

19 September 2017

Stewart Doran
Consultant
Urbis
Level 23, Darling Park Tower 2, 201 Sussex Street
Sydney, NSW 2000,

Dear Mr Doran,

RE: Update to the Amended EIS for The Next Generation: Energy from Waste Facility at Eastern Creek

General Background

Artefact have been commissioned by Urbis to provide a revised impact assessment for the Energy from Waste (EFW) facility at Eastern Creek, to accompany the existing reporting Artefact had undertaken for the study area in 2016 (Artefact ACHAR).

Several reports have been undertaken on the site to date, which in chronological order are:

-] 2014, GML, *Energy from Waste (EFW) Plant, Eastern Creek: Aboriginal Archaeological Technical Report* (GML ATR) for the Eastern Creek EFW Facility Environmental Impact Statement (EIS)
-] 2014, GML *Energy from Waste (EFW) Plant, Eastern Creek: Aboriginal Cultural Heritage Assessment* (GML ACHAR) for the Eastern Creek EFW Facility EIS
-] 2015, Artefact Heritage, *Energy from Waste Facility, Eastern Creek Aboriginal Cultural Heritage Assessment Report* (Artefact ACHAR). Artefact was engaged by Urbis to prepare an updated addendum to the ACHAR prepared by GML, to incorporate the additional Aboriginal consultation and results of test excavation.

The Artefact ACHAR, which accompanies this letter, contains a copy of the GML ATR in Appendix A and the GML ACHAR in Appendix B.

Proposal

The Next Generation NSW (the Proponent), propose to develop an EFW facility at Eastern Creek. The proposed EFW works will include the construction of an electricity generation plant; with ancillary works related to the preparation and subsequent operation of the EFW. The works will be located within Lots 1 to 2 of DP1145808, in the Blacktown City Council Local Government Area (LGA). The subject site is bounded by the M4 Western Motorway, the Hanson Wallgrove Quarry, transmission line easement and Archbold Road (Figure 4).

Technical Background

GML identified one area of moderate archaeological potential and two areas of high archaeological potential (2014a:40). However, only one of these areas of archaeological potential will be directly impacted by the proposed works. The area is known as EFW South (AHIMS 45-5-4491), and is located on an elevated area at the confluence of three waterlines in the southeast corner of the subject site (Figure 5). Therefore, GML recommended that an archaeological test excavation was required to assess the nature, extent, condition, and integrity of the site (GML 2014a:49).

Following the preparation of test excavation methodology (Artefact 2014) for EFW South, an archaeological test excavation was conducted over a period of four days at the proposed EFW Facility. Test excavation of PAD site EFW South (AHIMS 45-5-4491) retrieved an assemblage of fourteen artefacts from nine of the thirty-seven 500x500 mm excavation units. The Archaeological Test Excavation Report (Artefact ATR) is included as Appendix C of the Artefact ACHAR.

The GML ATR previously assessed EFW South (45-5-4491) as having high archaeological potential (GML 2014:50). However, test excavation identified a low density artefact scatter, with minimal lithic or technological diversity. EFW South (45-5-4491) presents low potential for further research and low rarity and representativeness within the local landscape. As such, EFW South (45-5-4491) has been assessed as having low archaeological significance.

Design Changes

The works will comprise construction and operation for the treatment of 552,500 tonnes per annum (tpa) of residual waste fuels (engineering capacity for approximately 405,000 to 675,500 tpa with an optimum expected throughput of 552,500 tpa).

This will comprise the following plant and systems:

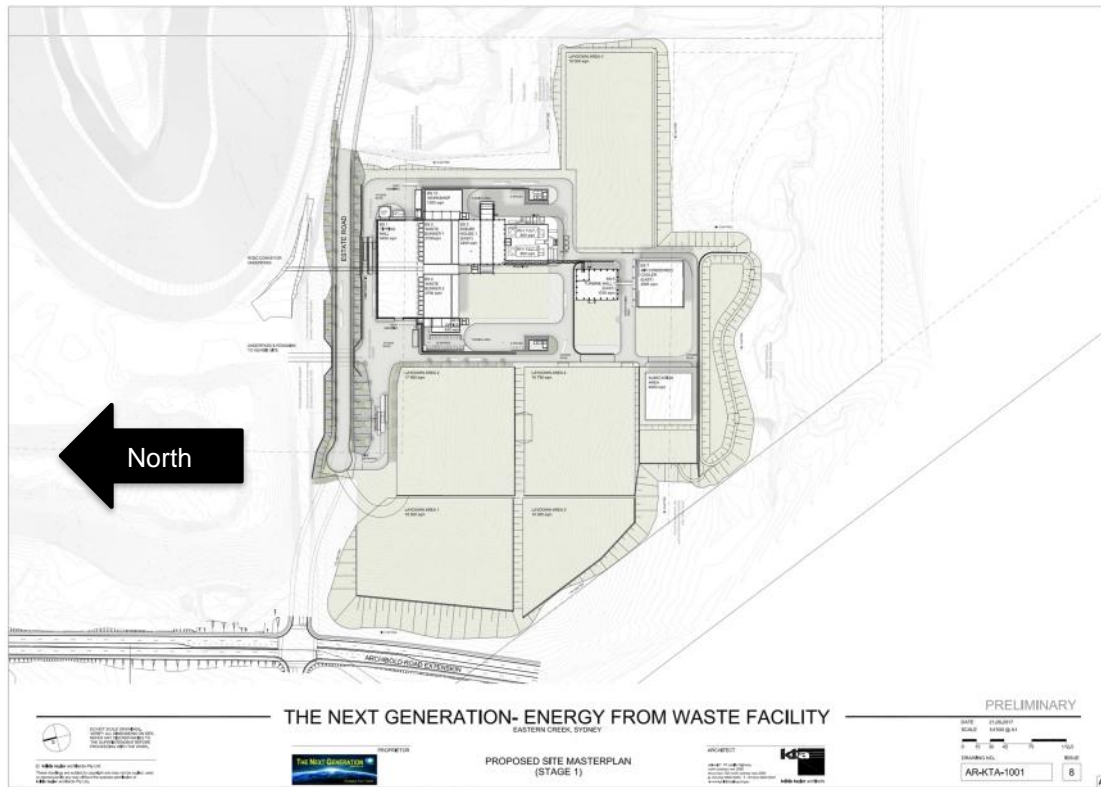
-] Tipping hall and fuel storage
-] Waste bunker
-] Combustion line 1
-] Combustion line 2
-] Two independent boilers
-] Flue gas treatment systems
-] One stack
-] One turbine
-] One air cooled condenser
-] Associated auxiliary equipment
-] Control room, workshop, offices and amenities
-] Laydown areas

Detailed engineering plans are included as Appendix 1, which provide the full extent of works.

Changes to the proposal which are the subject of this memo include changes in staging, design changes that do not effect footprint, and changes in project footprint.

The works will now comprise two stages, not one, with Stage 1 incorporated within the larger assessed area of the Artefact ACHAR and reviewed by this revised assessment (Figure 1). Stage 1 of the development is the subject of the current proposal and assessment, with stage 2 being subject to a separate and future development.

Figure 1: Stage 1 works area – coincides with blue areas in Figure 3 (Source: kta architects)



The form of the laydown areas has been changed, with the reduction of the laydown area in the south-east over EFW South (45-5-4491), and the laydown areas in the north-west expanded, in areas outside of EFW South (45-5-4491). These changes are illustrated in Figure 2 Figure 3, and overlaid in Figure 6.

However, current plans do not indicate if the former laydown areas will be impacted by works associated with construction activities or protected by specific measures during works.

Figure 2: Original footprint – Area of reduced impact outlined in yellow, and increased impact outlined in red (Source: at&I)

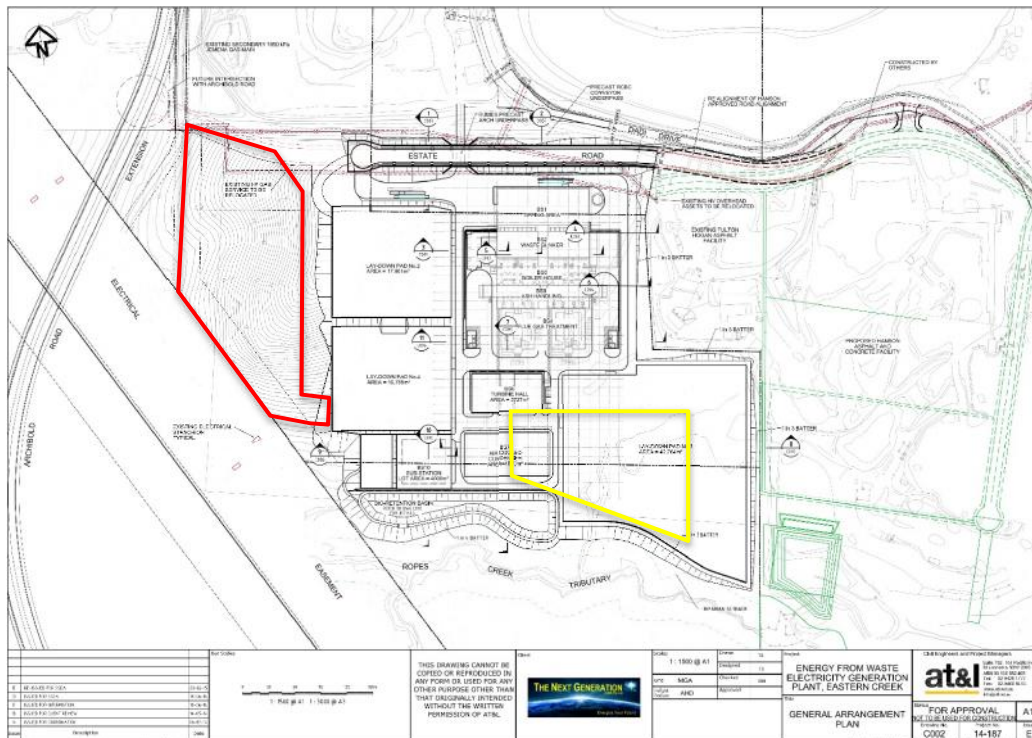
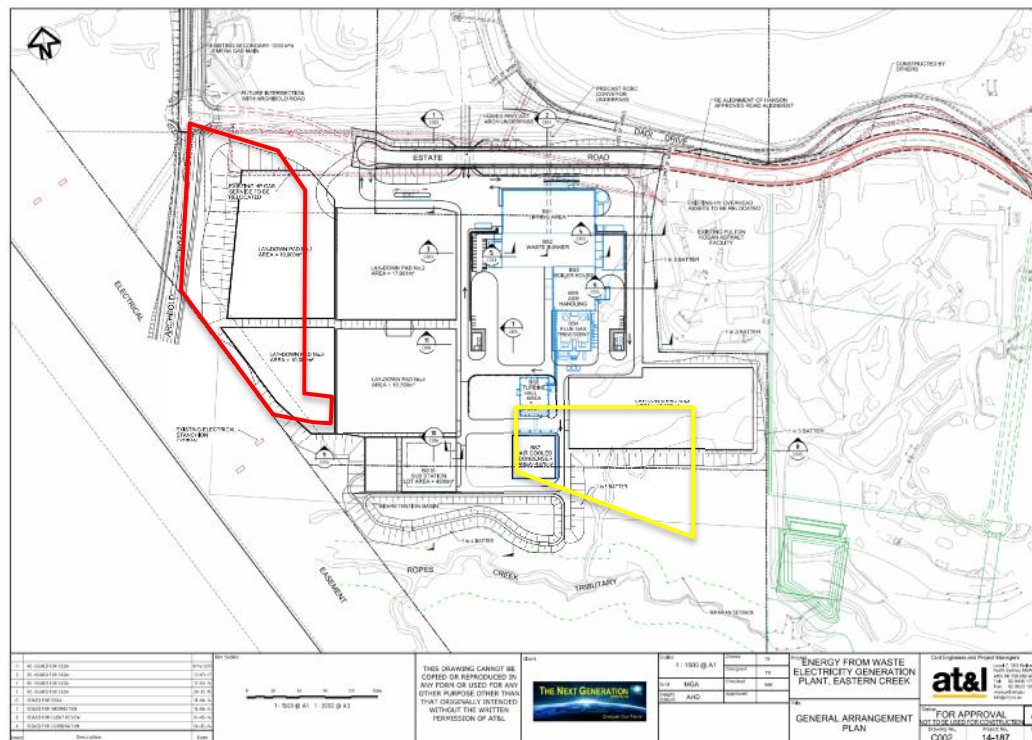


Figure 3: Revised footprint – Area of reduced impact outlined in yellow, increased impact outlined in red, and design changes within footprint shown in blue (Source: at&I)



Previously Assessed Significance

The Artefact ACHAR determined that EFW South (45-5-4491) demonstrates low research potential and low representativeness, rarity and education values; resulting in an overall low scientific significance.

Revision of Impacts

Aboriginal heritage values within the study area were taken into consideration during the development of the concept design. However, design constraints limit the development footprint options around the core EFW components. This limits the layout options for the laydown pads, which are necessary for the transfer of waste material to the Eastern Creek EFW facility for processing. However, the initial and revised designs do avoid direct impact to the two remaining sites, Archbold Road 1 (45-5-4492) and Archbold Road 2 (45-5-4493) shown in Figure 5.

Therefore, the assessed Stage 1 of the proposal, will not increase the levels of impact assessed in the Artefact ACHAR, and should Stage 2 remain within the current development footprint, the originally assessed impact will occur over a longer period and remain within the impact area assessed by the Artefact ACHAR (Figure 6).

Additionally, the change in the pattern of the laydown areas may reduce the direct impacts to EFW South (45-5-4491), resulting in an improved heritage impact result. However, EFW South (45-5-4491) will still be impacted by the proposal, and the plans do not make clear if the former laydown areas will be impacted by activities associated with construction works, such as works compounds, construction access roads, or materials storage.

Overall impact of the new design is assessed to be potentially less than assessed for the original design of the EFW, and it was determined that no new impacts will occur. To ensure reduced impact is achieved, the recommendations below should be implemented.

Overview of findings

The assessment of the design changes found that:

-)] The two stage process of construction will not increase impacts, and no new impacts were assessed as occurring
-)] The movement of laydown pads from the south-west to the north-west of the impact area has the potential to reduce impacts upon EFW South (45-5-4491)
-)] The potential reduction in impacts can be realised through careful management, as outlined in the recommendations

Additionally, the review of the new design did not require a revision of the original findings, which were:

-)] EFW South (45-5-4491) will be partially impacted by the proposed works. Based on the ATR (GML 2014a) and the results of test excavation, this site has been assessed as having low archaeological significance. Impacts would result in partial loss of value

-)] The intrinsic values of Archbold Road 1 (45-5-4492) and Archbold Road 2 (45-5-4493) will be indirectly impacted by the modification of the study area. However, there will be no ground surface impact within these areas as part of the proposed development.

Recommendations

The assessment of the design changes requires two new recommendations, in addition to the existing recommendations, which were:

-)] No further archaeological investigation of EFW South (45-5-4491) is required prior to impacts
-)] Archbold Road 1 (45-5-4492) and Archbold Road 2 (45-5-4493) are located outside of the development footprint and will be retained. Impact to this area should be avoided during proposed works, by designating these areas conservation zones. All contractors working in the area should be made aware of its location to avoid unintentional impacts
-)] If Aboriginal skeletal material is uncovered during construction the requirements of Section 3.6 of the OEH code of practice would be followed
-)] The retrieved test excavation artefact assemblage will be reburied at a nearby location that will not be impacted by any future development works. The area selected as a location for reburial is the portion of EFW South (45-5-4491) that falls within the Riparian Setback (Figure 6); as it will be retained as part of the proposed development
-)] When the artefact assemblage is reburied, a site recording form should be submitted to the OEH AHIMS site register within details of the location of the assemblage.

The new recommendations relates to the set down areas in the south-east of the study area (Figure 2 and Figure 3):

-)] For the parts of EFW South (45-5-4491) now outside of the design area, these areas should be protected from inadvertent impacts during works. This should include inductions for the staff working on site, and a clearly marked out barrier for works to protect against inadvertent impacts to this area. This area should be incorporated into the management framework for the riparian protection zone, to conserve it for the future and integrate it into the already planned conservation framework, where parts of EFW South (45-5-4491) are already planned to be protected and managed
-)] As no new or increased impacts have been assessed, additional consultation with the Registered Aboriginal Parties (RAPs) is not required
-)] Though formal consultation is not required, the RAPs should be provided with a copy of this assessment for their information.

The proposed works would not require any further heritage management measures to proceed, however, any additional changes in design would require further assessment.

Kind Regards,

A handwritten signature in blue ink, appearing to read 'Matt Alexander', followed by a horizontal line.

Matt Alexander
Project Leader
Artefact Heritage

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(02) 9518 8411

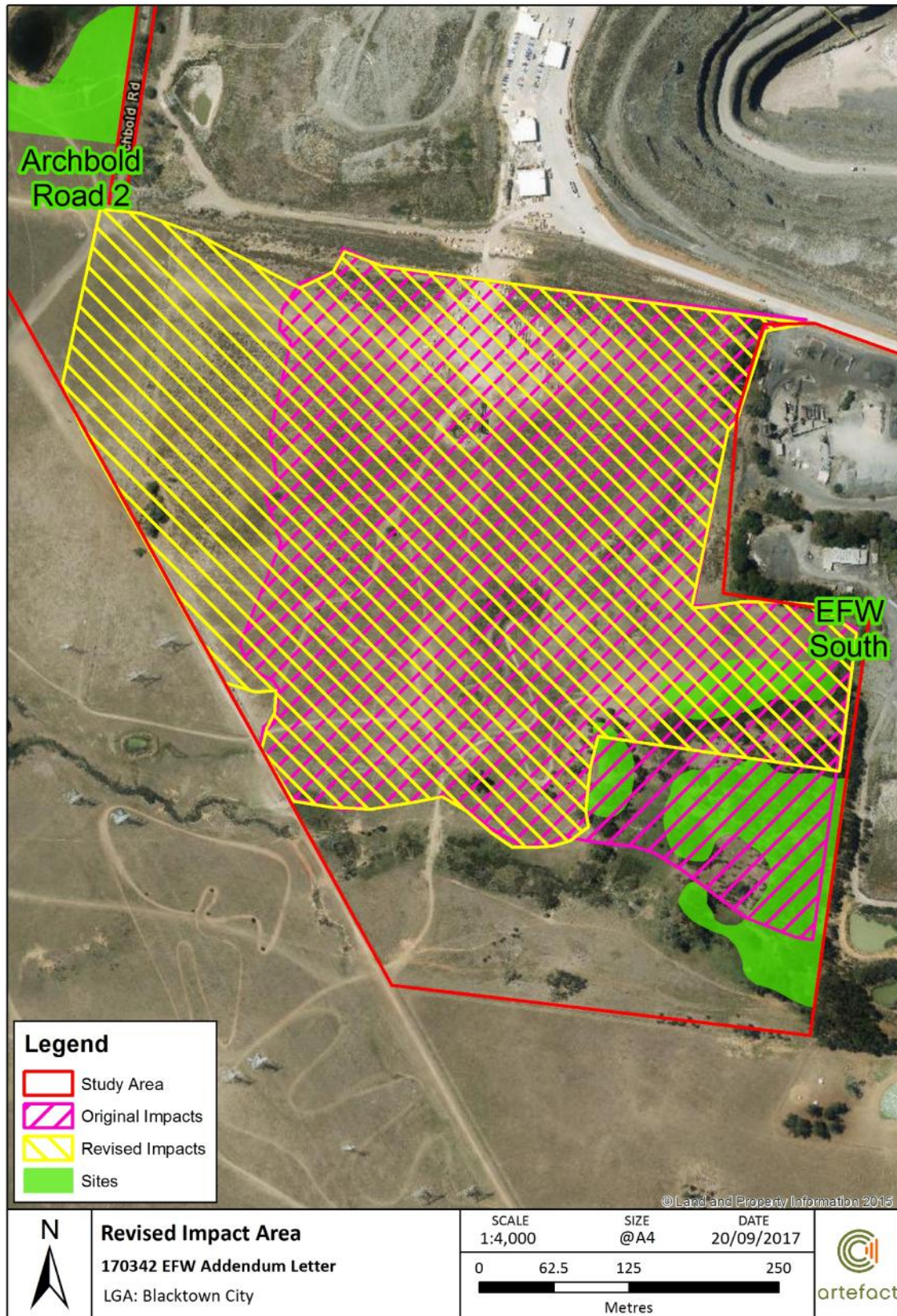
Figure 4: General location of study area



Figure 5: Location of recorded Aboriginal sites within the study area

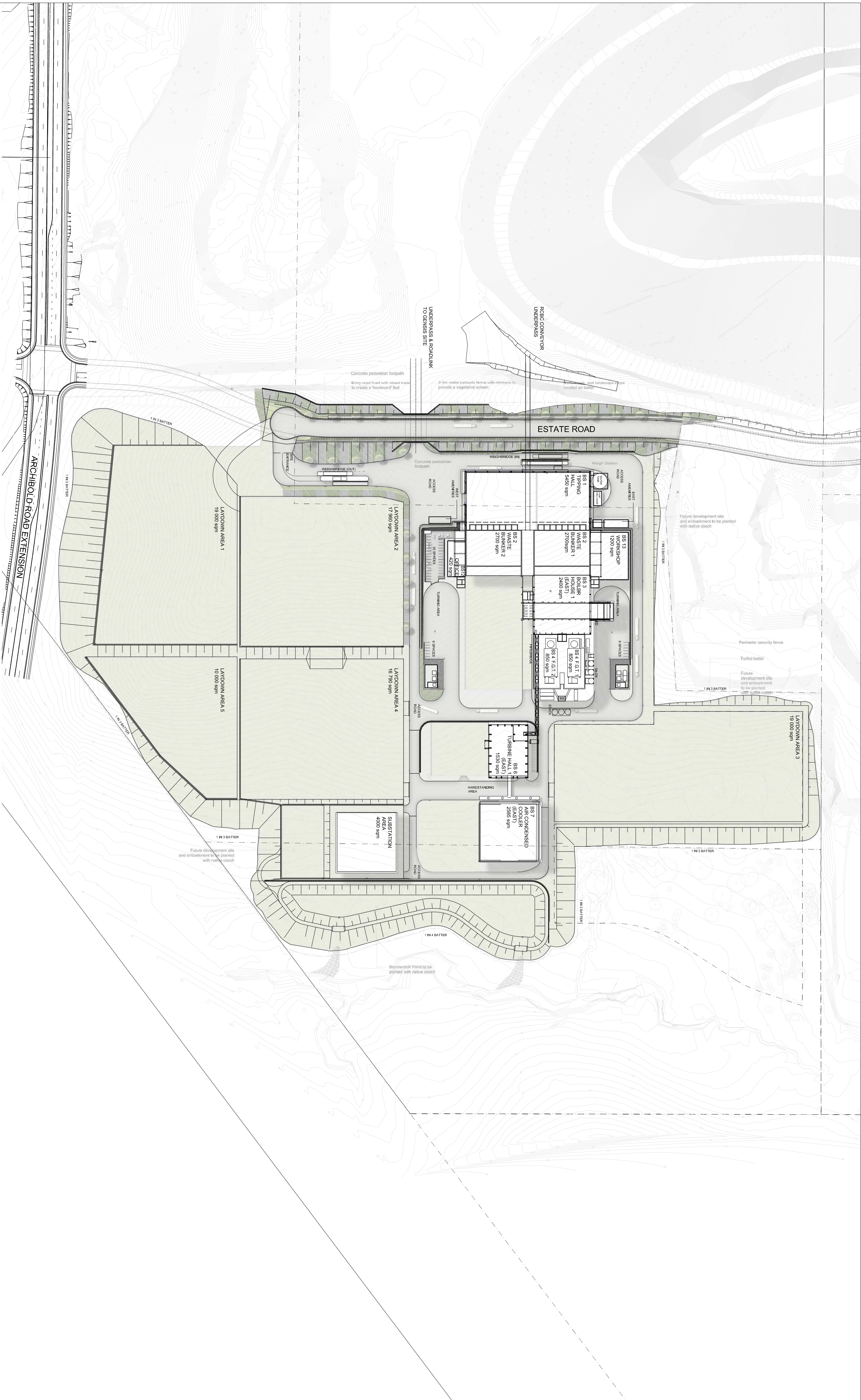


Figure 6: Aboriginal site areas overlayed with proposed area of impact



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Appendix 1: Detailed Plans

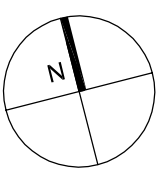


THE NEXT GENERATION- ENERGY FROM WASTE FACILITY

EASTERN CREEK, SYDNEY

PRELIMINARY

DO NOT SCALE DRAWINGS.
VERIFY ALL DIMENSIONS ON SITE.
REFER ANY DISCREPANCIES TO
THE SUPPLEMENT BEFORE
PROCEEDING WITH THE WORK.



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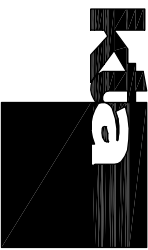


PROPRIETOR

PROPOSED SITE MASTERPLAN
(STAGE 1)

ARCHITECT

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