of energy self-sufficiency within the immediate business precinct, attracting investment, development and employment generating activities.

The proposal seeks to construct an Environmentally Sustainable Business Precinct centred on a green electricity generating facility using fuel that is currently being put into land fill.

The precinct will attract high energy use businesses, all of which will use the power and heat and or cooling within the Precinct making the Precinct largely energy self-sufficient. Excess power will be fed into the National Energy Market [NEM].

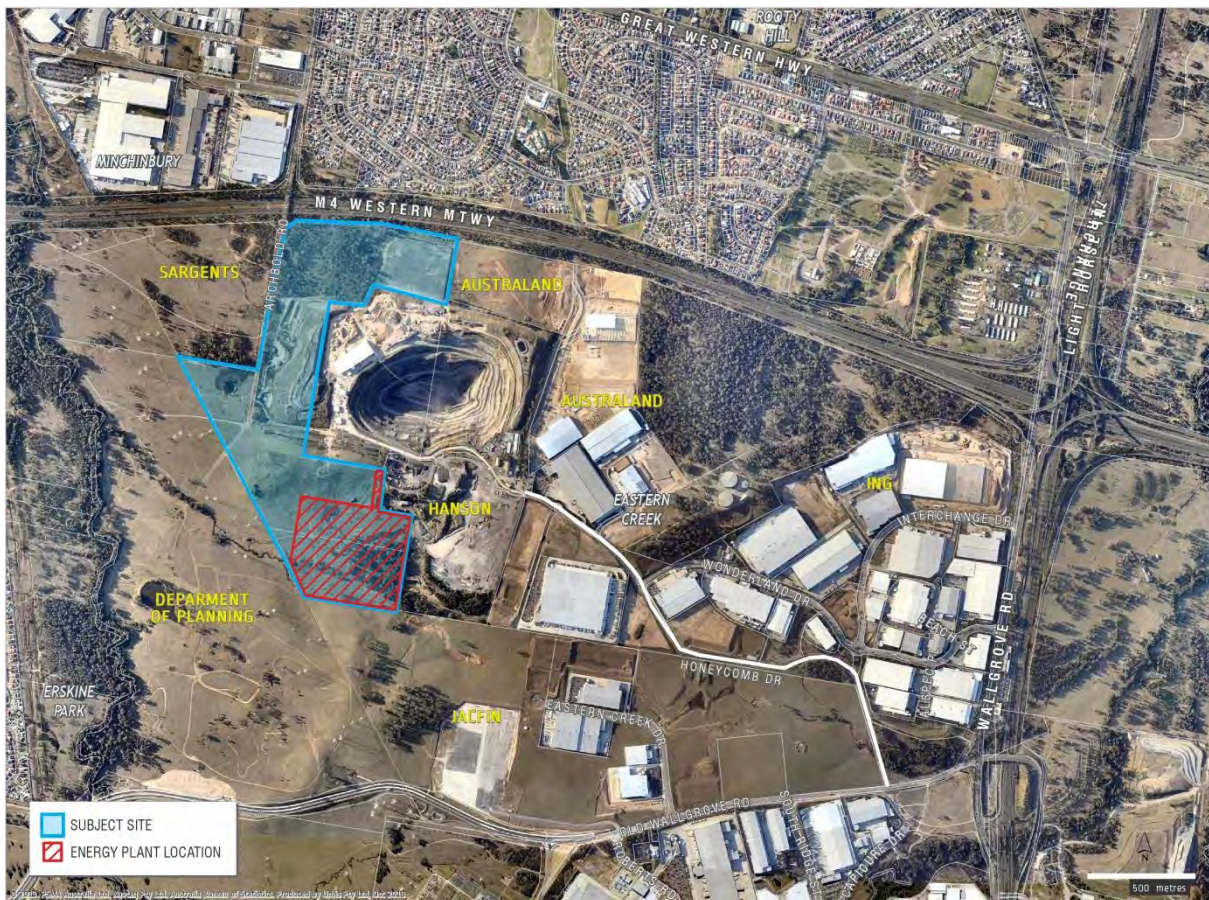
### 2.2 SITE HISTORY

In November 2009 a major project application was submitted by ThaQuarry P/L and ACN 114843 453 Pty Ltd to construct and operate a resource recovery and non-putrescible landfill facility at the former Pioneer Quarry site, Eastern Creek in the Blacktown Local Government Area (Lots 1 and 4, DP 1145808).

The project approval granted consent (P 06\_0139) for:

- A Waste recovery facility including a materials processing centre (MPC) and green waste area.
- Rehabilitation of the quarry void via a Class 2 (non-putrescible) landfill.
- A total throughput of up to 2 million tonnes of materials at the site per calendar year.
- Landfilling of up to 700,000 tonnes of non-putrescible waste (including asbestos).
- Stockpiling of up to 50 tonnes of tyres on site at any one time.
- Stockpiling of up to 20,000 tonnes of green waste on site at any one time.

FIGURE 1 – REGIONAL CONTEXT



2.3 CURRENT PROJECT

The proposed development, involving the construction and operation of an Energy from Waste Electricity Generation Plant, will allow for unsalvageable and uneconomic residue waste from the Genesis Material Processing Centre (MPC) and Waste Transfer Station (WTS) to be used for generation of electrical power. The EFW Plant is proposed to be located on Lots 2 and 3, DP 1145808.

The project is identified as State Significant Development (SSD) under Schedule 1 of the State Environmental Planning Policy (State and Regional Development) 2011 being:

- *Cl. 20 Electricity generating works and heat or co-generation:*
  - Development for the purpose of electricity generating works or heat or their co-generation (using any energy source, including gas, coal, biofuel, distillate, waste, hydro, wave, solar or wind power) that:*
    - (a) has a capital investment value of more than \$30 million, or*
    - (b) has a capital investment value of more than \$10 million and is located in an environmentally sensitive area of State significance.*

The proposal has a capital investment value of greater than \$30 million and therefore is classified as a SSD.

### 3 Site Details

#### 3.1 SITE CONTEXT

The site covers an area of approximately 56 hectares (including the Riparian Corridor).

The subject site is legally described as Lots 2 and 3 in DP 1145808.

It is proposed that the project will be wholly located within current land title holdings Lots 2 and 3, DP 1145808.

The site is located at Eastern Creek in the Central Western Suburbs of Sydney NSW, approximately 36 km west of the Sydney CBD, 18 km west of Parramatta and 12 km east of Penrith. The site is wholly within the Blacktown Local Government Area (LGA), situated in the area known as the M7 Business Hub.

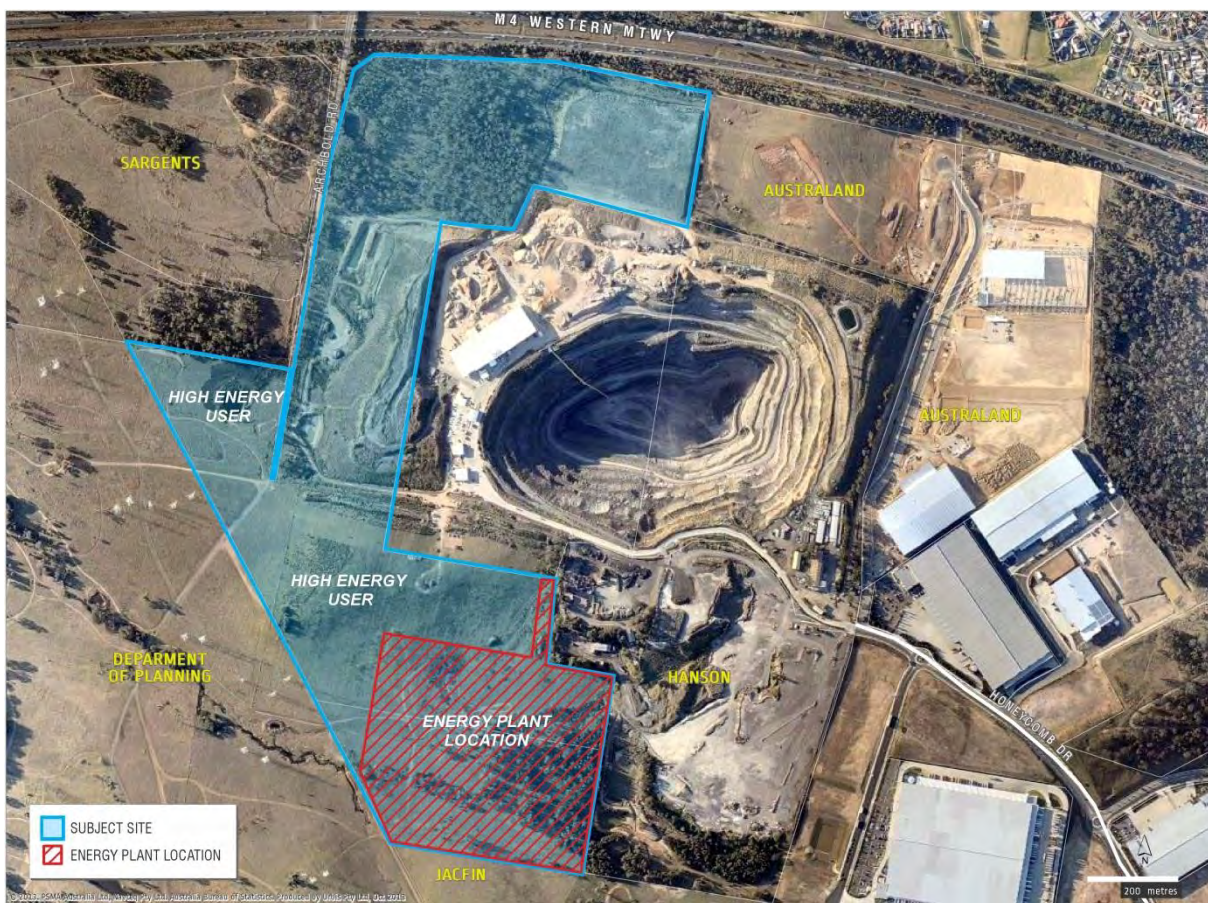
The site is surrounded by land owned by the Corporate Group Alexandria Landfill Pty Ltd, ThaQuarry Ptd LTD, Australand, Hanson, Jacfin, the Department of Planning and Infrastructure and Sargents, all of which is earmarked under the *Western Sydney Employment Area State Environmental Planning Policy (WSEA SEPP)* to be redeveloped for higher end industrial and employment uses over the next decade. Hanson is the adjoining landowner immediately to the east of site.

The closest residential areas to the proposed development at Minchinbury are located approximately 1000 metres from the Northern boundary of Lot 2, DP 1145808 and residential dwellings about 1,200 metres from the Northern boundary of Lot 2, and 800 metres to the west of the site at Erskine Park. Land use in the region is variable and includes residential, commercial and industrial development, small rural allotments with residences, tracts of undeveloped land which are cleared or support remnant vegetation, waterways and associated riparian vegetation corridors and transport and utilities infrastructure. The landform is gently undulating.

The Site is accessed via Honeycomb Drive at Eastern Creek.

An aerial photograph of the site and surrounding area is presented in **Figure 2** below.

FIGURE 2 – SITE AERIAL IMAGE



## 4 Project Details

### 4.1 DESCRIPTION OF THE PROJECT

#### 4.1.1 DEVELOPMENT NEED

The proponent seeks to construct and operate on the current landholding NSW’s largest and most sophisticated Energy from Waste Plant using as fuel, residual waste which would otherwise be landfilled. This proposal is consistent with the NSW EPA Draft Policy Guidelines on the thermal treatment of Waste.

The proposal is to construct an Environmentally Sustainable Business Precinct centred on an electricity generating facility using fuel that is currently being put into land fill.

An electricity generation facility which is synergistic with an existing waste disposal and recycling facility will be able to use the power and heat generated to provide a level of energy self-sufficiency within the immediate business precinct and to attract investment, development and employment generating activities.

The precinct will attract high Energy use Businesses (such as cold Storage, data collection and storage centres, manufacturing, etc.) all of which will use the Power and Heat within the Precinct making the Precinct largely energy self-sufficient. Excess power will be fed into the National Energy Market [NEM]

This Facility will utilise the latest European technology in emissions management the operational success of which has been amply validated and shown to comply with the European Union directive (EU Waste Incineration Directive (2000/76/EC) and Group 6 emission standards as set out in the Protection of the Environment Operations (Clean Air) Regulation 2010), which forms the basis of the NSW EPA Draft Policy guidelines.

#### 4.1.2 DEVELOPMENT OVERVIEW

Currently a Construction & Demolition Waste and Commercial & Industrial Waste Recycling Facility and Landfill is in operation immediately adjacent to the Land specified in the proposal. This is known as the Genesis Facility.

The proposal will involve the following:

- Construction of an Energy from Waste Electricity Generation Facility.
- The construction of an undercover electrically driven conveyor to feed into the an Energy from Waste Electricity Generation Facility.

The proposal is identified as State Significant Development (SSD).

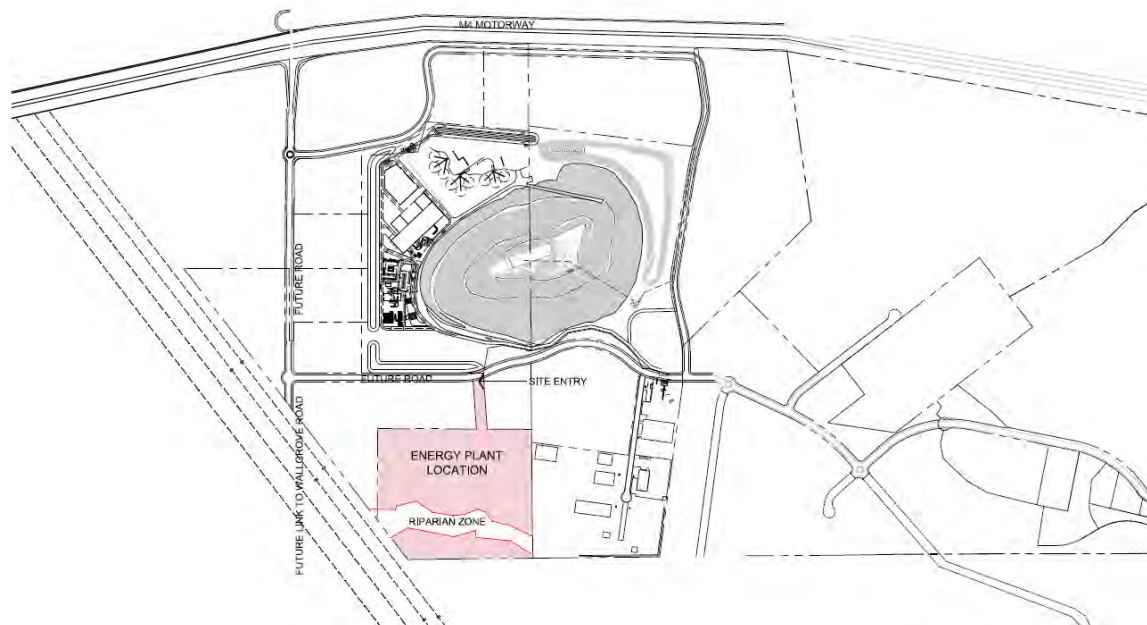
Discussion of the key issues pertaining to the proposal and other mitigating measures is made in **Section 5** below.

#### 4.1.3 OPERATIONAL DETAILS

The Proposed Development Site will occupy 6 hectares (ha) and comprises;

- Fuel reception and storage,
- Blended fuel store,
- Main process area, and
- Rail or conveyor delivery facility.

FIGURE 1 – LOCATION LAYOUT PLAN (REFER APPENDIX A)



The fuel reception and storage area is located on the eastern side of the Site. This area contains the delivery vehicle access point and weighbridge, six tipping bays, fuel reception and storage facility and fuel blending facility.

The blended fuel store is located approximately 240metres to the west of the reception area.

The area contains large storage indoor storage bunkers with a capacity to store 20,000 tonnes of solid fuel.

The main process area is a continuation of the storage area and contains the operational plant of the Proposed Development. This includes the boiler house, turbine hall, control room, administration room, and flue gas abatement systems.

The boiler house will accommodate four combustion trains, each comprising a grate and boiler with auxiliary equipment. Each boiler will have its own flue-gas treatment facility, which will be located outside the boiler house, connecting to the multi-flue stack,

All areas of the Proposed Development Site are linked by internal vehicle roadways and fuel transport pipe conveyors.

Approximately eight structures will be built, occupying a footprint of approximately 6 hectares.

The tallest structure on site will be the stack, which will be 100m high. The boiler house will be the second highest structure at approximately 40m high.

A storm water attenuation tank will be created within the base of the fuel reception and storage area. An indicative capacity of 12 million litres has been assumed and the purpose of the tank is to retain surface water runoff from the proposed Site and surrounding area.

The tank in turn will have an overflow first to a detention basin and thereafter to the Ropes Creek tributary at the southern boundary of Lot 3.

Operational access to the Site from public highways will be gained via Honeycomb Drive to the Genesis site and then within the Genesis site via the internal road known as Dadi Drive and via the under road culvert.

Access is considered to be good given that the entrance to the EFW Site is approximately 200 metres from the southern boundary of the Genesis Facility. Fuel will be delivered to the fuel reception and storage area to the north of the cooling towers.

It is estimated the proposed development will provide approximately 65 new permanent full time employment positions and as surrounding business and commercial developments come on line, up to 45 jobs per hectare are estimated.

#### 4.1.4 CAPITAL INVESTMENT VALUE

The proposal has an estimated Capital Investment Value of \$500 million.

#### 4.2 ALTERNATIVE SITE CONSIDERATION

Locating the proposed facility within easy reach of the Genesis Facility has a number of significant advantages including:

- The infrastructure for delivery of fuels is already present;
- There is no discernible need for any increase in truck movements or use of road infrastructure.



- There is a pool of skilled labour available for operation and maintenance of the Proposed Development;
- The Proponent has maintained good relationships with the local community;
- The EFW facility is of a type and design which is not experimental and has a demonstrable record of compliance with environmental legislation;
- It is able to present a good case for being able to operate within the environmental constraints of the Proposed Development.

## 5 Key Planning Considerations

### 5.1 OVERVIEW

Planning and development in New South Wales is carried out under the provisions of the Environmental Planning and Assessment Act 1979 and the Environmental Planning and Assessment Regulation 2000. Following the proclamation of the Environmental Planning and Assessment Amendment (Part 3A Repeal) Act of 2011 the Minister for Planning and Infrastructure has delegated to the Planning Assessment Commission and to Senior Staff at the Department of Planning the power to determine a range of development applications made under the Environmental Planning and Assessment Act 1979 including those made under the State Significant Development (SSD) Assessment regime. As part of this approvals path this document has been prepared to support the proposed development by way of accompanying an application by the Proponent for Director General Requirements that would apply to a full Environmental Assessment of the application. Further, this application is considered to qualify as 'State Significant Development' status in accordance with Division 4.1 of Part 4 of the EP&A Act as a use listed in Schedule 1 of the State Environmental Planning Policy (State and Regional Development) 2011.

The following table identifies the major planning instruments and other planning documents that apply to the site and the proposed development.

TABLE 1 – MATTERS FOR CONSIDERATION

KEY MATTERS FOR CONSIDERATION
Environment Protection and Biodiversity Conservation Act 1999
Environmental Planning and Assessment Act 1979
State Environmental Planning Policy (State and Regional Development) 2011
State Environmental Planning Policy (Infrastructure) 2007
State Environmental Planning Policy (Western Sydney Employment Area) 2009
State Environmental Planning Policy No. 33 – Hazardous and Offensive Development
State Environmental Planning Policy No. 55 – Remediation of Land
Blacktown Local Environmental Plan 1988

### 5.2 COMPLIANCE AND CONSISTENCY WITH PLANNING INSTRUMENTS AND POLICIES

#### 5.2.1 ENVIRONMENT PROTECTION AND BIODIVERSITY CONSERVATION ACT 1999

The Environment Protection and Biodiversity Act, 1999 (EP&B Act) requires the approval of the Commonwealth Minister for the Environment for actions on Commonwealth land or those that may have a significant impact on matters of national environmental significance, which are: World heritage areas, national heritage places, wetlands of international importance, threatened species and ecological communities listed in the EP&B Act, migratory species listed in the EP&B Act, nuclear actions, and actions affecting the Commonwealth Marine Environment. The full environmental assessment would include an assessment on whether the project would fall within the prescription of this particular Act.

#### 5.2.2 STATE ENVIRONMENTAL PLANNING POLICY (STATE AND REGIONAL DEVELOPMENT) 2011

The State and Regional Development SEPP identifies development:

- To which the State Significant Development assessment and approval process under Part 4 of the Act applies.
- State Significant Infrastructure and Critical State Significant Infrastructure.
- Development that is specified in Schedule 1 or Schedule 2 is declared to be SSD due to the proposed development complies with Clause 20 of Schedule 1.
- The proposed development has a capital investment value greater than \$30 and therefore qualifies as State Significant Development.

Schedule 1 of this SEPP identifies the proposed works as State Significant Development:

#### **Clause 20 - Electricity generating works and heat or co-generation**

*Development for the purpose of electricity generating works or heat or their co-generation (using any energy source, including gas, coal, biofuel, distillate, waste, hydro, wave, solar or wind power) that:*

*(a) has a capital investment value of more than \$30 million, or*

*(b) has a capital investment value of more than \$10 million and is located in an environmentally sensitive area of State significance.*

#### 5.2.3 STATE ENVIRONMENTAL PLANNING POLICY (INFRASTRUCTURE) 2007

This instrument aims to facilitate the effective delivery of infrastructure projects across the state. Division 4 of this SEPP outlines provision for electricity generating works being ‘a building or place used for the purpose of making or generating electricity’.

Clause 34 allows for development for the purpose of electricity generating works carried out by any person with consent on any land in a prescribed rural, industrial or special use zone. The proposed electricity generating facility is located within a prescribed Industrial (IN1) zone and is therefore considered permissible with consent under the SEPP.

Additionally, Clause 34 of the SEPP provides for the development of a ‘waste or resource management facility’ on the project site with development consent.

#### 5.2.4 STATE ENVIRONMENTAL PLANNING POLICY (WESTERN SYDNEY EMPLOYMENT AREA) 2009

SEPP (Western Sydney Employment Area) 2009 outlined the specific planning aims and objectives for urban development in Central Western Sydney, establishing the guiding principles to promote economic development and the creation of employment.

The subject site is zoned IN1 – General Industrial under the provisions of the SEPP.

The objectives of the IN1 zone include:

- *To facilitate a wide range of employment-generating development including industrial, manufacturing, warehousing, storage and research uses and ancillary office space.*
- *To encourage employment opportunities along motorway corridors, including the M7 and M4.*
- *To minimise any adverse effect of industry on other land uses.*

- *To facilitate road network links to the M7 and M4 Motorways.*
- *To encourage a high standard of development that does not prejudice the sustainability of other enterprises or the environment.*
- *To provide for small-scale local services such as commercial, retail and community facilities (including child care facilities) that service or support the needs of employment-generating uses in the zone.*

Whilst the proposed use is not permissible with consent under the provisions of the IN1 General Industrial Zone, the proposal is consistent with the zone objectives and is permissible under the provisions of the State Environmental Planning Policy (Infrastructure) 2007 as electricity generating works within an Industrial zone.

The proposal is found to be generally consistent with the SEPP (WSEA) 2009. A detailed assessment against the SEPP will be prepared as part of the detailed Environmental Impact Assessment.

#### 5.2.5 STATE ENVIRONMENTAL PLANNING POLICY NO. 33 – HAZARDOUS AND OFFENSIVE DEVELOPMENT

SEPP 33 requires the proponent and consent authority to assess the hazards and risks associated with the proposed development before approval is granted for construction and operation.

#### 5.2.6 STATE ENVIRONMENTAL PLANNING POLICY NO. 55 – REMEDIATION OF LAND

SEPP 55 introduces planning controls for the remediation of contaminated land and requires investigation to be made if land contamination is suspected.

A Phase 1 Environmental Site Assessment was prepared for the site in October 2004 and concluded that having been used as agricultural grazing the site posed a low potential for residual soil contamination.

The proposed development merely facilitates future use of the site generally for employment generating industrial purpose. Further contamination investigation is not considered to be warranted.

#### 5.2.7 BLACKTOWN LOCAL ENVIRONMENTAL PLAN 1988

The Blacktown Local Environmental Plan 1988 (BLEP) applies to the site, however the site falls within the State Environmental Planning Policy (Western Sydney Employment Area) 2009.

In the event of an inconsistency between this SEPP (WSEA) 2009 and a local environmental plan or deemed environmental planning instrument that applies to the land, the SEPP prevails to the extent of the inconsistency.

As such, the Blacktown LEP 1988 is of limited relevance to the subject site and proposed use.

### 5.3 AGENCY AND COMMUNITY CONSULTATION

A range of stakeholders will be consulted on the application including (but are not limited to):

- NSW Government
- Department of Planning and Infrastructure (DP&I)
- NSW Environment Protection Authority
- NSW Office of Water
- Blacktown City Council
- Local Community

- Roads and Maritime Services (RMS)

Consultation will continue throughout the preparation of the EIS and will be documented in the EIS.

## 5.4 KEY ISSUES

The following key considerations have been identified as applicable to the site and proposal:

### 5.4.1 AIR QUALITY AND ODOUR

Specific areas of concern relate to air pollution (dust, 'production of dangerous by-products' and contamination of local waterways and soil.

The Project is not predicted to result in significant dust deposition or soil and water contamination.

Odour impacts from this Project will not be a significant and emissions control systems will prevent odour impacts.

A detailed assessment will be provided during the final assessment.

### 5.4.2 NOISE MANAGEMENT

An assessment of the potential for noise from the Project to impact the surrounding community, taking into consideration the existing noise conditions will be prepared as part of the detailed Environmental Impact Assessment.

Noise levels generated by the Project during construction and operations are not predicted to exceed relevant EPA criteria at sensitive receivers

### 5.4.3 TRAFFIC AND TRANSPORT

An assessment of the potential impact from the Project upon traffic and transport, taking into consideration the existing traffic conditions will be prepared as part of the detailed Environmental Impact Assessment. It is noted however that nominal additional heavy traffic is expected to be generated by this project over and above the traffic movements already modeled for the approved adjacent Genesis Facility.

Preliminary assessment in relation to the potential traffic implications of the proposed redevelopment has concluded that the internal access and external road systems will be suitable for the traffic needs and circumstances related to the Project.

### 5.4.4 SOIL AND WATER

Assessment in relation to the potential impacts on surface water and water quality as a result of demand and on-site reuse will be investigated as part of the detailed assessment.

Past site investigations have found assessed contaminant concentrations to be below the adopted threshold criteria for both the stockpiled and in-situ material. On this basis, the stockpiled material, which was sourced from the quarry is considered suitable for re-use as fill.

The site is considered suitable for commercial/industrial use and contaminated soil is not expected to be present during construction works.

### 5.4.5 GREENHOUSE GAS

Emissions of greenhouse gases from the Genesis Waste Facility were previously assessed as part of an Environmental assessment and categorised as either 'direct' and 'indirect' emissions in accordance with The National Greenhouse Accounts (NGA) Factors, 2008 which adopts the emissions categories of the international reporting framework of *The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard* (WRI/WBCSD).

The project is anticipated to receive of up to 1,000,000 tonnes per annum of material. Annual emissions of greenhouse gases from landfilling activities at the Genesis Landfill estimated to be 1,665,439 tCO<sub>2-e</sub> per annum.

The project is expected to result in a significant reduction in greenhouse gas generation as waste is diverted from Landfill. A detailed assessment of the implications of the proposal in relation to greenhouse gas emissions will be provided with the final Environmental Impact Assessment.

#### 5.4.6 RIPARIAN CORRIDOR

A riparian corridor is identified along the southern boundary (Ropes Creek Tributary Catchment). The proposal is not considered to impact on this identified riparian corridor however the necessary buffer zones will be observed and the potential impacts from the proposal on the riparian corridor will be investigated in detail in the final Environmental Impact Assessment.

#### 5.4.7 HERITAGE

Based on preliminary heritage investigations, the Project is not expected to impact on known historical heritage items or values however mitigation measures are proposed to manage any historical heritage item uncovered during construction works. A detailed discussion of the heritage implications will be provided with the final Environmental Impact Assessment.

#### 5.4.8 FLORA AND FAUNA

The Energy From Waste site is highly disturbed by past grazing activities and the majority of native vegetation has been removed. The Project is unlikely to have a significant impact on threatened species, populations and/ or EECs identified as occurring or potentially occurring at and surrounding the site. A detailed assessment will be prepared and submitted with the final Environmental Impact Assessment.

#### 5.4.9 HAZARDS AND FIRE RISKS

An assessment of potential hazards and risks associated with the Project and recommended mitigation and management measures to address the identified hazards and risks will be submitted with the final Environmental Impact Assessment.

#### 5.4.10 VISUAL AMENITY

A visual assessment to determine the extent to which the Project will impact on the existing visual landscape, within the site's regional and local landscape setting will be submitted with the final Environmental Impact Assessment.

## Summary

This letter has provided an overview of the proposed Energy from Waste Facility, along with the construction of the proposed conveyor connecting the proposed facility with the existing 'Genesis' waste materials recycling facility.

The key issues associated with the proposed development have been identified as:

- Air Quality and Odour
- Noise Management
- Traffic and Transport
- Soil
- Water
- Greenhouse Gas
- Riparian Corridor
- Heritage
- Flora and Fauna
- Visual Amenity

These matters will be thoroughly addressed in the EIS. This letter provides an overview of the proposed Energy from Waste Facility to assist the Director General in preparing the Environmental Assessment Requirements for the project.

If you have any questions or wish to discuss the matter further, please do not hesitate to contact me on (02) 8233 7609

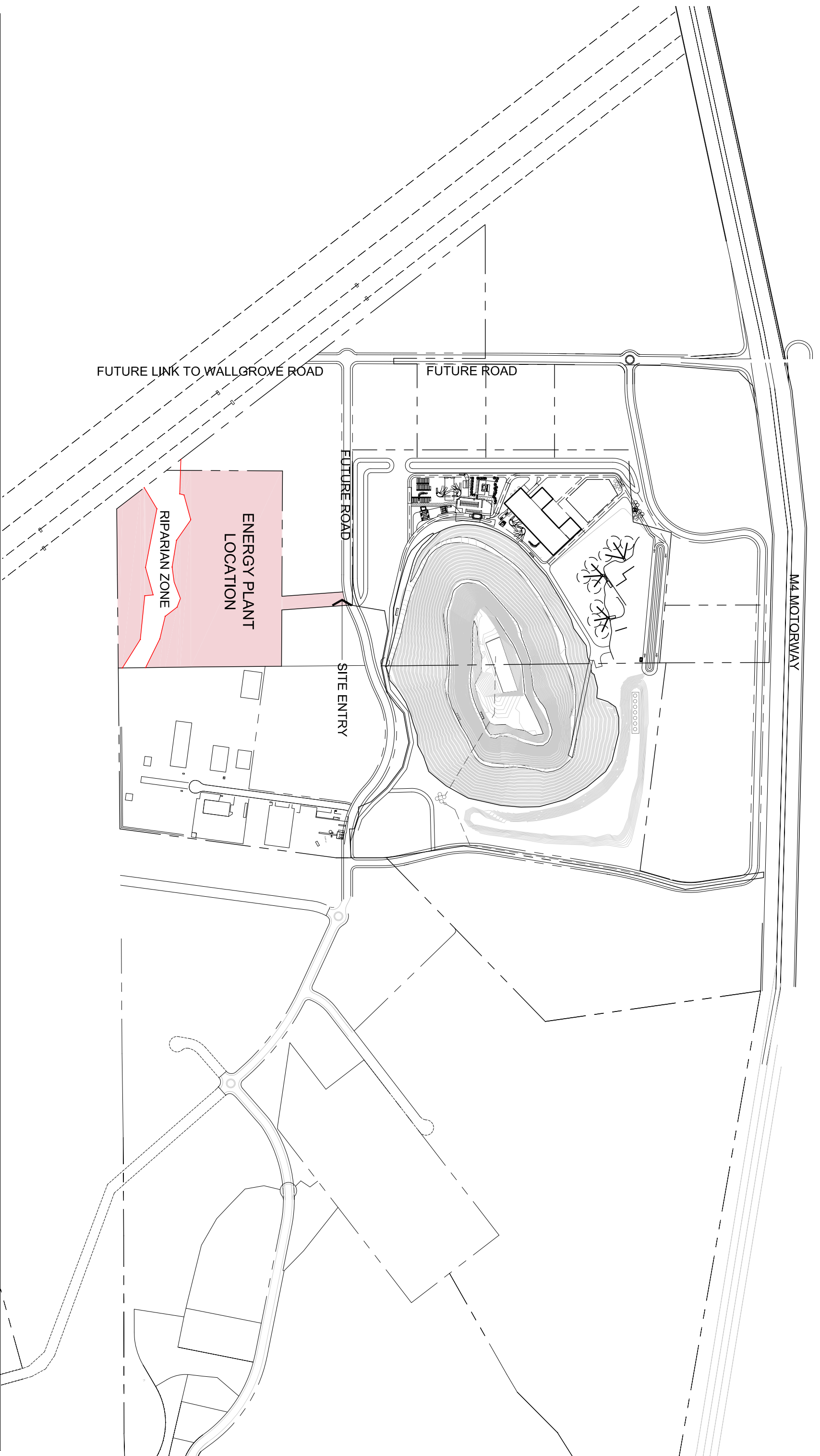
Yours sincerely,



Matthew O'Donnell  
Associate Director



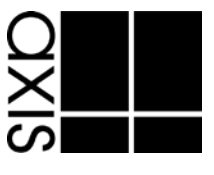
# APPENDIX A      Proposed Site Plan



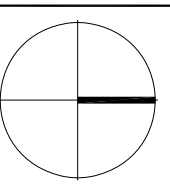
32 Burrows Road  
 Alexandria NSW 2015  
 t: + 61 2 9519 9999 E: enquiries@dadi.com.au

**TNG ENERGY PARK**

ARCHBOLD ROAD EASTERN CREEK, NSW.



**AXIS ARCHITECTURAL**  
 4 / 112 Cronulla Street, Cronulla NSW 2230  
 p + 02 9523 7858 / m + 0414 954 405  
 e + david@axisarchitects.com.au  
 AXIS ARCHITECTURAL Pty Ltd - ABN 18 086 853 376  
 Nominated Architect - David McDonald NSW ARB No. 7997



**LOCATION LAYOUT PLAN**

1 : 8000 @ A3  
 Oct 2013  
 130601 / EP-EC-SK A 101 / C