

NSW Land and Housing Corporation Department of Planning and Environment Locked Bag 5022 Parramatta NSW 2124

Your Reference LAHC 2020/642 PO 4100016970

Our Contact
Daniel Fettell
Daniel.fettell@mottmac.com
0433 326 543

Mott MacDonald 383 Kent Street Sydney NSW 2000 PO Box Q1678 QVB Sydney NSW 1230 Australia

T +61 (0)2 9098 6800 mottmac.com

Response to Submissions: Environmental Sustainability Study Addendum

26th September 2023

For the attention of: Susan Oktay

Dear Susan,

The Riverwood Estate Planning Proposal was placed on public exhibition between 12 August and 25 September 2022.

The project has been affected by recent market changes primarily because of significant increases in construction costs impacting on the overall viability of the project.

LAHC has implemented a revised strategy that will now focus on the delivery of an exemplar first stage of the project which will deliver approximately 420 new dwellings with less impact on existing local infrastructure. This will enable the wider masterplan to be considered in the future to ensure it meets the aspirations of the local community and allow identified local infrastructure to be delivered in tandem.

Rezoning of an exemplar first stage will build on the previous renewal work at Washington Park noting that the land and proposed redevelopment in this stage mirrors the 2022 exhibited planning proposal. As the proposed first stage sits within the exhibited proposal, this means the land needed for future infrastructure such as road widening will be unaffected. The subject site is shown below in Figure 1 below:



Figure 1 Riverwood LAHC Rezoning

To suit the revised scope of the precinct, an addendum letter has been prepared that summaries the specific items relevant to the revised scope. Specifically this letter is an addendum to the following:

Mott MacDonald Australia Pty Limited is a subsidiary of Mott MacDonald International Limited. Registered in Australia, ABN 13 134 120 353



- Riverwood Estate State Significant Precinct Environmental Sustainability Study Report (Mott MacDonald, 2022)
- Response to Submissions: Engineering Items (Mott MacDonald, 2022)

1. Study Requirements

The purpose of the Environmental Sustainability Study is to:

- Identify the existing situation, including constraints, opportunities and key environmental issues;
- Outline the likely impacts of the proposal in relation to energy use, greenhouse gas emissions, air quality, noise, water use, wastewater, solid waste and climate change resilience;
- Provides detail of proposed sustainability and circular economy principles and how they will be incorporated into the proposal;
- Include an integrated water cycle management strategy (as a separate report) supported by water sensitive urban design where it is safe and practical to do so and helps protect the environment;
- Include a principles-level waste management strategy (as a separate report) that embraces circular economy principles;
- Includes measures to address the impact of climate change (as a separate report) including urban heat and extreme weather events;
- Support opportunities for sustainable and efficient use of resources to minimise waste and deliver a circular economy, and water and energy from development to result in a carbon positive precinct by 2050;
- Embed circular economy design into buildings, infrastructure and domain to maximise the recycling and reuse of material;
- Facilitate and support a circular economy around repair, reuse, recycling, remanufacturing and reprocessing
- Recognise waste as a resource and the collection and transport of waste and recycling as an essential service that must be undertaken in a manner that is safe, efficient, cost effective and does not negatively impact on liveability and the environment;
- Inform and support the preparation of the proposed planning framework including any recommended planning controls or DCP/Design Guideline provisions that would deliver an appropriate sustainability outcomes; and
- Identify appropriate sustainability benchmarks for each development/building type and/or use within the precinct.

2. Environmental Sustainability Study Summary

From the assessment in Sustainability Framework – Riverwood Renewal Project and in consideration of the sustainability context around Riverwood Renewal project outlined in Section 2 of the Riverwood Estate State Significant Precinct Environmental Sustainability Study we recommend the following at this planning stage for the reduced scoping tor best align with and ensure future sustainability related targets are met.

Aim to Achieve 5-star Green Star – Buildings v1:

Green Star – Buildings is the latest rating system released by the GBCA to certify new buildings and major refurbishments. We recommend residential towers and townhouses in the redevelopment aim to achieve a 5-star rating under the Green Star – Buildings v1. The new tool not only addresses key issues such as energy use, greenhouse gas emissions, water use, wastewater, solid waste and climate change resilience, but it also provides a pathway for



buildings to achieve net zero carbon in operations, steering the redevelopment towards a net zero carbon precinct outcome.

NABERS for Apartment Buildings:

NABERS for Apartment Buildings measures a building's energy and water performance based on the energy use of shared service such as reception areas, car parks, lobbies and heating and cooling services. We recommend NABERS for Apartment ratings to be managed by strata or building management for all eligible buildings in the redevelopment to drive energy and water savings during building operation.

BASIX Energy and Water:

BASIX sets sustainability targets related to energy, water and thermal comfort based on information provided about the design of the development. Through installation of energy and water efficient appliances, optimised common area and apartment designs, onsite renewable energy generation, we believe exceeding the statutory BASIX energy and water score is reasonable and achievable, and recommend dwellings to aim to achieve scores beyond this.

• Precinct Wide Energy Distribution:

A precinct wide energy distribution network by connecting multiple buildings PV system can improve energy resilience, load balancing and reduce energy bills. For Riverwood Renewal project, we recommend investigating the option to connect these systems and early engagement with utilities companies to discuss the feasibility of these options.

• Electrical Infrastructure:

To support the transition to a net zero carbon precinct for Riverwood Renewal project, we recommend investigating the option of removing gas boilers and stovetops and install electric heat pumps and induction cooktops as an alternative. This will ensure the precinct will be well positioned to become net zero carbon once the electricity grid is decarbonised.

The same Environmental Sustainability items outlined in the main Riverwood Estate State Significant Precinct Environmental Sustainability Study Report remain valid for the revised precinct scope and adequately address the SEARS requirements.

Yours sincerely,

For and on behalf of

Mott MacDonald Australia Pty Ltd

Daniel Fettell

<u>Pronouns:</u> he, him, his BEng, CPEng, RPEQ

Technical Director - Civil Engineering

T +61 (0)2 9098 6800 M 0433326543

daniel.fettell@mottmac.com

Click or tap here to enter text.